

## GLOSSARY

---

- Absolute threshold:** The minimum intensity necessary for a stimulus to be detected.
- Accommodation:** Visual action of the ciliary muscles to change the shape of the lens.
- Acculturation:** Cultural and psychological changes resulting from continuous, first-hand contact between two distinctive cultural groups.
- Achievement need/motive:** Need to succeed, to perform better than others, to excel, to take challenging tasks which demonstrate person's ability.
- Acuity:** The sharpness of vision.
- Adolescence:** The developmental period of transition from childhood to early adulthood, starting at approximately 11 to 12 years of age and ending at 18 to 20 years of age.
- Adrenaline:** A very vital hormone of the human body, which prepares one for fight, flight or fright response.
- Adrenocorticotrophic hormone (ACTH):** A hormone secreted by the anterior pituitary gland that stimulates the adrenal to secrete its corticoid hormones.
- Aerial perspective:** A monocular cue to depth perception consisting of the relative clearness of objects under varying atmospheric conditions. Nearer objects are usually clearer in detail and colour whereas farther objects are less distinct.
- Afferent neurons:** Neurons involved in the process of sending information.
- After images:** A visual image that persists after a stimulus is removed.
- All-or-none law:** The rule that a neuron will always respond with its complete strength (action potential) to a stimulus or will not respond at all, regardless of the stimulus magnitude.
- Amplitude:** In sound waves, the distance from the baseline to the peak of each sinusoidal wave. In the EEG measurement, the distance from the maximal and minimal voltage in the EEG record. In either case, it is commonly used as a measure of intensity.
- Amygdala:** Two almond-shaped neural clusters that are components of the limbic system and are linked to emotion.
- Animism:** A facet of preoperational thought; the belief that inanimate objects have "lifelike" qualities and are capable of action.
- Anxiety:** A general feeling of apprehension or dread accompanied by predictable physiological changes.
- Approach-approach conflict:** Conflict characterising choice between two equally pleasurable or desirable goals.
- Approach-avoidance conflict:** Conflict caused by a situation that has both positive and negative aspects. The individual, who is both repulsed and attracted by the same goal, exhibits the feelings of ambivalence.
- Arousal:** A physiological state of the body.
- Artificial intelligence (AI):** The field concerned with creating machines (e.g., computers) that can perform complex tasks formerly considered to require human intelligence.
- Associative learning:** Learning that certain events occur together. The events may be two stimuli (as in classical conditioning) or a response and its consequences (as in operant conditioning).
- Attachment:** A close emotional bond between the infant and the parents or caregiver.
- Attribution:** Inference about an individual's internal state based on the perception of external factors (cues).
- Authoritative parenting:** A parenting style in which parents encourage children to be independent but still place limits and control on their actions.
- Autonomic nervous system:** A division of the peripheral nervous system that regulates smooth muscle, i.e. organ and glandular activities; includes the sympathetic and parasympathetic nervous system important in emotional behaviour.
- Avoidance-avoidance conflict:** Conflict between two equally undesirable or fear-evoking goals; the solution is often escaped.
- Axon:** The part of the neuron that carries information away from the cell body to other neurons.
- Basic emotions:** Feeling states common to the human species from which other feeling states are derived.
- Behaviour genetics:** The study of the power and limits of genetic and environmental influences on behaviour.
- Behaviour:** Any covert or overt action/reaction a person or animal does that can be observed in some way.

