PSYCHOLOGY — INTRODUCTION AND RESEARCH METHODS

What is the nature of psychology as a science?

CHAPTER 1 Introduction to psychology

What research methods and key science skills are used in VCE Psychology?

CHAPTER 2 Research methods in psychology

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CHAPTER

1 Introduction to psychology

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How do psychologists research topics of interest? What ethical principles do they have to follow? What factors influence how we think, feel and behave? Why are we alike yet so different from one another? What role do genetics and our everyday environment and experiences play? What is the connection between our brain and behaviour? How does our brain function? How much of our brain is active when we do something? Why do young children view the world in self-centred ways? How does our thinking change over time? How do we make sense of what we see or taste? Why do individuals experience the world differently? What is normal behaviour? What is abnormal behaviour? What thoughts, feelings and behaviours are associated with different types of mental disorder? How can the presence of others influence our behaviour? When are we more likely to help someone in distress? Why do some people bully others? Why do we hold the attitudes we do? Why are some people racially prejudiced? What factors influence how other people perceive us? Questions such as these will form the basis of your study of psychology this year. You will also have the opportunity to ask your own questions and design investigations to seek answers.

DEFINING PSYCHOLOGY AND ITS SUBJECT MATTER

The term psychology originates from two Greek words — *psyche*, meaning mind, and *logos*, which loosely translated means study or knowledge. Psychology was therefore originally defined as the study of the mind. Over time, this definition has broadened to include behaviour. **Psychology** is now commonly defined as the scientific study of human thoughts, feelings and behaviour. This is consistent with the definition used in the VCE Psychology study design.

The terms *thoughts* and *feelings* refer to mental processes that cannot be directly observed. What you think about, your choice of words in a conversation, how you interpret incoming sensory information, your attitudes towards asylum seekers, what motivates you to study or party, dreaming, learning, remembering, being in love, and feeling anxious, sad or happy are all examples of mental processes. They are private, internal experiences which cannot be seen by anyone in the way that we can see actions such as smiling, hugging and bike riding.



FIGURE 1.1 Psychology is the scientific study of human thoughts, feelings and behaviour.

The term *behaviour* refers to any action that can be directly observed. It includes activities such as walking, talking, laughing, texting, watching television, interacting with others, and so on. All these activities involve actions that can be seen as they occur, unlike mental processes that cannot be seen as they take place.

Because mental processes cannot be directly observed, psychologists draw conclusions about them on the basis of observable behaviour. For example, a person who is observed chanting anti-war statements at an anti-war rally may be reasonably assumed

to have a negative attitude towards war. Similarly, rapid eye movements observed in a sleeping person indicate that they are likely to be dreaming.

Although psychologists distinguish between behaviour and mental processes, and often study them separately, in reality, behaviour and mental processes are closely interrelated and influence each other continuously. For example, *feeling* angry about the way someone has treated you may affect what you *think* about the person and the way you *behave* towards them when you next meet them. Similarly, *thinking* you have not adequately prepared for an exam may cause you to *feel* anxious which may result in *behaviour* such as sweating, pacing the corridor and talking quickly.

People are the main subject matter of psychology. However, animals may also be used in psychological research. This is mainly done when suitable people are not available for a study of research interest or when human research participants cannot be used because of the risk of psychological or physical harm.

