

Glossary

abnormal behaviour behaviour which is regarded by society as deviant or maladaptive; according to DSM-IV, an individual must be suffering or show maladaptive functioning in order for behaviour to be described as abnormal.

accessibility in LTM, the principle that remembering and forgetting are dependent on effective retrieval; without the proper cues, information which exists in LTM may not be accessible.

accommodation in Piaget's theory of cognitive development, a process of modifying our cognitive schemata in response to new knowledge or experience.

actualizing tendency in Rogers's theory, an innate drive which reflects the desire to grow, to develop and to enhance one's capacities.

adrenal glands endocrine glands, located just above the kidneys, which play an important role in arousal and stress; the outer layer, the cortex, secretes corticosteroids and the medulla (the inner core) secretes epinephrine (adrenaline) and norepinephrine (noradrenaline).

aetiology the study of the causes of a disease or mental disorder.

aggression behaviour which causes intentional harm to another person.

agoraphobia anxiety disorder in which a person feels anxiety about experiencing panic attacks in public, and therefore avoids public situations.

algorithm a procedure for problem solving which, when used appropriately, always leads to the solution of a particular type of problem.

altered state of consciousness any state of awareness which differs from normal waking awareness; examples could include meditation, sleep, drug states and psychosis.

altruism behaviour intended to help others, independently of any self-interest.

ambiguous figure any stimulus which can be perceived in more than one way.

amphetamine delusional disorder a form of mental disorder resulting from the excessive use of amphetamines; its primary symptom, extreme paranoid delusions, can make it appear symptomatically identical to paranoid schizophrenia.

amygdala an almond-shaped structure in the limbic system which plays a role in basic emotions, and possible memory and stimulus evaluation.

anal stage in Freud's theory of psychosexual development, the second stage (15 months to 3 years); during this stage the focus of drive energy shifts to the lower end of the digestive tract, and the major conflict is toilet training.

androgens hormones whose functions are related to masculine characteristics; the most important is testosterone.

animism Piaget's term for the small child's tendency to ascribe humanlike qualities to inanimate objects.

anti-anxiety drug a drug which functions as a CNS depressant, but whose primary behavioural effect is the reduction of anxiety.

antidepressant a drug which is used to treat clinical depression, primarily by enhancing the activity of the neurotransmitter serotonin.

anti-social personality disorder a behaviour pattern in which an individual shows a history of disregard and violence towards others, unaccompanied by guilt; although these individuals may not report either suffering or unsatisfactory functioning (the generally-accepted standard for abnormality), their behaviour is still deemed abnormal because it violates society's norms in such significant ways.

anxiety a negative emotional state associated with threat to the self; in Freud's theory, it arises when the ego is faced with an influx of stimuli with which it cannot cope, as a result of either external danger or the demands of id or superego.

archetypes in Jung's theory, patterns or frameworks within the collective unconscious which serve to organize our experiences, providing the basis of many fantasies, myths and symbols.

- artificial intelligence** in computer science, the attempt to build machines which can function intelligently, and the use of such machines to test our understanding of human intelligence.
- assimilation** in Piaget's theory of cognitive development, a process of integrating new knowledge or experience into our existing cognitive schemata.
- association areas** areas of the cortex which have no primary function (such as receiving direct sensory data), but rather play a role in integrating activity from other brain areas.
- associationism** the doctrine, supported by Aristotle, Hume and others, that mental processes, particularly learning, are based on forming connections between ideas and/or events.
- attention** the process of selectively focusing on particular stimulus elements, typically those deemed most significant.
- attitude** a personal belief of an evaluative nature, such as good or bad, likeable or not likeable, which influences our reactions towards people or things.
- attribution theory** a theory dealing with the inferences we make about the causes of our own behaviour, and that of other people; the interpretations made are called attributions.
- autonomic conditioning** (also called 'learned operant control of autonomic responses') the conditioning of changes in autonomic (involuntary) responses (such as heart rate or blood pressure) by means of operant reinforcement.
- availability** in memory, the principle that remembering is determined by whether the information exists in LTM or not; forgetting implies that the information is destroyed.
- aversive conditioning** a form of behaviour modification which is designed to induce an aversive response to stimuli which are associated with existing undesirable behaviours.
- axon** the relatively elongated portion of a neuron between the cell body and the terminals which provides the signal pathway for a nerve impulse.
- basic anxiety** in Horney's psychodynamic theory, an intense sense of isolation and helplessness which is the primary source of human motivation.
- behaviour modification** the application of conditioning techniques to altering human behaviour, particularly those behaviours identified as abnormal.
- bias** a source of error which results in a systematic distortion of results.
- biofeedback** a general term for applications of the process of autonomic conditioning; the name refers to the fact that in humans reinforcement is based on providing an individual with information (feedback) about physiological processes (bio) which are normally not observable.
- brain** the portion of the central nervous system which lies within the skull.
- brain stem** the region at the top of the spinal cord, composed of three primary structures: the medulla, the pons and the midbrain.
- bystander apathy** the failure of onlookers to intervene in an emergency; despite the label, the cause is often unrelated to apathy.
- bystander intervention** the act of assisting strangers in an emergency.
- case study** a detailed description of a single individual, typically used to provide information on the person's history and to aid in interpreting the person's behaviour.
- catharsis** the release of drive energy in indirect form, either through the process of recalling emotionally charged experiences or involvement in symbolic activity.
- causality** the study of how actions or events produce (cause) a particular outcome.
- central nervous system (CNS)** the brain, together with the nerve pathways of the spinal cord.
- cerebellum** ('little brain' in Latin) two small hemispheres located beneath the cortical hemispheres, at the back of the head; the cerebellum plays an important role in directing movements and balance.
- cerebral dominance** the tendency for one hemisphere to be superior for particular functions.
- cerebral hemispheres** two half spheres, made up of the cortex and underlying structures, which comprise the major portion of the brain.
- chaos theory** a branch of mathematics dealing with non-linear functions which has been applied to the modelling of situations such as the weather and stock markets; non-linear systems are not predictable, because very small changes in initial conditions can result in radical differences at a later point.
- chromosomes** thread-like genetic structures composed of double strands of DNA and proteins, containing the genes; in humans, there are twenty-three pairs of chromosomes.