- Behaviourism:** A school of thought that emphasises objectivity, observable behavioural responses, learning, and environmental determinants.
- Bilingualism:** The acquisition of two languages that use different speech sounds, vocabularies, and grammatical rules.
- Binocular cues:** Depth cues, such as retinal disparity and convergence, that depend on the use of two eyes.
- Biofeedback:** A procedure that permits individuals to monitor their own physiological processes (e.g., heart rate, blood pressure), which they are normally unaware of, to learn to control them.
- Blind spot:** The point at which the optic nerve leaves the eye, creating a “blind” spot because no receptor cells are located there.
- Bottom-up processing:** In form perception, progression from individual elements to the whole.
- Brainstem:** The oldest part and central core of the brain, beginning where the spinal cord swells as it enters the skull; it is responsible for automatic survival functions.
- Brainstorming:** A problem-solving strategy in which an individual or a group collects all possible ideas and evaluates them only after all ideas have been collected.
- Brightness:** The psychological experience associated with a light’s intensity, or wave amplitude.
- Cannon-Bard theory:** A theory of emotion that holds that bodily changes and the experience of emotion occur simultaneously.
- Case study:** A technique in which one person is studied in depth.
- Cell:** The most fundamental unit of a living organism.
- Central nervous system (CNS):** Subsystem of the nervous system composed of brain and spinal cord.
- Centration:** The focusing or centring of attention on one characteristic to the exclusion of all others.
- Cephalocaudal pattern:** The sequence in which the greatest growth occurs at the top—the head—with physical growth in size, weight, and feature differentiation gradually working from top to bottom.
- Cerebellum:** Structure of the brain at the base of the skull, which organises bodily motion, posture, and equilibrium.
- Cerebral cortex:** Area of the brain that regulates the brain’s higher cognitive and emotional functions.
- Cerebral hemispheres:** Two nearly symmetrical halves of the cerebral cortex.
- Chromosomes:** Threadlike structures that come in 23 pairs, one member of each pair coming from each parent. Chromosomes contain the remarkable genetic substance deoxyribonucleic acid (DNA).
- Chronological age:** The number of years that have elapsed since a person’s birth; what is usually meant by “age”.
- Chunking:** A group of familiar stimuli stored as a single unit.
- Classical conditioning:** A type of learning in which an organism learns to associate stimuli. The main feature is that the originally neutral conditioned stimulus (CS), through repeated pairing with the unconditioned stimulus (US), acquires the response originally given to the US.
- Closure:** Organisational process leading to perception of incomplete figures as wholes.
- Cochlea:** The fluid-filled, coiled tunnel in the inner ear that contains the receptors for hearing.
- Cognition:** All the mental activities associated with knowing; namely, perceiving, thinking, and remembering, etc. These are associated with processing, understanding, and communicating information.
- Cognitive approach:** The view that emphasises human thought and all the processes of knowing as central to the study of psychology.
- Cognitive economy:** A term to denote maximum and efficient use of the capacity of long-term memory through organisation of concepts in a hierarchical network.
- Cognitive learning:** Learning that involves reorganisation of one’s perceptions, knowledge, and ideas.
- Cognitive map:** A mental representation of the layout of one’s environment. For example, after exploring a maze, rats act as if they have learned a cognitive map of it.
- Cognitive processes:** Processes involving the individual’s thought, intelligence, and language.
- Colour blindness:** Having some degree of inability to perceive colour.
- Colour constancy:** The tendency to perceive a well-known object as being a single colour, even if its actual colour is modified by changes in illumination.
- Concept:** A general category of ideas, objects, people, or experiences whose members share certain properties.
- Concrete operational stage:** The third Piagetian stage, lasting approximately from 7 to 11 years

of age. In this stage, children can perform logical operations, and reasoning on concrete examples but cannot deal with abstract things.

**Conditioned response (CR):** In classical conditioning, the learned or acquired response to a conditioned stimulus (CS).

**Conditioned stimulus (CS):** A neutral stimulus that, through repeated association with an unconditioned stimulus, becomes capable of eliciting a conditioned response (CR).

**Conditioning:** A systematic procedure through which new responses are learned to stimuli.

**Cones:** Specialised visual receptors that play a key role in daylight vision and color vision.

**Confidentiality:** Researchers are responsible for keeping all of the data they collect completely anonymous.

**Conflict:** A state of disturbance or tension resulting from opposing motives, drives, needs, or goals.

**Confounding:** A term used to describe the operation of variables in an experiment that confuse the interpretation of the data. If the independent variable is confounded with an uncontrolled relevant variable, the experimenter cannot separate the effects of the two variables on the dependent measure.

**Consciousness:** Awareness of the general condition of one's mind, awareness of particular mental contents, or self-awareness.

**Conservation:** A belief in the permanence of certain attributes of objects or situations in spite of superficial changes.

**Content analysis:** A procedure for analysing the themes in qualitative data by determining the frequency of specific ideas, concepts, or terms and their relationship.

**Control group:** Subjects in a study who do not receive the special treatment given to the experimental group.

**Control processes:** Mechanisms which govern transfer of information from one system of storage to another.

**Convergent thinking:** Thinking that is directed toward one correct solution to a problem.

**Corpus callosum:** A bundle of neural fibers connecting the two brain hemispheres and carrying messages between them.

**Correlational research:** Research with the goal of describing the strength of the relationship between two or more events or characteristics or variables.

**Cortex:** The greyish, thin, unmyelinated covering of the cerebrum.

**Creativity:** The ability to think in novel and

unusual ways and to come up with unique solutions to problems.