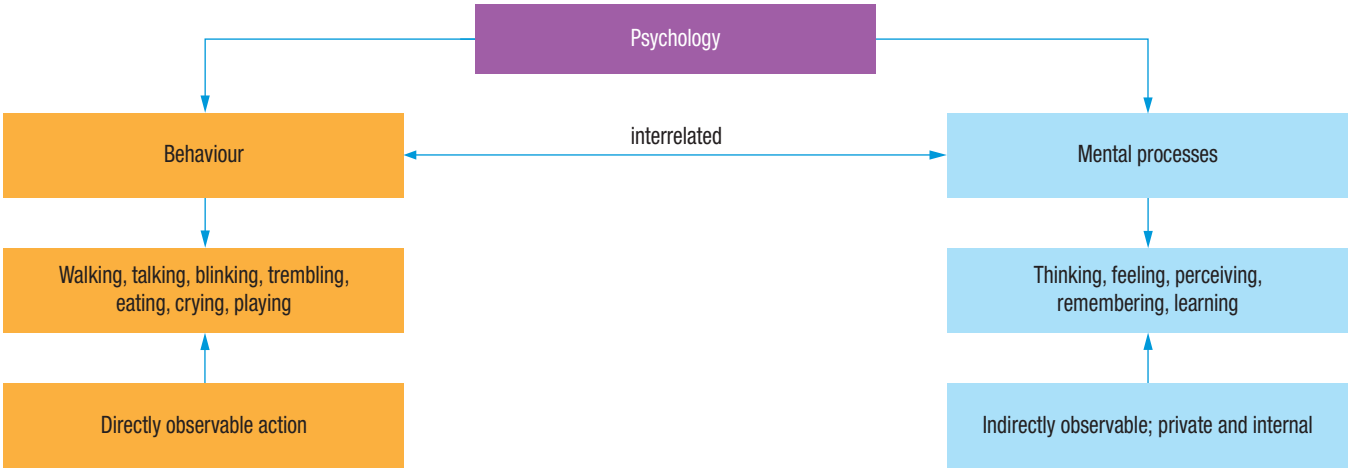


FIGURE 1.2 Behaviour and mental processes are different but interrelated.

LEARNING ACTIVITY 1.1

Distinguishing between behaviour and mental processes

1. Consider each activity listed in the left-hand column in the table. For each activity, tick (✓) the appropriate column to indicate whether you think it is a behaviour or a mental process. Give a reason for each answer.
2. Which of the activities were the most difficult to classify as either a behaviour or a mental process? Explain why.
3. Explain the relationship between behaviour and mental processes with reference to one of the activities in the table.

Activity	Behaviour	Mental process	Reason
Whistling aloud			
Deciding whether to shoot for a goal or pass to a team mate			
Starting to feel excited about going to a party			
Looking at yourself in a mirror			
Experiencing a toothache			
Singing a song 'in your head'			
Experiencing a nosebleed			
Worrying about giving a speech			
Planning an excuse to get out of a date			
Watching a movie alone at home			
Posting a photo on Facebook			
Adding numbers			
Experiencing 'butterflies in the stomach'			
Scratching an itch			
Looking at the time on your watch			

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Word copy of table

SCIENTIFIC NATURE OF PSYCHOLOGY

Should you change an answer to a question on a multiple-choice test? In answering multiple-choice questions, many people rely on common sense or what they have heard from others about the accuracy of a first answer. Popular belief suggests that 'Your first instinct is usually right'. If you relied on this information, you would never change a test answer, regardless of how certain you were that your first answer was incorrect.



FIGURE 1.3 You check your answer to a multiple-choice question and think it may be wrong. Should you change the answer?

Many students are often surprised at the results of scientific research studies which have found that when students change their answers in a test, they are more likely to change an incorrect answer to a correct answer than they are to change a correct answer to an incorrect answer (Kruger, Wirtz & Miller, 2005).

In everyday life we often use common sense in trying to understand our own behaviour and that of others. We draw on our life experiences, particularly our observations of how we and others do things, to develop opinions on matters such as the best way to teach children to read, what causes phobias, why people bully others, how stress affects exam performance, what makes people attractive to others, whether we are born with our personality or intelligence, and why we dream.

'Common sense psychology', whereby people collect information about behaviour informally or non-scientifically, often leads to inaccurate conclusions. There are several possible reasons for this. For example, the source of the information may not be dependable, observations may be incorrectly interpreted and conclusions may be based on faulty or insufficient 'evidence'. In addition, many people do not critically evaluate their beliefs and change them if conflicting information is presented. Research studies have found evidence that people tend to collect information which supports their beliefs and ignore evidence which suggests that their beliefs may not be true (Nickerson, 1998; Risen & Gilovich, 2007). This is called *confirmation bias*.