- chunk** the basic measure of STM capacity, representing a meaningful unit, such as random letters, numbers or words.
- classical conditioning** the study of learning which involves reflex responses, in which a neutral stimulus comes to elicit an existing reflex response.
- client-centred therapy** an approach to therapy developed by Carl Rogers, in which the person seeking treatment (termed a client), not the therapist, is seen as directing the process of therapy; later called person-centred therapy.
- closure** in perception, the tendency to fill in incomplete patterns to produce a coherent whole.
- cognitive appraisal theory** a theory of emotion which argues our emotional state is based on our assessment of the situation and its significance to our well-being.
- cognitive behaviour modification** an extension of behaviour modification which uses cognitive mediation (such as observing a model) in addition to basic conditioning techniques.
- cognitive dissonance** in Festinger's theory, a state of tension created when there are conflicts between an individual's behaviour and beliefs, or between two beliefs.
- cognitive map** Tolman's term for the mental representation of learned relationships among stimuli.
- cognitive neo-association theory** Berkowitz's theory that thoughts, memories and behaviour may be triggered by affective states and/or priming.
- cognitive neuroscience** a hybrid discipline aimed at identifying the biological bases of cognitive processes by combining techniques for the study of cognitive processes with measures of physiological processes.
- cognitive pathology** a phenomenon whereby researchers selectively ignore simplifying assumptions and other limitations which are part of the foundations of their theories and methods.
- cognitive restructuring** in Ellis's rational-emotive therapy, a process for modifying faulty beliefs and the negative emotions they produce, in order to develop realistic beliefs and self-acceptance.
- cognitive social learning theory** (sometimes simply 'social learning theory') a theory derived from the cognitive approach which asserts that behaviour can be learned from observing other people, and that behaviour is mediated by cognitive schemata.
- cognitive therapy** a form of therapy which focuses on the role of faulty beliefs and thought patterns in abnormal behaviour; because it also encourages testing beliefs via behavioural strategies, it is sometimes called 'cognitive behavioural therapy'. See also **rational emotive therapy**.
- collective unconscious** in Jung's theory, a biologically-based portion of the unconscious which reflects universal themes and ideas, not individual experience.
- collectivism** an orientation which emphasizes a person's connections and obligations to a social group (family, tribe, etc.); when applied to describe a culture, typically contrasted to **individualism**.
- compensation** in Adler's theory, a process of engaging in activities intended to produce a feeling of superiority over others, in order to overcome feelings of inferiority.
- competitive altruism** (also called 'costly signalling theory') the concept that individuals will make large public sacrifices if they believe there is a long-term personal benefit.
- complementarity** a concept developed by physicists to deal with the existence of two models which are both useful, but not directly reconcilable.
- complexity** a characteristic of systems composed of large numbers of interacting units (such as neurons in the brain), resulting in new patterns or phenomena not found in individual units.
- computerized imaging** techniques for studying brain function which use computers to convert information into a three-dimensional model of the brain which can be viewed on a television monitor.
- concordance** a technique for studying inheritance by examining characteristics of individuals whose genetic relationship is known.
- conditional positive regard** acceptance and caring given to a person only for meeting certain standards of behaviour.
- conditioned emotional response** an emotional response such as fear which is established through classical conditioning.
- conditioned reinforcer** stimuli which act as reinforcers but are not based on biological survival, such as attention, praise or money.
- conditioned response** in classical conditioning, a response to a previously neutral stimulus which has become a conditioned stimulus by repeated pairing with an unconditioned stimulus.

- conditioned stimulus** a stimulus which by repeated pairings with an unconditioned stimulus comes to elicit a conditioned response.
- conditions for growth** the conditions under which healthy development of personality occurs; defined by Rogers as unconditional positive regard, openness and empathy.
- conditions of worth** restrictions imposed on self-expression in order to earn positive regard.
- confirmation** in research, the process of determining that observations are consistent with the hypothesis being true.
- confirmation bias** a form of cognitive error based on the tendency to seek out information which supports one's beliefs, and ignore contradictory information.
- conformity** the tendency to adjust one's opinions and behaviour to comply with group norms in response to explicit or implicit social pressure.
- confound** in experimental research, a situation where two variables change simultaneously, making it impossible to determine their relative influence.
- confounding variable** a factor in research which varies jointly with a variable of interest, making it impossible to properly identify the role each variable has in affecting behaviour; typically, a confounding variable represents something which has been overlooked in planning the research, and is only identified after the data have been collected.
- congruence** in Rogers's theory, a feeling of integration experienced when the self and ideal self match.
- conscious** in Freud's theory, that aspect of the mind which contains those thoughts and feelings of which we are immediately aware at a given moment.
- context-dependent forgetting** failure to retrieve information from LTM due to the absence of appropriate contextual cues.
- contiguity** in behaviourism, the principle that a reinforcer must occur immediately after a response in order for learning to occur.
- contingency of reinforcement** in operant conditioning, a description of the relationship between a response and a reinforcer.
- continuity** in developmental theory, the view that changes occur through a continuous gradual process, rather than as a series of discrete stages; continuity is an assertion about the processes that underlie development, as well as the changes observed in behaviour.
- continuous reinforcement** a reinforcement schedule in which every response is followed by a reinforcer; equivalent to an FR 1 schedule.
- convenience sample** a quasi-random sampling procedure in which the potential sample pool actually differs from the population – for example, selecting university students instead of people in general; the impact on representativeness (if any) often depends on what behaviour is being studied.
- convergent problem** a problem which has a single solution, and all elements lead towards that solution; also called closed-end or well-defined problems.
- corpus callosum** a wide band of nerve fibres which connect the two hemispheres of the brain.
- correlation** a pattern or relationship observed between two variables.
- correlation coefficient** a descriptive statistic measuring the degree of relationship between two variables; for positive correlations, it is a number which varies between 0.0 and 1.0, and for negative correlations between 0.0 and -1.0; in both cases, the closer the value is to 1, the stronger the relationship between the two variables.
- cortex** the pink, somewhat wrinkled outer layer of the brain which controls many of our higher functions like speech and perception; from the Greek for 'bark' (as on a tree).
- creativity** the capacity to produce something which is both unique and useful.
- critical period** in development, the concept that there are optimal periods for the learning of certain behaviours.
- cross-sectional sample** a sample which is deliberately selected in such a way that the sample matches the population for particular characteristics, such as age and income.
- cross-sectional study** a research design based on selecting representative groups who vary on a particular characteristic; when the characteristic is age, this design provides a means of making developmental comparisons.
- cue-dependent coding** the concept that all information is stored in memory as a set of relationships called the context; remembering is seen as dependent on restoring the cues which formed the original context.

- culture** a relatively organized set of meanings, shared by members of a group, which affect the way that people, objects and events are interpreted.
- debriefing** discussing the nature of a research study with participants at its conclusion, in order to explain the true nature and goals of the research and to answer any questions or concerns.
- decay** in memory, the spontaneous loss of information with the passage of time.
- deception** in research, the deliberate misinforming of participants concerning the nature of the study and of their role.
- deduction** the process of drawing specific conclusions from a set of general principles.
- defective attention theory** a theory which argues that schizophrenia is due to difficulties in selecting and attending to the relevant stimuli in a situation.
- defence mechanism** in Freud's theory, a technique used by the ego to protect itself from anxiety and the threats which give rise to it; many psychologists use the terms for specific defences as descriptions of behaviour patterns, without endorsing the Freudian interpretation of their origin.
- deficiency motives** in Maslow's theory, needs whose motivating power is triggered by the absence of the underlying requirements, such as the physiological or esteem needs.
- delusions** false beliefs which are maintained in the absence of clear evidence to the contrary.
- demand characteristics** the overt and covert cues present in an experimental situation which can influence how participants behave.
- dependent variable** in an experiment, the behaviour measured in order to evaluate the effects of the independent variable.
- depersonalization** a type of dissociative reaction in which the individual psychologically withdraws from a situation, often accompanied by feeling that their body is not real or belongs to someone else.
- depressant** a drug which reduces CNS activity; in large doses, depressants can cause coma and even death.
- depression** a mood disorder characterized by sleep disturbances, fatigue and low self-esteem; in major depressive disorder, the symptoms are severe enough to seriously hamper normal functioning, and can be accompanied by thoughts of suicide.
- descriptive statistics** the branch of statistics which is concerned with describing and summarizing sets of scores.
- determinism** the assumption that all behaviour has specific causes.
- developmental psychology** the study of the processes which underlie growth and change in behaviour over time.
- diathesis-stress model** a theory which views abnormal behaviour as being due to a combination of a physiological predisposition (diathesis) and a stressful environment.
- diffusion of responsibility** a lessening of an individual's feeling of responsibility in a situation which involves other people.
- direct observation** any observational technique which depends on direct measurement of behaviour by the researcher, rather than asking an individual to report their behaviour.
- discriminative stimulus** in operant conditioning, a stimulus which signals the contingency of reinforcement available.
- displacement** in memory, forgetting (in STM) due to new incoming information pushing out the previous contents; in psychoanalysis, a defence mechanism which involves the redirection of drive energy from one object to a substitute object.
- distal cause** a factor which has an indirect effect on behaviour, such as previous experiences in similar situations.
- divergent problem** a problem which does not have a single optimal solution, except according to the criteria one may adopt; rather, the problem tends to lead in several different directions; equivalent to an ill-defined problem.
- domain-general model** a theory which attempts to account for many aspects of behaviour in terms of a single set of principles.
- domain-specific model** a theory which focuses on only a single aspect of behaviour in the belief that different aspects of behaviour involve different processes, and therefore require different theoretical explanations.
- dopamine hypothesis** a theory which argues that schizophrenia is based on overactivity in neural pathways which depend on dopamine as a neurotransmitter.

