

GLOSSARY

The glossary defines the technical words that appear in the text and some common words that have special meanings when used in psychology. No attempt is made to give the range of meanings beyond those used in the text. For fuller definitions and other shades of meaning, consult any standard dictionary of psychology.

A

- abnormal** Away from the norm.
- absolute threshold** The minimum magnitude of a stimulus that can be reliably discriminated from no stimulus at all.
- abstraction** Loss of information in the transformation from raw physical data to a percept.
- abstractions** Properties that characterize sets of instances rather than just single instances.
- accommodation** (1) The process by which the lens of the eye varies its focus. (2) In Piaget's theory of cognitive development, the process by which an infant modifies a pre-existing schema in order to include a novel object or event.
- action potential** An electrochemical impulse that travels from the dendritic area down to the end of the axon.
- activation model** In memory, the proposal that retrieval of an item depends on the activation of that item reaching a critical level.
- actualizing tendency** A tendency toward fulfillment or actualization of all the capacities of the organism.
- adaptive** Adaptive behavior has survival value.
- addiction** A pattern of compulsive and destructive drug-taking behavior.
- adolescence** The period of transition from childhood to adulthood.
- adolescent growth spurt** A period of rapid physical growth that accompanies the onset of puberty.
- affect** Emotions and feelings.
- affective neuroscience** The study of how emotional phenomena are executed in the brain.
- afferent nerves** Nerves that carry signals from the body to the central nervous system.
- agency** Sense of mastery, control, capability to engage in action.
- aggression** Behavior that is intended to injure another person (physically or verbally) or to destroy property.
- agnosia** The general term for breakdowns or disorders in recognition.
- agonists** A drug that binds to receptors and activates them in much the same way that another drug does.
- agoraphobia** Fear of places where one might be trapped or unable to receive help in an emergency.
- alliesthesia** An interaction between incentive and drive theories of motivation which states that any external stimulus that corrects an internal trouble is experienced as pleasurable.
- all-or-none law** The principle that any neuron propagates its action potential either at full strength, or not at all.
- altered states of consciousness** A change from an ordinary pattern of mental functioning to a state that seems different to the person experiencing the change.
- alternative form reliability** The consistency between two or more versions of the same test when given to the same person.
- American College Test (ACT)** An example of a group-administered general-ability test.
- American Law Institute** 'A person is not responsible for criminal conduct if at the time of such conduct, as a result of mental disease or defect, he lacks substantial capacity either to appreciate the wrongfulness of his conduct or to conform his conduct to the requirements of the law.'
- amnesia** Partial loss of memory.
- amphetamines** Central nervous system stimulants that produce restlessness, irritability, anxiety, and rapid heart rate. Dexedrine sulfate ('speed') and methamphetamine ('meth') are two types of amphetamines.
- amplitude (of a tone)** The difference in pressure between the peak and the trough.
- amygdala** A brain structure located below the cerebral cortex that is involved in consolidation of emotional memories.
- anal stage** The second stage in Freud's psychoanalytic theory of psychosexual development, following the oral stage. The sources of gratification and conflict have to do with the expulsion and retention of feces.
- analytic thought** An orientation toward objects, detached from their contexts, with much use of categories and formal logic and the avoidance of contradiction.
- Anderson's theory of intelligence** The theory that differences in intelligence result from differences in the 'basic processing mechanism' that implements thinking, which in turn yields knowledge. Individuals vary in the speed at which basic processing occurs.
- androgenization** Influence of androgen on anatomy and brain development.
- anhedonia** The loss of the ability to experience joy, even in response to the most joyous occasions.
- anomic aphasic** Patients who primarily have problems in retrieving and recognizing words (as a result of some brain damage).
- anorexia nervosa** Self-imposed weight loss – at least 15 percent of the individual's minimum normal weight.
- antagonists** A drug that locks onto receptors but in a way that does not activate them; the drug serves to 'block' the receptors so that another drug cannot gain access to them.