How do psychologists study questions about behaviour and mental processes? They do so in a scientific way. *Scientific research* involves using an appropriate research method to collect data (information) relating to a question, topic or issue of interest, then summarising the data and drawing justifiable conclusions about it. Importantly, the research is based on scientific assumptions, attitudes and procedures, and is planned, conducted and reported in accordance with scientific standards. This overall approach is commonly referred to as the *scientific method*.

If, for example, a psychologist wanted to find out whether it is true that 'you can't judge a book by its cover', or, more specifically, whether or not you can judge someone's personality from their physical appearance, they would conduct scientific research and collect relevant data in order to test the accuracy of this adage (common saying).

They might call for volunteer males and females to be participants in their research study and ask one half to be photographed, then the other half to look at the photos and describe the personality of each person in a photo. The psychologist may then give a personality test to each person who was photographed to generate personality profiles which could then be compared with the descriptions provided by the research participants.

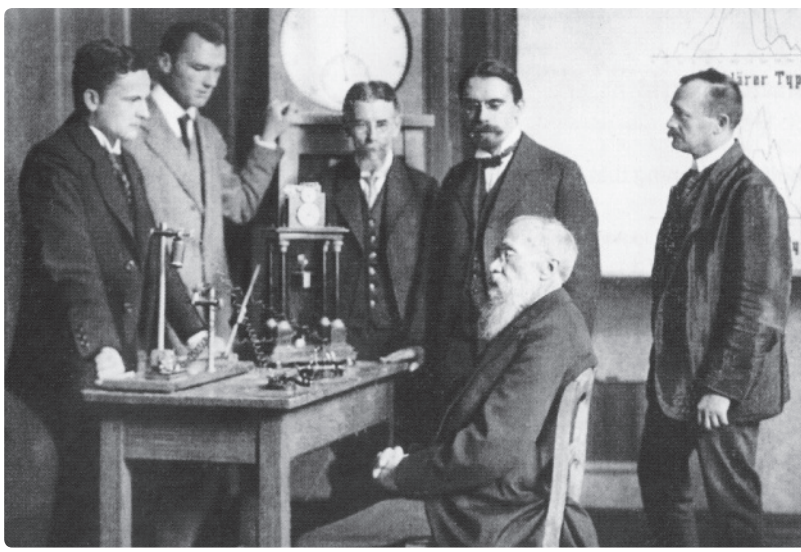


FIGURE 1.4 The year 1879 marks the beginning of psychology as a science. This is when Wilhelm Wundt established the first psychology research laboratory at the University of Leipzig in Germany. Wundt (seated) is shown with colleagues and an apparatus used for one of his experiments on the speed of mental processes.

If the descriptions closely matched the profiles and stood up to statistical tests for checking the results, then the psychologist may conclude that the adage ('saying') is incorrect based on the results obtained from their research. Alternatively, if the descriptions differed considerably from the profiles, the psychologist may conclude that the adage is correct based on the results obtained. Thus, the use of scientific method helps ensure that the data collected are accurate and reliable and that the conclusions drawn from the data are justifiable and can be trusted.

Scientific research, however, is not completely free from error. Like all people, psychologists who conduct research can make mistakes or not properly control all factors that can influence the results. It is important therefore in any science that a research study can be repeated to test the results for accuracy or find out if they can be applied to other people and other similar situations.

Replication involves conducting a study again to establish whether the results obtained can be reproduced, and are therefore reliable and able to be applied to other people across a range of situations and settings. For example, replicating the study on personality and physical appearance using participants and observers from a different age group, cultural background, sex and so on may provide similar results to the original study, thus reinforcing the finding.