- double-bind hypothesis** a theory of schizophrenia developed by anthropologist Gregory Bateson and his colleagues, which argues that faulty communication patterns within the family are the cause of schizophrenia.
- double-blind design** a rigorous form of experimental control, whereby both the subject and experimenter are kept uninformed about details of the experiment which could result in bias (both subject bias and experimenter bias).
- dream censor** the psychic mechanism whose function is to ensure that sleep is not disturbed by the unconsciously expressed desires that are the basis of dreams; to accomplish this, the dream censor converts the content of the dream into symbolic form (the manifest content).
- dualism** the view, first attributed to Descartes, that mind and body are distinct; Descartes believed the two could interact via the pineal gland in the brain.
- efficacy** the measured effectiveness of a treatment technique in medicine or psychotherapy.
- ego** (Latin for 'I') in psychoanalysis, the element of the psyche which provides the integrating of personality by mediating between the id and the superego, and also mediates the links with the outside world; in Jung's theory, the element of the self which provides the conscious direction of one's life.
- egocentrism** Piaget's term for the small child's tendency to assume that their perspective of the world is the only one possible.
- elaborative rehearsal** the active processing of items in STM in order to code the information for LTM; material may be processed in various ways, ranging from an emphasis on sensory characteristics (visual appearance, sound) to a focus on the semantic content (meaning) of information.
- electrical stimulation of the brain (ESB)** artificial stimulation of neurons by means of a current applied through an implanted electrode.
- electroencephalograph (EEG)** – 'writing the electricity of the brain') a device for recording the electrical activity of the brain.
- empathy** the ability to understand another person's perceptions and feelings; seen by Rogers as a condition for growth.
- empirical** based on making observations, as in an empirical theory.
- empiricism** the philosophical position, first attributed to John Locke, that all knowledge is based on experience; hence, the basis of the view that behaviour is learned.
- encoding** the processing of stimulus information for retention in memory.
- endocrine glands** (ductless glands) glands which secrete chemicals called hormones directly into the bloodstream.
- endorphin** (endogenous – naturally occurring – morphine) a neuropeptide which plays a significant role in pain and mood states.
- epigenetic effects** in genetics, a term to describe processes whereby stable changes in the expression of genes occur during development; such changes can be transmitted during cell division, but do not involve mutations of DNA itself.
- episodic memory** the portion of LTM which contains personal experiences, organized according to where and when events happened, such as what happened on your last birthday.
- equilibration** in Piaget's theory of cognitive development, the process of maintaining balance between our environment and the mental structures which we use to represent that environment.
- equipotentiality premise** an assumption made by some behaviourists which states that the principles of conditioning should apply equally to all behaviour, in any species.
- ethical hedonism** the principle that individuals engage in moral behaviour, such as altruism, because it provides some personal benefit.
- ethology** the study of the behaviour of animals in their natural environments.
- evolution** a theory to account for the development of species diversity by means of variations which are transmitted to offspring by inheritance; Darwin's theory of natural selection proposed that variations which enhance adaptability, and thereby enhance survival and reproduction rates, are the most likely to be transmitted.
- evolutionary psychology** the application of evolutionary principles to the understanding of behaviour.
- existentialism** a twentieth-century philosophical movement concerned with the meaning of individual existence in a universe which lacks objective meaning or purpose.
- experiment** a research design in which the experimenter uses a controlled situation and manipulates one or

more factors (called independent variables) in order to determine their effect on one or more measures of behaviour (called dependent variables).

experimental realism a quality of involvement whereby research participants respond without regard for the laboratory context, as they would in an ordinary situation.

experimenter bias systematic error created when an experimenter's knowledge and expectations about the experiment influences the behaviour of subjects.

expressed emotion a pattern of communication within families which is characterized by high levels of criticism, hostility and emotional intensity.

external validity an assessment of the degree to which one can generalize research results beyond the specific situation studied.

extinction in classical conditioning, the cessation of responding when the CS is presented repeatedly without being paired with the UCS; in operant conditioning, a drop in responding when reinforcement is discontinued.

false negative in inferential statistics, concluding that the observed results are due only to chance variability when in fact a significant effect exists; also called a Type II error.

false positive in inferential statistics, concluding that an observed outcome is significant when in fact it reflects only chance variability; also called a Type I error.

false recognition a form of memory error whereby the presence of familiar cues leads one to believe the stimulus matches a previously experienced stimulus.

falsifiability a criterion for evaluating a theory which states the theory should specify circumstances wherein it could be proven wrong.

falsification in research, the process of using observations to prove that a hypothesis is wrong.

faulty reference an error involving misinterpreting the significance of stimuli and events; while sometimes considered a form of delusion, it can also arise through faulty perceptual processing.

field experiment an experiment done in a natural setting, usually without the explicit awareness of participants; as contrasted to experiments done in a laboratory setting.

fixation in Freud's theory, the incomplete release of drive energy associated with a particular stage of development, resulting in a preference for that mode of gratification.

fixed interval schedule, a reinforcement contingency defined by the amount of time that must pass since the previous reinforcer was given, before a response will receive a reinforcer; thus, FI 5 min. means a fixed interval of five minutes.

fixed ratio schedule a reinforcement contingency defined by the number of responses the organism must make in order to get a reinforcer; the ratio is measured as FR x, where x is the required number of responses.

flow Csikszentmihalyi's term for a positive state of subjective experience associated with engaging in tasks which are involving and challenging.

free association a technique originated by Freud for studying the mind, based on asking a person to simply say whatever words floated into their mind, and then looking for patterns.

frequency distribution a statistical analysis of a set of data which tells how frequently each value occurs.

frontal lobe the area of the cortex in front of the central fissure, and above the lateral fissure; it is involved in the interpretation of emotion and experience.

frontal lobotomy an operation, popular in the 1940s and 1950s, which involved sectioning or removing portions of the frontal lobes, in an attempt to treat cases of bipolar mood disorder or chronic pain; later shown to be largely ineffective as a therapeutic procedure.

frontal motor area the area of the frontal lobes just before the central fissure which controls all voluntary movements of the muscles.

frustration-aggression hypothesis a theory of aggression developed by Dollard and Miller which states that frustration (defined as blocking a goal-oriented response) is the sole cause of aggression.

fully functioning person described by Rogers as the ideal of growth, closely related to congruence; healthy growth is characterized by openness, a high degree of spontaneity, compassion and self-direction.

functional fixedness in Gestalt theory, perceiving an object as having only one use.

functionalism an approach to the study of behaviour pioneered by William James, which emphasizes the analysis of the processes by which the mind works (compare structuralism).

fundamental attribution error the tendency to underestimate the importance of situational influences, and overestimate the importance of internal factors in interpreting the causes of people's behaviour.