- anterior system (for attention)** Designed to control when and how the perceptual features of an object (location in space, shape, color) will be used for selection. See also posterior system (for attention).
- antidepressant drugs** Drug used to elevate the mood of depressed individuals, presumably by increasing the availability of the neurotransmitters norepinephrine and/or serotonin. Examples are imipramine (Tofranil), isocarboxazid (Marplan), and fluoxetine (Prozac).
- antisocial personality** A type of personality disorder marked by impulsivity, inability to abide by the customs and laws of society, and lack of anxiety or guilt regarding behavior (syn. sociopathic personality, psychopathic personality).
- antisocial personality disorder** A disorder characterized by deficits in normal emotional responding – especially for shame, guilt, and fear – as well as deficits in empathy for the emotions of others.
- anxiety** A state of apprehension, tension, and worry. Synonymous with fear for some theorists, although others view the object of anxiety (such as a vague danger or foreboding) as less specific than the object of a fear (such as a vicious animal).
- anxiety disorders** A group of mental disorders characterized by intense anxiety or by maladaptive behavior designed to relieve anxiety. Includes generalized anxiety and panic disorders, phobic and obsessive-compulsive disorders. Major category of ICD-10 and DSM-IV covering most of the disorders formerly called neuroses.
- aphasia** Language deficits caused by brain damage.
- apnea** The individual stops breathing while asleep.
- arousal** Physiologically, the level of alertness of an organism. Psychologically, the tension that can accompany different levels of arousal, ranging from calmness to anxiety.
- asexuality** A complete lack of sexual attraction.
- Asperger's syndrome** Pervasive developmental disorder characterized by deficits in social skills and activities; similar to autism but does not include deficits in language or cognitive skills.
- assimilation** In Piaget's theory of cognitive development, the process by which an infant comprehends a novel object or event in terms of a pre-existing schema.
- associationist psychology** The view that the mind is filled with ideas that enter by way of the senses and then become associated through principles such as similarity and contrast.
- associative agnosia** A syndrome in which certain patients cannot recognize visually presented objects.
- associative learning** Learning that certain contingencies (or relations) exist between events; learning that one event is associated with another.
- ataque de nervios** Trembling, feelings of out of control, sudden crying, screaming uncontrollably, verbal and physical aggression, and sometimes seizure-like or fainting episodes and suicidal gestures.
- Atkinson-Shiffrin theory (of memory)** The basis for the distinction between different memories corresponding to different time intervals.
- attachment** An infant's tendency to seek closeness to particular people and to feel more secure in their presence.
- attention** The ability to select some information for more detailed inspection, while ignoring other information.
- attitude bolstering** Generating thoughts to support one's original attitude in the face of persuasion attempts, without directly refuting arguments within the message.
- attitudes** Favorable or unfavorable evaluations of and reactions to objects, people, situations, or other aspects of the world.
- attribution** The process by which we attempt to explain the behavior of other people. Attribution theory deals with the rules people use to infer the causes of observed behavior.
- attributional styles** Styles of making attributions for the events in one's life.
- atypical antipsychotics** Drugs that reduce symptoms of schizophrenia without causing so many side effects.
- auditory system** The ears, parts of the brain, and the various connecting neural pathways.
- augmented network** A network that includes inhibitory as well as excitatory connections.
- autism** A mental disorder, first evident during early childhood, in which the child shows significant deficits in communication, social interaction, and bonding and play activities, and engages in repetitive stereotyped behaviors and self-damaging acts.
- automaticity** The habituation of responses that initially requires conscious attention.
- autonomic nervous system** The division of the peripheral nervous system that regulates smooth muscle (organ and glandular) activities. It is divided into the sympathetic and parasympathetic divisions.
- autonomic system** Connects with the internal organs and glands.
- autonomy** A child's independence from caretakers.
- availability heuristic** The assumption that knowledge that is more easily available (for example, because it can more easily be retrieved) is in fact more likely.
- available wavelengths** The wavelengths of the light that is reflected off the paper reaching your eyes.
- avoidance learning** The process by which an organism learns to prevent an aversive event from starting (for example, avoiding a certain room if it was associated with a painfully loud noise in the past).
- axon** That portion of a neuron that transmits impulses to other neurons.
- ## B
- back projections** Activities that modify the way sensory input is processed.
- backward masking** A method used in psychological testing. The participant is shown a picture for only 30 milliseconds, which is then masked by a neutral picture so that participants are unaware of the picture's content.
- base-rate rule** A probability rule which states that the probability of something being a member of a class is greater the more class members there are.
- basic level** In a hierarchy of concepts, the level at which one first categorizes an object.
- basilar membrane** A membrane of the ear within the coils of the cochlea supporting the organ of Corti. Movements of the basilar membrane stimulate the hair cells of the organ of Corti, producing the neural effects of auditory stimulation.
- behavior genetics** Combines the methods of genetics and psychology to study the inheritance of behavioral characteristics.
- behavior therapy** A method of psychotherapy based on learning principles. It uses such techniques as counterconditioning, reinforcement, and shaping to modify behavior (syn. behavior modification).
- behavioral medicine** The study of how social, psychological, and biological factors interact to contribute to physical illness (syn. health psychology).

behavioral perspective An approach to psychology that focuses only on observable behavior, and tries to explain it in terms of its relation to environmental events.

behavioral rehearsal Role-playing.

behaviorism A school or system of psychology associated with the name of John B. Watson; it defined psychology as the study of behavior and limited the data of psychology to observable activities. In its classical form it was more restrictive than the contemporary behavioral viewpoint in psychology.

behaviorist approach (to personality) Emphasizes the importance of environmental, or situational, determinants of behavior.

belief bias The finding that, contrary to the rules of deductive logic, humans are quite likely to judge a logically invalid conclusion as valid if it seems plausible to them.

benzodiazepines A class of drugs with similar chemical structures that are effective in reducing anxiety. Examples are diazepam (Valium) and alprazolam (Xanax).

bias A criterion, set by the observer, for making a particular response.

'Big Five' Five trait dimensions capture most of what we mean by personality. They are Openness to experience, Conscientiousness, Extroversion, Agreeableness, and Neuroticism.

binding problem How activity in different parts of the brain, corresponding to different primitives such as color and shape, are combined into a coherent perception of an object.

binocular disparity (as a depth cue) The difference in the views seen by each eye.

biofeedback Receiving information (feedback) about an aspect of one's physiological state and then attempting to alter that state.

biological perspective An approach to psychology that tries to explain behavior in terms of electrical and chemical events taking place inside the body, particularly within the brain and nervous system.

biological psychologist A psychologist concerned with the relationship between biological processes and behavior.

bipolar disorders Alternating between periods of depression and periods of mania. (syn. manic-depression).

blocking A phenomenon in classical conditioning: if one conditioned stimulus reliably predicts an unconditioned stimulus, and another conditioned stimulus is added, the relation between the added conditioned stimulus and the unconditioned stimulus will not be learned.

borderline personality disorder A mental disorder in which the individual has manifested unstable moods, relationships with others, and self-perceptions chronically since adolescence or childhood.

bottom-up processes Processes in perception, learning, memory, and comprehension that are driven solely by the information input, and that do not involve the organism's prior knowledge and expectations.

brain The part of the central nervous system encased inside the skull.

brain imaging Techniques such as event-related potentials (ERPs), positron emission tomography (PET), and functional magnetic resonance imaging (fMRI).

brain's dopamine system The neurons of this system lie in the upper brain stem and send their axons through the nucleus accumbens and up to the prefrontal cortex. As their name implies, these neurons use the neurotransmitter dopamine to convey their message.

brightness How much light appears to be reflected from a colored surface.

broaden-and-build theory The theory that positive emotions broaden our typical ways of thinking and acting and, in turn, build our lasting personal resources.

Broca's aphasia Damage to Broca's area leads to difficulties in speech production.

Broca's area That portion of the left cerebral hemisphere involved in the control of speech. Individuals with damage in this area have difficulty enunciating words correctly and speak in a slow and labored way; their speech often makes sense, but it includes only key words.

bulimia Recurrent episodes of binge eating (rapid consumption of a large amount of food in a discrete period of time), followed by attempts to purge the excess by means of vomiting or laxatives.

bystander effect The rule that people are less likely to help when others are present.

C

cannabis The hemp plant from which marijuana is obtained.

case history Biography designed for scientific use.

categorization The process of assigning an object to a concept.

catharsis Purging an emotion by experiencing it intensely.

cathartic effect The hypothesized reduction of aggression that follows the vicarious expression of it.

causality heuristic The use of the strength of the causal connections between the events in a claim to estimate the probability of that claim.

