

CONTENTS OF CHAPTER

	EXAM QUESTIONS WITH ANSWERS AND EXAMINER COMMENTS	144
	EXAM QUESTION BANK	142
	SUMMARY	140
A LEVEL ONLY ZONE	Comparison of approaches	138
	Humanistic psychology	136
	The psychodynamic approach	134
	The biological approach	132
	The cognitive approach	130
	Social learning theory	128
	The behaviourist approach	126
	The origins of psychology	124

SPECIFICATION CHECKLIST

• Origins of psychology: Wundt, introspection and the emergence of psychology as a science.

The basic assumptions of the following approaches:

- Learning approaches: i) the behaviourist approach, including classical conditioning and Pavlov's research, operant conditioning, types of reinforcement and Skinner's research; ii) social learning theory including imitation, identification, modelling, vicarious reinforcement, the role of meditational processes and Bandura's research.
- The cognitive approach: the study of internal mental processes, the role of schemas, the use of theoretical and computer models to explain and make inferences about mental processes. The emergence of cognitive neuroscience.
- The biological approach: the influence of genes, biological structures and neurochemistry on behaviour. Genotype and phenotype, genetic basis of behaviour, evolution and behaviour.
- The psychodynamic approach: the role of the unconscious, the structure of personality, id, ego and superego, defence mechanisms including repression, denial and displacement, psychosexual stages.
 Humanistic psychology: free will, self-actualisation.
 - Humanistic psychology: free will, self-actualisation and Maslow's hierarchy of needs, focus on the self, congruence, the role of conditions of worth. The influence on counselling psychology.
 - · Comparison of approaches.



Approaches to amusement parks

A few summers ago I (Mike) paid a visit to Tivoli Gardens, the famous amusement park in Copenhagen, Denmark. The park opened in 1843 and is the second oldest amusement park in the world. It features the world's second tallest carousel at 80 metres high (The Star Flyer – pictured above) and Vertigo, a looping plane ride where the rider is able to control the plane him or herself. This one seemed to draw the loudest screams, so must have been the scariest. I watched while a seemingly never-ending line of people threaded their way onto all sorts of horrifying contraptions that swung them around ancient towers, dropped them from great heights, turned them upside down at frighteningly high speeds and generally did the sorts of things that logically we should avoid at all costs.

So, why do some people (like me...) stare upwards at these monstrosities with a sense of absolute dread, whereas others can't wait to be twirled, dropped, rotated and generally scared witless? Perhaps psychology has the answer, so try doing this activity in two parts.



Part 1 (Before reading this chapter.) Why do *you* think some people love these rides and other people hate them?

Part 2 (After reading this chapter.) Now you are more psychologically informed, how would the different approaches explain this difference?

The origins of psychology

The success of the natural sciences had a significant influence on the emergence of psychology, particularly because the scientific methods used by sciences such as biology and chemistry were regarded as the only reliable methods for discovering reliable knowledge about the world. Therefore, in order to be accepted and to flourish as a subject in its own right, psychology had to adopt the methods of the natural sciences. This was not a straightforward process, as there was a long-standing belief that the human psyche was not amenable to scientific investigation. Despite this, the scene was set for a dramatic evolution in our understanding of the human condition. and, towards the end of the nineteenth century, scientific psychology was finally born.



Research methods

Introspection was used in a study of gambling behaviour (Griffiths, 1994). The study investigated the thought processes of people who gambled regularly versus non-regular gamblers, proposing that the thought processes of regular gamblers would be more irrational. To assess irrational thinking the participants were asked to 'think aloud' while playing a fruit machine. In order to do this the participants were given a list of instructions, such as:

- Say everything that goes through your mind. Do not censor any thoughts even if they seem irrelevant to you.
- Keep talking as continuously as possible, even if your ideas are not clearly structured.
- Do not hesitate to use fragmented sentences if necessary.
- Do not try to justify your thoughts. The study found that gamblers used more irrational verbalisations.
- Explain how the dependent variable in this study has been operationalised. (1 mark)
- 2. Write a suitable hypothesis for this study. (2 marks)
- State whether your hypothesis is directional or non-directional and explain why you chose this kind of hypothesis. (2 marks)
- **4.** Explain why this study would be considered to be a quasi-experiment using self-report. (3 marks)
- **5.** Explain in what way the procedures of this study were standardised. (2 marks)

LINK TO RESEARCH METHODS

Hypotheses on pages 179, 182 Experiments on page 188 Standardisation on page 178

WILHELM WUNDT (1832-1920)

Wundt was the first person to call himself a psychologist, believing that all aspects of nature, including the human mind, could be studied scientifically. His approach paved the way for the acceptance of psychology as a distinct science in its own right, and experimental psychology as the preferred method of studying human behaviour. In his laboratory in Leipzig, Germany, he studied only those aspects of behaviour that could be strictly controlled under experimental conditions. These included the study of reaction time (how long it takes people to respond to various stimuli) and various aspects of sensation and perception.

Wundt's aim was to study the *structure* of the human mind, and he believed that the best way to do this was to break down behaviours such as sensation and perception into their basic elements. Because of this, his approach was referred to as structuralism and the technique he used as **introspection**. Although Wundt originally believed that *all* aspects of human experience could be investigated experimentally, he eventually came to realise that higher mental processes, such as learning, language and emotions, could not be studied in this strict controlled manner. These topics could instead be described in terms of general trends in behaviour among groups of people. He referred to this latter field as *Völkerpsychologie* (cultural psychology).

Introspection

Introspection, from the Latin meaning 'looking into', is the process by which a person gains knowledge about his or her own mental and emotional states. Just as our perceptual ability enables us to observe and make sense of the outer world, our introspective ability enables us to observe our inner world.

Wundt claimed that, with sufficient training, mental processes such as memory and perception could be observed systematically as they occurred using introspection. For example, observers might be shown an object and asked to reflect upon *how* they were perceiving it. This information could then be used to gain insight into the nature of the mental processes involved in perception, reaction time, etc. For example, in Wundt's studies of perception, participants would be presented with carefully controlled stimuli (e.g. visual images or auditory tones). They would then be asked to provide a description of the inner processes they were experiencing as they looked at the image or listened to the tone. This made it possible to compare different participants' reports in response to the same stimuli, and so establish general theories about perception and other mental processes.

THE EMERGENCE OF PSYCHOLOGY AS A SCIENCE

We might ask 'What is the glue that holds psychology together as a discipline?' This is most probably its reliance on a philosophical view known as **empiricism**. Empiricists believe that knowledge comes from observation and experience alone (rather than being innate). When empirical methods were first applied to the study of human beings by Wundt and his followers, psychology began to emerge as a distinct entity. This new 'scientific' approach to psychology was based on two major assumptions. First, all behaviour is seen as being *caused* (the assumption of determinism). Second, if behaviour is determined, then it should be possible to *predict* how human beings would behave in different conditions (the assumption of predictability). The technique used to explore these assumptions became known as the scientific method.

The scientific method in psychology

The **scientific method** refers to the use of investigative methods that are objective, systematic and replicable. It is objective in that researchers do not let preconceived ideas or biases influence the collection of their data, and systematic in that observations or experiments are carried out in an orderly way. Measurement and recording of empirical data are carried out accurately and with due consideration for the possible influence of other factors on the results obtained. It is replicable in that observations can be repeated by other researchers to determine whether the same results are obtained. If results are not replicable, then they are not reliable and cannot be accepted as being universally true. The research process is not restricted to empirical observation alone, but also necessitates the use of reason to explain the results of these observations. The development of scientific theories and the constant testing and refining of these theories through further observation completes the scientific cycle (see the diagram on the facing page).

Wundt's methods were unreliable

A criticism of Wundt's structuralist approach, mainly from behaviourists, was that this approach relied primarily on 'nonobservable' responses.

Although participants could report on their conscious experiences, the processes themselves (e.g. memory, perception) were considered to be unobservable constructions. Wundt's approach ultimately failed because of the lack of reliability of his methods. Introspective 'experimental' results were not reliably reproducible by other researchers in other laboratories.

In contrast, the early behaviourists such as Pavlov and Thorndike were already achieving reliably reproducible results and discovering explanatory principles that could be easily generalised to all human beings.

A scientific approach tests assumptions about behaviour

Because of its reliance on objective and systematic methods of observation, knowledge acquired using the scientific method is more than just the passive acceptance of theories about behaviour.

This means that scientific methods are able to establish the causes of behaviour through the use of methods that are both empirical and replicable.

A consequence of this is that if scientific theories no longer fit the facts, they can be refined or abandoned, meaning that scientific knowledge is self-corrective.

A scientific approach is not always appropriate

Not all psychologists share the view that all human behaviour can, or should, be explored by the use of scientific methods.

If human behaviour is not subject to the laws and regularities implied by scientific methods, then predictions become impossible and these methods are inappropriate. Likewise, much of the subject matter of psychology is unobservable, therefore cannot be measured with any degree of accuracy.

A consequence of this is that much of psychological knowledge is inferential, i.e. there is a gap between the actual data obtained in research investigations and the theories put forward to explain this data.

A03 plus

Introspection is not particularly accurate

Nisbett and Wilson (1977) claim that we have very little knowledge of the causes of, and processes underlying, our behaviour and attitudes.

Nisbett and Wilson found this problem was particularly acute in the study of implicit attitudes, i.e. attitudes or stereotypes that are unknown to us. For example, a person may be implicitly racist, which influences the way they react to members of a different ethnic group.

Because such attitudes exist outside of conscious awareness, self-reports through introspection would not uncover them. This challenges the value of introspective reports in exploring the roots of our behaviour.



Introspection is still useful in scientific psychology

Despite the fact that introspection rapidly fell out of favour as a research tool, it has not been *entirely* abandoned by psychologists, and in recent years it has made something of a comeback.

Csikszentmihalyi and Hunter (2003) used introspective methods as a way of making 'happiness' a measurable phenomenon. They gave a group of teenagers beepers that went off during random times throughout the day, requiring them to write down their thoughts and feelings in the moment before the beep. Most of the entries indicated that the teens were unhappy rather than happy, but when their energies were focused on a challenging task, they tended to be more upbeat.

Introspection therefore offers researchers a way of understanding more clearly the momentary conditions that affect happiness, and as such may help them to improve the quality of our lives.

MEET THE RESEARCHER

Wilhelm Wundt

In 1873 Wundt published the first book on psychology – *Principles of Physiological Psychology*.

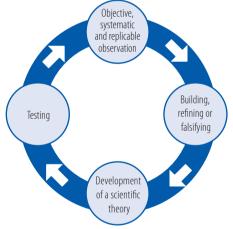
This book established psychology as a unique branch of science with its own subject matter and its own methods. He was the first person in history to be called a 'psychologist'. Wundt was certainly prolific as a writer. If you were to read his works at the rate of 60 pages a day, it would take you two and a half years to finish them!

KEY TERMS

Empiricism The belief that all knowledge is derived from sensory experience. It is generally characterised by the use of the scientific method in psychology.

Introspection The process by which a person gains knowledge about his or her own mental and emotional states as a result of the examination or observation of their conscious thoughts and feelings.

Scientific method Refers to the use of investigative methods that are objective, systematic and replicable, and the formulation, testing and modification of hypotheses based on these methods.



▲ The scientific cycle.

CAN YOU?

No. 5.

- **1.** Explain Wundt's contribution to the development of psychology. (4 marks)
- **2.** Outline **one** criticism of Wundt's contribution to psychology. (3 marks)
- **3.** Explain what is meant by 'introspection'. (4 marks)
- **4.** Briefly outline **two** criticisms of introspection as a method of investigation. (2 marks each)
- **5.** Explain the emergence of psychology as a science. (6 marks)
- **6.** Outline **one** strength and **one** limitation of the scientific approach in psychology. (3 marks each)

The behaviourist approach

The **behaviourist** approach rejected the vagueness of introspection, focusing instead on *observable* events, i.e. stimuli and responses, and the conditions under which learning would be most likely to occur. Because of the focus on learning, this approach is sometimes referred to as 'learning theory'. Behaviourists believed that much of human behaviour could be explained in terms of a basic form of learning known as *conditioning*, which involves the formation of learned associations between stimuli in the environment and an organism's responses. On this spread we look at two influential forms of conditioning – Pavlov's research on **classical conditioning** and Skinner's research on **operant conditioning**.

Don't be confused by the words 'positive' and 'negative' in this context. 'Positive' means adding something, and 'negative' means taking something away. Both positive and negative reinforcement increase the frequency of a behaviour.

