



Ian P. Albery
Chris Chandler
Andy Field
Dai Jones
David Messer
Simon Moore
Chris Sterling

Editor: Graham Davey

Complete Psychology

SECOND EDITION



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IAN P. ALBERY
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SIMON MOORE
CHRISTOPHER STERLING
JON SUTTON
ANNIE TRAPP

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Preface to the second edition

Over the first 4 years of its existence, *Complete Psychology* has had a successful debut as a new and comprehensive text for students studying psychology. It has been adopted as a core recommended text in dozens of higher education institutions and has sold steadily from the book stands to anyone interested in expanding their knowledge of psychology.

While retaining all successful features of the first edition, this revision supplements the original syllabus and teaching and learning features with some additional materials. The syllabus content has been updated with references to new knowledge and recent research and the illustrative examples have been updated to give them a contemporary relevance. We have also included a number of new features that have been requested by teachers and instructors who have had a practical experience of using the book over the past 4 years. As well as a revised text, we have also given the book's website a facelift and upgrade. As well as offering links to other useful psychology-relevant sites and providing downloads of pdfs and PowerPoint presentations, the site also offers an expansive range of multiple choice questions (MCQs) covering all sections of the book. The MCQs can be accessed by teachers and instructors wishing to use them in their course assessments.

Features new to the second edition include:

- Provision of example generic essay titles at the end of each chapter together with a full list of supporting references that the student can source as an aid to writing their essay.
- Inclusion of self-test questions throughout each chapter so that the students can test their knowledge and retention of material as they read.
- The introduction of class activity boxes, which provide the teacher or instructor with a learning activity they can use with their lecture class or seminar group.
- Greater emphasis on examples of psychology in applied settings.
- A glossary of all the important terms and concepts that the student has been introduced to in this book. This will ensure that the student has a clear understanding of the basic terminology that is needed to pursue an academic career in psychology and this can be supplemented by the fuller descriptions and discussions of such terms that can be found in Hodder Arnold's *Encyclopaedic Dictionary of Psychology* (2005).

Finally, you will also notice that the text has been given a more contemporary design that should provide a more accessible learning experience and has also resulted in a book that is less bulky and cumbersome to carry around.

Graham Davey
November 2007

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Introduction

What is psychology?

Psychology is about *people*. In particular, it is about why people do the things they do. It is also about *groups of people*. Why do people in the same group behave differently? Why are some people leaders and other people followers? Psychology is also about *helping people*. It enables us to develop treatments for psychological problems, put together effective health campaigns, facilitate education, help catch criminal offenders and increase productivity and health in the workplace. Psychology is also about the very *basis of our biology*. These are the things we take for granted and never even have to think about: our response to pain, riding a bicycle, experiencing a visual illusion or learning to speak. Psychology is also about *science* and the scientific investigation of our human nature and the social and biological contexts in which we live. But, in addition to all this – and unlike most other disciplines – psychology is about *you*. When you learn about psychology, you don't just learn about why *other* people do the things they do, you also learn about yourself – both as a social being and a biological organism – and why *you* do the things you do. It is very rarely that a student of psychology completes a course without encountering an unexpected insight into her own psychology or acquiring some knowledge that contributes to her personal growth as an individual.

That's quite a lot! But that is why psychology is one of the most popular undergraduate degrees the world over and why psychology teaching at all levels has rapidly expanded since the mid-1990s. It is difficult to conceive of any other discipline that gives the student a broader and more rounded education than psychology. The psychology graduate doesn't just learn about people's behaviour and their personality and intelligence (the kinds of knowledge you might think is useful in many areas of applied psychology, such as occupational psychology, clinical psychology, educational psychology etc.), but they will inevitably acquire knowledge of the practical skills necessary to interact with people in a variety of occupations and careers. In understanding and comparing psychological theories, they will also acquire skills of critical thinking and analysis and the need to construct and analyse psychological studies will provide them with valuable methodology and statistical skills that will be prized by many employers. Finally, psychology graduates will also take with them a knowledge of the computing and presentational skills that

are now part and parcel of an undergraduate degree in the social and biological sciences.

You will encounter a lot of people unfamiliar with psychology who claim it is all common sense! It has to be said that much of it is common sense – we all have to use a bit of psychology to negotiate our lives, regardless of whether we have studied it or not. However, much of what seems like common sense in psychology is often only so with hindsight. For example, one of the simplest rules of behaviour is that if you reward someone for doing something, they are more likely to do it again (the principle of reinforcement – Chapter 8, p.106). Yet how many of us actually verbalise that rule and use it consistently? Certainly not the mother who responds to her child's tired tantrum in the street by buying him a toy or magazine or the person who showers her partner with attention and affection when he is having a jealous sulk at a party. While some psychology is common sense, much of what we learn about people when we study them closely is counterintuitive – and some of it is downright strange! Focus point 1.1 gives you the flavour of some of the unusual facts you will come across during the course of reading this book.

Potential of psychology

The largest proportion of students who apply to psychology degree programmes in the UK do so because they claim to have an interest in becoming an 'applied' psychologist. That is, they want to apply their knowledge of psychology in some way – perhaps as a clinical psychologist, an occupational psychologist or maybe as one of the increasing numbers of sports psychologists.

However, psychology is not just about generating professionals and practitioners who apply their practical skills in specific settings; it is also about personal understanding and personal growth and, to this extent, the discipline has a duty to ensure that psychological knowledge informs daily life. This means finding ways not only of helping people to understand themselves and why they do the things they do, but also of making people aware of the range of activities that psychology can be applied to – with positive effects! (For a view on how psychology is relevant to everyday life, see Davey, 2007).

FOCUS POINT 1.1

Is psychology just common sense?