**Culture:** The widely shared customs, beliefs, values, norms, institutions, and other products of a community that are transmitted socially across generations.

**Dark adaptation:** The process in which the eyes become more sensitive to light in low illumination.

**Data:** Qualitative and quantitative information related to mental processes and behaviour, gathered from individuals.

**Debriefing:** The procedure for informing a participant of the actual intent of an experiment after its successful completion. It is specially required if the participant was seriously misled during the conduct of experiment.

**Decision-making:** The process of evaluating alternatives and making choices among them.

**Deductive reasoning:** Reaching a conclusion by accepting the premises of an argument and then following the formal logical rules.

**Deoxyribonucleic acid (DNA):** The genetic material of the cell, located in the nucleus.

**Dependent variable:** The factor that is measured in an experiment; it changes because of the manipulation of the independent variable.

**Depth perception:** The perception of the distance of an object from the observer or the distance from front to back of a solid object.

**Development:** It is the pattern of progressive, orderly, and predictable changes that begin at conception and continue throughout life.

**Difference threshold:** The minimum difference between a pair of stimuli that can be perceived.

**Discrimination:** In classical conditioning, the ability to distinguish between a conditioned stimulus and other stimuli that do not signal an unconditioned stimulus. In operant conditioning, responding differently to stimuli that signal a behaviour will be reinforced or will not be reinforced.

**Divergent thinking:** Thinking that meets the criteria of originality, inventiveness, and flexibility. It calls for thinking in different directions, searching for a variety of answers to questions that can have several answers and is characteristic of creativity.

**Divided attention:** The process by which attention is split between two or more sets of stimuli.

**Dual-coding theory:** Paivio's theory that memory is enhanced by forming semantic and visual codes, since either can lead to recall.

**Dyslexia:** A general term referring to difficulty in reading.

- Echoic memory:** A momentary sensory memory of auditory stimuli; if attention is elsewhere, sounds and words can still be recalled within 3 or 4 seconds.
- Efferent neurons:** Conducting or conveying (nervous system impulses) away from the central nervous system and toward effector units in muscles or glands.
- Egocentrism:** A salient feature of pre-operational thought, which refers to the inability to distinguish between one's own perspective and someone else's perspective.
- Elaborative rehearsals:** The linking of new information in short-term memory to familiar material stored in long-term memory.
- Emotion:** Complex pattern of changes in response to situation perceived as personally significant, including physiological arousal, feelings, thoughts, and behaviours.
- Emotional intelligence:** The set of skills that underlie the accurate assessment, evaluation, expression, and regulation of emotions.
- Encephalisation:** The tendency for greater elaborations of the nervous system across evolutionary development to be directed towards the head end of the organism.
- Encoding:** The process of recording information into the memory system for the first time.
- Endocrine glands:** The glands, which secrete their hormones directly into the bloodstream.
- Environment:** The aggregate of external conditions – physical, biological, social and cultural that influence the functions of the organism.
- Episodic memory:** LTM component that stores autobiographic information coded for reference to a timeframe for past occurrences.
- Esteem needs:** In Maslow's theory, needs for prestige, success, and self-respect. They can be fulfilled after belongingness and love needs are satisfied.
- Eustachian tube:** Passage that connects the middle ear to the throat and allows release of pressure.
- Evolution:** The theory proposed by Charles Darwin that over time organisms originate and change in response to adaptational demands of their unique environments.
- Experiment:** A series of observations conducted under controlled conditions to investigate the causal relationship between selected variables.
- Experimental group:** The subjects in study who receive some special treatment in regard to the independent variable.
- Explicit memory:** Memory of facts and experiences that one can consciously know and “declare” (also called declarative memory).
- Extinction:** The diminishing of a conditioned response; occurs in classical conditioning when an unconditioned stimulus (US) does not follow a conditioned stimulus (CS); occurs in operant conditioning when a response is no longer reinforced.
- Feedback:** Information regarding performance on a learning task; also called knowledge of results.
- Field experiment:** An experiment carried out in a natural “real world” setting in which variables are manipulated in some manner and observed for their reactions.
- Fight or flight syndrome:** It is an acute reaction to stress in which an individual reacts to stimulus by fighting against stress or runs away from stressful stimulus.
- Fine motor skills:** Motor skills that involve more finely tuned movements, such as finger dexterity.
- Formal operational stage:** The fourth Piagetian stage in which the individuals move beyond the world of actual or concrete experiences and think in abstract and more logical terms.
- Free recall:** In memory experiments, retrieval of stored items in any order by the participant.
- Frontal lobe:** The portion of the cerebral cortex lying just behind the forehead; involved in speaking and muscle movements and in making plans and judgments.
- Frustration:** State assumed to exist when goal-directed activity is blocked in some manner.
- Fugue state:** Amnesia accompanied by actual physical flight — the person may wander away for several hours or move to another area and establish a new life.
- Functional fixedness:** The tendency to think of things only in terms of their usual functions, an impediment to problem solving.
- Functionalism:** The school of psychology that emphasised the utilitarian, adaptive functions of the human mind or consciousness.
- Galvanic skin response (GSR):** Changes in electrical conductivity of, or activity in, the skin, detected by a sensitive galvanometer.
- Gender:** The social dimension of being male or female.
- Gender identity:** The sense of being male or female, which most children acquire by the time, they are 3 years old.
- Gender role:** A set of expectations that prescribe how females and males should think, act and feel.