Alternatively, if replication of the study using participants with different backgrounds produces different results from those obtained in the original study, the conclusion made about personality and appearance may need to be refined so that it is applied only to the actual participants in the study and the larger group from which they were selected.

SCIENTIFIC VS NON-SCIENTIFIC EXPLANATIONS

There are many ways of explaining human thoughts, feelings and behaviour that are not based on science. Some of these approaches claim to be scientific but are not. Some have scientific-sounding names and use very elaborate systems to explain how we think, feel or behave. Consequently, they seem to be based on science. Among these non-scientific explanations are astrology, numerology, graphology and palmistry.

Astrology describes the belief that the movement and positions of the stars and planets influences a person's personality, moods, behaviour, events in their life and so on.

Numerology involves examining significant numbers in a person's life, such as birth date, house address or phone number, to predict future events or describe influences on their life.

Graphology involves interpreting handwriting to judge a person's personality and identify significant issues in their life.

Palmistry involves examining the lines on the palm of a person's hand and using these to describe aspects of their thoughts, feelings and behaviour, as well as to predict future events in their life.

These kinds of alternative approaches are often called pseudosciences. 'Pseudo' is a prefix used to indicate that something is fake or falsely imitates something else. Consequently, **pseudoscience** means fake or false science.

Psychologists and other scientists generally believe that the methods and results, and, therefore, the claims, of pseudoscientists are often inaccurate as they are not based on true science. The non-scientist is likely to draw inaccurate conclusions about human thoughts, feelings and behaviours (and other events) because the conclusions are based on faulty or insufficient evidence resulting from unsystematic study (if any). Similarly, psychologists and other scientists also hold a view that common sense, faith or personal beliefs cannot be used as the sole basis of explaining human thoughts, feelings and behaviour, or determining whether or not something is true.



BOX 1.1

Scientists versus non-scientists: some key differences

Approach and method	Scientist	Non-scientist
Develops hypotheses ('predictions') that can be tested through empirical research	✓	✗
Uses research procedures that minimise the influence of personal biases	✓	✗
Relies on systematic data collection	✓	✗
Considers the effects of sample size in obtaining reliable data	✓	✗
Assesses claims on the basis of supporting evidence or reasons	✓	✗
Openly considers other interpretations of results obtained	✓	✗
Reports to others how ideas were obtained, how they were tested and what the results were	✓	✗
Replicates studies to test results or apply results to different situations	✓	✗
Identifies and defines what is being studied in clear, precise, concrete, testable, measurable terms	✓	✗
Challenges existing beliefs	✓	✗
Does not fully accept a conclusion unless there is supportive evidence	✓	✗
Looks for and considers evidence that contradicts own findings or beliefs	✓	✗
Does not withhold information that does not support the claims made	✓	✗
Seeks criticism from others with expertise in the area	✓	✗
Avoids emotional reasoning and relies on logic	✓	✗

BOX 1.2

How scientific is astrology?

Astrology is a system for explaining and predicting how we think, feel and behave on the basis of the positions of the planets and the stars at the time of a person's birth. It uses scientific-looking astronomical charts and technical terms and is often confused with the real science of astronomy.

Astrology has been practised in different cultures for many centuries, with astrological beliefs going back at least 2500 years. In more recent times, particularly given the regular inclusion of horoscopes in the print media, the public's exposure to astrology and astrological predictions has increased. Astrology and its horoscopes currently enjoy wide appeal and many people read their horoscopes, even if they don't believe them or take them seriously.

Psychologists have conducted numerous scientific research studies to test astrology. These studies have repeatedly found that astrology is non-scientific and lacking in valid evidence to support its claims.

Statements in horoscopes are usually vague (such as 'mistakes could cost you time and money', 'you can only discuss plans or argue points so much' and 'if you're patient you should be able to achieve a great deal') and highly applicable to most people, irrespective of their birth sign, as evident in the statements in figure 1.5 on page 8.