CLASSICAL CONDITIONING

All animals (including humans) are born with a number of natural reflexes such as the reflex action of salivation when food is placed in the mouth. These reflexes are made up of a *stimulus* (such as food) and its naturally associated response (in this case, salivation). When other stimuli are consistently associated with this stimulus, and predict its arrival, then eventually they too trigger the same response and the animal is described as having been classically conditioned.

Pavlov's research

Russian physiologist Ivan Pavlov is normally credited with discovering the process of classical conditioning (Pavlov, 1927). He was investigating the salivary reflex in dogs when he noticed that the animals not only salivated when food was placed in their mouths, but also reacted to stimuli that coincided with the presentation of food, such as the presence of a food bowl or the person who fed them. This led him to explore the conditions under which this type of learning was most likely to occur.

The natural stimulus in any reflex is referred to as the unconditioned stimulus (UCS) and the natural response to this stimulus is the unconditioned response (UCR). During the acquisition phase, a neutral stimulus (NS), which does not elicit the UCR, is presented shortly before the UCS. After many pairings of NS + UCS, this changes and the NS is now able to produce the same response *in the absence of the UCS*. The NS is now referred to as a conditioned stimulus (CS) and the response it produces is called a conditioned response (CR). Ringing a bell shortly before presenting

food to a hungry animal will eventually (after many pairings of NS and UCS) mean that the bell on its own will be sufficient to produce the response of salivation (CR).

Other important features

Timing – if the NS cannot be used to predict the UCS (e.g. if it occurs after the UCS or the time interval between the two is too great), then conditioning does not take place.

- Extinction Pavlov discovered that, unlike the UCR, the CR does not become permanently established as a response. After a few presentations of the CS in the absence of the UCS, it loses its ability to produce the CR.
- Spontaneous recovery following extinction, if the CS and UCS are then paired together once again, the link between them is made much more quickly
- Stimulus generalisation Pavlov discovered that once an animal has been conditioned, they will also respond to other stimuli that are similar to the CS.

BEFORE CONDITIONING UCS UCR UCR

Neutral stimulus No salivation

UCS automatically produces UCR. Neutral stimulus does not produce salivation





UCS paired with neutral stimulus

UCS is paired with neutral stimulus. UCS produces UCR.

AFTER CONDITIONING



Neutral stimulus is now the conditioned stimulus. It produces CR, salivation, which is similar to the UCR produced by the food.

OPERANT CONDITIONING

The basic idea behind Skinner's theory of operant conditioning (Skinner, 1938) is that organisms spontaneously produce different behaviours,

and these behaviours produce consequences for that organism, some of which may be positive (i.e. desirable) and some negative (i.e. undesirable). Whether or not an organism repeats a particular behaviour depends on the nature of these consequences, i.e. it is reinforced.



▲ Skinner developed a special cage (called a 'Skinner box') in order to investigate operant conditioning in rats. The rat moves around the cage, and when it accidentally presses the lever, a food pellet (the reinforcer) falls into the cage. In no time at all the hungry rat begins pressing the lever in order to obtain food. If the food pellets stop, the rat presses the lever a few more times and then abandons it (extinction).

Types of reinforcement

Reinforcement means just what the word implies, i.e. something in the environment that strengthens (or reinforces) a particular behaviour and so makes it more likely to recur. There are two main types of reinforcer, positive and negative reinforcers. Although they both make it more likely that a behaviour will recur, they do this in different ways.

Positive reinforcement occurs when behaviour produces a consequence that is satisfying or pleasant for the organism; for example, food to a hungry animal or praise given to a child after they do something particularly well are both effective positive reinforcers.

Negative reinforcers work because they remove something aversive (unpleasant) and so restore the organism to its 'pre-aversive' state. For example, the act of hitting the 'off' button on an alarm clock allows a person to escape from the unpleasant ringing and restores the restful pre-alarm state.

Other important features

- Schedules of reinforcement although a *continuous* reinforcement schedule (e.g. reinforcing a rat every time it presses a lever) is most effective in establishing a particular response, a partial reinforcement schedule (e.g. reinforcing every third lever press or every 10 minutes) is more effective in maintaining that response and avoiding extinction.
- Punishment refers to the circumstance whereby a behaviour is followed by a consequence that is undesirable or unpleasant for the organism. Reinforcement increases the likelihood of a behaviour recurring, whereas punishment decreases it. As with reinforcement, punishment can also be positive (i.e. adding something unpleasant as a consequence, such as slapping a naughty child) or negative (i.e. taking away something pleasant such as 'grounding' a naughty teenager).

Classical conditioning has been applied to therapy

Classical conditioning has been applied in the development of treatments for the reduction of anxiety associated with various phobias.

Systematic desensitisation is a therapy based on classical conditioning (see page 106). It works by eliminating the learned anxious response (the CR) that is associated with a feared object or situation (the CS). It is then possible to eliminate one learned response (anxiety) by replacing it with another (relaxation) so the patient is no longer anxious in the presence of the feared object or situation.

This classical conditioning-based approach has been found to be effective for a range of phobias such as fear of spiders (arachnophobia) and fear of flying (aerophobia).

Classical conditioning is only appropriate for some learning

Because different species face different challenges to survive, some relationships between CS and UCS are more difficult (and others easier) to establish.

Seligman (1970) proposed the concept of preparedness to explain this. Animals are *prepared* to learn associations that are significant in terms of their survival needs (e.g. associating the smell of meat with the presence of food), yet *unprepared* to learn associations that are not significant in this respect (e.g. associating the sound of a bell with food).

This suggests that classical conditioning may be more appropriate in the learning of specific types of association (i.e. those important to survival), something that is linked to a species' evolutionary history.

Operant conditioning based on experimental work

A particular strength of Skinner's research was his reliance on the experimental method, using controlled conditions to discover a possible causal relationship between variables.

Skinner's reliance on the Skinner box was a good example of this approach in practice. By manipulating the consequences of behaviour (the independent variable), he was able to accurately measure the effects on the rat's behaviour (the dependent variable).

This allowed him to establish a cause-and-effect relationship between the consequences of a behaviour (i.e. positive or negative) and the future frequency of its occurrence.



Over-reliance on non-human animals in research

Skinner's research has received some criticism because his experiments involved the study of non-human animals rather than humans.

Critics claim that his reliance on rats and pigeons means that Skinner's studies can tell us little about human behaviour. They claim that, unlike non-human animals, human beings have free will rather than having their behaviour determined by positive and negative reinforcement.

However, Skinner argued that free will is merely an illusion and what we believe are behaviours chosen through free will are actually the product of external influences that 'guide' our behaviour on a daily basis.



A limited perspective on behaviour

Behaviourists have been accused of ignoring other levels of explanation such as those that emphasise the importance of cognitive factors or emotional states.

Treating human beings as a product of their conditioning alone means that we ignore the evidence for the role of these other factors in shaping behaviour. However, Skinner rejected this claim, arguing that these internal states are scientifically untestable.

Skinner argued that even complex behaviours, such as our interactions with the opposite sex or pathological behaviour, could be better understood by studying the reinforcement history of the individual.

MEET THE RESEARCHER

Burrhus Skinner

While the US military were working on their first missile guidance systems, psychologist Burrhus Skinner (1904–1990) had an unusual idea – pigeons could be trained to guide anti-ship missiles to their targets. The project, known as 'Project Pelican', involved three pigeons in separate compartments in the nose cone of a 'Pelican' missile. Each compartment had a lens, and using operant conditioning, the pigeons were trained to peck at the target projected on it in order to keep the missiles on target. This idea was taken seriously enough for the military to adapt some missiles to accommodate the pigeons before they eventually decided that electronics was a better bet for the future.



UPGRADE

Questions requiring AO3 are looking for *elaboration*, which means you need to explain and develop any point that you make. Shorter questions such as 'Briefly outline one strength of the behaviourist approach. (2 marks)' do not need much detail and doing more than one point will not get you extra credit. In contrast, consider the question: 'Evaluate the behaviourist approach. (6 marks)'. This question requires you to go deeper in your evaluation but you are not restricted to just the one point.

Here's what you could do to answer this question: start by identifying a strength of the approach – such as 'There is research to support the behaviourist approach'. Elaborate that by giving an example of a study without going into much detail. Say why this is a strength of the approach. Next you could comment on the fact that behaviourists often use a scientific approach (such as experiments) and say why this is a strength (i.e. it can establish a causal relationship between two variables and the research is replicable). You could further elaborate this by bringing in other research that backs up or goes against it, or by highlighting a potential problem of the methods used.

Try this elaboration process for one of the other evaluation points of the behaviourist approach.

KEY TERMS

Behaviourist People who believe that human behaviour can be explained in terms of conditioning, without the need to consider thoughts or feelings.

Classical conditioning When a neutral stimulus is consistently paired with an unconditioned stimulus so that it eventually takes on the properties of this stimulus and is able to produce a conditioned response.

Operant conditioning Learning through reinforcement or punishment. If a behaviour is followed by a desirable consequence then that behaviour is more likely to occur again in the future.

Punishment Involves the application of an unpleasant consequence following a behaviour, with the result that the behaviour is less likely to occur again in the future.

Reinforcement Anything that strengthens a response and increases the likelihood that it will occur again in the future.

CAN YOU?

No. 5.2

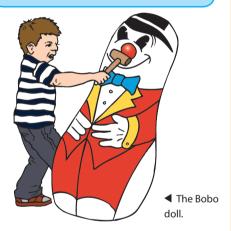
- 1. Briefly explain what is meant by 'classical' and 'operant conditioning'. (2 marks each)
- **2.** Outline the main findings of Pavlov's research. (4 marks)
- **3.** Explain what is meant by 'positive' and 'negative reinforcement' in operant conditioning. (3 marks each)
- **4.** Outline the main findings of Skinner's research. (4 marks)
- **5.** Outline **one** strength and **one** limitation of the behaviourist approach. (6 marks)
- **6.** Discuss the behaviourist approach in psychology. (12 marks AS, 16 marks A)

Social learning theory

Albert Bandura believed that new patterns of behaviour could be acquired not only through direct experience, but also by observing one's own behaviour and the behaviour of others. Unlike operant conditioning, where the role of reinforcement is simply to strengthen a response by providing immediate consequences, Bandura believed that reinforcement could also serve an informative function for the individual. During the course of learning, people not only perform responses; they also observe the different consequences of their own and others' behaviour. On the basis of this feedback, they develop hypotheses about the types of behaviour most likely to succeed in a given situation. These hypotheses then serve as guides for their future behaviour. Bandura referred to this approach as social learning theory.

Insider tip...

A common pitfall when answering questions in this area is that students provide descriptions of a study when a question has actually asked about the theory. Make sure you use appropriate material to answer the specific question set.



Social learning theory is nowadays known as 'social cognitive theory' to acknowledge the importance of mediational processes in social learning.

The term 'identification' is used in a slightly different way here than it was on page 18. However, both uses of the term stress either a desire to be part of, or a recognition of similarity between, the individual and others.

SOCIAL LEARNING THEORY (BANDURA, 1986)

Modelling

In order for social learning to take place, someone must carry out (or 'model') the attitude or behaviour to be learned. Individuals that perform this role are referred to as **models**. There are different types of model. A *live* model might be a parent, a teacher at school or a member of a peer group. A *symbolic* model would be someone portrayed in the media, for example a character on TV. These models provide examples of behaviour that can be observed by the individual and later reproduced by them in a process known as **imitation**.

Imitation

Although a certain amount of learning takes place through direct reinforcement, much of what a child learns is acquired through imitation of attitudes and behaviour that are modelled by parents and significant others. Research on imitation has shown that, unlike the relatively slow learning that takes place with conditioning, when a model is provided, whole patterns of behaviour can be rapidly acquired. The key determinants of whether a behaviour is imitated are (i) the characteristics of the model, (ii) the observer's perceived ability to perform that behaviour and (iii) the observed consequences of the behaviour.

Identification

Identification refers to the extent to which an individual relates to a model and feels that he or she is similar to that person. In order to identify with a model, observers must feel that he or she is similar enough to them that they would be likely to experience the same outcomes in that situation. Research (e.g. Shutts *et al.*, 2010) suggests that children are more likely to identify with, and preferentially learn from, models who are similar to them, particularly same-sex models. Identification with a model means that the individual is more likely to imitate their behaviour, meaning that social learning is more likely to be effective.

Vicarious reinforcement

Bandura and Walters (1963) noted that children who observed a model rewarded for aggressive behaviour were much more likely to imitate that behaviour than children who had observed a model punished for the same behaviour. Bandura called this **vicarious reinforcement** – i.e. individuals learn about the likely consequences of an action, and then adjust their subsequent behaviour accordingly. The concept of vicarious reinforcement suggests that individuals do not need to experience rewards or punishments directly in order to learn. Instead they can observe the consequences experienced by a model and then make judgements as to the likelihood of experiencing these outcomes themselves.