- Individuals who have reported being abducted by space aliens are prone to exhibit false memory effects (i.e. in laboratory tests of memory they claim to recall and recognise items they have never seen before – Chapter 33, p.489).
- People who are shown a film of a car crash and then asked how quickly the cars were going when they ‘smashed’ into each other estimate the speed up to 30% more quickly than people who were asked the same question, but with the word ‘hit’ or ‘collided’ used instead of ‘smashed’ (Chapter 14, p.197).
- Most people have an optimistic bias! If asked to respond to this statement ‘Compared with others your age, are your chances of developing cancer greater than them/same as them/less than them’, most people will judge themselves as being *less* at risk than their contemporaries. This is why it is often so difficult to get people to switch from unhealthy (e.g. smoking) to healthy behaviours (e.g. exercising regularly) (Chapter 35, p.527).
- People tend to accept vague and general personality descriptions as being uniquely applicable to themselves without realising that the same description can be applied to just about anyone! If you give a group of people a personality test, but ignore their answers and give everyone the same general positive feedback, everyone believes the description is true of them! This is what makes people so gullible to the vaguely worded predictions in horoscopes (Chapter 28, p.407).
- Your spouse or partner is probably the person that you think you would find the easiest to recognise. But with the disorder *apperceptive agnosia*, the individual cannot recognise familiar objects (such as tables, chairs, book, etc.) because of a perceptual impairment. Sufferers often cannot point out a shape in a busy picture or recognise an object from an unusual angle. One sufferer couldn’t recognise his wife when she was standing in front of him, but could recognise her when she moved or when she spoke! (Chapter 12, p.159).
- Would you raise the alarm if smoke suddenly started billowing into the room you were in? In one study, students attended an interview to discuss life at their university. While they were filling in a preliminary questionnaire smoke was pumped into the room. Participants were either by themselves, with two confederates who completely ignored the smoke or with two other people (non-confederates) who were strangers to them. About 75% of people who were alone reported the smoke but only about 38% of those in the other two groups did! (Chapter 24, p.356).

The psychology curriculum

This book presupposes no prior knowledge of psychology and so should be quite accessible to the interested layperson, as well as to those studying psychology at a range of different educational levels. It should also be accessible and informative for those studying disciplines related to psychology (such as medicine, nursing, speech therapy, counselling etc.).

The book’s contents reflect a standard curriculum for Level 1 undergraduate students and covers eight major areas of psychology. These are:

- 1 conceptual and historical issues on which psychology is based
- 2 psychobiology
- 3 cognitive psychology (covering the areas of perception, attention, memory, language and thinking)
- 4 developmental psychology
- 5 social psychology
- 6 personality and intelligence
- 7 psychopathology and health psychology
- 8 introduction to research methods and statistics.

These contents are supported by a comprehensive chapter on study skills designed specifically for psychology undergraduates, which covers basic study principles, tips on lecture note taking, writing essays and laboratory reports and revision and exam skills. A separate chapter on careers also gives the reader the fullest insight into how psychologists are employed – illustrated with the professionals’ own insights into their specialised areas of psychology.

Apart from ensuring the fullest coverage of the most recent psychology curriculum, we have presented this material in an accessible and structured way. The full colour presentation with plentiful illustrative material is designed to make the reading and learning experience as pleasant as possible. All chapters contain highlighted focus points to draw the reader’s attention to interesting or important facts and concepts. Chapters contain application and research method boxes designed to provide the reader with examples of practical applications of psychological knowledge and to familiarise you with the different types of research methodology that are used across the differing areas of psychology. Finally, every chapter provides the

reader with suggestions for activities that will facilitate learning and understanding and further support and information is available from the book's website at www.completepsychology.com.

Happy reading!

Graham Davey
November 2007

Reference

Davey, G. C. L. (2007) Taking psychology to the people – and making them listen. *The Psychologist*, 20, 368–9.

sectionone

Dai Jones



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Approaches to psychology

Route map of the chapter

In this chapter, we will look at the ways in which psychologists go about understanding human behaviour. We'll do this in two ways. First, we will look at where psychology came from and how it developed. This will help us to understand how our ideas of what psychology is and should be have changed. We will then look at how psychology is approached today, and see that there are six main theoretical approaches. We will cover each of these approaches individually, discuss their main assumptions and evaluate the strengths and weaknesses of each approach.

Introduction

How do psychologists go about trying to understand human behaviour? You've probably heard a range of different theories that explain human behaviour. For example, that 'it's all in the unconscious', 'it's all in the genes' or 'it's the result of learning'. Are these all part of psychology? Why are there so many different kinds of explanation? We'll answer these questions in this chapter. We'll see that there are indeed several different approaches to psychology and these give different kinds of explanations of human behaviour. The different approaches work together to give a fuller picture of behaviour than one approach alone can provide. We'll start, though, by looking at where psychology came from and how it developed. If we understand the history of psychology we should be able to get a better grasp of what psychology is like today.

A brief history of psychology

It has been said that 'psychology has a long past, but its real history is short' (Ebbinghaus, 1908: 3). The standard view of psychology's history is that it stretches back to Ancient Greek philosophers, but only became independent when Wilhelm Wundt founded a psychology laboratory at Leipzig in 1879. However, in the last 30 years, approaches to its history have changed from giving a list of events to understanding the contexts within which the discipline developed (Benjamin, 1997). We'll try to give a flavour of this approach in outlining a brief history of psychology.

Before psychology

The idea that psychology can be traced back to the Ancient Greeks comes about because of the kinds of question philosophers such as Plato and Aristotle asked. The Greeks tried to answer questions about personality types and the association between the mind and the body. Such questions

are part of psychology today but, as we shall see, psychology uses rather different methods to answer these questions.

The way psychology is today has been shaped by the work of philosophers since the Greeks. The Greeks started a tradition of rational thought, trying to explain things using logical reasoning. This was developed by 17th-century philosophers such as Descartes, Locke and Hobbes. Descartes claimed there was a separation between the mechanical body, which could be investigated through science, and the spiritual soul, which was a gift of God (the principle of Cartesian dualism). Locke and Hobbes, by contrast, claimed that only matter existed, that the mind was the result of the operation of nerves and the brain and that ideas were acquired from the environment. This led to a concentration on physical explanations of phenomena and a belief that the mind is a side-effect of the material brain. This inhibited the development of a science of mind during the 17th and 18th centuries because the mind was viewed as not worth investigating (Leahey, 2001).