- gender identity** an individual's belief about whether they are male or female.
- gender roles** patterns of behaviour which a culture defines as being appropriate for each gender.
- gender schema** (pl., schemata) a cognitive representation which organizes an individual's knowledge of cultural norms for male or female behaviour.
- gene** the basic unit of heredity, made up of sequences of 'building blocks' called amino acids; it is estimated that humans possess about 30,000 different genes, each regulating production of various proteins.
- general adaptation syndrome** a model of stages of stress identified by Hans Selye, ranging from acute stress (alarm) to outward coping (resistance) to finally depletion of bodily resources (exhaustion).
- general aggression model (GAM)** a theory of aggression developed by Anderson and Bushman which attempts to integrate cognitive social learning theory, cognitive neo-association theory, and biological data on arousal.
- generality** a criterion for evaluating a theory, which refers to the range of application of a theory; a good theory should apply to a wide range of situations.
- genital stage** in Freud's theory, the final stage of psychosexual development (from puberty onward), when drive energy is focused on the genitals, with adult expression of sexuality.
- genotype** the genetic code which an individual carries in the DNA of their cells.
- genuine altruism** the principle that individuals will assist others without deriving any personal benefit.
- Gestalt theory** a theory of behaviour pioneered in the early part of the twentieth century by Kohler, Wertheimer and others, which emphasized the active, creative nature of perception and learning (Gestalt is German, and means roughly 'organized whole').
- goal state** in problem solving, the desired outcome of a problem.
- guilt** in the recovery movement, a feeling of negative worth in response to behaviour which we recognize as harming others; for Freud, guilt is a form of anxiety associated with behaviours which violate the standards of the superego.
- habituation** a reduction in neural response due to continual stimulation.
- hallucinations** false perceptions in the absence of relevant sensory stimuli, such as hearing voices or seeing objects which are not present.
- halo effect** a form of perceptual bias which occurs when our rating of a person on one characteristic as being positive or negative of a person leads to similar expectations for other characteristics of the individual.
- heredity** the biological transmission of characteristics from one generation to another.
- heuristic** a guide to thinking; in problem solving, heuristics provide informal strategies which are usually better than random search, but less effective than algorithms.
- hierarchy of fears** in systematic desensitization, a list of fear-evoking stimuli, ranging from very mild to very intense, arranged in order of the intensity of fear which they elicit.
- hierarchy of needs** Maslow's model of basic human needs, which he saw as organized in a hierarchical structure; needs range from physiological (most basic) to self-actualization (top of hierarchy).
- higher order conditioning** a form of classical conditioning in which a previously-established conditioned stimulus is used as if it were an unconditioned stimulus to create conditioning to a new stimulus.
- hippocampus** a structure within the limbic system which is important to memory function.
- history of reinforcement** in operant conditioning, the sum of all prior reinforcement for a particular behaviour; behaviourists assert that the cumulative history of reinforcement is more important than any single reinforcement in determining behaviour.
- hormone** a chemical secreted by an endocrine gland; hormones are involved in many aspects of metabolism and long-term functioning of the body.
- hypothalamus** one of the most important elements in the limbic system, the hypothalamus both regulates behaviours associated with hunger, thirst, sex and other basic drives, and also plays a role in regulating hormonal functions.
- hypothesis** a statement describing a proposed relationship between variables; a specific outcome or prediction derived from a theory which can be evaluated by making further observations.
- hysteria** a disorder characterized by physical symptoms for which there is no apparent physical cause; the term was used by Freud but actually predates him.
- id** (Latin for 'it') in Freud's theory, the element of the psyche which is the source of all basic drives.
- ideal self** in Rogers's theory, a dynamically changing construct which represents an individual's goals and aspirations.

- identification** a defence mechanism which involves incorporating characteristics of a drive object into one's own ego.
- illusory correlation** a cognitive error in which an individual perceives a relationship between variables where none actually exists.
- imitation** the learning of behaviour by observing the behaviour of others; sometimes called 'modelling' or 'observational learning'.
- implicit personality theories** a general cognitive schema about human behaviour, which is used in making interpretations of the behaviour of other people.
- incongruence** In Rogers's theory, a feeling of conflict or unease experienced when there is a mismatch between the self and ideal self.
- incubation** in the Gestalt model of problem solving, a process of ceasing to actively work on a problem, in order to modify one's mental set.
- independent variable** a variable in an experiment which is systematically varied by the researcher, in order to see what effect it has on behaviour.
- individualism** an orientation which emphasizes personal freedom and independence as important values; when applied to describe a culture, typically contrasted to collectivism.
- individuation** Jung's conception of the goal of development, which he described as the expansion of conscious awareness by the ego making contact with the unconscious portions of the self.
- induction** a process of reasoning based on forming general principles from specific observations.
- inference** the process of drawing a conclusion based on logical analysis of what is already known.
- inferential statistics** the branch of statistics which deals with the interpretation of data, particularly in terms of generalizing from the observed sample to the larger population.
- inferiority** for Adler, the notion that all children experience a sense of helplessness because of their size and dependence on others; this feeling can also be intensified by real or imagined physical defects, social rejection and other factors.
- inferiority complex** in Adler's theory, an intense feeling of insecurity based on failure to resolve the feelings evoked by childhood experiences of helplessness.
- information processing** a term borrowed from computer science by cognitive psychologists to describe the mental functions which occur between stimulus and response.
- initial state** in problem solving, the situation at the outset of a problem, including any existing constraints (such as time limits or restrictions on permitted actions).
- insight** in Gestalt theory, a sudden change in the way one organizes a problem situation, typically characterized by a change in behaviour from random responding to rule-based responding; in psychotherapy, awareness of the underlying conflicts which are regarded as the causes of behaviour.
- instrumental aggression** aggressive behaviour which is maintained because it is positively reinforced.
- interference** according to associationism, competition between items which can hamper learning and produce forgetting.
- internal validity** the assessment of the degree to which the design and execution of an experiment are free from bias, confounds and other sources of error.
- interpersonal psychotherapy (IPT)** a short-term, focused psychodynamic therapy which emphasizes current interpersonal problems and the development of strategies for dealing with them.
- intersubjective verification** a process for validating observations based on agreement by two observers; proposed by Rogers as a means of making subjective impressions useful as scientific data.
- interview** a method of gathering data in which a researcher asks an individual questions; the format may be pre-planned and highly structured, or relatively free-flowing and unstructured.
- introjection of values** for Rogers, the incorporation of values into the ideal self due to accepting conditions of worth imposed by others; the term was first used by Freud to refer to a defence mechanism.
- introspectionism** a method of gathering data in which the individual attempts to analyse the content of their conscious mind; associated with the structuralist approach.
- kin altruism** in evolutionary psychology, the concept that individuals help those who are close relatives, because it fosters the transmission of their genes.
- language** a system of communication based on symbols or gestures which can vary across individuals and allow for new forms and meanings.