The role of mediational processes

Social learning differs from other learning approaches in that it places special importance on internal **mediational processes**. Bandura (1986) claimed that, in order for social learning to take place, the observer must form mental representations of the behaviour displayed by the model and the probable consequences of that behaviour in terms of expectancies of future outcomes. When appropriate opportunities arise in the future, the individual might display the learned behaviour *provided* that the expectation of positive consequences is greater than the expectation of negative consequences.

KEY STUDY: BANDURA ET AL. (1961)

Procedures

Bandura *et al.* (1961) carried out an experiment involving children who observed aggressive or non-aggressive adult models and were then tested for imitative learning in the absence of the model. Half the children were exposed to adult models interacting aggressively with a life-sized Bobo doll and half exposed to non-aggressive models.

The aggressive model displayed distinctive physically aggressive acts towards the doll, e.g. striking it with a mallet, accompanied by verbal aggression such as saying 'POW'. Following exposure to the model, children were frustrated by being shown attractive toys which they were not allowed to play with. They were then taken to a room where, among other toys, there was a Bobo doll.

Findings

Children who observed the aggressive model reproduced a good deal of physically and verbally aggressive behaviour resembling that of the model. Children who observed the non-aggressive model exhibited virtually no aggression toward the Bobo doll.

About one-third of the children who observed the aggressive model repeated the model's verbal responses while none of the children who had observed the non-aggressive model made verbally aggressive remarks.

In a follow-up to this study, Bandura and Walters found that children who saw the model being rewarded for aggressive acts were more likely to show a high level of aggression in their own play.

Social learning theory has useful applications

The principles of social learning have been usefully applied to increase our understanding of many areas of human behaviour, including criminal behaviour.

Akers (1998) suggests that the probability of someone engaging in criminal behaviour increases when they are exposed to models who commit criminal behaviour, identify with these models and develop the expectation of positive consequences for their own criminal behaviour.

Ulrich (2003) supports the importance of social learning in this process in a review of the literature, finding that the strongest cause of violent behaviour in adolescence was association with delinquent peer groups, where violence was both modelled and rewarded.

Research support for identification

According to social learning theory, observing a model similar to the self should lead to more learning than observing a dissimilar model.

Fox and Bailenson (2009) found evidence for this using computer generated 'virtual' humans engaging in exercise or merely loitering. The models looked either similar or dissimilar to the individual participants. Participants who viewed their virtual model exercising engaged in more exercise in the 24 hours following the experiment than participants who viewed their virtual model merely loitering or a dissimilar model

They concluded that greater identification with a model leads to more learning because it is easier to visualise the self in the place of the model, so the observer feels as if he or she is having the same experience.

A problem of establishing causality

A major criticism of social learning theory explanations of deviant behaviour relates to its claim that increased associations with deviant peers increases the likelihood that an individual will adopt the same values and behaviours.

Siegel and McCormick (2006) suggest that young people who possess deviant attitudes and values (e.g. low self-control) would seek out peers with similar attitudes and behaviours, as they are more fun to be with than their less reckless counterparts.

The cause of delinquency, therefore, may not be social learning as a result of exposure to deviant role models, but the possession of deviant attitudes prior to contact with deviant peers.



A problem of complexity

In focusing exclusively on the processes of social learning, advocates of this approach disregard other potential influences on behaviour.

For example, in explaining the development of gender role behaviour, social learning theorists would emphasise the importance of gender-specific modelling. In real life, however, a child is exposed to many different influences, all of them interacting in complex ways. These include genetic predispositions, media portrayals, locus of control and so on.

This presents a serious problem for social learning researchers. If virtually anything can have an influence on a specific behaviour, it becomes very difficult to show that one particular thing (social learning) is the main causal influence.



The importance of identification in social learning

Media attempts to change health-related behaviours have shown that models similar to the target audience are more likely to bring about identification and greater social learning.

To achieve this, health campaigns have tried to match characters that model the desired behaviour with the target audience in terms of physical characteristics, attitudes and behaviours. Greater identification with the model is then expected to influence modelling behaviour. And sager et al. (2006) found that perceived similarity to a model in an anti-alcohol advertisement was positively related to the message's effectiveness.

Based on this finding, the researchers suggest that some of a message's potency may be lost if the individual finds it difficult to identify with a given model.

MEET THE RESEARCHER

Albert Bandura was born in 1925, in Northern Canada. He was educated in a small local school before enrolling as a



biological sciences major at the University of British Columbia. While working nights to make ends meet, he found himself arriving at university much earlier than his classes started. To pass the time, he began taking 'filler classes' during these early morning hours, which led him to stumble upon psychology. 'One morning, I was wasting time in the library. I thumbed through a course catalogue attempting to find a filler course to occupy the early time slot. I noticed a course in psychology. It sparked my interest and I found my career. He still continues to research and teach at Stanford University, at over 90 years of age!

KEY TERMS

Identification is a form of influence where an individual adopts an attitude or behaviour because they want to be associated with a particular person or group.

Imitation The action of using someone or something as a model and copying their behaviour.

Mediational processes refer to the internal mental processes that exist between environmental stimuli and the response made by an individual to those stimuli.

Modelling A form of learning where individuals learn a particular behaviour by observing another individual performing that behaviour.

Social learning theory Learning through observing others and imitating behaviours that are rewarded.

Vicarious reinforcement Learning that is not a result of direct reinforcement of behaviour, but through observing someone else being reinforced for that behaviour.



APPLY YOUR KNOWLEDGE

Jack and Jess are two 10-year-old children. Their mother has noticed that Jack has a tendency to be disruptive and badly behaved after watching television programmes



with a violent theme. She is shocked when she discovers that he has been caught fighting at school and the teacher asks whether he has been watching a lot of violent TV. Jack's mum is puzzled because Jess watches the same programmes but doesn't appear to be as affected by them.

Social learning theory has been used as a possible explanation of how and why children learn aggressive behaviour as a result of their exposure to violence on TV.

Using what you have learned from this spread, explain Jack's behaviour and suggest why Jess does not behave in the same way after watching violent programmes on TV.

CAN YOU?

- 1. Briefly explain what is meant by 'imitation', 'identification', 'modelling', 'vicarious reinforcement' and the role of 'mediational processes'. (2 marks each)
- 2. Outline the main findings of Bandura's research into social learning. (4 marks)
- 3. Discuss the social learning approach in psychology. (12 marks AS, 16 marks A)

The cognitive approach

Cognitive psychology focuses on how people perceive, store, manipulate and interpret information; studying processes like perception, memory, thinking and problem solving. Unlike behaviourists, cognitive psychologists believe it is necessary to look at internal mental processes in order to understand behaviour. Much of cognitive psychology uses an information processing model, whereby information received through the senses is processed by various systems in the brain. Because the information processing approach was first used to describe the way in which computers processed information, what goes on in the human brain is often explained using computing metaphors such as 'encoding', 'processing' and 'retrieval'.

THE STUDY OF INTERNAL MENTAL PROCESSES

The cognitive approach studies information processing, i.e. ways in which we extract, store and retrieve information that helps to guide our behaviour. Many different kinds of mental processes contribute to information processing. These include selecting important information (attention), using it to solve problems (thinking), storing it in memory and retrieving it as and when it is needed. The cognitive approach recognises that these mental processes cannot be studied directly but must be studied indirectly by **inferring** what goes on as a result of measuring behaviour. This enables cognitive psychologists to develop theories about the mental processes that led to the observed behaviour.

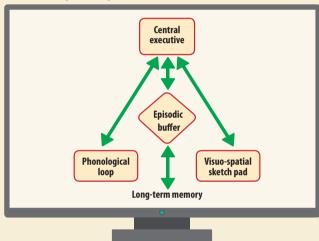
The role of schemas

A **schema** (plural *schemas* or *schemata*) is a cognitive framework that helps organise and interpret information in the brain. For example, schemas for specific events are based on expectations of how to behave in different situations (such as in a restaurant or a classroom) or in different roles (e.g. as a guard in a mock prison – see page 22). Schemas are useful to us because they allow us to take shortcuts when interpreting the huge amount of information we have to deal with on a daily basis. However, schemas also cause us to exclude anything that does not conform to our established ideas about the world, focusing instead on things that confirm our preexisting beliefs and ideas. Schemas help us fill in the gaps in the absence of full information about a person, event or thing. For example, if we classify food as 'foreign' or someone we sit next to on the bus as 'old', our schemas will tell us what to expect and we act accordingly, regardless of how tasty the food or stimulating our companion might really be. A consequence of this is that we may develop stereotypes that are difficult to disconfirm, even when faced with new and conflicting information.

The role of theoretical and computer models

Theoretical models In cognitive psychology, models such as the multi-store model of memory or the working memory model are simplified representations based on current research evidence. Models are often

pictorial in nature, represented by boxes and arrows that indicate cause and effect or the stages of a particular mental process. Models such as the working memory model are often incomplete and informal and are frequently changed, updated and refined. For example, the working memory model was first proposed by Baddeley and Hitch in 1974. Their initial model consisted of three main sections with a fourth (the episodic buffer) added by Baddeley in 2000.



Computer models The development of computers and computer programming led to a focus on the way in which sensory information is 'coded' as it passes through the system. Using a computer analogy, information is inputted through the senses, encoded into memory and then combined with previously stored information to complete a task. A computer model of memory is a good example. Information stored on the hard disk is like long-term memory and RAM (random access memory) corresponds to working memory (see page 48). The idea of working memory as a temporary workspace fits the computer model nicely as, like working memory, RAM is cleared and reset when the task being carried out is finished.

THE EMERGENCE OF COGNITIVE NEUROSCIENCE

The rapid advances in ways of studying the brain in the latter part of the twentieth century has meant that neuroscientists are now able to study the living brain, giving them detailed information about the brain structures involved in different kinds of mental processing (**cognitive neuroscience**). The use of non-invasive neuroimaging techniques such as positron emission tomography (PET) and functional magnetic resonance imaging (fMRI) helps psychologists to understand how the brain supports different cognitive activities and emotions by showing what parts of the brain become active in specific circumstances. For example, Burnett *et al.* (2009) found that when people feel guilty, several brain regions are active, including the medial prefrontal cortex, an area associated with social emotions.



▲ Neuroimaging techniques such as PET scans help psychologists by showing what parts of the brain become active in specific circumstances.

Cognitive neuroscientists study many different aspects of human cognition, including the neural processes underlying memory, attention, perception and awareness. They are also interested in social cognition, the brain regions involved when we interact with others, and how impairments in these regions may characterise different psychological conditions.

The cognitive approach has many applications

A strength of the cognitive approach is that it has been applied in many other areas of psychology.

In social psychology, research in *social* cognition has helped psychologists better understand how we interpret the actions of others, and the cognitive approach to psychopathology has been used to explain how much of the dysfunctional behaviour shown by people can be traced back to faulty thinking processes.

These insights have led to the successful treatment, using cognitive-based interventions, of people suffering from disorders such as depression and OCD.

The cognitive approach is scientific

Cognitive psychologists' emphasis on scientific methods is a particular strength of this approach.

The use of the experimental method provides researchers with a rigorous method for collecting and evaluating evidence in order to reach accurate conclusions about how the mind works.

This means that conclusions about how the mind works are based on far more than common sense and introspection, as these can give a misleading picture of mental processes, many of which are not consciously accessible.

Computer models have limited explanatory powers

The cognitive approach uses computer models to explain human information processing.

For example, terms such as 'encoding', 'storage' and 'retrieval' are borrowed directly from the field of computing. However, there is an important difference between the sort of information processing that takes place within a computer program and the information processing that takes place within the human mind. Computers do not make mistakes, nor do they ignore available information or forget anything that has been stored on their hard drives.

Humans, on the other hand, do all of these things, which limits the appropriateness of explaining human thought and behaviour using computer models.



The cognitive approach ignores emotion and motivation

A problem for the cognitive approach is that, although it can tell us *how* different cognitive processes take place, it fails to tell us *why* they do.

In other words, the role of emotion and motivation has largely been ignored by this approach. This is not surprising given that approaches that focus on the motivational processes in behaviour (e.g. Freud; see page 134) largely ignore the cognitive processes involved in behaviour.

The lack of focus on motivational states may be explained by the over-dependence on information processing analogies, as motivation is clearly irrelevant to a computer, but not to a human being.