Ceci's bioecological theory This theory proposes 'multiple cognitive potentials' rather than a single underlying general intelligence. These multiple abilities are biologically based and place limits on mental processes and their emergence is shaped by the challenges and opportunities in the individual's environment, or context.

central core The most central portion of the brain, including structures that regulate basic life processes.

central nervous system All the neurons in the brain and spinal cord.

central route When an individual mentally responds to and elaborates on a persuasive communication.

cerebellum Lobed structure attached to the rear of the brain stem that regulates muscle tone and coordination of intricate movements.

cerebral cortex The surface layer of the cerebral hemispheres in higher animals, including humans, commonly called gray matter.

cerebrum The brain's two cerebral hemispheres.

change blindness Not noticing a major change in a visual stimulus that appeared a very short time ago (e.g., a second ago).

childhood amnesia The inability to recall events from the first years of one's life.

childhood disintegrative disorder Pervasive developmental disorder in which children develop normally for the first two years of life but later show permanent loss of basic skills in social interactions, language and/or movement.

chromosomes Structures which carry genes, found in the nucleus of each cell in the body.

chunking Recoding new material into larger, more meaningful units and storing those units in working memory.

circadian rhythms Rhythms of the body that occur approximately every 24 hours.

classical conditioning A learning process in which a previously neutral stimulus becomes associated with another stimulus through repeated pairing with that stimulus.

- client-centered therapy** A method of psychotherapy developed by Carl Rogers in which the therapist is nondirective and reflective and does not interpret or advise. The operating assumption is that the client is the best expert on his or her problems and can work them out in a nonjudgmental, accepting atmosphere (syn. nondirective counseling).
- clinical psychologist** A psychologist, usually with a Ph.D. or Psy.D. degree, trained in the diagnosis and treatment of emotional or behavioral problems and mental disorders.
- clock-dependent alerting process** The process in the brain that arouses us at a particular time each day.
- coaction** The interaction between individuals performing the same task.
- cocaine** A central nervous system stimulant derived from leaves of the coca plant. Increases energy, produces euphoria, and in large doses causes paranoia.
- cochlea** The portion of the inner ear containing the receptors for hearing.
- cognitive appraisal** The interpretation of an event or situation with respect to one's goals and well-being. The cognitive appraisal of an event influences both the quality and intensity of the emotion experienced and the degree of perceived threat.
- cognitive approach (to personality)** A general empirical approach and a set of topics related to how people process information about themselves and the world.
- cognitive behavior therapy** A therapy that attempts to help people identify the kinds of stressful situations that produce their physiological or emotional symptoms and alter the way they cope with these situations.
- cognitive dissonance theory** This theory assumes that there is a drive toward cognitive consistency, meaning that two cognitions – or thoughts – that are inconsistent will produce discomfort, which will in turn motivate the person to remove the inconsistency and bring the cognitions into harmony.
- cognitive map** A hypothetical structure in memory that preserves and organizes information about the various events that occur in a learning situation; a mental picture of the learning situation.
- cognitive neuroscience** An interdisciplinary approach that combines aspects of cognitive psychology and neuroscience to study how mental activities are executed in the brain.
- cognitive perspective** An approach to psychology that focuses on mental processes such as perceiving, remembering, reasoning, deciding, and problem solving, and tries to explain behavior in terms of these mental processes.
- cognitive psychologists** Psychologists who take an experimental approach to understanding people's internal mental processes, such as perception and attention, thinking, problem solving, judgment and decision making, memory, and language.
- collective unconscious** A part of the mind that is common to all humans and consists of primordial images or archetypes inherited from our ancestors.
- collectivism** Refers to cultures that emphasize the fundamental connectedness and interdependence among people.
- color constancy** The tendency to see a familiar object as of the same color, regardless of changes in illumination on it that alter its stimulus properties.
- color-matching experiment** An experiment that measures an observer's inclination to see two physically different lights as having the same color.
- commitment** The cognitive component of love that reflects the intention to remain in the relationship.
- companionate love** Contrasted with passionate love. The affection we feel for those with whom our lives are deeply intertwined.
- complex cell** A cell in the visual cortex that responds to a bar of light or straight edge of a particular orientation located anywhere in the visual field.
- compliance** Going along with the wishes of the influencer without necessarily changing our beliefs or attitudes.
- comprehension of language** Understanding language by hearing sounds, attaching meanings to the sounds in the form of words, combining the words to create a sentence, and then somehow extracting meaning from it.
- compulsion** Irresistible urges to carry out certain acts or rituals that reduce anxiety.
- computerized axial tomography (CAT or CT)** An X-ray technique used to record brain activity.
- concept** The set of properties that we associate with a particular class.
- concrete operational stage** Piaget's third stage of cognitive development (ages 7 to 11 years) during which children become capable of logical thought and conservation.
- conditioned aversion** Learning that occurs when negative associative memories cause something (often food) to subsequently be experienced as unpleasant.
- conditioned reinforcer** A stimulus that has become reinforcing through prior association with a reinforcing stimulus (syn. secondary reinforcer).
- conditioned response (CR)** The learned or acquired response to a stimulus that did not evoke the response originally (i.e., a conditioned stimulus).
- conditioned satiety** The idea that the fullness we feel after a meal is at least in part a product of learning.
- conditioned stimulus (CS)** A previously neutral stimulus that comes to elicit a conditioned response through association with an unconditioned stimulus.
- cones** In the eye, specialized cells of the retina found predominantly in the fovea and more sparsely throughout the retina. The cones mediate both chromatic and achromatic sensations.
- confirmation bias** The tendency to give more credence to evidence that is in line with our previous beliefs than to evidence that contradicts it.
- conjunction rule** A probability rule which states that the probability of a proposition cannot be less than the probability of that proposition combined with another proposition.
- connectionist models** Models of cognitive processes (like perception) that incorporate a network of nodes, with excitatory and inhibitory connections between them.
- conscious** Our current awareness.
- consciousness** (a) Monitoring ourselves and our environment so that percepts, memories, and thoughts are represented in awareness. (b) Controlling ourselves and our environment so that we are able to initiate and terminate behavioral and cognitive activities.
- conservation** The understanding that the amount of a substance remains the same even when its form is changed.
- constancy** The brain's ability to maintain a perception of the underlying physical characteristics of an object, such as shape, size or color, even when the sensory manifestations of these objects change drastically.
- construct validity** The ability of a test or assessment instrument to confirm predictions of the theory underlying some theoretical concept or construct. Confirming results validate both the concept and the assessment instrument simultaneously.

constructive memory The part of memory that is created after the event that gave rise to the memory is over.