Philosophers were not the only ones asking questions about human nature. Theologians, doctors and teachers all tried to understand human nature. What makes people good or bad? How can we explain madness? How do children learn? Again, these are all questions that are part of psychology. Of course, philosophy, theology, medicine and education are still around today and still asking the same kinds of question. So why do we have psychology? All of these disciplines are doing what Richards (2002) calls **reflexive discourse** – talking about human nature. They differ in the methods they use to answer questions and the kinds of answer that are looked for (theology, for example, tries to find answers in religious doctrine). Psychology came about as a new kind of reflexive discourse because people began to want a way of using science to explain human nature.

Self-test: What is reflexive discourse? What forms of reflexive discourse can you identify?

Emergence of psychology

The usual story about the birth of psychology (as already mentioned) is that Wilhelm Wundt opened a psychology laboratory in Leipzig in 1879 and started a new discipline. However, psychology actually developed gradually over the course of the 19th century and a range of forms of psychology existed before Wundt's lab opened. The idea that Wundt was the founder of psychology is now seen as an origin myth, with Wundt being chosen because he was the first to do experiments in psychology (Jones and Elcock, 2001). Modern histories describe the emergence of psychology as a logical progression from how people were describing human nature. So, let's look at how psychology emerged.

Forerunners of psychology

The late 18th and early 19th centuries saw an increasing interest in the range of mental faculties humans possessed, in where these faculties came from and in how people differed in their capabilities. The discipline of phrenology claimed that faculties were performed by organs in the brain and tried to map the locations of these organs on phrenology busts (such as that in Photo 2.1). The discipline of faculty psychology, taught in church-based universities in the USA, tried to identify faculties that could be improved, with the appropriate moral guidance. Neither approach used scientific methods to investigate these faculties, but they had the effect of preparing people for the idea of a scientific psychology (Richards, 2002).

A more scientific approach to understanding human nature came from physiology. During the 19th century,

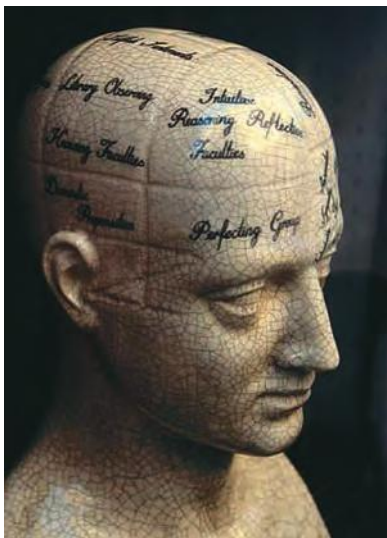


Photo 2.1 Phrenology busts are often used to represent psychology, but actually date back to before the development of the discipline.

physiologists developed better understandings of how nerves and sense organs worked and started to investigate mental processes in perception. Science was getting closer to investigating mental life, but was inhibited by the dominance of the church. Human nature was still widely seen as a gift from God and outside the scope of natural science. For a science of mind to become possible, human nature had to be made natural. This happened with the development of evolutionary thought.

The theory of evolution

Evolutionary thought suggests that species change over time. Evolutionary theories started appearing in the late 18th century, but few people were convinced. This changed with Charles Darwin's formulation of a theory of evolution by natural selection (1859/1959). This quickly became accepted and firmly located humans in the animal kingdom, opening the possibility of psychology as part of natural science.

A major advocate of the evolutionary approach was Herbert Spencer (see Photo 2.2). He developed an adaptational psychology (1855/1897) that investigated how individuals acquire and pass on psychological characteristics. The most notable example of this is Spencer's formulation of social Darwinism – the view that natural selection should be allowed to run its course in the way it affected the human species. For Spencer, individuals differed in their fitness to thrive in society and passed on their degree of fitness to their offspring. Spencer argued that governments should not intervene to help the poor and weak because this would allow them to survive in the face of evolutionary pressure, overturning the process of evolution. Instead, Spencer argued, the poor and weak should be weeded out by natural selection. This view continues to influence some attempts to explain differences between groups in society (Gould, 1997). More generally,

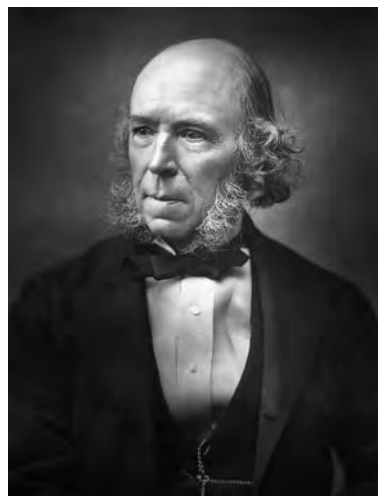


Photo 2.2 Herbert Spencer (1820–1903), the father of British adaptational psychology.

Spencer's work laid the foundations for comparative psychology, which compared human behaviours to those of other animals and for Francis Galton's work on individual differences and the inheritance of psychological traits. This approach was to have a fundamental influence on the development of psychology.

Early schools of psychology

Psychology grew quickly from the 1880s onwards, but it soon became apparent that people had different views of what psychology should be about (see Table 2.1 for a potted history of psychology). Some wanted to explain universal aspects of consciousness, some wanted to apply psychology to social problems and still others wanted to develop therapeutic techniques. These different purposes needed different kinds of theory and different methods. Soon different groups of psychologists emerged, divided in terms of their views of the appropriate subject matter and methods of psychology. These groups became known as the early 'schools of psychology' and include:

- **Structuralism** A development of Wundt's work that emphasised the search for the structure of consciousness through introspection.
- **Functionalism** Functionalism attempted to explain how

mental functions enabled humans to behave in ways that were effective for survival. It introduced a focus on application, but it became necessary to focus on behaviour rather than consciousness as the subject matter of psychology.