- language acquisition device** a hypothetical mechanism in the brain that provides an innate understanding of the basic principles of language.
- latency stage** in Freud's developmental theory, the stage which begins at about age 5 and extends until puberty, during which the drives appear to be relatively inactive.
- latent content** in Freud's theory of dreams, the true meaning of a dream, which is transformed by the dream censor into symbolic form as the manifest content.
- latent learning** a term used by Tolman to describe situations in which learning is distinct from the performance of a behaviour.
- law of effect** a principle of learning developed by Edwin Thorndike, stating that any response which leads to a satisfying outcome for the organism is likely to be repeated, and any response which leads to an unpleasant outcome is not likely to be repeated.
- learned helplessness** a condition found in animals exposed for prolonged periods to unavoidable aversive stimuli, resulting in passive, helpless behaviour.
- learning** in behaviourism, a change in behaviour which occurs as the result of experience; in cognitive psychology, the process of gathering information and organizing it into mental schemata.
- learning set** a learned strategy or set which enables the individual to deal efficiently with problems of the same type; similar in meaning to the Gestalt concept of mental set, except that it emphasizes that the set develops as the result of experience.
- limbic system** a series of subcortical structures which connect the cortex with other parts of the brain and which are important in many basic functions; among the main parts of the limbic system are the thalamus, hypothalamus, amygdala and hippocampus.
- localization of function** the assumption that specific functions are associated with specific areas of the brain.
- logical empiricism** in philosophy of science, the assumption that it is possible to compare and evaluate theories in terms of how well they account for the evidence.
- logotherapy** Viktor Frankl's theory of development and therapy, which is based on the argument that finding a meaning for life is central to individual growth and happiness.
- longitudinal study** a research design in which a given group of individuals are studied over a period of time.
- long-term memory (LTM)** the component of memory which is involved with retention over relatively long periods (hours, days, weeks or longer).
- maintenance rehearsal** the retention of material in STM by means of rote repetition.
- manifest content** in Freud's theory of dreams, the symbolic form of a dream (disguised by the dream censor) which the conscious mind is aware of, both during sleep and on waking.
- materialism** the assumption that all behaviour has a physiological basis.
- maturation** processes in development which seem to be relatively independent of environmental influences, such as depth perception and walking; implied in the term is the assumption that the characteristics are governed by heredity.
- mean** (also called 'arithmetic mean') a statistic measuring central tendency, calculated as the sum of all the scores, divided by the number of scores.
- measure of central tendency** a type of descriptive statistic used to determine what is a representative value for a set of scores.
- median** a statistic measuring central tendency, calculated as the middle score in a frequency distribution.
- mediator** a process or event within the individual which comes between a stimulus and a response.
- medical model** a theory of abnormal behaviour which assumes that all such disorders have physiological causes.
- meditation** a technique or practice that seeks to achieve mental and physical relaxation, a more passive, receptive awareness, and harmony of mind and nature.
- medulla** a small swelling at the top of the spinal cord composed of the cell bodies of neurons whose axons extend to the heart and other internal organs; its role is to regulate basic bodily processes.
- memory** the retention and use of prior learning.
- mental set** in Gestalt theory, the cognitive schema an individual uses to organize their perception of a particular situation, such as a problem.
- metaneeds** in Maslow's theory, need states which are based on a desire to grow rather than an underlying deficiency; expressed as the need for self-actualization.
- mind** the inner subjective experience of conscious awareness; the term has no direct reference to physical form.

- mnemonics** the study and use of techniques for improving memory (from the Greek for 'memory').
- mode** a statistic measuring central tendency, calculated as the most frequently occurring value (or interval) in a set of scores.
- mode of gratification** in Freud's theory of development, the way in which the individual satisfies basic drives – for example, in the oral stage, the mouth is the focus for obtaining pleasure (by sucking, eating, biting, etc.).
- monism** the belief that mind and body are a single entity.
- motor nerves** those neurons which are responsible for initiating muscle activity.
- multiple-personality disorder** a severe form of dissociative reaction which can result in several independent personalities being manifested.
- mutation** a change in the genetic material of a cell; while rare, mutations can result in new characteristics which may be transmitted to descendants of the original cell.
- myelin** in a neuron, an insulating sheath around the axon, composed of the spirally-wound membrane of Schwann cells, which serves to improve the efficiency of neural conduction.
- nativism** the philosophical view, held by Plato and others, that knowledge and behaviour are innate in origin.
- need for positive regard** a need for positive social contacts like love, which Rogers regarded as universal.
- negative correlation** a relationship observed between two variables in which increases in one variable occur as the value of the other variable decreases.
- negative feedback** in systems theory, a process within a system which serves to dampen disturbances, promoting stable functioning.
- negative reinforcement** in operant conditioning, a process for increasing the probability of a response in which a response immediately leads to termination or withholding of an aversive stimulus (negative reinforcer); note that since the response increases in frequency, it is not equivalent to punishment.
- negative reinforcer** an aversive stimulus which when it follows a response serves to decrease the probability of the response in the future.
- negative symptoms** in abnormal psychology, particularly with reference to schizophrenia, the absence of expected behaviours; negative symptoms include bodily immobility, limited speech, flattened affect (absence of emotional expression) and social withdrawal.
- nerve impulse** the electrical signal generated when a neuron is active, which normally passes from the dendrites, along the axon, to the terminals.
- neuron** (alt., 'nerve cell') a cell of the nervous system.
- neuropeptide** a chemical, comprised of a short chain of amino acids, which can function both as a neurotransmitter and as a hormone; also called a neurohormone.
- neurosis** Freud's term for disorders in which high levels of anxiety are a primary symptom.
- neurotransmitter** a chemical released by the terminals of a neuron which plays a role in communication between neurons, across the synapse.
- neutral stimulus** in classical conditioning, a stimulus which initially produces no specific response other than provoking attention; as conditioning proceeds, the neutral stimulus becomes a conditioned stimulus.
- non-contingent reinforcement** in operant conditioning, a situation where reinforcers sometimes occur independently of any specific response; chance forms of reinforcement.
- non-experimental methods** research methods which do not involve direct control of any factor, in contrast to experiments; sometimes called descriptive/correlational designs.
- noögenic neuroses** in Frankl's theory, conflicts within an individual which are based on existential frustrations, rather than the conflicts of id, ego and superego which Freud saw as the source of anxiety.
- norm** A statistical description of what is typical (e.g., for height); in social psychology, a shared belief about appropriate behaviour.
- normal distribution** a type of frequency distribution which resembles a bell-shaped curve; among its special properties, first identified by Gauss, is that its measures of central tendency are all the same.
- null hypothesis** in research, a hypothesis which asserts that any differences observed between groups are random rather than representing an experimental effect; used for statistical purposes to evaluate results.
- obedience** the study of how people respond to social situations which involve following instructions from an authority figure which may be contrary to individual preference.
- occipital lobe** the rearmost portion of the cortex, which is devoted solely to vision.
- Oedipal conflict** in Freud's theory of development, the major conflict associated with the phallic stage which