Furthermore, systematic procedures used by psychologists to check astrological predictions have repeatedly found that the predictions are usually wrong. The small percentage found to be correct tend to be very general; for example, statements such as 'you will meet someone new in the next 12 months' and 'there will be a political crisis in Australia during this year'. These statements describe events that are more likely to happen than not happen under the ordinary circumstances of everyday life.

Studies have also found that many astrological descriptions of personality and behaviour tend to be made up of desirable, flattering statements. This increases the tendency to accept the description because people are less likely to accept negative and undesirable statements about themselves, such as 'you are insensitive, uncaring, unfriendly and hard to get along with'.

Our willingness to accept the descriptions of ourselves made by astrologers, palm readers, tarot card readers and the like has been called the *Barnum effect*, named after the American circus showman Phineas T. Barnum

(continued)

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(1810–91), whose success and fame was reportedly built around the principle 'Always have a little something for everybody'. The Barnum effect is the tendency to believe that a personality description or a prediction about the future is accurate if it is stated in a vague or very general way.

STARS
with Katinka de Strunker

Aquarius
(Jan. 20–Feb. 18)
Plans with a colleague, friend or family member may become more involved as complications arise. Extra commitments may prove more expensive than you initially thought.

Pisces
(Feb. 19–Mar. 20)
A relationship may change significantly, causing you to relate differently to that person. A friend may need extra attention, so spend quality time with them. Make sure to leave the communication channels open.

Aries
(Mar. 21–Apr. 19)
Mars is yet to transect your sector, so be prepared — obstructions may come your way. The determination of the ram will push you through any problems you encounter, but take care not to tread on other people's toes, particularly your partner's!

Taurus
(Apr. 20–May 20)
Beware your bullheadedness, Taurus! Flexibility and openness are needed when problems arise, especially when they involve work colleagues or friends. A trip later in the month may see you in contact with family members or friends you haven't seen for some time.

Gemini
(May 21–June 20)
Unexpected complications on the home or work front require ingenuity and discretion. Be prepared for challenges. There may be an unexpected boost in your income, but take care, as extra funds will be needed towards the end of the year.

Cancer
(June 21–July 22)
Something important is about to happen to you or to a family member. Be open with your partner to encourage good communication. Working with your mate to achieve a common goal will strengthen your bond.

Leo
(July 23–Aug. 22)
Someone close to you may be going through a rough patch. This will require all of your diplomatic skills, Leo! Beware of impulsive spending, as unexpected outlays may dent your savings.

Virgo
(Aug. 23–Sept. 22)
A short trip or visit from a friend or family member will happen in the near future. You may pursue a course of study in a subject you've always been interested in. A new direction at work will bring fresh challenges and excitement.

Libra
(Sept. 23–Oct. 22)
Your mate will add sparkle to your relationship with a romantic interlude or surprise, injecting passion into your relationship. Planning for the future will see your hearts and souls aligned.

Scorpio
(Oct. 23–Nov. 21)
The budget may be strained by recent large outlays, so the opportunity to make extra money will be welcome. A statement of confidence that will come through a work colleague or reference will thrill you.

Sagittarius
(Nov. 22–Dec. 21)
Your creativeness will be put to good use when you redecorate your home or work space, creating a pleasant and happy place to be. Music may also feature this month. This will be a passionate time for Sagittarians!

Capricorn
(Dec. 22–Jan. 19)
Passion is in the air for you, Capricorn! A romantic interlude with your mate will inject sizzle into your relationship. Singles, a sudden call or invitation to a fun social outing may have happy results when a charming new person enters your life.

FIGURE 1.5 An example of a horoscope

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Practical activity — how scientific is astrology?

LEARNING ACTIVITY 1.2

Is 'common sense' good psychology?

Psychologists using scientific research have studied the accuracy of each of the statements below. On the basis of 'common sense', decide whether each statement is true or false.