- **Behaviourism** Behaviourism was the logical consequence of the shift to studying behaviour. It emphasised the role of the environment in guiding behaviour.
- **Gestalt** Gestalt was a German school of psychology, which rejected the reductionism of other approaches and emphasised instead holistic aspects of mental processes. Its major insights were in the areas of perception and problem solving, but it also influenced social psychology.
- **Psychoanalysis** While American psychology focused on behaviour and German psychology on consciousness, Sigmund Freud developed a psychology of the unconscious. Freud concentrated on investigating the causes of mental disorders, explaining them with a theory based on the idea of conflict in components of the unconscious.

Self-test: What were the key features of the various early schools of psychology?

TABLE 2.1 NOTABLE DATES IN THE HISTORY OF PSYCHOLOGY	
1650	Rene Descartes proposes the separation of mind and body ('Cartesian dualism')
1651	Hobbes suggests mental life is composed of ideas
1690	Locke proposes that the newborn mind is a blank slate (tabula rasa)
1855	Spencer publishes <i>Principles of Psychology</i>
1859	Darwin publishes <i>The Origin of Species</i>
1860	Fechner publishes <i>Elements of Psychophysics</i>
1861	Broca identifies speech areas in the brain through autopsy
1869	Galton publishes <i>Hereditary Genius</i>
1872	Darwin publishes <i>The Expression of the Emotions in Man and Animals</i>
1873	Wundt publishes <i>Principles of Physiological Psychology</i>
1875	The Psychological Society of Great Britain formed, folding in 1879
1876	First issue of <i>Mind: A Quarterly Journal of Psychology and Philosophy</i> published
1879	Wundt opens experimental psychology laboratory at Leipzig

TABLE 2.1 NOTABLE DATES IN THE HISTORY OF PSYCHOLOGY (CONTINUED)	
1880	Galton introduces use of questionnaires
1884	Hall sets up first experimental psychology laboratory in the USA
1885	Ebbinghaus publishes <i>Memory</i>
1890	James publishes <i>Principles of Psychology</i>
1892	Hall founds American Psychological Association
1898	First experimental psychology laboratories in Britain established by W. H. R. Rivers
1899	Thorndike publishes <i>Animal Intelligence</i>
1900	Freud publishes <i>The Interpretation of Dreams</i>
1901	British Psychological Society founded
1904	Spearman proposes concept of general intelligence
1905	Binet and Simon develop first intelligence tests
1906	Pavlov publishes findings on classical conditioning
1912	Wertheimer describes the <i>phi</i> phenomenon, the first account of Gestalt psychology
1913	Watson publishes 'Psychology as the behaviourist views it'
1916	Stanford-Binet IQ test developed
1929	Boring publishes <i>A History of Experimental Psychology</i>
1932	Bartlett publishes <i>Remembering</i>
1938	Skinner publishes <i>The Behaviour of Organisms</i>
1951	Rogers publishes <i>Client-Centred Therapy</i>
1952	Translation of Piaget's <i>The Origin of Intelligence in the Child</i> into English
1953	Skinner publishes <i>Science and Human Behaviour</i>
1956	Miller publishes work on the 'magic number' 7 ± 2 ; Bruner, Goodnow and Austin publish <i>A Study of Thinking</i> ; Beginnings of cognitive psychology
1967	Neisser publishes <i>Cognitive Psychology</i>
1970	<i>Journal of Cross-cultural Psychology</i> first published
1974	American Psychological Association decides, by vote, that homosexuality is not a disorder

FOCUS POINT 2.1**Ways of explaining**

Different approaches to psychology exist because a given psychological phenomenon, such as emotion, can be explained in a range of different ways. For example, emotions can be explained as a set of cognitive thought processes or as a set of physiological brain processes. The classic illustration is of explaining a handshake. A handshake can be explained from a range of different approaches:

- To the behaviourist, the handshake could be the result of previous conditioning, having been associated with some reward.
- To the psychoanalyst, the handshake could be the result of a desire for physical contact.
- To the cognitive psychologist, the handshake would be the result of purposive mental processes, for example the result of consciously deciding to show friendship.
- To the humanist, the handshake may be the result of a need for acceptance.

- To the physiologist, the handshake might be the result of particular sets of neural and muscular processes; alternatively, it might be due to a gene for sociability.
- To the social constructionist, a person might shake hands because it's been constructed within society as the right thing to do.

No one form of explanation is necessarily the right one to use, since all offer some insights into human behaviour. The approaches usually complement one another and often psychologists will consider a phenomenon from a range of approaches or work in teams with other psychologists with different perspectives.

Psychologists differ in their preferred form of explanation. They adopt a particular approach for a range of reasons, some of which we'll look at in Chapters 4 and 5. As you learn more about psychology and the approaches it uses, you'll find that you develop a preferred approach too.

Theoretical approaches to psychology

Up until the 1950s it was common to characterise psychology in terms of the different schools that psychologists adhered to. For most psychologists their favoured school was behaviourism. However, after the Second World War the discipline of psychology diversified considerably and a range of fields of study began to be identified – for example, social psychology, child development and learning theory. At the same time, psychologists started to use different ways to investigate phenomena. Two psychologists studying the same field might approach a topic using quite different approaches to investigation and to theory development and produce different kinds of explanation (see Focus point 2.1). It's now usual to characterise psychology in terms of fields of study and the theoretical approaches used in those fields. This book is organised according to the different fields of study in contemporary psychology and this section provides an overview of the different approaches that are used in the various fields.

Behaviourist

Behaviourism was the dominant school in English-speaking psychology until the end of the 1950s. It had a rigorous scientific method, promised to explain all aspects of behaviour and lent itself to application in areas as diverse as behavioural therapy and education. It is no longer dominant, but remains an important approach in some areas of psychology, particularly in the study of learning

and in therapeutic applications (see Chapters 8 and 34 respectively).