constructive perception What is perceived forms the basis for the initial memory; therefore, if what is originally perceived differs systematically from the objective world, the perceiver's initial memory of what happened will likewise be distorted.

constructive processes The processes by which perception is based on prior knowledge and inference in addition to the objective data from the environment.

contingency Event A is contingent on event B, if A is more likely to occur when B has occurred, than when it has not.

continuum model A model that describes the full continuum of processes from stereotyping to individuation.

contrast acuity The ability to see differences in brightness.

control group In an experiment, the group in which the condition under study is absent.

controllability The degree to which we can stop an event or bring it about.

controlled stimulation Conditions in which the perceptual experiences of an organism are systematically varied in order to determine the effect on subsequent performance. For example, rearing kittens in an environment where they see only vertical stripes for the first few months of life.

conventional level of moral development Level of moral development in which children evaluate actions in terms of other people's opinions.

coping The process by which a person attempts to manage stressful demands.

core The part of a concept that contains the properties that are more essential for determining membership in the concept.

core relational theme The personal meaning that results from a particular pattern of appraisals about a specific person-environment relationship.

coronary heart disease The narrowing or closing of the blood vessels that supply the heart muscles by the gradual buildup of a hard, fatty substance called plaque, blocking the flow of oxygen and nutrients to the heart.

correlation coefficient An estimate of the degree to which two variables are related.

counseling psychologist A trained psychologist, usually with a Ph.D. or Psy.D. degree, who deals with personal problems not classified as illness, such as academic, social, or vocational problems of students. He or she has skills similar to those of the clinical psychologist but usually works in a nonmedical setting.

counterarguing Directly rebutting the arguments within a message that aims to be persuasive.

criterion problem in assessment The difficulty that arises in validating a test or assessment instrument when there is no criterion behavior the investigator is willing to accept as the 'true' measure of the concept being evaluated.

criterion validity The ability of a test or assessment instrument to predict the behavior it is designed to predict (syn. empirical validity).

critical periods Crucial time periods in a person's life during which specific events occur if development is to proceed normally.

cue A directing stimulus such as a small arrow that directs the subject to attend either to the left or to the right.

cultural perspective (of abnormality) The view that mental disorders are not situated in the brain or mind of the individual but in the social context in which the individual lives.

cultural psychology An interdisciplinary approach involving psychologists, anthropologists, sociologists, and other social scientists that is concerned with how an individual's culture influences his or her mental representations and psychological processes.

cultural relativist perspective (for acceptable behavior) This perspective follows that people should respect each culture's definitions of abnormality for the members of that culture.

D

dark adaptation The increased sensitivity to light when the subject has been continuously in the dark or under conditions of reduced illumination.

dark adaptation curve The absolute threshold decreases with the length of time a person is in darkness.

data-driven learning A kind of associative learning in which people have no prior beliefs about the relation that has to be learned; learning is driven only by the input or data.

debriefing The meeting between researcher and participant following a study in which the researcher tells the participant the reasons for keeping them in ignorance – or deceiving them – about the procedures or hypotheses. The researcher also deals with any of the participants' residual emotional reactions so that participants leave with their dignity intact and their appreciation for the research enhanced.

decibel scale A logarithmic scale of loudness. A change of 10 decibels corresponds to a change in sound power of 10 times; 20 decibels, a change of 100 times; and so forth.

deductive validity According to logicians, it is impossible for the conclusion of an argument to be false if its premises are true.

defense mechanisms Strategies that people use to deal with anxiety, which are largely unconscious.

degradation The process in which enzymes in the membrane of a receiving neuron react with a neurotransmitter to break it up chemically and make it inactive; one method (in addition to reuptake) of terminating a neurotransmitter's action.

deindividuation A feeling that one has lost his or her personal identity and merged anonymously into a group.

deinstitutionalization The movement toward discharge of institutionalized mental patients to community-based services.

delusions Beliefs that most people would view as misperceptions of reality.

dendrites Branches projecting from the cell body of a neuron, which receive neural impulses from other neurons.

denial A defense mechanism by which unacceptable impulses or ideas are not perceived or allowed into full awareness.

dependent variable A variable that is hypothesized to depend on the value of the independent variable.

depolarized If the electric potential across the neuron's cell membrane is such that the outside of a neuron is more negatively charged than the inside, the neuron is in a polarized state.

depressants Drugs that depress the central nervous system.

depressive disorders Having one or more periods of depression without a history of manic episodes.

depth cues Different kinds of visual information that, logically or mathematically, provide information about some object's depth.

developmental psychologist A psychologist whose research interest lies in studying the changes that occur as a function of the growth and development of the organism, in particular the relationship between early and later behavior.

Diagnostic and Statistical Manual of Mental Disorders, 4th edition The classification of mental disorders used by most mental health professionals in the United States.

dichromatism Color blindness in which either the red-green or the blue-yellow system is lacking. The red-green form is relatively common; the blue-yellow form is the rarest of all forms of color blindness.

difference-reduction method A problem-solving strategy in which one sets up subgoals that, when obtained, put one in a state closer to the goal.

difference threshold The smallest difference in stimulus intensity that is noticeable.

difficult temperament Term used to describe a child who is irritable, has irregular sleeping and eating patterns, and responds intensely and negatively to new situations.

diffusion of responsibility The tendency for persons in a group situation to fail to take action (as in an emergency) because others are present, thus diffusing the responsibility for acting. A major factor in inhibiting bystanders from intervening in emergencies.

dimensional appraisal theories A group of appraisal theories that identify a range of appraisal dimensions thought to be sufficient to account for differences among emotions.

direct observation The observation of a particular phenomenon under study as it occurs naturally.

discrimination A reaction to differences.

disorganized Term used to describe a child who exhibits contradictory behaviors related to attachment to his or her caretaker.

displacement (a) A defense mechanism whereby a motive that may not be directly expressed (such as sex or aggression) appears in a more acceptable form. (b) The principle of loss of items from short-term memory as too many new items are added.

display rules A culture's rules for the types of emotions people should experience in certain situations, and the behaviors (including facial expressions) appropriate for each emotion.

dispositional attribution Attributing a person's actions to internal dispositions (attitudes, traits, motives), as opposed to situational factors.

dissociation Under certain conditions some thoughts and actions become split off, or dissociated, from the rest of consciousness and function outside of awareness.

dissociative identity disorder The existence in a single individual of two or more distinct identities or personalities that alternate in controlling behavior. Formerly called multiple personality disorder.