1. A fully qualified hypnotist can hypnotise anybody.
2. Most brain activity stops during sleep.
3. Out of the 7.5 billion or so people on Earth, there is probably someone else who is exactly like you.
4. People with schizophrenia have two or more distinct personalities.
5. Having someone read study material to you while you are asleep results in better recall of the material when you awaken.
6. In an emergency, your chances of getting help from someone increases as the number of bystanders increases.
7. You can tell quite accurately what emotion a person is experiencing by observing the expression on their face.
8. Most people have one psychic ability.
9. You can't fool a lie detector.
10. Only humans are capable of self-recognition when looking at their reflection in a mirror.

Go to page 457 of this book for the answers.

CLASSIC AND CONTEMPORARY PERSPECTIVES IN PSYCHOLOGY

Throughout the history of psychology there have been different perspectives, or 'viewpoints', on how to best study, describe and explain human behaviour and mental processes. Some of the more prominent perspectives and what they focused on or emphasised are:

- *Structuralism* (late 1800s) — the structure of human consciousness ('awareness'), particularly the basic parts or building blocks that make up consciousness, how the parts are organised and how they are interrelated

- *Psychoanalysis/Psychodynamic* (early 1900s to present) — the roles of conflicts, childhood memories, drives and motives existing beneath the level of conscious awareness
- *Gestalt* (early 1900s to 1950s) — the importance of the whole experience of a person rather than the individual parts
- *Behaviourism* (early 1900s to 1960s) — how observable behaviour is learned and changed by experience, particularly rewards and punishments
- *Humanism* (1950s to present) — the uniqueness of individuals and their positive potential to fulfil their lives
- *Biological* (1950s to present) — bodily structures and processes underlying thoughts, feelings and behaviour
- *Cognitive* (1950s to present) — how we acquire, process, remember and use information about ourselves and the world
- *Socio-cultural* (1960s to present) — social and cultural influences on thoughts, feelings and behaviour.

The *biopsychosocial approach*, which emerged in the late 1970s, is probably the most widely adopted perspective in contemporary psychology. Its viewpoint is that human behaviour and mental processes originate, develop and function due to the complex interaction of biological, psychological and social factors. This approach is used in VCE Psychology and therefore throughout this text.

CAREERS AND AREAS OF SPECIALISATION IN PSYCHOLOGY

The study of psychology can lead to opportunities in a range of careers that involve working with individuals, couples, families, large groups, organisations or even communities. For example, opportunities exist in industry, community mental health services, within government departments in the public service, in schools, courts, prisons, the defence forces, emergency services, with sports teams or in a university as a lecturer and/or researcher.

Some psychologists work by themselves; for example, in a private practice. Others choose to work as part of a team in a bigger organisation. What a psychologist does on a daily basis depends on their area of specialisation, as is the case with doctors who specialise in an area such as psychiatry, surgery or dermatology. Many apply their expertise in a combination of work settings.

The Psychology Board of Australia (2016a) has identified the following specialist areas of psychology for registered psychologists.

Clinical neuropsychology: assessment and treatment of changes in behaviour and mental abilities that may arise from brain damage or irregularities in brain function; for example, due to head injury, stroke, disease or drug abuse

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Video interview with clinical psychologist Elizabeth Cosgrave
eles-0235, eles-0418





FIGURE 1.6 The discipline of psychology since its early establishment has moved its perspective from a study of the structure of consciousness under Wilhelm Wundt to one that focuses on the interaction of biological, psychological and social factors in influencing how we think, feel and behave.

Clinical psychology: assessment, diagnosis, and treatment of mental health problems and disorders across the lifespan

Community psychology: assisting communities in developing programs to improve the wellbeing of all their members, such as addressing homelessness and supporting bushfire recovery

Counselling psychology: assisting people of all ages to deal effectively with personal and relationship problems that impact on their mental health and wellbeing. Problems tend to be less serious than those dealt with by clinical psychologists (for example, not life-threatening).