Key features of behaviourism

Behaviourism is often presented as a revolution in psychology stirred up by John Watson's paper 'Psychology as the behaviourist views it' (1913). However, it is more realistic to say that behaviourism was the inevitable result of a move in American psychology from investigating mental events to investigating behaviour (Leahey, 2001). Certainly, though, Watson led the move to behaviourism and outlined the initial scope of the approach. He suggested that psychology should discard the notion of mind and other mentalistic concepts, since these could not be observed objectively. For psychology to meet the assumptions of science (see Chapter 3), Watson argued that psychologists should investigate only observable behaviour.

Behaviourism changed the subject of psychology from mind to behaviour, but also changed the terms in which psychology explained human nature. Previous approaches explained behaviour in terms of evolutionary adaptation or mental processes. In contrast, behaviourism emphasised the importance of the environment in shaping behaviour. Behaviourism explained behaviour in terms of associations made between stimuli (S) and responses (R) through interaction with the environment. For example, you might smell food (the stimulus) and feel hungry (the response).

There are two main theories of learning: classical conditioning and operant conditioning. The theory of classical conditioning is based on the work of Pavlov. Pavlov noted that dogs salivate when they see food and attempted to provoke salivation with an alternative stimulus. To achieve this, Pavlov sounded a bell whenever food was presented. Over time, the bell became a trigger for salivation, even when no food was present (see Chapter 8 for a fuller description).

The theory of operant conditioning comes from the work of B. F. Skinner. In operant conditioning, the consequences of a response affect learning. Skinner investigated this by training rats to press a lever in exchange for food and found that rewarding an action increased the likelihood of that action being performed. This is called positive reinforcement. Its opposite is negative reinforcement, whereby punishment (such as electrical shock) reduces the likelihood of an action occurring.

Evaluation of behaviourism

Behaviourism had, from its beginnings, a practical focus. A significant part of behaviourism's early appeal was that it promised to provide a means of social control. If behaviour is the result of experiential learning, then we can change behaviours by changing people's experiences. If we can change behaviours, then we can change society.

Applications of behaviourist theories are used frequently today. These include behavioural therapies such as desensitisation therapy and aversion therapy – based on the view that 'abnormal' behaviour arises through conditioning (see Chapter 34 for more on these therapies) – and teaching techniques such as programmed instruction, where tests are used to provide positive reinforcement to successful learning.

Behaviourism has had a significant effect on theory development in psychology. Current theories of learning rely on behaviourist principles, as does Bandura's (1977) social learning theory. Behaviourism's greatest effect, however, has been on methodology. Behaviourism emphasised the principles of hypothesis testing and controlled experimentation that underpin scientific methodology in psychology (see Chapter 3).

Despite the influence of the behaviourist approach, a number of criticisms have been levelled at it (Barker, 2003). It is said that it is mechanistic, in that it ignores mental processes. It is overly environmentally deterministic, in that it overlooks the importance of biological factors in behaviour. It overlooks the finding that there are biological constraints on what behaviours a species can perform (for example, you can't teach rats to fly, no matter how much learning occurs). Finally, it has problems in accounting for a range of behaviours, particularly those that are complex, like driving, and those that are spontaneous, like language.

Self-test:

- What are the key features of behaviourism?

- What was the main impact of behaviourism on contemporary psychology?

Psychodynamic

The term psychodynamic covers Freud's original theory and later theories based on Freud's work, such as those of Adler (1927), Erikson (1950) and Jung (1964). These theories argue that behaviour is shaped by the dynamic interaction of drives and forces within the individual, particularly in the unconscious mind. We'll concentrate on Freud's theory of **psychoanalysis** (Freud, 1949) as one example of the psychodynamic approach.

Key features of the psychodynamic approach

Freud claimed that the mind is made up of three parts: the **conscious**, the **preconscious** and the **unconscious**. The conscious mind contains thoughts and perceptions, but is only a small part of the total, usually described as the tip of an iceberg (see Figure 2.1). The preconscious contains material available to consciousness, including memories and stored knowledge. The unconscious is the largest part of mind and contains wishes and desires formed during early childhood, biological instincts and drives. Most of our behaviour is determined by the unconscious mind.

Personality is made up of three parts – the **id**, the **ego** and the **superego**. The id, located in the unconscious, contains sexual and aggressive instincts that demand instant gratification. The ego, located in the conscious and preconscious, develops in early life as a rational mechanism to decide between the id and the outside world. The superego is the conscience, which develops by the age of 5 under the influence of authority figures. The superego places constraints on behaviours and uses feelings of pride and guilt to achieve compliance.

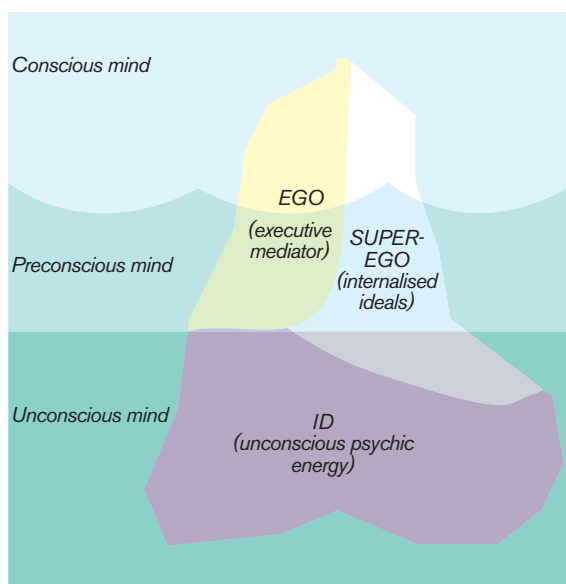


Figure 2.1 Freud's 'mental iceberg' view of the mind

Psychological development is claimed to take place in a series of fixed psychosexual stages. Each stage represents the concentration of libido (pleasure derived from organs) on a different part of the body. Fixating on (sticking at) one stage may cause neuroses in later life. The stages are:

- oral (0–18 months)
- anal (18–36 months)
- phallic (3–6 years)
- latent (6 years–puberty)
- genital (puberty onwards).