distress Feelings of anxiety, depression, or agitation, or experiences such as insomnia, loss of appetite, or numerous aches and pains.

dizygotic Dizygotic (or 'fraternal') twins have developed from different egg cells and are no more alike genetically than ordinary siblings.

dream analysis Talking about the content of one's dreams and then free associating to that content.

dreaming An altered state of consciousness in which remembered images and fantasies are temporarily confused with external reality.

drive theories Theories of motivation that emphasize the role of internal factors.

drug misuse Continued use of a drug by a person who is not dependent on it (that is, shows no signs of tolerance, withdrawal, or compulsive craving), despite serious consequences.

drug dependence A pattern of compulsive drug use usually characterized by tolerance (the need to take more and more of

the drug to achieve the same effect), withdrawal (unpleasant physical and psychological reactions if the drug is discontinued), and compulsive use (taking more of the drug than intended, being unable to control drug use, or spending a great deal of time trying to obtain the drug).

drug tolerance The decreased effect of a drug when it is taken repeatedly.

dynamic control theory A theory that, instead of an early, hard-wired system sensitive to a small number of visual primitives, there is a malleable system whose components can be quickly reconfigured to perform different tasks at different times.

E

eardrum The membrane at the inner end of the auditory canal, leading to the middle ear.

easy temperament Term used to describe a child who is playful, regular in his or her sleeping and eating patterns, and adapts readily to new situations.

eclectic approach An approach to looking at topics within psychology using multiple psychological perspectives.

educational psychologist A psychologist whose research interest lies in the application of psychological principles to the education of children and adults in schools.

efferent nerves Nerves that carry signals from the central nervous system to the body.

ego The executive of the personality.

egocentrism The condition of being unaware of perspectives other than one's own and believing that everyone perceives the environment in the same way.

elaboration A memory process wherein one expands verbal material so as to increase the number of ways to retrieve the material.

elaboration likelihood model According to this model, if a person is at the high end of the continuum – willing and able to think deeply – then persuasion is said to follow a central route, relying on controlled and effortful thinking; if a person is at the low end of the continuum – for whatever reasons not willing or able to think deeply – then persuasion is said to follow a peripheral route, relying on automatic and effortless thinking.

electroconvulsive therapy (ECT) A mild electric current is applied to the brain to produce a seizure similar to an epileptic convulsion. Also known as electroshock therapy.

emergent features Features that owe their existence to the configuration of other features.

emotion A complex condition that arises in response to certain affectively toned experiences.

emotion-focused coping Ways of reducing anxiety or stress that do not deal directly with the emotion-producing situation; defense mechanisms are a form of emotion-focused coping.

emotion regulation People's responses to their own emotions.

emotional intelligence The ability to perceive, express, understand, use, and manage emotions.

encoding Creating a memory representation of an event.

encoding stage Occurs when environmental information is translated into and stored as a meaningful entity.

engineering psychologist A psychologist who specializes in the relationship between people and machines, seeking, for example, to design machines that minimize human error.

escape learning The process by which an organism learns to terminate an ongoing aversive event (for example, leaving a room if there is a painfully loud noise there).

event-related potentials (ERP) A technique to measure the electrical activity of the brain at the scalp (using

electroencephalograms, EEGs), as it occurs in response to a stimulus or preceding a motor response.

evocative interaction The interaction between individuals and their environments that arises because the behavior of different individuals evokes different responses from others.

evolutionary psychology An area of research that studies how psychological processes have evolved by means of natural selection; those behaviors that aided survival or increased the chance of reproduction have tended to persist through the course of evolutionary history.

excitation threshold If the electric potential is raised above the excitation threshold (for most neurons, around -55 mV) the cell membrane becomes temporarily unstable, resulting in an action potential.

excitatory Synaptic transmission is excitatory if it allows positively charged ions to enter the post-synaptic neuron; this depolarization of the cell makes it more likely to generate an action potential.

excitatory conditioning The ability of a CS to increase the probability or magnitude of a given behavior.

excitatory connections Connections between two nodes in a connectionist network that are positive: An increase in one leads to an increase in the other.

exotic-becomes-erotic A theory about the determinants of sexual orientation that integrates nature and nurture views.

expectation A belief, based on past experience, that something will occur.

experiment The strongest test of hypotheses about cause and effect in which an investigator carefully controls conditions and takes measurements to discover the causal relationships among variables.

experimental group In an experiment, the group of subjects given the treatment whose effect is under investigation.

exploratory behavior The (human) desire to discover and learn new things.

explicit memory The kind of memory that underlies a conscious recollection of something in the past.

exponent (of a power function) A unique number that characterizes the function of each sensory modality.

extinction (a) The experimental procedure, following classical or operant conditioning, of presenting the conditioned stimulus without the usual reinforcement. (b) The reduction in response that results from this procedure.

extracellular thirst The psychological manifestation of the need for water that occurs when our bodies lose water because we have gone without drinking or have exercised intensively.

extrinsic motivation Motivation that derives from external factors, such as (financial) rewards.

eye fixations Periods during which the eyes are stationary and are acquiring information.

F

facial expressions The muscle actions that move facial landmarks in particular ways.

facial feedback hypothesis The hypothesis that people's subjective experience of an emotion is determined by feedback from the physiological arousal caused by engaging in specific facial expressions.

facial preference In infants, an inborn, unlearned preference for faces.

factor analysis A statistical method used in test construction and in interpreting scores from batteries of tests. The method enables

the investigator to compute the minimum number of determiners (factors) required to account for the intercorrelations among the scores on the tests making up the battery.

false-alarm rate The proportion of false alarms over all the trials in an experiment.

false alarms The response of incorrectly responding yes when only noise is present.

family therapy Psychotherapy with the family members as a group rather than treatment of the patient alone.

feature-integration theory A cornerstone of understanding object perception that was initially proposed by Anne Treisman.

fetal alcohol syndrome Mental retardation and multiple deformities of the infant's face and mouth due to exposure to alcohol in the womb.

fight-or-flight response A pattern of bodily responses that prepares the organism for an emergency. Includes increases in pupil size, heart rate, blood pressure, respiration, muscle tension, and the secretion of epinephrine, norepinephrine, ACTH and other hormones; decreases in saliva, mucous, digestive activity, and the size of blood vessels.

figure The objects of interest, which appear more solid than the ground and appear in front of it. The figure and ground regions are the two most elementary forms of perceptual organization.