Studies may lack ecological validity

Many studies of cognitive psychology tend to use tasks that have little in common with participants' natural everyday experiences.

For example, experiments in memory use artificial test materials that are relatively meaningless in everyday life (e.g. random word lists or digits) rather than being based on the way in which memory is used in everyday life (e.g. why people forget appointments or repress early childhood memories).

As a result, it is unlikely that we would be able to generalise these findings to real-life situations. Therefore, much of the research in cognitive psychology might be criticised as lacking ecological validity, i.e. it fails to reflect the behaviours that occur in real-life settings.



▲ Cognitive psychology research may not always reflect real-life situations.

CAN YOU?

. 5.4

- 1. Briefly explain what is meant by 'internal mental processes', 'schema', 'theoretical and computer models', and 'cognitive neuroscience'. (3 marks each)
- 2. Outline the use of theoretical and computer models as an explanation of mental processes. (3 marks each)
- 3. Using examples from research, explain the emergence of cognitive neuroscience. (4 marks)
- **4.** Outline **two** strengths of the cognitive approach in psychology. (6 marks)
- $\textbf{5.} \ \ \text{Outline } \textbf{two} \ \text{limitations of the cognitive approach in psychology.} \ (\text{6 marks})$
- 6. Discuss the cognitive approach in psychology. (12 marks AS, 16 marks A)



UPGRADE

Students often lose marks or waste valuable time in the exam because they do not consider the marks available when constructing their answers to questions. Sometimes students write more than is needed for the marks available or, conversely, do not write enough. For example, a question that asks you to . . .

Briefly explain what is meant by the terms 'internal mental processes' and 'schema'. (4 marks)

... should make you realise that the explanation of each term is worth just 2 marks. Having these 2 marks assigned to each term means that you might *define* each term (for the first mark) and then elaborate it (perhaps through an example) for the second mark. Putting in extra and unnecessary detail would not get you any more than the 2 marks available. Likewise, a question that asks for *two* strengths (or *two* limitations) for 6 marks warrants a *little more* elaboration because there are more marks available.

For questions worth 5 marks or less, practise writing answers that take 'a mark a minute'. That will keep you from writing too much and losing time that you should be spending on answering higher tariff questions.

KEY TERMS

Cognitive Relates to mental processes such as perception, memory and reasoning.

Cognitive neuroscience An area of psychology dedicated to the underlying neural bases of cognitive functions.

Computer model Refers to the process of using computer analogies as a representation of human cognition.

Inference/inferring means reaching a logical conclusion on the basis of evidence and reasoning.

Schema A cognitive framework that helps to organise and interpret information in the brain. Schemas help an individual to make sense of new information.

Theoretical models In cognitive psychology, models are simplified, usually pictorial, representations of a particular mental process based on current research evidence.

The biological approach

The **biological approach** views human beings as biological organisms and so provides biological explanations of all aspects of psychological functioning. Biological psychologists are particularly interested in the genetic basis of behaviour, showing how some characteristics can be passed from generation to generation through the genes. Biological researchers have also studied the important role that chemical changes in the nervous system (neurochemistry) and hormonal changes play. More recently, psychologists have become interested in how Charles Darwin's ideas about biological evolution might apply to human behaviour, allowing us to understand the original adaptive significance of behaviours such as mate selection or aggression.

BIOLOGICAL INFLUENCES ON BEHAVIOUR

The influence of genes on behaviour

Genes: the mechanisms of heredity

Heredity is the passing of characteristics from one generation to the next through the **genes**, and is the reason why offspring 'take after' their parents in terms of psychological characteristics. Genes carry the instructions for a particular characteristic (such as intelligence or temperament), but how this characteristic develops depends partly on the interaction of the gene with other genes, and partly on the influence of the environment. The extent to which a psychological characteristic is determined by genes or environment is called the nature-nurture debate.

Genotype and phenotype

There is an important difference between the **genotype** – the genetic code that is 'written' in the DNA of an individual's cells – and the **phenotype**, which is the physical appearance that results from this inherited information. Whilst we might expect a direct relationship between the two, this is not always the case. For example, in the case of eye colour, someone may inherit a recessive gene for blue eyes, but this will not be expressed if they have also inherited a dominant gene for brown eyes from the other parent. In this case, we cannot determine the *genotype* (one blue eyes gene, one brown eyes gene) from just observing the phenotype (i.e. brown eyes).

The genetic basis of behaviour

Each individual possesses a unique combination of genetic instructions, therefore we differ from each other in terms of personality, intelligence, abilities and so on. The term heritability refers to the amount of variability in a trait within a population that can be attributed to genetic differences between individuals within that population. The more that a trait is influenced by genetic factors, the greater its heritability. For example, studies of identical twins have suggested that the variation in individual intelligence – what makes one person more intelligent than another - could be 60-80% due to genes.

The influence of biological structures on behaviour

Neurons and the nervous system

The nervous system is comprised of several connected systems.

- The central nervous system (CNS) comprises the brain and spinal cord.
- The peripheral nervous system (PNS) comprises the somatic and autonomic nervous systems.

The nervous system carries messages from one part of the body to another using individual nerve cells known as neurons. Neurons transmit nerve impulses in the form of electrical signals. Many aspects of behaviour are under neuronal control, including breathing, eating and sexual behaviour.

The largest part of the brain is the cerebrum, making up about 85% of the total mass of the brain. The outer surface of the cerebrum is called the cerebral cortex, which is responsible for many of the 'higher-order' functions such as thought and language. The cerebrum is divided into two halves (known as hemispheres), with each hemisphere further divided into four different parts (known as lobes):

The influence of neurochemistry on behaviour

Neurotransmitters

When a nerve impulse reaches the end of one neuron, a chemical called a neurotransmitter is released. It travels from one neuron to the next across a junction called the synapse. There are many different types of neurotransmitter, some of which trigger the receiving neuron to send an impulse and some stop it from doing so. Those neurotransmitters that trigger nerve impulses in the receiving neuron and stimulate the brain into action are called *excitatory* neurotransmitters. Those that inhibit nerve impulses in order to calm the brain and balance mood are called *inhibitory* neurotransmitters (see page 151). Dopamine is an excitatory neurotransmitter that

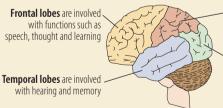
Evolution and behaviour

Charles Darwin argued that, over time, organisms become adapted to their environment through biological evolution. This refers to the changes that take place in the characteristics of a population over time. The mechanism behind biological evolution is natural selection. Individuals within a species differ from each other in terms of their physical characteristics and in their behaviour, and at least some of this variation is inherited. Because individuals must compete with each other for access to resources (mates, food, etc.), those who survive this competition and go on to reproduce will tend to have behaviours that are more likely to lead to survival and reproductive success than those who do not.

These behaviours will be passed on to offspring and will become more widespread in the population; through the process of natural selection, successive generations will develop behaviours that are even more likely to lead to survival and reproductive success. Buss (1989) studied 37 different cultures and found universal similarities in human mate preferences. Women desired mates with resources (to provide for offspring) whilst men desired young, physically attractive women (an indication of their fertility and reproductive value).

is associated with our 'drive' or motivation. Serotonin is an inhibitory transmitter, adequate amounts of which are necessary to maintain a stable mood. For example, Crockett et al. (2008) found that when serotonin levels are low people tend to display increased aggression.

Frontal lobes are involved with functions such as speech, thought and learning



Parietal lobes process sensory information such as touch, temperature and pain

Occipital lobes process visual information

Hormones

Hormones are chemicals that are produced by endocrine glands such as the pituitary gland, which together make up the endocrine system. In response to a signal from the brain, hormones are secreted directly into the bloodstream by the endocrine glands, where they travel to their 'target cells' and exert their influence by stimulating receptors on the surface of or inside cells. The presence of a hormone causes a physiological reaction in the cell, altering its activity (see page 152). For example, Carré et al. (2006) studied a Canadian ice hockey team over the course of a season. They found evidence of a surge in levels of the hormone testosterone whenever the team played in their home stadium, suggesting the hormone energised the players to defend their home territory.

The importance of the scientific method

The biological approach uses the scientific method, particularly the experimental method, as its main method of investigation.

Experimental studies take place in highly controlled environments so that other researchers are able to replicate research studies under the same experimental conditions, adding to the validity of the original findings if they can be reproduced. The use of sophisticated imaging and recording techniques has increased the precision and objectivity of experimental research in this area.

As a result, these techniques have contributed to the scientific validity of the biological approach.

Applications of the biological approach

A strength of the biological approach is that it provides clear predictions, e.g. about the effects of neurotransmitters on behaviour or the influence of biological rhythms on behaviour.

This has led to significant applications of biological research in the real world. Research into the role of neurochemical imbalance in depression has led to the development of effective drug treatments.

Likewise, research into circadian rhythms and their effect on psychological well-being (see page 164) has led to significant improvements in the working conditions of shift workers.

This further demonstrates the value of adopting a biological approach to the study of human behaviour.

The biological approach is reductionist

The biological approach is criticised for its belief that complex behaviour can be broken down into the action of genes, neurochemicals and hormones.

For example, many explanations of mental disorders are reductionist because genes or neurochemical imbalances are believed to be the main cause of these disorders.

However, whilst a reductionist approach lends itself to scientific investigation, we cannot fully understand a behaviour without also taking account of the other factors that influence it. These include cognitive, emotional and cultural factors, all of which have a significant influence on behaviour.

Problems for evolutionary explanations

Because human behaviours can evolve through either genetic or cultural routes, a biologically based evolutionary explanation may have limited explanatory power.

Critics of such explanations claim that many established patterns of human behaviour have purely cultural origins with no obvious survival value. For example, in many cultures, such as in China and parts of India, the sex ratio at birth is strongly biased in favour of males. This cultural preference for sons has resulted in sex-selective abortion or the withholding of resources from daughters. Unlike behaviours shaped by biological evolution, which change very gradually over many generations, behaviours shaped by cultural evolution can change more rapidly.

In China, a consequence of the more rapid change possible through cultural evolution is that there has been a change in public attitudes toward girls and a reduction in the widespread cultural preference for sons.

The dangers of genetic explanations

Recent research suggesting a genetic basis for criminal behaviour has led to concerns about how this information might be used.

Critics claim this may lead to genetic screening of the population to identify this genetic susceptibility and subsequent discrimination against those with a predisposition for criminality. This also creates the danger that genes might then be used as convenient explanations for complicated human behaviour, despite the fact that the connection between genes and complex behaviour such as criminality is far from straightforward.

However, there may be positive consequences of such research. *If individuals discover that they have a genetic predisposition for* criminality or a mental disorder such as schizophrenia, this gives them the opportunity to avoid environmental situations likely to trigger this predisposition, or to develop coping skills that would protect them from its influence.

KEY TERMS

Biological approach Views humans as biological organisms and so provides biological explanations for all aspects of psychological functioning.

Evolution Refers to the change over successive generations of the genetic make-up of a particular population. The central proposition of an evolutionary perspective is that the genotype of a population is changeable rather than fixed, and that this change is likely to be caused by the process of natural selection.

Gene A part of the chromosome of an organism that carries information in the form of DNA.

Genotype The genetic make-up of an individual. The genotype is a collection of inherited genetic material that is passed from generation to generation.

Natural selection The process by which inherited characteristics that enhance an individual's reproductive success (or 'fitness') are passed on to the next generation, and so become more widespread in the population over time.

Neurochemistry The study of chemical and neural processes associated with the nervous system.

Phenotype The observable characteristics of an individual. This is a consequence of the interaction of the genotype with the environment.



👺 APPLY YOUR KNOWLEDGE

Criminal behaviour may be all in the genes

Turning to crime may be a consequence of our genes according to a recent study. Researchers in the US found that men and women who had been adopted as children were over four times more likely to get into trouble with the police if one of their biological parents had a criminal record. The fact that biological parents had an influence on their children's behaviour despite having no input in their upbringing appears to show a significant genetic influence.

- 1 With reference to the report above, explain the relationship between genetics and criminal behaviour.
- 2 What limitations can you think of for genetic explanations of criminal behaviour?

CAN YOU?

- 1. Briefly explain what is meant by the terms 'genotype' and 'phenotype'. (2 marks + 2 marks)
- 2. Outline the influence of genes on behaviour. (4 marks)
- **3.** Outline the influence of biological structures and neurochemistry on behaviour. (4 marks + 4 marks)
- **4.** Explain the difference between genotype and phenotype. (3 marks)
- 5. Outline the relationship between evolution and behaviour. (4 marks)
- **6.** Outline **two** strengths and **two** limitations of the biological approach in psychology. (3 marks for each)
- 7. Discuss the biological approach in psychology. (12 marks AS, 16 marks A)

The psychodynamic approach

The term **psychodynamic** describes any theory that emphasises change and development in the individual. It is also used to describe theories where drive is a central concept in this development. Both of these uses of the term stress the importance of change, i.e. the person is seen as dynamic, or constantly changing as they develop. Although there are a number of theories that fit this psychodynamic profile, they all emphasise unconscious motives and desires, as well as the importance of early childhood experiences in shaping personality. The best known of the psychodynamic theories is Freudian **psychoanalysis**.