The most important of these is the phallic stage, when the child becomes aware of his or her gender. It is at this stage that the Oedipus complex occurs. This is when an unconscious rivalry develops in the child between themselves and the same-sex parent for the affection of the opposite-sex parent. Boys experience castration anxiety, resolved through identification with the father, while girls experience penis envy, which becomes sublimated into a wish to have a baby.

The id, ego and superego are in constant conflict between their competing demands. The ego resolves conflict using defence mechanisms, including:

- repression, pushing unwanted ideas into the unconscious

- displacement, diverting energy into other activities
- denial, refusing to accept the existence of a threat
- reaction formation, when someone takes an attitude opposite to their real feelings.

The most important of these is repression, which is responsible for most of the contents of the unconscious. Once in the unconscious, threatening ideas continue to exert an influence and may lead to psychological problems.

Psychoanalysis emphasises the effect of early experiences in shaping adult personality. It attempts to treat neuroses by bringing thoughts from the unconscious into the conscious. Methods include free association, when the client says whatever comes into their mind in response to a cue, and dream analysis, where the analyst identifies unconscious material that is represented in dreams (see Chapter 34).

Evaluation of the psychodynamic approach

Psychoanalytic theory has had a significant impact. Freud's original work has led to a range of psychodynamic theories and the approach has contributed to a range of topics within psychology, including those of personality, development and abnormality. The main impact of psychodynamics has been on therapeutic techniques within clinical and counselling psychology. Psychoanalysis has also had a significant cultural impact. Many people's

FOCUS POINT 2.2

Psychoanalysis and film criticism

As we learnt earlier in this chapter, psychoanalysis has proved influential in the field of film criticism. Let's look at an example. The extracts that follow are taken from a review of the 1999 film *Fight Club*, starring Brad Pitt and Ed Norton (Redd, 2000). The reviewer is clearly using psychoanalytic insights to interpret representations in the film:

In a twist that will catch most viewers by surprise, Tyler Durden turns out to be a fragment of Jack's personality, but this is merely a device to have this mysterious and powerful character (and manifestation of wish fulfilment) appear in Jack's life. (An analysis of Tyler Durden's name reveals that in antiquated English, 'Tyler' means gatekeeper or house builder. 'Durden' has the word root dour meaning hard (as in 'durable'). His initials, T. D., invoke Todd or death in German or perhaps D. T. (delirium tremens), since Tyler is a hallucination of Jack, the waking person. Although a second viewing shows that the first understanding of the film meshes successfully with subsequent viewings, the narrative device of the alternate personality is just that and does little to tap into what is understood about multiple

personalities. One of few consistencies with psychological literature is that Jack, the waking self, is depleted and becomes less powerful as Tyler becomes more dominant. [...]

The film, though violent and brutally blunt, is remarkably nonsexual. The love in the film is not love between Tyler (or Jack) and Marla, nor is it homoerotic (the idea that heterosexual men need to integrate their feminine side or embrace some of the sensitivity of gay men is completely avoided). There is not a single gay character. There only is the goal of self-love, both in the sense of a well-integrated self and in the sense of the central male character, Jack-Tyler, loving his penis.

There are also nagging fears of castration and mutilation that pervade the film. The first support meeting that Jack attends is a testicular cancer group where the members have had their testicles removed and commiserate, saying, 'We're still men.' One of the survivors of testicular cancer, Bob (Meatloaf), has grown huge breasts because of subsequent hormone imbalances, but there is no sense of his being effeminate. His breasts are almost incidental and (consistent with the rest of the film's dismissal of women) referred to as 'bitch tits.'

everyday understanding of psychology is shaped by psychoanalysis and psychoanalytic insights are used in analysing literature, film and art (see Focus point 2.2). Richards (2002) claims that psychoanalysis has provided meaning to people's lives in a more accessible way than other approaches to psychology. Most theoretical approaches to psychology provide complex descriptions of the causes of behaviour that are difficult to understand without a wide knowledge of psychology, and that seem divorced from our everyday experiences. Psychoanalytic explanations, contrariwise, are easier to understand for the layperson and seem more directly related to our experiences. For example, most of us can understand how the nature of our relationship with our parents might affect our personalities.

It has been suggested that psychoanalysis has had a limited impact on scientific psychology (Jones and Elcock, 2001). This is because psychoanalysis is widely seen as being unscientific and hence as having little to contribute to scientific psychology. In addition, Freud's research is seen as being methodologically poor (Eysenck, 1985), being based on a small number of individual cases; as subjective, because therapy relies on the interpretation of analysts; and biased, because Freud's subjects were largely middle-class Viennese women. Many of Freud's concepts are said to be unfalsifiable (i.e. they can't be tested). For example, the concept of reaction formation can be used to explain any unexpected results. A psychoanalyst might believe that a male client is fixated at the phallic stage and has not formed a strong identification with his father. If the client protests that he, in fact, has a very close identification with his father, the analyst can explain this in terms of reaction formation: the client believes he has a close identification with the father as a defence against the castration anxiety that he unconsciously experiences. In this way, the analyst is always right.

In response to these criticisms, supporters of Freud have argued that complex theories are often untestable (Zeldow, 1995) and that the theory consists of many parts, some of which are more easily tested than others (Kline, 1989). In addition, recent studies have provided support for some aspects of Freud's theories (see Jarvis and Russell, 2002, for a review).

Self-test:

- What are the components of the mind and the personality in psychoanalytic theory?
- How has psychoanalytic theory affected everyday conceptions of ourselves?

Humanistic

After the Second World War some psychologists became uncomfortable with the mechanistic view of human nature suggested by behaviourism. An approach known as **humanism** developed in response to these concerns. It is mainly applied in therapy within clinical and counselling

psychology and has had a relatively limited impact on academic psychology.