fixation In Freud's psychoanalytic theory, arrested development through failure to pass beyond one of the earlier stages of psychosexual development or to change the objects of attachment (such as fixation at the oral stage or fixation on the mother).

fixed interval schedule The organism is reinforced for its first response after a certain amount of time has passed since its last reinforcement.

fixed ratio schedule (FR) The number of responses that has to be made before reinforcement is fixed at a particular value.

flashbulb memory A vivid and relatively permanent record of the circumstances in which one learned of an emotionally charged, significant event.

foot-in-the-door technique To get people to say 'yes' to requests that would ordinarily lead to 'no', this technique suggests beginning with a small request that few would refuse.

forebrain The structures located in the front, or anterior, part of the brain.

formal operational stage Piaget's fourth stage of cognitive development in which the child becomes able to use abstract rules.

fovea In the eye, a small area in the central part of the retina, packed with cones; the most sensitive part of the retina for detail vision and color vision in daylight.

free association A patient is instructed to say everything that comes to mind, regardless of how trivial or embarrassing it may seem.

frequency (of a tone) The number of cycles per second.

Freudian slip In psychoanalytic theory, a mistake or substitution of words in speaking or writing that is contrary to the speaker's conscious intention and presumably expresses wishes or thoughts repressed to the unconscious.

frustration-aggression hypothesis The hypothesis that frustration (thwarting a person's goal-directed efforts) induces an aggressive drive, which, in turn, motivates aggressive behavior.

functional fixedness When a person has difficulty with a problem, presumably because they represent components of the problem as having a different function than that needed to solve the problem.

functional magnetic resonance imaging (fMRI) A brain imaging technique that measures brain activity by measuring the magnetic changes that result from oxygen consumption.

functionalism Studying how the mind works so that an organism can adapt to and function in its environment.

fundamental attribution error The tendency to underestimate situational influences on behavior and assume that some personal characteristic of the individual is responsible.

G

g General intelligence factor.

ganglia (sing. ganglion) A group of neuronal cell bodies found outside the brain and spinal cord.

ganzfeld procedure Tests for telepathic communication between a participant who serves as the 'receiver' and another participant who serves as the 'sender'.

Gardner's theory of multiple intelligences The theory that there are seven distinct kinds of intelligence that are independent of one another, each operating as a separate system (or module) in the brain according to its own rules. These are (1) linguistic, (2) musical, (3) logical-mathematical, (4) spatial, (5) bodily-kinesthetic, (6) intrapersonal, and (7) interpersonal.

gate control theory of pain According to this theory, the sensation of pain requires not only that pain receptors be activated, but also that a neural gate in the spinal cord allow these signals to continue to the brain. Pressure stimulation tends to close the gate; this is why rubbing a hurt area can relieve pain. Attitudes, suggestions, and drugs may act to close the gate.

gender identity A firm sense of oneself as either male or female.

gender schema A mental structure that organizes the person's perceptual and conceptual world into gender categories (male–female, masculine–feminine).

genes Segments of DNA molecules that are the basic hereditary units.

general adaptation syndrome A set of responses that is displayed by all organisms in response to stress.

general learning disability Deficits in intellectual and practical skills far below average.

general paresis A gradual decline in mental and physical functioning, marked changes in personality, and delusions and hallucinations.

generalization (a) In learning, the detection of a characteristic or principle common to a class of objects or events. (b) In conditioning, the principle that once a conditioned response has been established to a given stimulus, similar stimuli will also evoke that response.

generalized anxiety disorder A constant sense of tension and dread.

genital stage In Freud's psychoanalytic theory, the final stage of psychosexual development, beginning at puberty and culminating in mature adult sexuality.

geons In perception, geometric forms (such as cylinders, cones, blocks, and wedges) that comprise the features of objects. Recognition of an object is good to the extent that the geons of the object can be recovered.

Gestalt A German word meaning 'form' or 'configuration'. Gestalt psychologists are interested primarily in perception and believe that perceptual experiences depend on the patterns formed by stimuli and on the organization of experience.

glial cell A supporting cell (not a neuron); glial cells compose a substantial portion of brain tissue; recent speculation suggests that they may play a role in neural conduction.

grain size A limiting feature in both imaginal and perceptual processing. It can be thought of as our images are occurring in a mental medium whose grain limits the amount of detail we can detect in an image.

grammatical morpheme A morpheme that is not a word, including what are commonly referred to as articles and prepositions.

ground The region that appears to be behind the figure. The figure and ground regions are the two most elementary forms of perceptual organization.

group polarization effect The tendency of groups to arrive at decisions that are in the same direction but are more extreme than the mean of the pre-discussion decisions of the individuals in the group.

group therapy A group discussion or other group activity with a therapeutic purpose participated in by more than one client or patient at a time.

grouping by proximity If the vertical distance between dots is reduced columns will most likely be seen.

grouping by similarity Grouping like with like.

grouphink A phenomenon in which members of a group are led to suppress their own dissent in the interests of group consensus.

H

habit A learned stimulus-response sequence.

habituation The reduction in the strength of a response to a repeated stimulus.

habituation method A technique used to study perception in infants. It is based on the fact that while infants look directly at novel objects they soon tire of doing so (habituation). Hence one can determine the degree to which an infant perceives an object as novel by measuring the time spent looking at it.

hair cells In audition, hairlike receptors in the cochlea that bend due to vibration of the basilar membrane and then send electrical impulses to the brain.

hallucinations Sensory experiences in the absence of relevant or adequate external stimulation.

hallucinogens Drugs whose main effect is to change perceptual experience (syn. psychedelic drugs).

hardiness Resistance to becoming physically or emotionally impaired even in the face of major stressful events.

hashish A form of cannabis commonly used in the Middle East.