Although the idea of defence mechanisms is attributed to Sigmund Freud, much of the development of this idea was done by his daughter, Anna Freud, in her 1936 book *The Ego and the Mechanisms of Defence*.

FREUD'S THEORY OF PSYCHOANALYSIS

Sigmund Freud believed that behaviour was determined more by psychological factors than by biological factors or environmental reinforcement. He assumed that people are born with basic instincts and needs and that behaviour is in large part controlled by the **unconscious** mind.

The role of the unconscious

Freud believed in the existence of a part of the mind that was inaccessible to conscious thought. He referred to this as the unconscious mind. He used the metaphor of an iceberg to describe the mind, the tip of the iceberg (representing the conscious mind) being visible, but the much larger part (representing the unconscious) being hidden under water. Freud believed that most of our everyday actions and behaviours are not controlled consciously but are the product of the unconscious mind, which reveals itself in slips of the tongue (or 'Freudian slips'), in creativity and in neurotic symptoms. The unconscious, he believed, extended its influence into every part of our waking (and sleeping) lives. Freud believed the mind actively prevents traumatic memories from the unconscious from reaching conscious awareness.

These memories might cause anxiety; therefore the mind uses **defence mechanisms** (see below) to prevent the person becoming aware of them.

The structure of personality

Freud divided the mind into three structures – the id, the ego and the superego – each of which demands gratification, but is frequently in conflict with the other parts.

The id The id operates solely in the unconscious. It contains the libido, the biological energy created by the reproductive instincts. The id operates according to the *pleasure principle*, i.e. it demands immediate gratification regardless of circumstances. For example, if a person is hungry, the id demands that they eat there and then.

The ego The ego mediates between the impulsive demands of the id and the reality of the external world (the reality principle). For example, it may delay gratifying the id until there is a more appropriate opportunity to satisfy its demands. It must also compromise between the impulsive demands of the id and the moralistic demands of the superego.

The superego This is divided into the conscience and the ego-ideal. The conscience is the internalisation of societal rules. It determines which behaviours are permissible and causes feelings of guilt when rules are broken. The ego-ideal is what a person strives towards, and is most probably determined by parental standards of good behaviour.

► The ego mediates between the demands of the id and the demands of the superego.



Defence mechanisms

If an individual is faced with a situation that they are unable to deal with rationally, their defence mechanisms may be triggered. These tend to operate unconsciously and work by distorting reality so that anxiety is reduced. By using defence mechanisms the individual stops themselves becoming aware of any unpleasant thoughts and feelings associated with the traumatic situation.

Examples of defence mechanisms

Repression refers to the unconscious blocking of unacceptable thoughts and impulses. Rather than staying quietly in the unconscious, these repressed thoughts and impulses continue to influence behaviour without the individual being aware of the reasons behind their behaviour. For example, a child who is abused by a parent may have no recollection of these events, but has trouble forming relationships.

Denial is the refusal to accept reality so as to avoid having to deal with any painful feelings that might be associated with that event. The person acts as if the traumatic event had not happened, something that those around them find to be quite bizarre. For example, an alcoholic will often deny they have a drinking problem even after being arrested several times for being drunk and disorderly.

Displacement involves the redirecting of thoughts or feelings (usually hostile) in situations where the person feels unable to express them in the presence of the person they *should* be directed towards. Instead, they may 'take it out' on a helpless victim or object. This gives their hostile feelings a route for expression, even though they are misapplied to an innocent person or object.

Psychosexual stages

Freud believed that personality developed through a sequence of five stages. These are referred to as *psychosexual* stages to emphasise that the most important driving force in development is the need to express sexual energy (libido). Freud believed that the individual experiences tension due to the build up of this sexual energy and that pleasure comes from its discharge. At each stage this energy is expressed in different ways and through different parts of the body.

Stage	Approx age	Description of stage
Oral	0—2 years	The mouth is the focal point of sensation and is the way in which the child expresses early sexual energy (e.g. through sucking and biting).
Anal	2–3 years	The beginnings of ego development, as the child becomes aware of the demands of reality and the need to conform to the demands of others. The major issue at this stage is toilet training as the child learns to control the expulsion of bodily waste.
Phallic	3–6 years	Sexual energy is now focused on the genitals. The major conflict of this stage is the Oedipus complex in which the male child unconsciously wishes to possess their mother and get rid of their father. As a result of this desire, boys experience castration anxiety (punishment from the father), and in an attempt to resolve this problem, the child identifies with their father.
Latent	6–12 years	The child develops their mastery of the world around them. During this stage, the conflicts and issues of the previous stages are repressed with the consequence that children are unable to remember much of their early years.
Genital	12+	The culmination of psychosexual development and the fixing of sexual energy in the genitals. This eventually directs us towards sexual intercourse and the beginnings of adult life.

A pioneering approach to understanding human behaviour

The development of psychoanalysis as an explanation of human behaviour represented a dramatic shift in psychological thinking.

It suggested new methodological procedures for gathering evidence (case studies) and the development of the approach was based on observations of behaviour rather than relying on introspection (see page 124). From these observations, Freud and his followers were the first to demonstrate the potential of *psychological*, rather than biological, treatments for disorders such as depression and anxiety.

This approach has led to successful treatments; for example, de Maat et al.'s (2009) large-scale review of psychotherapy studies concluded that psychoanalysis produced significant improvements in symptoms that were maintained in the years after treatment.

Scientific support for the psychoanalytic approach

Critics of psychoanalysis often claim there is no scientific evidence for psychoanalysis and that its claims are not testable or falsifiable.

However, many of the claims of psychoanalysis *have* been tested and many have been confirmed using scientific methodology. Fisher and Greenberg (1996) summarised 2,500 of these studies, concluding that experimental studies of psychoanalysis compare well with studies relevant to any other major area of psychology.

Fisher and Greenberg's support for the existence of unconscious motivation in human behaviour and for the defence mechanisms of repression, denial and displacement adds scientific credibility to psychoanalytic explanations of human behaviour.

Psychoanalysis is a gender-biased approach

Freud's views of women and female sexuality were less well developed than his views on male sexuality.

Despite the fact that his theories were focused on sexual development, Freud seemed content to remain ignorant of female sexuality and how it may differ from male sexuality. This led psychoanalysts such as Karen Horney, who broke away from Freudian theory, to criticise his work, particularly his views on women and their development.

Dismissing women and their sexuality in such a way is problematic, not only because Freud treated many female patients, but also because his theories are still so influential today.

Psychoanalysis is a culture-biased approach

Sue and Sue (2008) argue that psychoanalysis has little relevance for people from non-Western cultures.

Psychoanalysts believe that mental disorders are the result of traumatic memories being 'locked' in the unconscious, and that freeing them through therapy gives the individual the chance to deal with them in the supportive therapeutic environment. However, they claim that many cultural groups do not value insight in the same way that Western cultures do. In China, for example, a person who is depressed or anxious avoids thoughts that cause distress rather than being willing to discuss them openly.

This contrasts with the Western belief that open discussion and insight are always helpful in therapy.

Psychoanalysis: a comprehensive theory

One of the main strengths of psychoanalysis is the comprehensive nature of the theory.

As well as its therapeutic applications, psychoanalysis can be used to explain many other aspects of human behaviour outside of the realm of psychology. For example, psychoanalysis has been used as a form of literary criticism. Works of literature such as Shakespeare's play *Hamlet* have repressed messages hidden beneath the surface of the text – many aspects of Hamlet's psyche are seen as a projection of Shakespeare's own mind.

As a result, we are able to interpret these works using psychoanalytic concepts, delving into the mind of the author or the fictional character and so enrich our understanding of their psychological state.



Research methods

Some psychology students conducted a study to test whether people with an anal personality were more careful with their money. They did this by constructing a questionnaire to assess personality type based on Freud's ideas that too much or too little pleasure during any psychosexual stage would result in a fixation on that stage and would result in certain personality types. One particular prediction is that 'anal-retentives', people who are treated harshly at this stage, are stingy.

The questionnaire also asked people to say how much money they typically withdrew when they went to a cash machine. The students then correlated personality score (a high score indicated a strong anal-retentive character) with amount of money withdrawn.

- **1.** Were the students expecting to find a negative or positive correlation? Explain your answer. (2 marks)
- 2. Identify an appropriate sampling method that the students might use in their study and explain your choice. (2 marks)
- **3.** Describe how the students might carry out a pilot study before undertaking the full study. (3 marks)
- **4.** The students designed their own questionnaire. Identify and explain **three** considerations that are important when designing a questionnaire. (3 marks)

LINK TO RESEARCH METHODS

Correlation on pages 206–207
Sampling methods on pages 192–193
Pilot studies on page 183
Ouestionnaire design on pages 204–20

KEY TERMS

Defence mechanisms Unconscious strategies that protect our conscious mind from anxiety. Defence mechanisms involve a distortion of reality in some way, so that we are better able to cope with a situation.

Psychoanalysis A term used to describe the personality theory and therapy associated with Sigmund Freud.

Psychodynamic Refers to any theory that emphasises change and development in the individual, particularly those theories where 'drive' is a central concept in development. The best known psychodynamic theory is Freudian psychoanalysis.

Unconscious That part of the human mind that contains repressed ideas and memories, as well as primitive desires and impulses that have never been allowed to enter the conscious mind.

CAN YOU?

No. 5.6

- 1. Explain the role of the unconscious. (3 marks)
- 2. Outline the structure of personality from a psychodynamic perspective. (4 marks)
- Outline what is meant by the terms 'id', 'ego' and 'superego'. (2 marks each)
- **4.** Explain the defence mechanisms of 'repression', 'denial' and 'displacement'. (3 marks each)
- **5.** Outline **two** strengths and **two** limitations of the psychodynamic approach in psychology. (3 marks each)
- **6.** Discuss the psychodynamic approach in psychology. (16 marks)

Humanistic psychology

Humanistic psychology differs from most other approaches in psychology by focusing on conscious experience rather than on behaviour, on personal responsibility and **free will** rather than on determinism, and on discussion of experience rather than on use of the experimental method. Developed by Carl Rogers and Abraham Maslow in the 1950s, humanistic psychology is concerned with topics that are meaningful to human beings, and emphasises the importance of the individual's striving towards personal growth and fulfilment.

BASIC ASSUMPTIONS OF HUMANISTIC PSYCHOLOGY

Free will

Unlike most other approaches, humanistic theories emphasise that people have full conscious control over their own destiny, i.e. they have free will. This is not to say that we are free to do anything at all, as we are subject to many other forces, including biological and societal influences. However, humanistic psychologists believe that human beings are able to make significant personal choices within the constraints imposed by these other forces.

Maslow's theory (Maslow, 1943)

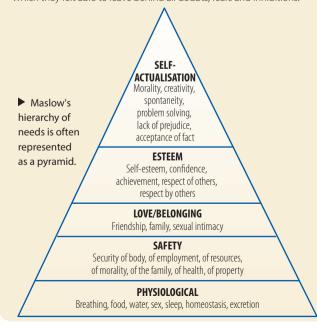
Unlike the psychoanalysts, Maslow was not interested in what went wrong with people, but rather he was interested in finding out what could go right with them. His hierarchy of needs emphasised the importance of personal growth and fulfilment and opened the door for later movements in psychology, such as positive psychology and happiness.

Hierarchy of needs

Although Maslow did not include the visual idea of a 'pyramid' (see bottom of page) in his original theory, the **hierarchy of needs** is usually represented in this way. The most basic, physiological needs are represented at the bottom of the pyramid and the most advanced needs at the top. Each level must be fulfilled before a person can move up to a higher need. Maslow believed that the more basic the need, the more powerfully it is experienced and the more difficult it is to ignore.

Self-actualisation

Maslow found that most of those who attained this level shared certain characteristics. They tended to be creative, accepting of other people and had an accurate perception of the world around them. Maslow believed that such individuals experienced **self-actualisation** in the form of *peak experiences*. These are moments of extreme inspiration and ecstasy during which they felt able to leave behind all doubts, fears and inhibitions.