Key features of humanism

The humanistic approach rejects determinism and emphasises free will, believing that people act purposely to achieve psychological growth. There is a commitment to treating individuals as fully human, as only the individual can fully explain their own behaviour and experience. While scientific psychology adopts a detached perspective, humanism investigates phenomena from the subjective perspective of the individual. Humanistic psychologists also emphasise the need to study the whole person.

The leading humanists are Carl Rogers and Abraham Maslow. Both emphasise psychological health, in contrast to psychoanalysis's concentration on psychological distress. A fundamental concept for both is that of *actualisation*. Rogers (1951) suggested that people are born with an actualising tendency, driving them to achieve psychological health. A person's sense of self is an organised whole that is constantly being re-formed, in contrast to most theories of self that see it as a fixed aspect of personality. Rogers identified two components of this self-concept: the perceived self (how we see ourselves) and the ideal self (how we would like to be). Psychological health is achieved when the two components match, while distress occurs when we feel we don't match up to the ideal.

Maslow (1954) suggested that humans are born with a hierarchy of needs (see Chapter 29), claiming that we need to satisfy lower needs before we can reach higher levels and achieve psychological growth. The goal of psychological growth is to achieve self-actualisation, where we find personal fulfilment.

Evaluation of humanism

The humanistic approach has had a considerable influence on the practice of counselling. Rogers' person-centred therapy is used extensively in clinical and counselling psychology and humanistic psychology's emphasis on the counsellor helped develop the profession of counselling. Rogers also developed a range of techniques for evaluating the effectiveness of therapy, providing a research basis for clinical practice (see Chapter 34).

As with psychoanalysis, humanistic psychology has been criticised for being unscientific, which may explain its limited impact on academic psychology. There's limited evidence for humanistic concepts – largely because these are not clearly defined. In addition, therapeutic intervention depends on the client's being committed and capable of responding and Maslow's work in particular has been criticised for having a western cultural bias (Jarvis, 2000).

Self-test:

- How do Rogers and Maslow explain the achievement of self-actualisation?

- What are the main weaknesses of humanistic approaches?

Cognitive

From the 1950s onwards it became increasingly apparent that behaviourism couldn't account for complex behaviours such as language use and that it was necessary to consider mental processes to explain some psychological phenomena. The cognitive approach developed from the mid-1950s, based on the idea that the mind is like a computer (see Photo 2.3). It has become the dominant approach to experimental psychology, replacing behaviourism.

Key features of the cognitive approach

The cognitive approach emphasises the importance of active mental processing. Behaviour is seen as being the result of information processing in the brain, just as computer outputs are the result of information processing in the machine. The task of cognitive psychologists is to develop models of mental processes, in terms of discrete processing modules with specific functions and the flow of information between these modules. The approach is commonly used to explain the cognitive processes of perception, memory and problem solving, but is also used to explain social behaviour and child development. Because of this, the approach is sometimes termed **cognitivism** (Jones and Elcock, 2001) to emphasise its independence of any one field of study.



Photo 2.3 In May 1997 the IBM chess computer, Deep Blue, beat the world chess champion Garry Kasparov. The ability of computers to perform apparently intelligent behaviours, like playing chess, suggested that the human mind might operate like a computer. This idea formed the basis for cognitive psychology.

The main method of investigation used by cognitive psychology is the controlled experiment, a methodology carried over from the behaviourists. Other methods include computer modelling, where psychologists write programs to attempt to make computers behave like humans (see Focus Point 2.3) and cognitive neuropsychology, where psychologists investigate patients with impairments following brain injury to learn how intact brains function.

FOCUS POINT 2.3

Eliza, the listening computer program

Since the development of the electronic computer in the 1940s, people have tried to get computers to behave intelligently (the project of artificial intelligence). Examples include chess-playing computers, seeing robots and decision-making systems. These attempts to model intelligent behaviour strongly influenced the development of cognitive psychology, the view being that if computers could behave intelligently then it must be the case that humans – who are intelligent – are like computers. Attempts to model intelligence have continued and are seen by some as a way of modelling human cognition to produce theories in cognitive psychology (Strube, 2000).

This has been particularly true in the case of language processing. Human language is seen as logical and rule based and that's how computers work, so it seems quite plausible to believe that we can make computers understand language. As it turns out, it's proved rather more difficult to understand language than expected and we're still some way from the

situation portrayed in *Star Trek* of talking naturally to computers and being understood. However, there are some interesting examples of computer models of language. In this focus point we'll look at an early, very simple, model of language understanding called Eliza (Weizenbaum, 1966).

Eliza emulates a Rogerian psychotherapist. Users type messages into the computer using the keyboard and Eliza responds similarly to a therapist. Over time, a form of conversation develops. Eliza can be quite convincing and people have been known to become quite attached to the program. However, the Eliza software is actually rather stupid, relying on a small number of devices to give the appearance of understanding. These include substituting strings of words, using stock phrases and turning around what you type in. Eliza has no real understanding of what you are typing and no knowledge of the world. This stupidity is a major reason why the software emulates a Rogerian psychotherapist. The Rogerian technique includes acting as an empty well, listening to what people say but not contributing knowledge to the

FOCUS POINT 2.3 CONTINUED

conversation. This technique is designed to guide the client towards their own understandings of their situation.

As stated earlier, the Eliza software can be quite convincing. Let's look at some examples of conversations with Eliza:

- > *Hello, I am Eliza.*
- * *Hello, Eliza.*
- > *How are you today? What would you like to discuss?*
- * *I'm unhappy.*
- > *Did you come to me because you are unhappy?*

So far, so good. There's some variation in the responses Eliza gives to keep up the illusion:

- > *Hello, I am Eliza.*
- * *Hello, Eliza.*
- > *How are you today? What would you like to discuss?*
- * *I'm unhappy.*
- > *Do you believe it is normal to be unhappy?*

The conversation continues in quite a convincing way, drawing information out of you:

- > *Do you believe it is normal to be unhappy?*
- * *No, I don't.*
- > *Does that trouble you?*
- * *Yes, it does.*
- > *I understand.*

However, Eliza isn't actually that helpful.