Educational and developmental psychology: assessment, intervention and counselling services for learning and development problems arising at any time in the lifespan

Forensic psychology: applying expertise in legal and justice settings

Health psychology: assisting individuals, groups and communities to promote positive mental health behaviours and minimise harmful health behaviours

Organisational psychology: assisting organisations such as private companies and government departments to become more effective and productive in one or more areas while promoting employee wellbeing

Sport and exercise psychology: assisting elite-level, professional and recreational athletes to enhance performance, personal development and wellbeing from participation in sport and exercise.

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Video interview with sport and exercise psychologist Dr Sean Richardson
eles-0241, eles-0420

There are also specialist areas of psychology which tend to be more focused on research or working with psychology students rather than working directly with clients. These include:

Academic psychology: planning and conducting research in areas of interest, often combining with lecturing of undergraduate psychology students and supervising students' research projects

Biological psychology: studies bodily structures, systems and activities associated with behaviour and mental processes

Cognitive psychology: studies how people acquire, process and use information; for example, how we perceive, learn, remember, think and use language

Developmental psychology: studies development of behaviour and mental processes across the lifespan

Environmental psychology: studies how people affect and are affected by the physical environment

Personality psychology: studies people's characteristic ways of thinking, feeling and behaving that collectively make up personality; for example, components of personality, factors influencing personality development

Social psychology: studies how people's thoughts, feelings and behaviour can change in different social situations and through exposure to different social influences.

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Weblinks
- Psychology Board of Australia: descriptions of specialist areas
- APS: descriptions of different types of psychology



FIGURE 1.7 There are many different areas of specialisation within psychology. These include (a) sport and exercise psychology, (b) educational and development psychology, (c) clinical psychology and (d) academic psychology.

BOX 1.3

What is the difference between a psychologist and a psychiatrist?

A person can work as a psychologist or use the title 'psychologist' if they are registered as a *psychologist* by the Psychology Board of Australia. Registration helps ensure that people have the required qualifications and skills to provide psychological services safely (Psychology Board of Australia, 2016b).

Generally, the minimum education and training requirement for registration is a six-year full-time sequence of study in psychology (or part-time equivalent). The six years must include an approved four-year psychology course (such as a Bachelor of Arts or Bachelor of Science at a university with Honours in psychology) followed by two years of supervised practice as a Provisional Psychologist.

A *psychiatrist* is a qualified medical doctor who has obtained additional qualifications to become a specialist in the diagnosis, treatment and prevention of mental disorders. In all, this involves at least 13 years of study in medicine, surgery and psychiatry (Royal Australian & New Zealand College of Psychiatrists, 2015).

Having qualified as a medical doctor, a psychiatrist is able to provide a wider range of treatment. In addition to psychotherapy ('talking treatments'), a psychiatrist can perform medical procedures and prescribe medications to treat symptoms of mental illnesses such as schizophrenia and depression. Because psychologists are not trained or qualified to perform medical procedures or prescribe medications, they rely on psychotherapy and other strategies to assist their clients.

As psychiatrists are qualified medical specialists, Medicare reimburses (rebates) part or all of their fee for a consultation, depending on how much is charged for the consultation. Medicare also reimburses the fees of registered psychologists, but not necessarily the entire fee and only those psychologists who are endorsed by Medicare *and* if the client has been referred by a GP, psychiatrist or paediatrician.

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Weblinks

Additional information about psychologist and psychiatrist qualifications:

- Psychology Board of Australia
- Royal Australian & New Zealand College of Psychiatrists
- Australian Psychological Society



FIGURE 1.8 (a) Unlike psychologists, psychiatrists are medically qualified and can prescribe medications such as Prozac, which is commonly used to treat patients suffering from severe depression. If the antidepressant medication is ineffective, the psychiatrist may perform a medical procedure such as electroconvulsive therapy (ECT). (b) During ECT, the patient is given a short-acting anaesthetic and muscle relaxant before a series of half-second electric shocks are delivered to the brain to trigger a mild seizure. The patient is asleep during the procedure and awakes several minutes after it is completed.