Focus on the self

The **self** (or self-concept) refers to how we perceive ourselves as a person. Rogers (1951) claimed that people have two basic needs: positive regard from other people and a feeling of self-worth (i.e. what we *think* about ourselves). Feelings of self-worth develop in childhood and are formed as a result of the child's interactions with parents. Further interactions with significant others (friends, spouse, etc.) also influence the person's feelings of self-worth. Rogers believed that how we think about ourselves, and our feelings of self-worth, are important in determining our psychological health. The closer our self-concept and our ideal self (i.e. who we feel we should be or would like to be) are to each other, the greater our feelings of self-worth and the greater our psychological health.

Congruence

When there is similarity between a person's ideal self and how they perceive themselves to be in real life, a state of **congruence** exists. However, if there is a difference between the self and ideal self, the person experiences a state of incongruence. The closer our self-image and ideal self are to each other, the greater the congruence and the higher our feelings of self-worth. It is rare for a complete state of congruence to exist, with most people experiencing some degree of incongruence. Because most people prefer to see themselves in ways that are consistent with their self-image, they may use defence mechanisms in order to feel less threatened by inconsistencies between how they would like to be and how they really are.

Conditions of worth

Although other people may help the process of self-actualisation, Rogers (1959) believed that more often they hinder it. The love and acceptance given by others may be unconditional (unconditional positive regard), when a person is accepted for who they are or what they do, or conditional, when they are accepted only if they do what others want them to do. When people experience conditional positive regard they develop **conditions of worth**. These are the conditions that they perceive significant others (e.g. parents or a spouse) put upon them, and which they believe have to be in place if they are to be accepted by others and see themselves positively. An individual may experience a sense of self-acceptance only if they meet the expectations that others have set as conditions of acceptance.

The influence on counselling psychology

Rogers (1959) claimed that an individual's psychological problems were a direct result of their conditions of worth and the *conditional* positive regard they receive from other people. He believed that, with counselling, people would be able to solve their own problems in constructive ways, and move towards becoming a more fully functioning person. Instead of acting in a directive way, humanistic therapists regard themselves as 'guides' or 'facilitators' to help people understand themselves and to find ways to enable their potential for self-actualisation.

Therapists provide empathy and unconditional positive regard, expressing their acceptance and understanding, regardless of the feelings and attitudes the client expresses. By doing this, a therapist is able to offer an appropriately supportive environment to help dissolve the client's conditions of worth. This results in the client moving towards being more authentic and more true to self, i.e. able to behave in a way that is true to the person they are, rather than the person others want them to be.

Links to economic development

Research suggests that Maslow's hierarchy may have relevance on a much larger stage than individual growth.

Hagerty (1999) looked at the relationship between economic growth and measures of Maslow's levels in 88 countries over a 34-year period. Countries in the early stages of economic development were characterised by lower level needs (e.g. physiological needs such as access to food and safety needs).

As would be predicted by Maslow's model, it was only in the advanced stages of economic development that self-actualisation became important (e.g. using levels of educational enrolment as a measure of people's desire to better themselves).

Research support for conditions of worth

Research with adolescents has shown evidence consistent with Rogers' view.

Individuals who experience conditional positive regard are likely to display more 'false self behaviour' – doing things to meet others' expectations even when they clash with their own values. Harter et al. (1996) discovered that teenagers who feel that they have to fulfil certain conditions in order to gain their parents' approval frequently end up not liking themselves.

Consistent with Rogers' predictions, adolescents who created a 'false self', pretending to be the kind of person his or her parents would love, were more likely to develop depression and a tendency to lose touch with their true self.

Humanistic research methods do not establish causality

Evaluating the humanistic approach scientifically is difficult because most of the evidence used to support this approach fails to establish a causal relationship between variables.

Rogers in particular was an advocate of non-experimental research methods, arguing that the requirements of experimental methods make it impossible to verify the results of counselling. Most psychologists would argue that, without experimental evidence, evaluation of a therapy, or the theory that underlies it, becomes very difficult.

Although some studies have shown personal growth as a result of receiving humanistic counselling, these do not show that the therapy caused the changes, a fundamental requirement of scientific psychology.

The humanistic approach is unrealistic

Humanistic psychology represents an overly idealised and unrealistic view of human nature.

Critics argue that people are not as inherently good and 'growth oriented' as humanistic theorists suggest, and the approach does not adequately recognise people's capacity for pessimism and self-destructive behaviour. The view that personality development is directed only by an innate potential for growth is seen as an oversimplification, as is the humanistic assumption that all problems arise from blocked self-actualisation.

This suggests that encouraging people to focus on their own selfdevelopment rather than on situational forces may be neither realistic nor appropriate in modern society.

Cultural differences in the hierarchy of needs

In a later development to his theory Maslow did acknowledge that, for some people, needs may appear in a different order or may even be absent altogether.

This is borne out by cross-cultural evidence. For example, a study carried out in China (Nevis, 1983) found that belongingness needs were seen as more fundamental than physiological needs and that self-actualisation was defined more in terms of contributions to the community than in terms of individual development.

Consistent with this view, many studies have confirmed that Europeans and Americans focus more on personal identity in defining their self-concept, whereas Chinese, Japanese and Koreans define self-concept more in terms of social relationships.

MEET THE RESEARCHER

Abraham Maslow (1908–1970) was born in a New York slum, the child of immigrant Russian Jews. As a child he was the victim of anti-Semitism. Despite having an IO of 195 he still flunked some of his undergraduate courses as he found it difficult to focus on anything that didn't interest him. Described as shy and incredibly humble, Maslow eventually became an intellectual whose influence stretched far beyond academic psychology, into the world of business and popular culture.

KEY TERMS

Conditions of worth Conditions imposed on an individual's behaviour and development that are considered necessary to earn positive regard from significant others.

Congruence If there is similarity between a person's ideal self and self-image, a state of congruence exists. A difference represents a state of incongruence.

Free will The ability to act at one's own discretion, i.e. to choose how to behave without being influenced by external forces.

Hierarchy of needs The motivational theory proposed by Abraham Maslow, often displayed as a pyramid. The most basic needs are at the bottom and higher needs at the top.

Humanistic Refers to the belief that human beings are born with the desire to grow, create and to love, and have the power to direct their own lives.

Self Our personal identity, used synonymously with the terms 'self-image' and 'self-concept'.

Self-actualisation A term used in different ways. Rogers used it as the drive to realise one's true potential. Maslow used it to describe the final stage of his hierarchy of needs.



APPLY YOUR KNOWLEDGE

Entrepeneurs like Chip Conley, the founder of Joie de Vivre Hospitality, attribute much of their success to psychologist Abraham Maslow's hierarchy of needs. By applying this theory to his business, particularly to staff and customers, Conley was able to build a successful business empire and set out to teach others how to do the same thing.

Imagine you have started a new company selling hot tubs in the North of England. You have a staff of 20 and a potential customer base of millions.

How could you utilise Maslow's hierarchy of needs model to make your staff happier and your customer base more likely to buy one of your expensive hot tubs?

CAN YOU?

- 1. Briefly explain what is meant by the terms 'free will', 'selfactualisation', 'congruence' and 'conditions of worth'. (2 marks each)
- 2. Outline Maslow's hierarchy of needs. (4 marks)
- 3. Explain the influence of humanistic psychology on counselling psychology. (4 marks)
- 4. Outline one strength and one limitation of humanistic psychology. (3 marks each)
- **5.** Discuss the humanistic approach in psychology. (16 marks)

Comparison of approaches

The six approaches we have covered in this chapter are very different, but also have some notable similarities in the assumptions they make about human behaviour. In this final spread we examine where each approach stands with regards three central issues in psychology, **determinism**, **nature-nurture**, and the importance of the **scientific method**.

DETERMINISM: THE CAUSES OF BEHAVIOUR

Determinism refers to the belief that behaviour is determined by forces other than the individual's will to do something. Many of the approaches covered in this chapter represent a determinist view, because they suggest that our behaviour is determined by, for example, biology, early experience or rewards. Free will is used to refer to the alternative end of the spectrum, where the individual is seen as being capable of self-determination. As with most debates in psychology, the answer usually lies somewhere in between – our behaviour is probably a mixture of the two extremes.

APPROACH	Behaviour is determined by
Behaviourist	the consequences of our behaviour (i.e. our reinforcement history), which determines the likelihood of a behaviour reoccurring. Behaviourists such as Skinner emphasise the importance of external forces in the environment (e.g. rewards and punishments) in shaping our behaviour (environmental determinism).
Social learning	observations of others (vicarious learning) and so behaviour is largely a product of our experience (i.e. it is <i>determined</i>). However, although the learning process provides the 'tools' to conduct a particular behaviour, it is up to the individual how and when to apply these tools (i.e. <i>free will</i>).
Cognitive	our own thought processes, which determine our behaviour. Therefore the individual has some degree of control over his or her behaviour.
Biological	physiological (e.g. neurochemical and hormonal) factors and/or inherited (genetic) factors, both of which are outside of our control.
Psychodynamic	unconscious factors, which are largely unknown to us and therefore beyond our conscious control. Freud believed that even trivial phenomena such as Freudian slips (e.g. calling someone by the wrong name) are caused by unconscious factors operating within the individual's motivational system.
Humanistic	our own free will. Humanistic psychologists such as Abraham Maslow and Carl Rogers believed that people exercise choice in their behaviour, rather than being at the mercy of outside forces such as biological predispositions or reinforcement history.

NATURE AND NURTURE: THE ROLE OF INNATE AND EXPERIENTIAL FACTORS

Human behaviour is either the product of a person's genes and biology (nature) or what they experience as a result of interacting with the environment (nurture). It is rare that behaviour is entirely one or the other alone. More usually, the question of 'nature or nurture' lies in looking at the way in which nature and nurture interact.

APPROACH	The origin of behaviour is
Behaviourist	nurture, as it is a consequence of our interactions with the environment and the consequences of our behaviour within that environment.
Social learning	primarily <i>nurture</i> in that people learn as a result of observing others. However, it is generally assumed that the capacity to learn from an observation of others has some adaptive value, therefore is likely to be innate (i.e. <i>nature</i>).
Cognitive	both <i>nature</i> and <i>nurture</i> , as thought processes may be a product of innate factors or our experiences. We all share the same means of cognitive processing (<i>nature</i>), but problems may arise when people develop irrational thoughts and beliefs as a result of their experiences (<i>nurture</i>).
Biological	primarily <i>nature</i> . Biological systems such as the CNS and the endocrine system are the product of innate factors (<i>nature</i>). However, experience may modify these systems, e.g. Maguire <i>et al.</i> 's study (2000) of London taxi drivers, which found structural changes in the brain as a result of having to learn to navigate London's complex road layout (see page 161).
Psychodynamic	both <i>nature</i> and <i>nurture</i> . The psychodynamic approach focuses on the <i>nature</i> side of human behaviour in the unconscious forces (e.g. the demands of the id) and conflicts that we must all deal with. However, how we cope with these is in a large way a product of our upbringing (i.e. <i>nurture</i>).
Humanistic	both <i>nature</i> and <i>nurture</i> . The humanistic approach makes various assumptions about human nature, e.g. our drive to self-actualise (<i>nature</i>). However, it also acknowledges the problems in achieving self-actualisation that arise from our experiences and upbringing, e.g. our experience of conditional positive regard and conditions of worth (<i>nurture</i>).

PSYCHOLOGY AS SCIENCE

Psychology is often defined as the 'science of behaviour', and psychologists have adopted the scientific method as the most appropriate way of studying human behaviour. However, because psychology lies at the intersection of many other different disciplines, such as biology, philosophy and sociology, the application of scientific methods is not universal across the subject. For example, psychologists who are allied with biology may adopt the methods associated with the natural sciences, whereas psychologists who are more allied with philosophy or sociology may not always see scientific methodology as appropriate to their areas of interest.

APPROACH	Its commitment to the scientific method is
Behaviourist	positive, as the behavioural approach is highly objective and experimentally based. By focusing only on responses that can be accurately measured, it aligns itself with the rigour of the scientific method more than most other approaches. This also allows for a high degree of replication, which is an important part of the scientific process.
Social learning	positive, as its research investigations are reliable and allow inferences about cause and effect to be drawn. However, this does mean that research (e.g. Bandura's Bobo doll studies) tends to be carried out in rather artificial settings, so can lack validity in terms of real-life behaviour.
Cognitive	positive to a degree, as most propositions can be easily tested. However, because mental processes are largely unobservable, a great deal of inference is necessary to develop models of cognitive processing.
Biological	positive, as it lends itself to experimental study. For example, the influence of neurotransmitters in a behaviour can be investigated by administrating drugs which change the levels of a particular neurotransmitter in the brain and then measuring any change in that behaviour.
Psychodynamic	mixed. Although some aspects of this approach are open to scientific investigation, there tends to be much greater reliance on case studies and subjective interpretation.
Humanistic	largely negative. Humanistic psychologists argue that scientific research methods are derived from and suited for the natural sciences, but are not appropriate for studying the complexities of human consciousness and experience.