- challenges the developing ego; named after the Greek story of Oedipus, who unknowingly killed his father and married his mother.
- omission** in operant conditioning, a process whereby a response is followed by terminating or withholding a positive reinforcer, which results in a decrease in the probability of the response.
- openness** behaviour characterized by a person freely expressing their own sense of self, rather than playing a role or hiding behind a façade; seen by Rogers as a condition for growth.
- operant conditioning** in the behaviourist approach, the form of learning concerned with changes in emitted responses (voluntary behaviour) as a function of their consequences.
- operational definition** a term whose meaning is defined by the processes or observable events used to measure it.
- operator** in problem solving, one of the actions permitted in order to solve a problem.
- oral stage** in Freud's theory of development, the first stage, extending from birth to about 15 months, when the focus of gratification is on the mouth.
- organism** in Rogers's theory, the biological being which is the source of basic needs (such as food and water), and also the source of a growth motive termed the actualizing tendency.
- paradigm** in Kuhn's analysis of science, a super-ordinate framework or world view accepted by a group of researchers, which shapes both theories and evidence; since the paradigm influences the observations one makes, no observations can ever be used to evaluate the paradigm.
- paraprax** (Freudian slip) an error or verbal slip due to an unconscious conflict.
- parietal lobe** the portion of the cortex just behind the central fissure and above the lateral fissure, whose primary function is the sense of touch.
- parsimony** in the philosophy of science, the principle that one should always seek the simplest possible explanation for any event.
- partial reinforcement** in operant conditioning, a contingency of reinforcement in which reinforcement does not follow every response.
- participant** (alt., 'subject') in research, an individual who is the object of study or the participant in an experiment.
- participant observation** a non-experimental research method in which the researcher becomes part of a group he/she wishes to observe.
- peak experience** for Maslow, a transient experience of deep intensity which involve enhanced awareness, often accompanied by feelings of being fully alive.
- perception** the process of selection, organization and interpretation of information about the world conveyed by the senses.
- peripheral nervous system (PNS)** those nerve pathways which lie outside the central nervous system, involving sensation, motor control and regulation of internal organs.
- persistence of set** a phenomenon in problem solving, identified by Gestalt psychologists, in which a mental set developed in a previous problem is maintained even though it is no longer appropriate, and tends to interfere with solving a current problem.
- persona** in Jung's theory, level, the conscious character or role we assume in presenting ourselves to the world.
- personality** patterns of behaviour which are characteristic of an individual and which tend to be consistent across situations and over time.
- person-centred therapy** (also called 'client-centred therapy') a form of therapy developed by Carl Rogers which emphasizes the responsibility of the individual to determine the direction of change within therapy.
- person-situation debate** an ongoing issue concerned with the relative importance of personal characteristics vs. situational variables as influences on behaviour.
- phallic stage** in Freud's theory, the third stage of development, extending from about 3 to 5 years of age, during which gratification is focused on the genitals, although not in the form of adult sexuality.
- phantom limb** a mysterious phenomenon in which individuals who have lost a limb will often continue to experience sensations which seem to come from the missing limb.
- phenomenal field** for Rogers, an individual's unique perception of the world.
- phenomenological** pertaining to the way things appear or are experienced; in the humanistic approach, a reference to the emphasis on an individual's perceptions and feelings as defining the meaning of their behaviour.

- phenotype** the observed characteristics of the individual, based on the combination of genetic expression and environmental influences.
- phobia** an irrational fear of a specific object or situation which is severe enough to interfere with an individual's functioning in daily life.
- phrenology** a now-discredited eighteenth-century theory which asserted that one could assess ability by examining the shape of the skull.
- pituitary gland** a small gland adjacent to the hypothalamus which regulates many endocrine functions, including growth, and also interacts with the nervous system via hypothalamic connections; in stress, it releases a hormone called ACTH which triggers the release of steroids by the cortex of the adrenal glands; sometimes called 'the master gland' because of its many functions.
- placebo effect** a phenomenon whereby inert substances labelled as drugs (such as a painkiller) produce effects similar to the real drug.
- plateau experience** for Maslow, an experience which produces an intensified awareness of the world, and a heightened appreciation for life; a more enduring but less intense state of enhanced awareness than a peak experience.
- pleasure principle** an early description by Freud of the basis of human motivation, which stated that we are driven to maximize pleasure (Lust in German), and to avoid that which is unpleasant (Unlust).
- pons** (Latin for 'bridge') a region in the brainstem above the medulla which provides connections between the cortex and cerebellum.
- population** in statistics, the group whose characteristics one wishes to determine, and from which a sample is chosen.
- positive correlation** a relationship observed between two variables in which increases in the value of one variable are associated with increases in the value of the other variable.
- positive feedback** in systems theory, a process within a system which reacts to disturbances by amplifying the effects, triggering a major change in functioning.
- positive psychology** an initiative to combine objective research and subjective experience, with the aim of improving our understanding of how to foster human growth and happiness.
- positive reinforcement** in operant conditioning, a process of increasing the probability of a response by immediately following the response with a desirable stimulus (a positive reinforcer).
- positive reinforcer** in operant conditioning, a stimulus which when it follows a response serves to increase the probability of the response in the future.
- positive symptoms** behaviours associated with a mental disorder which would not occur in a healthy person; for example, hallucinations in schizophrenia or sleep disturbances in depression.
- post-traumatic stress disorder (PTSD)** a chronic stress-like anxiety disorder that can occur as a result of a terrifying experience, such as being in an auto accident or being attacked in wartime.
- preconscious** in Freud's theory, that part of the subconscious mind which can be accessed by deliberate choice.
- preparedness** a concept developed by Martin Seligman to describe the degree to which physiological structure influences the occurrence of behaviour.
- primary process thinking** in Freud's theory, a form of thinking characteristic of the id in which no distinction is made between a wish and its fulfilment.
- primary reinforcer** a stimulus whose capacity to act as a reinforcer is based on an innate biological significance, such as food or water.
- priming** a phenomenon whereby a thought or memory increases the activation of associated thoughts or memories (the term is analogous to 'priming a pump' by using a small quantity of water to enhance the flow of water).
- proactive interference** in memory, a form of interference in which prior experiences make learning and recall of subsequent experiences more difficult.
- problem solving** the process of determining appropriate actions in order to overcome obstacles that interfere with reaching a desired goal.
- procedural memory** that component of LTM which stores 'how-to' information, such as how to play a piano or cook a turkey.
- projective test** a type of personality test used by psychodynamic theorists in which an individual is asked to interpret an ambiguous stimulus; since the stimulus itself is ambiguous, the assumption is that whatever the person says reveals the workings of their own unconscious mind.