Hebbian learning rule The idea that repetition of the same response will lead to permanent changes at the synapses between neurons. In particular, if input from neuron A repeatedly increases the firing rate of neuron B, then the connection between neurons A and B will grow stronger.

hemispheres Structures on the left and right sides of the brain that are connected by the corpus callosum.

heritability The percentage of the variance in any trait that is accounted for by genetic differences among the individuals in a population.

heroin An extremely addictive central nervous system depressant derived from opium.

hertz (Hz) The unit used to measure the frequency of a sound wave, specifically the number of cycles per second.

heuristic A short-cut procedure that is relatively easy to apply and can often yield the correct answer, but not inevitably so.

hidden observer A part of the mind that is not within awareness seems to be watching the person's experience as a whole.

hierarchy of needs Maslow's way of classifying needs and motives, from the basic biological needs to the more complex psychological motivations that become important only after the basic needs have been satisfied.

hindbrain All the structures located in the hind, or posterior, part of the brain, closest to the spinal cord.

hippocampus A brain structure located below the cerebral cortex that is involved in the consolidation of new memories; its role seems to be that of a cross-referencing system, linking together aspects of a particular memory that are stored in separate parts of the brain.

hit rate The proportion of hits over all the trials in an experiment.

hits The response of correctly responding 'yes' when a signal is present.

holistic thought An orientation toward the entire context or field and assigning causality to it, making relatively little use of categories and formal logic, and relying instead on dialectical reasoning, which involves recognizing and transcending apparent contradictions.

homeostasis The normal level of functioning that is characteristic of the healthy organism (Chapter 2); a constant internal state (Chapter 10).

homeostatic sleep drive A physiological process that strives to obtain the amount of sleep required for a stable level of daytime alertness.

hormones Chemicals secreted by the endocrine glands into the bloodstream and transported to other parts of the body, where they have specific effects on cells that recognize their message.

hue The quality best described by the color's name.

humanistic therapies A general term for approaches to psychotherapy that emphasize the individual's subjective experiences, free will, and ability to solve his or her own problems. Client-centered therapy and Gestalt therapy are examples.

hypercomplex cell A cell in the visual cortex that responds to a particular orientation and length.

hyperpolarized If the cell is more polarized than it is at rest, it is called hyperpolarized.

hypnosis A willing and cooperative individual relinquishes some control over his or her behavior to the hypnotist and accepts some distortion of reality.

hypothalamus A small but very important structure located just above the brain stem and just below the thalamus. Considered a part of the central core of the brain, it includes centers that govern motivated behavior such as eating, drinking, sex, and emotions; it also regulates endocrine activity and maintains body homeostasis.

hypothesis A statement that can be tested.

I

id The most primitive part of the personality and the part from which the ego and the superego later develop.

ideal self Image of self that represents the best self one can be or aspires to be.

identification Respecting or admiring other individuals or groups and obeying their norms and adopting their beliefs, attitudes, and behaviors in order to be like them and identify with them.

identity confusion Occurs when a person has no consistent sense of self or set of internal standards for evaluating his or her self-worth in major areas of life.

identity crisis In Erikson's theory of psychosocial development, a period of self-doubt and active questioning about one's definition of self ('Who am I?' 'Where am I going?') which typically takes place during adolescence.

ideology A set of beliefs and attitudes.

illusion A percept that is false or distorted.

illusory conjunction An incorrect combination of two separate attributes of an object.

imaginal mode A form of thought based in (visual) imagery.

imaginal thought Images, particularly visual ones, that we can 'see' in our mind.

implicit egotism The non-conscious tendency to be attracted to people, places and objects that subtly remind one of oneself.

implicit leniency contract To appear fair, majority members let minority members have their say, but by doing so they unwittingly open the door to minority influence.

implicit memory The kind of memory that underlies perceptual and cognitive skills. It is often expressed as an improvement on some perceptual or cognitive task without any conscious recollection of the experiences that led to the improvement.

imprinting A type of early learning in which a newborn forms an attachment with some kind of model (normally, a parent).

inattentive blindness Not 'seeing' something because one is not paying attention to it.

in vivo exposure A method of therapy highly similar to systematic desensitization that requires the client to actually experience the anxiety-producing situations.

incentive motivation Wanting something.

incentive The expected reward of a behavior.

incentive salience Objects and events that have become linked with anticipated affect, which serves to grab attention and steer seeking behavior.

incentive theory A theory of motivation that emphasizes the importance of negative and positive incentives in determining behavior; internal drives are not the sole instigators of activity.

incus One of three small bones located in the middle ear.

independent variable A variable that is independent of what the participant does.

individualism Refers to cultures that emphasize the fundamental separateness and independence of individuals.

individuation Assessing an individual's personal qualities on a person-by-person basis.

inductive reasoning Reasoning about arguments in which it is improbable that the conclusion is false if the premises are true.

inductive strength It is improbable that the conclusion is false if the premises are true.

inferences (a) A perceptual or memorial process based on what is believed to be true rather than what necessarily is true.
(b) Judgments that go beyond the information given.

information-processing model In general, a model based on assumptions regarding the flow of information through a system; usually best realized in the form of a computer program. In cognitive psychology, theories of how the mind functions are often represented in the form of an information-processing model. By simulating the model on a computer, one can study the properties and implications of the theory.

information-processing skills Skills that help one gather and analyze information from the environment.

informational social influence We conform because we believe that other people's interpretations of an ambiguous situation are more correct than our own.

informed consent The participants must enter a study voluntarily and be permitted to withdraw from it at any time without penalty if they so desire.

inhibitory Synaptic transmission is inhibitory if it allows positively charged ions to leave the post-synaptic neuron, or negatively

charged ions to enter it; this hyperpolarization of the cell makes it more likely to generate an action potential.

inhibitory conditioning The ability of a CS to decrease the probability or magnitude of a behavioral response.

inhibitory connections Connections between two nodes in a connectionist network that are negative: An increase in one leads to a decrease in the other.

insecurely attached Term used to describe a child who is ambivalent and/or shows resistance to his or her caretaker during a reunion episode.

insight An understanding of a situation, leading to the solution of a problem (contrast with trial-and-error learning).

insomnia Dissatisfaction with the amount or quality of one's sleep.

institutional norms Like social norms – implicit or explicit rules for acceptable behavior and beliefs – except they are applied to entire institutions, or organizations of the same type.

instrumental conditioning Certain responses that are learned because they operate on, or affect, the environment.

intellectualization A defense mechanism whereby a person tries to gain detachment from an emotionally threatening situation by dealing with it in abstract, intellectual terms.

intelligence (a) That which a properly standardized intelligence test measures. (b) The ability to learn from experience, think in abstract terms, and deal effectively with one's environment.

intelligence quotient (IQ) A ratio of mental age to chronological age.

intensity How strong a particular stimulus is.

interference A factor that can impair retrieval from long-term memory. It arises when different items are associated with the same retrieval cue; attempted retrieval of one of these items can be blocked by the inadvertent retrieval of the other item.

interjudge reliability The consistency achieved by two or more observers when assessing or rating some behavior (for example, in rating the aggressiveness of nursery-school children). Also called interrater agreement.

internal conflicts Unresolved issues that may be either conscious or unconscious.

internal consistency A form of test reliability. Specifically, the homogeneity of a set of items on a test, the degree to which they are all measuring the same variable.