KEY TERMS

Determinism Behaviour is determined by external or internal factors acting upon the individual.

Nature Behaviour is seen to be a product of innate (biological or genetic) factors.

Nurture Behaviour is a product of environmental influences.Science A systematic approach to creating knowledge. The method used to gain scientific knowledge is referred to as the scientific method.

CAN YOU? No. 5.8

 Using every combination of the six approaches covered in this chapter, outline one similarity and one difference between each combination (2 marks each).

For example: Psychodynamic vs Social learning

Cognitive vs Biological Humanistic vs Behavioural Biological vs Psychodynamic

AN OVERVIEW

APPROACH	Basic assumptions
Behaviourist	 External forces in the environment shape our behaviour (i.e. it is determined). Explanations of behaviour emphasise the role of nurture more than nature. Behaviourism aligns itself strongly with the scientific method.
Social learning	 Behaviour is learned as a result of the observations of others (i.e. it is determined). Explanations of behaviour emphasise the role of nurture more than nature. Social learning aligns itself with the scientific method but research can lack validity.
Cognitive	 Thought processes determine behaviour (i.e. some degree of control over behaviour). Explanations of behaviour emphasise the role of nature and nurture. Cognitive psychology aligns itself with the scientific method despite some inference.
Biological	 Physiological and/or inherited factors determine behaviour. Explanations of behaviour emphasise the role of nature more than nurture. Biological psychology aligns itself strongly with the scientific method.
Psychodynamic	 Unconscious factors beyond our conscious control determine behaviour. Explanations of behaviour emphasise the role of nature and nurture. Psychodynamic psychology does not really align itself with the scientific method.
Humanistic	 Behaviour is under our conscious control (i.e. we have free will). Explanations of behaviour emphasise the role of nature and nurture. Humanistic psychology mostly rejects the use of the scientific method.



UPGRADE

This spread focuses on a 'comparison' of the different approaches, so the main skill to acquire is to be able to explain *similarities* and *differences* between the approaches. This is quite a challenging thing to do, although the comparison tables on this spread should make it easier. You could:

- **1.** State the way in which they are similar, e.g. both the behaviourist approach and the biological approach see human behaviour as being determined by factors that are largely out of the person's control.
- 2. Elaborate this similarity by pointing out how it applies to the approaches concerned, e.g. behaviourists see an individual's behaviour as being a product of their reinforcement history, and biological psychologists focus on the determining influences of genetics and brain chemistry.

Explaining differences can be achieved in a similar way, which is where the word 'whereas' comes in handy. For example, psychodynamic and humanistic approaches differ in their focus on determinism or free will. Psychodynamic theorists believe that behaviour is determined by unconscious forces beyond our conscious control, whereas humanistic psychologists believe that we are free to choose how to act.

End-of-chapter review) CHAPTER SUMMARY

We have identified here the key points of the topics on the AQA specification covered in this chapter, i.e. the bare minimum that you need to know. You may want to fill in further details to elaborate and personalise this material.

THE ORIGINS OF PSYCHOLOGY

WILHELM WUNDT

- · Established experimental psychology as a science.
- · Involves breaking down behaviours into basic
- Introspection was the chosen method of study.
- Worked by asking individuals to engage in a task and then reflect the mental processes they were
- Used to establish general theories about mental processes.

THE EMERGENCE OF PSYCHOLOGY AS A SCIENCE

- · Scientific psychology uses empirical methods.
- Assumptions of determinism and predictability.
- The scientific method refers to the use of methods that are objective, systematic and replicable.
- Replication means results might be accepted as
- Scientific method also includes development of theories that can explain results and constant testing and refining.

EVALUATION/DISCUSSION

- Wundt's methods were unreliable (relied on 'nonobservable' responses).
- Scientific approach tests assumptions about behaviour by establishing causality and correcting
- Not all psychologists believe human behaviour can be explored using scientific methods - much is unobservable and relies on inferences from data.
- Introspection not particularly accurate (e.g. Nisbett and Wilson).
- lntrospection still useful in psychology (e.g. Csikszentmihalyi and Hunter).

THE BEHAVIOURIST APPROACH

CLASSICAL CONDITIONING

- Associated with Pavlov.
- Involves pairing of NS with UCS so that eventually NS becomes CS, capable of eliciting a CR.
- After many pairings NS (CS) + CR.
- Timing NS must be shortly before UCS.
- Extinction CS loses its ability to produce CR after a few trials if no reinforcement.
- Spontaneous recovery CS + UCS paired again, link made much more quickly.
- Stimulus generalisation CR also to stimuli that are similar to CS.

OPERANT CONDITIONING

- Likelihood of repeating behaviour depends on its consequences.
- Positive and negative reinforcement increases the likelihood of a behaviour occurring.
- Pleasant consequences = positive reinforcement.
- Removal of unpleasant stimulus = negative reinforcement.
- Continuous reinforcement effective for establishing a behaviour, partial reinforcement for
- Adding unpleasant consequence, or removing pleasant stimulus = punishment.

EVALUATION/DISCUSSION

- Classical conditioning has been applied to therapy, e.g. in treatment of phobias.
- Classical conditioning only appropriate for some forms of learning, e.g. concept of preparedness (Seligman).
- Operant conditioning based on experimental work allows establishment of cause-effect relationships.
- Operant conditioning over-reliance on nonhuman animals in research, ignores possibility of
- Limited perspective behaviourist explanations ignore the role played by cognitive and emotional

SOCIAL LEARNING THEORY

SOCIAL LEARNING THEORY (BANDURA, 1986)

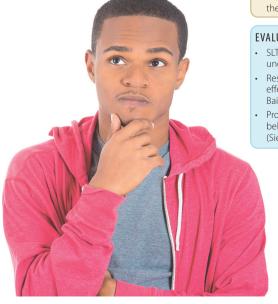
- New patterns of behaviour acquired as a result of the observation of others.
- Models provide examples of behaviour that can be observed and imitated.
- Key determinants: (i) characteristics of the model; (ii) observer's ability to perform the behaviour; (iii) its observed consequences.
- Identification with a model based on perceived similarity.
- Vicarious reinforcement individuals learn about the likely consequences of behaviour by observing others.
- Individuals must form mental representations of the behaviour and its probable consequences.

KEY STUDY (BANDURA ET AL., 1961)

- Procedure: children observed aggressive or nonaggressive models interacting with Bobo doll.
- The aggressive model displayed distinctive physical and verbal aggressive acts toward the
- Children then allowed to interact with the Bobo
- Findings: children who observed the aggressive model imitated their aggression.
- Children who observed the non-aggressive model showed little aggression.

EVALUATION/DISCUSSION

- SLT has useful applications offers a way of understanding criminal behaviour (Ulrich).
- Research support for identification learning more effective from similar than dissimilar model (Fox and
- Problem of causality criticism of view of criminal behaviour due to exposure to deviant models (Siegel and McCormick).
- Problem of complexity advocates of SLT disregard other potential influences on behaviour.
- ldentification has been shown to be important in social learning (e.g. Andsager study on health campaigns).





THE COGNITIVE APPROACH

THE STUDY OF INTERNAL MENTAL PROCESSES

- Mental processes cannot be studied directly so must be inferred.
- Schemas help organise and interpret information.
- Schemas fill in gaps in the absence of full information.
- Theoretical models are simplified representations based on current evidence.
- Computer models of mental processes analogies of information processing where information is inputted through the senses, encoded into memory, etc.

THE EMERGENCE OF COGNITIVE NEUROSCIENCE

- The emergence of cognitive neuroscience, e.g. use of neuroimaging techniques to study the brain.
- Burnett et al., when people feel guilt, medial prefrontal cortex is active.

EVALUATION/DISCUSSION

- Cognitive approach has applications, e.g. cognitive approach to psychopathology.
- · Cognitive approach is scientific, i.e. it uses the scientific method.
- Computer models there are many differences between computer processing and human processing, e.g. computers do not make mistakes.
- The cognitive approach ignores emotion and motivation irrelevant to a computer but not to a human.
- Studies may lack ecological validity most research uses tasks that are relatively meaningless in real-life settings.

THE BIOLOGICAL APPROACH

BIOLOGICAL INFLUENCES ON BEHAVIOUR

- Genes carry the instructions for a particular characteristic from one generation to the next.
- Relative role of genes or environment = nature-nurture debate.
- Genotype is the genetic code written in individual's DNA.
- Phenotype is physical manifestation of this inherited information.
- Heritability = the amount of variability in a trait within a population attributed to genetic differences.
- The nervous system = central and peripheral nervous systems.
- · The largest part of the brain is the cerebrum, divided into four lobes.
- Neurotransmitters enable nerve impulses to cross the synapse.
- Excitatory and inhibitory neurotransmitters stimulate or inhibit a receiving nerve cell
- · Serotonin is an inhibitory neurotransmitter.
- Hormones produced by endocrine cells and stimulate target cells.
- · Evolution and behaviour through natural selection.

EVALUATION/DISCUSSION

- Biological approach uses the scientific method makes replication easier.
- Biological approach provides clear predictions, which can be tested.
- · Biological approach is reductionist.
- Evolutionary explanations stress importance of biological evolution, but ignores possibility of *cultural* evolution.
- @ Identifying a genetic basis for behaviour may lead to discrimination of the basis of a particular genotype.

A LEVEL ONLY ZONE

THE PSYCHODYNAMIC APPROACH

FREUD'S THEORY OF PSYCHOANALYSIS

- Unconscious mind controls many of our everyday activities.
- Defence mechanisms prevent traumatic memories from the unconscious from reaching conscious awareness.
- The id, ego and superego.
- Id operates according to the pleasure principle.
- Ego mediates between the demands of the id and demands of reality.
- Superego divided into conscience and egoideal.
- Defence mechanisms operate unconsciously, distorting reality to reduce anxiety.
- Repression the unconscious blocking of unacceptable thoughts.
- · Denial the refusal to accept reality.
- Displacement redirecting of thoughts and feelings from original target onto an innocent object.
- Psychosexual stages oral, anal, phallic, latent, genital.

EVALUATION/DISCUSSION

- Pioneering approach Freud the first to demonstrate the potential of psychological treatments for disorders.
- Scientific support Fisher and Greenberg found support for many psychoanalytic claims.
- Psychoanalysis is gender biased based on male rather than female sexuality.
- Psychoanalysis is culture biased little relevance for people from non-Western cultures.
- Psychoanalysis is a comprehensive theory, including use as a form of literary criticism.

HUMANISTIC PSYCHOLOGY

BASIC ASSUMPTIONS OF THE HUMANISTIC APPROACH

- Stresses the importance of free will and conscious control over our own destiny.
- Maslow interested in what could go right rather than what could go wrong.
- Hierarchy of needs most basic needs at the bottom, higher needs at the top.
- People reaching self-actualisation experience it through peak experiences. Rogers used term to describe 'fully functioning person'.
- Feelings of self-worth develop in childhood as a result of interactions with parents.
- State of congruence exists when similarity between person's ideal self and how they perceive themselves to be.
- Conditions of worth arise when people experience conditional rather than unconditional positive regard.
- Problems a product of person's conditions of worth. Therapist provides unconditional positive regard to help person self-actualise.

EVALUATION/DISCUSSION

- Maslow's hierarchy linked to economic development (e.g. Hagerty).
- Research support for conditions of worth, e.g. Harter et al..
- Humanistic research methods produce data that is mostly correlational.
- The humanistic approach represents an overly idealised and unrealistic view of human nature.
- Cross-cultural evidence that in some cultures needs appear in a different order (Nevis).

COMPARISON OF APPROACHES

DETERMINISM: THE CAUSES OF BEHAVIOUR

- Behaviourist our reinforcement history.
- Social learning observation of others.
- · Cognitive our own thought processes.
- Biological physiological and/or genetic factors.
- Psychodynamic unconscious factors.
 Humanistic our own free will.

NATURE AND NURTURE: THE ORIGINS OF BEHAVIOUR

- Behaviourist nurture (interactions with the environment).
- Social learning primarily nurture (observing others).
- Cognitive both nature and nurture (innate factors or our own experiences).
- Biological primarily nature (innate factors although can be modified by experience).
- Psychodynamic both nature and nurture (unconscious forces and upbringing).
- Humanistic both nature and nurture (drive to self-actualise and conditions of worth).