- * *Can you help me?*
- > *You want me to be able to help you?*
- * *Yes, very much*
- > *I see.*
- * *Will you help me?*
- > *We were discussing you, not me.*
- * *I want help.*
- > *Why do you want help?*

She also has a limited repertoire and often uses the same stock phrases:

- > *We were discussing you, not me.*
- * *I want help.*
- > *Why do you want help?*
- * *Because I'm unhappy.*
- > *Do you believe it is normal to be unhappy?*

Which brings us back to where we started! It turns out that even in this limited domain, the system isn't very good at understanding language. As we heard earlier, however, Eliza was an early attempt and is widely recognised to be stupid. Systems have got better since, but they are still a long way away from real understanding. Perhaps the most important lesson of such models for psychology is that language understanding is more difficult than we first thought. In particular, it has become clear that language understanding relies on extensive background information and can't always be characterised in terms of rules.

If you'd like to try Eliza for yourself, an online version can be found at <http://www.manifestation.com/neurotoys/eliza.php3>

Evaluation of the cognitive approach

The cognitive approach has had a significant impact in the field of cognitive psychology, but also in the fields of social psychology and developmental psychology. The approach has led to theories of social cognition and of cognitive development in children. It has also led to applications, particularly in cognitive therapy, that involve the replacement of faulty thought patterns with more effective ones (see Chapter 34).

One particular strength of the cognitive approach is that it uses a range of rigorous research methods (Eysenck and Keane, 2000). This means that if findings from different methods give the same results we can have more faith in their validity.

Despite the success of the cognitive approach it has still attracted a number of criticisms (Jones and Elcock, 2001). Cognitive research takes place in artificial settings and may

not reflect our cognition in the 'real world'. There's no integrating theoretical framework for cognitive psychology. Instead, there are several separate cognitive theories that don't relate well to each other. There is also some dispute as to whether the brain is best seen as being like a computer. Computers, after all, have no emotions, morals or unconscious, all of which might be expected to influence human behaviour.

Self-test:

- How does the metaphor of the mind as a computer affect theories in cognitive psychology?
- What are the main strengths of the cognitive approach?

Physiological

The **physiological** approach studies psychological functioning by examining biological processes – for example, brain structure and the operation of genetics.

Key features of the physiological approach

There are three main areas of work within the physiological approach: brain function, biochemistry and heredity. These share the assumptions that biological factors underlie behaviour and that behaviour is best explained in biological terms. The physiological approach is reductionist, in that psychological functions are explained in more basic biological terms. It is also deterministic, behaviour being seen as directly determined by biological factors.

Psychologists study brain function using techniques such as fMRI scanning (Carlson, 2004) in order to identify the brain areas involved in particular tasks (see Chapter 6). They also identify patterns of impaired and spared functioning in brain-damaged patients (Parkin, 1999).

Psychologists also study biochemistry in order to understand how brain chemistry affects behaviour (Carlson, 2004). The brain uses chemicals, called *neurotransmitters*, to communicate between cells, but imbalances in the levels of these chemicals cause problems. For example, the neurotransmitter serotonin is involved in regulating mood. Sufferers of depression have low levels of serotonin. Drugs such as Prozac are effective because they increase the effectiveness of serotonin in the brain.

The study of heredity involves attempting to find a basis in our genetic inheritance for psychological phenomena. Psychologists study heredity because they believe that genes influence behaviour and determine differences and similarities between people (Plomin et al., 1997). Behavioural geneticists attempt to identify genes that may underpin psychological phenomena such as personality and intelligence (see Chapters 29 and 30).

Evaluation of the physiological approach

The physiological approach has provided explanations of behaviour across a wide range of areas of psychology and has led to treatments for disorders such as depression and schizophrenia. It has also captured the popular imagination, with genetic explanations in particular providing a framework for understanding the behaviour of others and ourselves.

The main criticism of the physiological approach is that it is overly reductionist. It is suggested (Rose, 1998) that psychological phenomena should be explained in psychological rather than physiological terms. In addition, a range of criticisms has been levelled at evolutionary explanations. These include the view that evolutionary explanations ignore the influence of the environment and that there is limited evidence for some evolutionary claims (Jarvis, 2000). A further concern is that evolutionary explanations may make antisocial behaviours, such as male aggression, seem natural and hence unavoidable and may be used to excuse injustice (Byrne, 1994; see also Chapter 4).

Self-test:

- What different areas of work are conducted in the physiological approach?

- What problems might be identified with evolutionary explanations?

Social constructionist

The social constructionist approach developed from the 1970s as a challenge to 'mainstream' psychology (Fox and Prilleltensky, 1997). This challenge came in response to concerns about gender and sexuality bias in psychology leading to the misrepresentation of women, gays and lesbians (see Chapter 4) (Photo 2.4 shows a leading British feminist psychologist).

Key features of social constructionism

Social constructionism is a diverse approach. However, social constructionists share a number of assumptions (Burr, 1995). The first is that our perceptions of the world don't necessarily correspond with natural categories. The second is that knowledge is culturally specific, so how we understand the world depends on a particular culture at a particular time. The third is that we construct our perception of the world through social interaction, particularly through language. The final assumption is that our constructions are associated with possible actions. So, for example, our construction of what it is to be female will affect our view of how women should behave.

Social constructionism rejects the positivist view of scientific psychology, that individuals can be studied objectively in isolation. Instead, social constructionists try to identify how knowledge is constructed through interactions. Social constructionists analyse people's language use through the techniques of conversation analysis and discourse analysis, to identify the ways in which people construct the world (see Research methods 2.1).

Evaluation of social constructionism

Social constructionism provides detailed analyses of particular phenomena and draws on links with other disciplines, particularly sociology. It has been used to challenge sources of bias within psychology (see Chapter 4).



Photo 2.4 Sue Wilkinson, a leading British feminist psychologist.