- prosocial behaviour** socially desirable behaviour that is beneficial to another person, or to society as a whole.
- proximal cause** a factor which is a direct influence on behaviour, such as one's attitude or an aspect of the immediate situation.
- proximity** a Gestalt principle of perception which states that elements which are close together tend to be perceived as a group.
- psychiatrists** medical doctors who specialize in treating mental disorders; by comparison, clinical psychologists typically have a PhD rather than an MD degree.
- psychic determinism** the assumption made by Freud which states that all behaviour has a cause, and that the cause is to be found in the mind.
- psychoactive drug** a chemical agent which has a discernible effect on mental state or behaviour.
- psychoimmunology** the study of mental states and their effect on health, as expressed through the functions of the immune system; sometimes referred to as psychoneuroimmunology.
- psychology** the scientific study of behaviour and experience.
- psychosis** a serious mental disorder characterized by severe disturbances of thought and behaviour (as in schizophrenia); according to Freud's theory, psychosis is the result of overuse of defence mechanisms.
- psychotherapy** any variety of treatment for abnormal behaviour which is primarily verbal in nature, rather than based on the use of drugs.
- punding** stereotyped, purposeless behaviour that is maintained for long periods of time.
- punishment** in operant conditioning, a process whereby a response is followed by a negative reinforcer, which results in a decrease in the probability of the response.
- quasi-experiment** a research design in which participants are assigned to groups based on variables which cannot be manipulated by the researcher (such as, age, height, sex).
- radical behaviourism** a position adopted by Watson and Skinner which argues that mental states are both inaccessible to scientific study and irrelevant to understanding behaviour.
- random error** non-systematic error produced by the variability in sampling or other natural processes.
- random sample** a sample obtained through a selection procedure in which everyone in the population has an equal chance of being selected.
- range** a statistical measure of variability which is calculated as the difference between the highest score and the lowest score in a frequency distribution.
- ratio variable** a characteristic whose measurements is based on a continuous scale, with an obvious zero point.
- rational- emotive therapy** a form of therapy developed by Albert Ellis which focuses on the relationship between thoughts and emotions, particularly negative emotions which arise from an individual's faulty interpretations of experiences.
- rationalization** a defence mechanism in which one explains behaviour by offering a reason acceptable to the ego in place of the true reason.
- reaction range** in genetics, the limits on the variability of a phenotype (observed characteristic) determined by the genotype; in essence, the limits set by the genes on how environmental influences (whether deprivation or enrichment) can affect the trait.
- reaction time** the time required to make a response to a stimulus, as measured by the interval between the stimulus and the response.
- reactivity** the tendency for people to alter their behaviour when they are being observed.
- reality principle** in Freud's theory, the constraints imposed on the ego by the recognition of the demands of the environment.
- recall** in memory, the active retrieval of information.
- recentering** in Gestalt theory, developing an alternative mental set for a situation, such as when trying to solve a problem.
- reciprocal altruism** in evolutionary psychology, the concept that individuals help strangers if the expected benefit of future help from the strangers exceeds the short-term cost of helping.
- recognition** in memory, the process of identifying presented information as familiar.
- reconstruction** in memory, the process of remembering by actively creating a whole out of partial information.
- reductionism** the assumption that phenomena at one level of description can be understood in terms of principles at a more basic level of analysis; for example, that biology is 'reducible' to chemistry.

- reflex** an unlearned response that can be triggered by specific environmental stimuli, such as a baby's sucking on an object placed in the mouth.
- regression** in Freud's theory, a defence mechanism in which the individual reverts to behaviours characteristic of an earlier mode of gratification.
- reinforcement** the process by which a reinforcer increases the probability of a response.
- reinforcer** in operant conditioning, a stimulus which, when it follows a response, alters the probability of the response recurring.
- relearning** in memory, an improvement in performance which occurs by reviewing, despite the inability to recall or recognize the information.
- reliability** a criterion for evaluating a measurement process, which assesses the consistency of measurements; often measured by comparing the correlation between repeated observations.
- representative sample** in statistics, a sample whose composition matches the population from which it is drawn.
- repression** in Freud's theory, a defence mechanism in which impulses, memories or ideas are actively blocked from the conscious mind.
- research method** a procedure for examining a problem and gathering observations; in broad terms, research methods are either experimental or non-experimental.
- research setting** the context in which research is conducted, either a laboratory setting (which involves having participants come to a special location), or a field setting (which requires going to where the people are that the researcher wishes to study).
- resistance** in psychoanalysis, the rejection by an individual of the analyst's interpretations of the meaning of behaviour; regarded as a defence mechanism.
- response** (often abbreviated as R) in general, any reaction to a stimulus, whether overt or mental; for the behaviourists, a measurable change in behaviour.
- reticular formation** a diffuse network of nerve fibres which runs through the brainstem and limbic system, with connections both up to the cortex and down to the spinal cord; the reticular formation acts as a relay network controlling sensory inputs, and thereby plays a key role in regulating arousal level, alertness and sleep.
- retroactive interference** in memory, a form of interference in recent experiences that makes it difficult to recall something learned earlier.
- sample** in statistics, a subgroup drawn from a population; in research, the group which one actually studies.
- sampling** the process by which one selects observations for research (the sample).
- sampling error** an error caused by having a non-representative sample, due either to using a biased sampling procedure or the inherent variability associated with the sampling process.
- sampling variability** variability due to chance variations among samples randomly drawn from the same population.
- schedule of reinforcement** in operant conditioning, a description of the conditions which determine when a response will be followed by a reinforcer.
- schema** (pl., 'schemata') a mental framework which organizes knowledge, beliefs and expectations, and is used to guide behaviour.
- schizophrenia** a severe form of mental disorder in which there can be distortions of perception, thought, language and emotions.
- secondary process thinking** in Freud's theory, a form of thinking used by the ego to direct the gratification of drives; unlike primary process thinking, secondary process thinking is accessible to conscious awareness, and recognizes constraints imposed by the external world.
- selective attention** the perceptual process of selectively focusing on particular stimulus elements.
- self** in Jung's theory, the self comprises the totality of the person, both conscious and unconscious, and is distinct from both the ego and the persona (conscious aspects of personality); for Rogers, the self is a fluid perceptual structure based on our experience of our own being.
- self theory** a general term for theories of behaviour which focus on an individual's self concept and subjective experience of the world.
- self-actualization** for Maslow, self-actualization is the most advanced human need, and is based on the desire to grow and use one's capacities to their fullest; as such, it is process-oriented, not based on an underlying deficiency.

- self-awareness** the capacity for individuals or other living organisms to consciously observe their own behaviour.
- self-fulfilling prophecy** a phenomenon whereby our expectations about other people leads to acting in ways which elicit the expected response from them; the everyday equivalent to experimenter bias.
- self-report** a method of gathering data which involves asking an individual to describe their behaviour or mental state in some way, such as an interview, survey or psychological inventory.
- self-selected sample** a sampling procedure which allows members of the population to decide whether to be included or not, as when a survey has a low rate of response.
- self-serving bias** the tendency to distort our assessment of our own behaviour, by attributing our successes to personal factors, and our failures to situational factors.
- semantic memory** the component of LTM which involves general knowledge of the world.
- sensory memory** a modality-specific transient form of memory which serves as a buffer between the senses and short-term memory.
- sensory nerves** neural pathways in the PNS which carry information from the sense receptors to the CNS.
- sequential design** a research design which combines features of both longitudinal and cross-sectional studies by selecting groups of different ages (like a cross-sectional design), and then following them over a period of time (like a longitudinal study) sufficient to create overlap in the ages represented by different groups.
- shame** a negative feeling evoked by a perceived loss of self-esteem associated with a particular behaviour.
- shaping** in operant conditioning, the process of guiding the acquisition of a new response by reinforcing successive approximations to the desired response.
- short-term memory (STM)** the component of memory which handles retention over relatively brief intervals of up to approximately fifteen seconds.
- sign stimuli** in ethology, environmental cues which regulate the expression of behaviours related to innate drives.
- significance level** in inferential statistics, a statement of the probability that an observed outcome is due only to chance.
- significance tests** in statistics, the general name given to inferential statistical procedures which are used to determine whether observed results reflect real differences rather than chance variations.
- similarity** in the Gestalt theory of perception, a principle of organization based on grouping together similar elements (e.g., based on shape or size).
- single-blind design** an experiment set up in such a way that subjects are kept uninformed of any details which might lead to bias.
- skewed distribution** an asymmetrical frequency distribution with a single mode; with a skewed distribution the median is usually more representative than the mean as a measure of central tendency.
- social behaviour** any behaviour which involves others or is implicitly oriented towards others (for example, both conformity and social expectations that become part of our mental schemata).
- social cognition** the mental processes involved in the way people perceive and react to social situations.
- social constructionism** in philosophy of science, the idea that the formation and assessment of theories is primarily influenced by social processes rather than empirical evidence.
- social influence** a general term for the various ways in which an individual's behaviour is affected by others, such as conformity pressures and group dynamics.
- social perception** the study of the social aspects of perception – how we see other people, and ourselves in relation to others; part of **social cognition**.
- social psychology** the study of how interactions with other people affect an individual's thinking and behaviour.
- species-specific behaviour** behaviours which are characteristic of all members of a particular species. These response patterns (sometimes popularly called 'instincts') apply to behaviours such as mating, finding food, defence and raising offspring.
- spontaneous recovery** in classical conditioning, the reoccurrence of the CR when the CS is presented after some time has elapsed since extinction training.
- spontaneous remission** in medicine or therapy, improvement in an individual's condition in the absence of treatment.
- stages** in developmental theory, the belief that development is based on distinct periods with clear boundaries,

with behaviour at each stage governed by different underlying processes; Freud's theory of psychosexual stages is one such theory.