PSYCHOLOGY AS SCIENCE

- Behaviourist positive (highly objective and experimentally based).
- Social learning positive (inferences about cause and effect can be drawn).
- Cognitive positive to a degree (propositions can be tested, but a good deal of inference is necessary).
- Biological positive (lends itself to experimental study).
- Psychodynamic mixed (some aspects open to scientific investigation but greater reliance on case studies).
- Humanistic largely negative (scientific methods seen as inappropriate for human experience).

End-of-chapter review

EXAM QUESTION BANK ON APPROACHES IN PSYCHOLOGY TOPICS

The exam questions on approaches in psychology will be varied but there will be some short answer questions (AO1), including some multiple choice questions, some questions that ask you to apply your knowledge (AO2) and possibly an extended writing question (AO1 + AO3). Some questions may involve research methods and maths skills. We have provided a selection of these different kinds of questions here.

AS AND A LEVEL QUESTIONS

A LIVIL QUISTIONS			
0 1	Which of the following terms best matches the statements below? Choose one term that matches each statement. Use each letter once only.		
	A phenotype B identification C introspection D reinforcement E genotype		
	(i) The process of observing our inner world through analysing thoughts.	[1 mark]	
	(ii) The process that results in a response being strengthened.	[1 mark]	
	(iii) The process of relating to a model who we see as similar to ourselves.	[1 mark]	
	(iv) The genetic make-up of an individual.	[1 mark]	
0 2	Outline what is meant by cognitive neuroscience.	[2 marks]	
0 3	Using an example, outline one type of reinforcement used in learning theories.	[3 marks]	
0 4	Read the item below and then answer the question that follows.		
	Petra has just started university. She has decided to approach other students who dress similarly to her as she assumes that they will be 'into' the same kinds of things as her. Petra understands that many other people must feel like her, and this is why she does not get upset if other people have awkward conversations with her.		
	Outline what is meant by a schema. Make reference to Petra's experiences as part of your response.	[4 marks]	
0 5	Outline the role of meditational processes in social learning.	[3 marks]	
0 6	Read the item below and then answer the question that follows.		
	Both of Oliver's parents were very intelligent so there is a good chance that he had inherited the potential to be as intelligent as them. However, his parents died when he was very young, and he has been brought up by his aunt, who has five other children. Now that Oliver has just started school, he appears to be behind his year group and needs extra help with phonics.		
	Distinguish between the concepts of genotype and phenotype. Make reference to the case of Oliver as part of your answer.	[4 marks]	
0 7	Using an example, outline how neurochemistry can influence behaviour.	[3 marks]	
0 8	Distinguish between classical and operant conditioning.	[3 marks]	
0 9	Explain how computer models are used to make inferences about mental processes.	[4 marks]	

1 0	Describe and briefly evaluate the influence of evolution on behaviour.	[6 marks]
1 1	Describe and evaluate Skinner's research into operant conditioning.	[12 marks]
1 2	Discuss the biological approach in psychology.	[12 marks]
1 3	Read the item below and then answer the question that follows.	
	Rory looks up to his older sister Rosie and tries to copy many of the things that he sees her doing. Rory is particularly keen to be as sporty as Rosie as he sees that their parents give her lots of praise and attention for this. Rosie is also aware that Rory pays a lot of attention to what she does. This is why she is always careful to play fair when she knows that he is watching.	
	With reference to social learning theory, explain Rory's sporty behaviour.	[6 marks]
A LEVEL O	ONLY QUESTIONS	
1 4	Name two psychosexual stages.	[2 marks]
1 5	Choose one of the following defence mechanisms.	
	RepressionDisplacementDenial	
	Using an example, outline how it is used according to the psychodynamic approach.	[3 marks]
1 6	Describe the influence of humanistic psychology on counselling.	[8 marks]
1 7	Outline what is meant by self-actualisation in humanistic psychology.	[2 marks]
1 8	Explain the role of conditions of worth in the development of self.	[3 marks]
1 9	Read the item below and then answer the questions that follow.	
	Sometimes Veronica cannot control her urge to just eat everything that is in her treat drawer. When she does do it, she feels extremely guilty and often forces herself to be sick afterwards. However, most of the time, Veronica deals with her urge by making sure that her treat drawer is not too full.	
	(i) State what is meant by the following structures of personality, according to the psychodynamic ap	proach.
	IdEgoSuperego	[1 mark] [1 mark] [1 mark]
	(ii) For each structure of personality, briefly state how it is shown in the case of Veronica.	[3 marks]
2 0	Discuss the biological approach in psychology. Refer to at least one other approach in your discussion	n. [16 marks]
2 1	Discuss the humanistic approach in psychology.	[16 marks]
2 2	Outline and discuss the cognitive approach. Refer to cognitive neuroscience in your answer.	[16 marks]
2 3	Discuss both the psychodynamic approach and the humanistic approach. Include a comparison of the approaches as part of your discussion.	[16 marks]

End-of-chapter review

EXAMPLE EXAM QUESTIONS WITH STUDENT ANSWERS AND EXAMINER'S COMMENT

We've provided answers by two students to some of the questions from pages 142–143 here, together with comments from an examiner about how well they've each done. Green comments show what the student has done well. Orange comments indicate areas for improvement.

10 Describe and briefly evaluate the influence of evolution on behaviour. (6 marks)

Ciaran's answer

Clear link to the question.

Evolutionary explanations of behaviour emphasise the role of natural selection in behaviours linked to survival and reproductive success. Evolutionary explanations of reproductive behaviour claim that males and females select mates that have certain characteristics because this makes it more likely that their offspring will survive and reproduce and so these ullet

A problem for evolutionary explanations of behaviour is that behaviour such as mate choice is just as likely to be determined by cultural factors such as media messages. Unlike explanations of behaviour based on cultural factors, it is difficult to subject evolutionary explanations to scientific testing in the same way, nor control for all the other factors that might influence the behaviour in question.

More of a focus on the process than the influence it has.

A good evaluation point, but it could be developed with an example or further elaboration.

Examiner's comments

After a positive start, the answer lacks detail in relation to the influence on behaviour. There is some development of the evaluation points but it doesn't go far enough. 3/6 marks

AS essay

12 Discuss the biological approach in psychology. (12 marks)

characteristics become more widespread in the population.

'Assumptions' of the approach are included, giving a clear and accurate beginning.

Maisie's answer

The biological approach <mark>argues that there is a biological basis to all behaviour</mark>. For example an imbalance of neurotransmitters, such as serotonin, has been shown to be important in lots of different behaviours, such as aggression. Crockett et al. found that low levels of serotonin increased aggressive behaviour. An imbalance has also been found with many mental disorders, such as increased dopamine linked to schizophrenia and low serotonin also linked to increased • <mark>depression</mark>. Scientific evidence like this adds to the approach and suggests that the explanations are valid.

Genetic factors influence behaviour too, with characteristics such as intelligence, personality and eye colour being passed down from one generation to the next (heredity). This genetic material is our genotype, whereas phenotype is the consequence of the genotype interacting with the environment. The biological approach also states that different parts of the brain have different functions, such as the hippocampus being linked to our memory.

There has been lots of research to back the approach up, such as twin studies and Buss's study ullet<mark>into human mate preferences</mark>. Buss's study showed that there were universal similarities across 37 cultures. This suggests that at least parts of the biological approach are correct.

Another strength is that it uses the scientific method to test its predictions, allowing there to be more replicability to check the findings. To test a neurochemical explanation of depression, for example, drugs that alter the levels of neurotransmitters in the brain can be given to one group and a placebo given to a control group. If the first group has a reduction in their symptoms and the control group doesn't, then this suggests that their depression has a neurochemical cause. This has also led to important applications using biological (drug) treatments in the treatment $^{
m of}$ depression. These have gone on to be effective in treating the disorder, $^{
m and}$ have led to real-life $^{
m o}$ improvements for many people.

The biological approach also has limitations, for example it is accused of being reductionist. This means that it reduces behaviour down into its smallest units, such as genes, <mark>and other possible</mark> • <mark>influences, such as conditioning or internal mental processes, are ignored.</mark> This can be a problem

Good elaboration of the point. It is linked back to the approach well and used as AO3 by saying the research adds to the explanation.

Some excellent knowledge demonstrated in this section with detail - all AO1.

Accurate detail and an effective, concise use of research.

Excellent link back to the approach, which shows that Maisie understands what the question is asking.

A decent example of the scientific method but a little generic.

A good point but could be elaborated further.

A good point that is elaborated

when there is evidence to show that things like conditioning can be linked to our behaviour, again using a scientific method. It looks more likely that the biological explanations of our behaviour are a significant part of the answer but other factors need to be included as well. (409 words)

A good attempt at a conclusion. which could be more detailed but given the time limit and the length of this essay, it is not needed.

Examiner's comments

Maisie demonstrates a good breadth of knowledge with clear description of the approach, including accurate detail and explanation. The discussion of the approach is accurate and mainly effective alongside a good use of research. *Level 4 essay – potentially full marks: 12/12.*

A Level essay

23 Discuss both the psychodynamic approach and the humanistic approach. Include a comparison of the approaches as part of your discussion. (16 marks)

Exam tip...

When writing your answer remember to refer back to the question regularly, to check you are still covering what is required.

Ciaran's answer

Concisely written and although there is a lot more that could be written, you don't want to spend too long on AO1 and leave yourself without enough time for AO3.

Freud's psychoanalytic theory claimed that much of our behaviour was not under conscious control but was influenced by the unconscious mind. The id lies within the unconscious mind and is driven by the need to express sexual energy (libido). The ego must deal with the demands of the id within the constraints imposed by reality. The superego is the moralistic part of personality. It contains the conscience and the ego ideal which is what a person strives towards and is largely a product of parental influence. Freud believed that the child went through five psychosexual stages, each of which expresses libido in different ways.

There is some support for Freud's claims. For example, Fisher and Greenberg looked at over 2,000 studies that had tested Freudian claims. They found support for a number of these, including the role played by unconscious motivation in behaviour. A problem for this approach is the claim that it is gender biased. Freud concentrated on males only, and his theory is largely a theory of male development.

The humanistic approach focuses more on positive development in humans, and so has a strong emphasis on conscious experience and self-actualisation. Maslow's self-actualisation theory represents development in the form of a pyramid, with the basic 'deficit' needs at the bottom, and the higher 'growth' needs at the top. The highest of these is self-actualisation. People who achieve self-actualisation tend to be more creative than those motivated by lower level needs. Rogers' humanistic theory stresses the importance of self-worth in development. If there is congruence between our ideal self and our actual self, then we experience greater feelings of self-worth and so higher levels of psychological health.

There is research support for both of these humanistic theories. Hagerty (1999) found evidence that the economic development of different countries was linked to Maslow's levels. Countries in the early stages of economic development were more concerned with lower levels, e.g. physiological needs such as access to food. Countries in more advanced stages of economic development were concerned with higher level needs such as education and female emancipation. A problem for the humanistic approach is that it doesn't lend itself to experimental testing and relies too much on case studies, which do not give researchers the opportunity to establish cause and effect relationships.

There are some differences between the psychodynamic and humanistic approaches. The humanistic approach believes that people have free will rather than the psychodynamic belief that people are at the mercy of forces that are out of their conscious control. There are some similarities between the two approaches. Both have based their theories on individual case studies rather than using the scientific method. (442 words)

Some elaboration of this point. It could be made a little more specific, countered with a problem with the research or a confirmation point such as 'this suggests that....'

A valid criticism but limited development. No real examples and no explanation of how that will affect the approach itself, for example, outlining how the gender bias may limit how effective the explanation is.

This would be a good point to use to make comparisons. It would help the flow of the essay and mean less writing, as the point about conscious experience is already being made

'Unlike the psychodynamic approach, the humanistic approach emphasises conscious experience rather than unconscious drives'.

Only support for one of these is highlighted here though. It would help to explain support for both.

Good use of research.

There are a number of limitations, such as the approach being unrealistic, that could be added here.

A good attempt to develop the point. It could be elaborated further by saying 'This is a problem because...'

A good comparison point. Try to think of ways that this could be developed further.

Given the time constraints, there is some accurate and generally well detailed description.

Examiner's comments

Knowledge of the approaches is accurate and reasonably detailed. The discussion is accurate but not always elaborated enough or lacks explicit comparison at times, which limits how effective it is. *Level 3 essay: this answer is likely to get 10 marks out of 16.*

Accurate comparison – however it could be elaborated and it would be better to have some comparison throughout the essay.