BOX 1.4

The Australian Psychological Society

The Australian Psychological Society (APS) is a national organisation that represents, advances and promotes the interests of the psychology profession and psychologists. It was first formed in 1944 and currently has over 21 000 members. Membership of the APS is not compulsory, but it is highly regarded and often required by employers.

There are different categories of APS membership. Generally, to become a full member of the APS it is necessary to have completed a six-year sequence of study in psychology. The six years must cover an approved four-year course of full-time study in psychology at a university, as well as either a two-year or more approved post-graduate coursework degree, such as a Graduate Diploma in Psychology, or a two-year post-graduate research degree in psychology such as a Masters or PhD. It is possible to join the APS as a student while gaining qualifications. However, full membership is not granted to individuals who are not fully qualified. Secondary school teachers of psychology may also join as a Teacher Affiliate.

Psychologists who are members of the APS can be recognised by the letters MAPS (Member of the APS), FAPS (Fellow of the APS) or Hon FAPS (Honorary Fellow of the APS) after their names.

All members of the APS are required to observe the society's *Code of Ethics*. The code describes ethical standards and guidelines for the professional conduct of psychologists in order to safeguard the welfare of anyone who uses psychological services or are participants in research.

APS Australian Psychological Society

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APS homepage

OVERVIEW OF VCE PSYCHOLOGY

VCE Psychology is made up of four units, each with different content. Units 1 and 2 can be studied in any order and are not prerequisites for Units 3 or 4.

As a science study, there is an emphasis on the development of key science skills in all four units. These skills are described on pages 11–12 of the Psychology Study Design and covered in chapter 2.

There are three areas of study in each unit. These are described in a way that reflects the inquiry nature of VCE Psychology.

Course outline

The Units 1 and 2 areas of study are:

Unit 1: How are behaviour and mental processes shaped?

Area of Study 1 *How does the brain function?*

- Role of the brain in mental processes and behaviour
- Brain plasticity and brain damage

Area of Study 2 *What influences psychological development?*

- The complexity of psychological development
- Atypical psychological development

Area of Study 3 *Student-directed research investigation*

- Collect secondary data to investigate a question related to brain function and/or psychological development. The question may be from a list of options in the study design or one of your own developed in conjunction with your teacher.

Unit 2: How do external factors influence behaviour and mental processes?

Area of Study 1 *What influences a person's perception of the world?*

- Sensation and perception
- Distortions of perception

Area of Study 2 *How are people influenced to behave in particular ways?*

- Social cognition
- Social influences on behaviour

Area of Study 3 *Student-directed practical investigation*

- Design and conduct your own investigation to collect primary data related to external influences on behaviour.

Assessment

Each unit has a set of three learning outcomes, one for each area of study, that students are required to achieve in order to satisfactorily complete the unit.

All assessments for Units 1 and 2 are school-based using a variety of assessment tasks. The study design has a list of assessment tasks from which the teacher may select.

The assessment tasks available for Outcomes 1 and 2 are:

- a report of a practical activity involving the collection of primary data
- a research investigation involving the collection of secondary data
- a brain structure modelling activity (Unit 1 only)
- a logbook of practical activities

- analysis of data/results including generalisations/conclusions
- media analysis/response
- problem solving involving psychological concepts, skills and/or issues
- a test comprising multiple choice and/or short answer and/or extended response
- reflective learning journal/blog related to selected activities or in response to an issue.

A report of the student-directed investigation is required for Outcome 3 in both Units 1 and 2.

The student's level of achievement (e.g. grade) for each unit is determined by the school but this is not reported to the Victorian Curriculum Assessment Authority (VCAA).

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VCE Psychology study design

CHAPTER SUMMARY