standard deviation a commonly used measure of variability, calculated as the square root of the mean of the squared deviations from the mean of a set of scores.

state-dependent forgetting forgetting related to changes in context associated with internal cues of physical and mental state, as opposed to the context defined by the external environment.

statistics the branch of mathematics that is concerned with the description and interpretation of sets of scores, such as scientific data.

stereotype an oversimplified and often inaccurate perception of an individual based on generalizing from schemata related to the individual's group membership.

steroids hormones produced by the cortex of the adrenal glands which are involved in the regulation of water and sugar metabolism, immune system function and other basic bodily processes; sometimes called 'corticosteroids'.

stigma a mark or label which identifies an individual as deviant, resulting in social rejection.

stimulant a drug which increases activation of the CNS and the autonomic nervous system; these drugs tend to decrease fatigue, increase physical activity and alertness, diminish hunger, and produce a temporary elevation of mood.

stimulus (often abbreviated as S) in general, any event, situation, object or factor that may affect behaviour; for the behaviourists, a stimulus must be a measurable change in the environment.

stimulus discrimination in classical conditioning, selective responding to the CS, but not to stimuli which are similar in some way, as a result of training.

stimulus generalization in classical conditioning, the tendency to produce a CR to both the original CS and to stimuli which are similar to it in some way.

storage the retention of information in memory.

stress a term coined by Hans Selye to describe the non-specific response of the body to any demand on it.

stressor any factor which triggers a stress response in an individual.

structuralism an approach to psychology pioneered by Wundt which attempted to analyse the contents of the mind, using the introspectionist method (compare functionalism).

style of life a term used by Adler to describe an individual's unique way of adapting to and interacting with the world, which is an expression of the person's life history and goals.

subconscious in Freud's theory, the portions of the mind which are below the level of conscious awareness.

subject bias in an experiment, systematic error created because the subjects in different groups have different information (for example, knowing whether they are in the control group or experimental group).

sublimation in Freud's theory, a defence mechanism in which drive energy is redirected towards a socially desirable creative activity.

superego in Freud's theory, that portion of the psyche which represents the moral demands of family and society, and is therefore governed by moral constraints.

superiority complex in Adler's theory, a response to feelings of inferiority in which the individual attempts to mask their weakness by adopting an attitude of exaggerated self-importance.

survey a technique for determining attitudes of many individuals by providing a pre-planned series of questions to which individuals respond.

symptom substitution in psychodynamic theory, the assumption that changing overt behaviour without addressing the underlying dynamics will lead to the expression of the problem in a new way.

synapse the junction between two neurons, represented by a small physical gap which is bridged by the flow of neurotransmitter chemicals from the terminals of the 'sending' neuron.

systematic desensitization a technique based on classical conditioning which is designed to treat phobias (unrealistic fears) and related anxiety disorders by gradually diminishing the undesired response.

systems theory a theoretical framework designed for understanding phenomena which involve multiple interrelated elements, where the properties of the whole are different from the properties of the parts; systems are viewed as governed by processes of negative feedback (which promotes stability) and positive feedback (which promotes instability).

temperament behavioural tendencies which are believed to be determined by heredity; examples include emotionality, sociability and fearfulness.

temporal lobe the region of the cortex below the lateral fissure; its primary functions are hearing and memory.

- theory** a structured set of principles intended to explain a set of phenomena.
- think-aloud protocol** a transcript of the comments made when an individual is asked to describe their thoughts and behaviour while working on a task such as problem solving.
- thought disturbances** in abnormal psychology, distortions of thinking processes such as violations of logic, incoherent speech and inappropriate shifts in word usage.
- token economy** a form of behaviour modification based on operant conditioning; most commonly used in institutional settings, it involves giving conditioned reinforcers (tokens) for doing specific behaviours.
- trait** a behaviour pattern which occurs consistently across a range of situations; a specific personality characteristic.
- transference** in psychoanalysis, the displacement of drive energy from past relationships, often between the individual and a parent, to the relationship between the individual and the therapist.
- t-test** in inferential statistics, a procedure for determining the significance of observed differences; a common use is to decide whether the difference between the means of two groups is due only to sampling variability.
- unconditional positive regard** acceptance and caring given to a person as a human being, without imposing conditions on how the person behaves.
- unconditioned response** in classical conditioning, a reflexive response produced by a specific stimulus, such as pupil contraction to bright light.
- unconditioned stimulus** in classical conditioning, a stimulus which elicits a reflexive (unconditioned) response.
- unconscious** in Freud's theory, that portion of the subconscious which cannot be directly accessed by the conscious mind; nonetheless, impulses and thoughts from the unconscious can 'leak out' in fragmentary intrusions into conscious awareness, either directly or in symbolic form.
- unigenic inheritance** genetic transmission which is dependent on the action of a single pair of genes; also called Mendelian inheritance, in recognition of Gregor Mendel's pioneering work.
- unlearning** an alternative interpretation of the interference theory of memory which holds that the build-up of interference can lead to the breaking of associations, and therefore the destruction of memories.
- unobtrusive measure** an indirect measure of behaviour intended to avoid the reactivity which can occur with direct observation; such measures typically require making complex assumptions about the relationship of the measure to actual behaviour.
- vacuum activities** in ethology, behaviours which arise in the absence of appropriate environmental stimuli when drive levels are very high.
- validity** a criterion for evaluating a measurement process, which assesses whether the variable measures the intended characteristic, as opposed to some other characteristic.
- variability** in statistics, the dispersion of scores within a set of data.
- variable** any measured characteristic which shows variation across cases or conditions.
- variable interval schedule** in operant conditioning, a reinforcement contingency defined by the average time interval which must elapse since the last reinforcer before a response will be reinforced; thus, on a VI 15 sec. schedule, over a long period the average duration would be fifteen seconds.
- variable ratio schedule** in operant conditioning, a reinforcement contingency defined in terms of the average number of responses required to receive a reinforcer; thus, VR 10 means that on average every tenth response is reinforced.
- visual agnosia** a general term for disorders which result in disruption of visual recognition.
- voluntary response** a response which is controlled by the individual (i.e., emitted) rather than being triggered (elicited) by specific stimuli the way reflexes are.
- wish-fulfilment** in Freud's theory, the symbolic expression of drives in fantasy form, as in dreams.
- would-should dilemma** the conflict between one's own needs, expressed through the actualizing tendency, and the demands of others, expressed through the ideal self.