**Generalisation:** The tendency, once a response has been conditioned, for stimuli similar to the conditioned stimulus to evoke similar responses.

**Genes:** The units of hereditary information, short chromosome segments composed of DNA. Genes act as blueprints for cells to reproduce themselves and manufacture the proteins that maintain life.

**Gestalt:** An organised whole, Gestalt psychologists emphasise our tendency to integrate pieces of information into meaningful wholes.

**Gestalt psychology:** A branch of psychology in which behaviour is viewed as an integrated whole, greater than the sum of its parts.

**Grammar:** Is the set of rules indicating how the elements of language may be combined to make intelligible sentences.

**Gross motor skills:** Motor skills that involve large muscle activities, such as walking.

**Group test:** A test administered to several people at one time by a single tester.

**Hemispheres:** The symmetrical halves of the cerebrum or cerebellum.

**Hemispheric dominance:** Refers to control of key motor and cognitive functions by one hemisphere, generally the left hemisphere

**Heredity:** The biological transmission of traits from parents to offspring.

**Hierarchy of needs:** Maslow's pyramid represents motivational needs in a hierarchy. The more basic needs, such as physiological and safety needs, are at the bottom followed by the higher-level needs, such as love, and esteem, and self-actualisation at the top. To move up the hierarchy, a person must have the basic physiological needs met first.

**Homeostasis:** The physiological tendency to maintain an internal, bodily state of balance in terms of food, water, air, sleep, and temperature.

**Homo sapiens:** The scientific nomenclature of modern human beings.

**Hormones:** Chemical substances secreted by glands into the bloodstream.

**Hue:** Colour.

**Humanistic psychology:** The approach to psychology that emphasises the person, or the self, and personal growth and development.

**Hypothalamus:** A neural structure located just below the thalamus; it includes centers that govern motivated behaviour such as eating, drinking, sex, and emotions; it also regulates endocrine activity and maintains body homeostasis.

**Hypothesis:** A tentative statement of the

relationship between variables as answer to the research question.

**Identification:** The process of associating one's self closely with other persons and assuming their characteristics or views.

**Identity vs role confusion:** Erikson's psychosocial developmental stage in which adolescents are faced with conflicts as who they are, what they are all about, and where they are going in life, resolution to these leads to identity formation.

**Illumination:** A stage in the creative process. The idea, solution, or new relationship emerges and all the facts fall into place.

**Incidental learning:** Learning that is not deliberate, or intentional and which is acquired as a result of some other possibly unrelated, activity.

**Incubation:** A stage in the creative process. The progress is not apparent at conscious level, the unconscious mind may work on any idea or solution.

**Independent variable:** The event or situation manipulated by an experimenter to see if it will have a predicted effect on some other event or situation.

**Individual test:** A test which can be administered to only one person at a time. The Stanford-Binet and the Wechsler intelligence tests are examples of individual tests.

**Inductive reasoning:** The logical process by which general principles are inferred from particular instances.

**Infancy:** The developmental period extending from birth to 24 months.

**Information-processing approach:** An approach concerned with how individuals process information about their world, how information enters our minds, how it is stored and transformed, and how it is retrieved to perform problem solving and reasoning.

**Informed consent:** Agreement to an experimental or therapeutic procedure on the basis of the subject's or patient's understanding of its nature and possible risks.

**Initiative vs guilt:** Erikson's stage of development in which pre-school children face a widening social world and are faced with the challenge of developing purposeful behaviour to cope with challenges, failure to which leads to development of guilt and shame.

**Insight:** The ability to deal effectively with novel situations.

**Instinct:** A complex universal behaviour that is rigidly patterned throughout a species and is unlearned.