International Classification of Diseases System to classify mental disorders.

interneuron A neuron that connects sensory and motor neurons.

interpersonal therapy A style of therapy that tends to be more structured and short-term than traditional psychoanalysis.

interposition (as a depth cue) If one object is positioned so that it obstructs the view of the other, the viewer perceives the overlapping object as being nearer.

interrater agreement See interjudge reliability.

interval schedules Reinforcement is available only after a certain time interval has elapsed.

intimacy The emotional component of love which involves closeness and sharing of feelings.

intracellular thirst The psychological manifestation of the need for water that is caused by osmosis – the tendency of water to move from zones where it is plentiful to zones where it is relatively rare.

intrinsic motivation Motivation that derives from internal factors, such as feeling satisfaction, pride, and competence.

introspection The observation and recording of one's own perceptions, thoughts, and feelings.

introversion–extroversion The personality dimension first identified by Carl Jung that refers to the degree to which a person's basic

orientation is turned inward toward the self or outward toward the external world. At the introversion end are shy individuals who tend to withdraw into themselves; at the extroversion end are sociable individuals who prefer to be with others.

inversion effect The relative difficulty of recognizing upside-down faces compared to other upside-down visual stimuli (such as cars or houses).

ion Electrically charged molecule.

ion channel A specialized protein molecule that permits specific ions to enter or leave cells. Some ion channels open or close in response to appropriate neurotransmitter molecules; others open or close in response to voltage changes across the cell membrane. This process regulates depolarization and the firing of nerve impulses.

ion pump Protein structure that helps to maintain the uneven distribution of ions across the cell membrane by pumping them into or out of the cell.

J

James–Lange theory A classical theory of emotion, named for the two men who independently proposed it. The theory states that the stimulus first leads to bodily responses, and then the awareness of these responses constitutes the experience of emotion.

just noticeable difference (jnd) The minimum difference in stimulus magnitude necessary to tell two stimuli apart.

K

knowledge According to knowledge acquisition approaches to development, the child's understanding of how facts in a particular domain are organized.

L

language A multilevel system for relating thoughts to speech by means of word and sentence units.

latency period In Freud's psychoanalytic theory, a period in middle childhood, roughly the years 6–12, when both sexual and aggressive impulses are said to be in a quiescent state.

latent learning Learning that has taken place, but that is not manifesting itself in a change in behavior.

lateral hypothalamic syndrome An apparent total lack of hunger caused by the destruction of the lateral hypothalamus.

law of effect The principle that any behavior that is followed by reinforcement is strengthened; from the infinite pool of possible responses, those that lead to reinforcement are repeated, whereas those that do not are extinguished.

learned helplessness A condition of apathy or helplessness created experimentally by subjecting an organism to unavoidable trauma (such as shock, heat, or cold). Being unable to avoid or escape an aversive situation produces a feeling of helplessness that generalizes to subsequent situations.

learned taste aversion An aversion to eat a particular food, as a result of an experience in which the food became associated with illness.

learning A relatively permanent change in behavior that occurs as the result of practice.

libido (Latin for 'lust'.) In Freud's psychoanalytic theory, the psychic energy of the id.

liking In the study of motivation, liking refers to the pleasure experienced while sought-after rewards are consumed, whereas in the study of interpersonal relationships, liking refers to friendship and the early stages of more intimate relationships.

limbic system A set of structures that are closely interconnected with the hypothalamus and appear to impose additional controls over some of the instinctive behaviors regulated by the hypothalamus and the brain stem.

literature review A scholarly summary of the existing body of research on a given topic.

lithium Drug used to treat mania.

lobes Large regions of the cerebral cortex that perform diverse functions.

localization Determining where objects are in space.

lock-and-key action A model of synaptic transmission based in which a neurotransmitter affects only those receptor sites into which it 'fits' (like a key in a lock).

long-term depression A long-lasting decrease in synaptic transmission at synapses in the cerebellar cortex.

long-term memory Semi-permanent memory.

long-term potentiation A phenomenon concerning the neural bases of learning. Once stimulated, neurons will show an increase in their rate of activity when subsequently stimulated (at least up to a period of months).

long-term store The large repository of information where we maintain all information that is generally available to us.

loosening of associations Occurs when the individual's ideas shift from one topic to another in ways that appear unrelated.

loudness An intensity dimension of hearing correlated with the amplitude of the sound waves that constitute the stimulus. Greater amplitudes yield greater loudnesses.

LSD A potent drug that produces hallucinations at very low doses. See also hallucinogen.

lucid dream A dream in which events seem so normal (lacking the bizarre and illogical character of most dreams) that the dreamer believes he or she is awake and conscious.

M

magnetic resonance imaging (MRI) A computer-based scanning procedure that uses strong magnetic fields and radio-frequency pulses to generate a picture of a cross section of the brain or body. Provides greater precision than the CT scanner.

maladaptive Having adverse effects on the individual or on society.

malleus One of three small bones located in the middle ear.

manic episode An episode in which an individual is energetic, enthusiastic, full of self-confidence, talks continually, rushes from one activity to another with little need for sleep, and makes grandiose plans, paying little attention to their practicality.

marijuana The dried leaves of the hemp plant (cannabis); also known as hashish, 'pot', or 'grass'. Hashish is actually an extract of the plant material and, hence, is usually stronger than marijuana. Intake may enhance sensory experiences and produce a state of euphoria.

marital therapy Psychotherapy with both members of a couple aimed at resolving problems in their relationship (syn. couples therapy).

maturation An innately determined sequence of growth and change that is relatively independent of external events.

McGurk effect Results from conflicting auditory and visual information.

mean The technical term for an arithmetic average.

meaning The concept named by a word.

means-ends analysis A problem-solving strategy in which one compares one's current state to the goal state in order to find the

most important difference between them; eliminating this difference then becomes the main subgoal.

measurement A system for assigning numbers to variables.

meditation Achieving an altered state of consciousness by performing certain rituals and exercises.

medulla The lowest section of the brainstem, a slight enlargement of the spinal cord as it enters the skull; the point at which the major nerve tracts cross over so that the right cerebral hemisphere controls the left side of the body, and the left cerebral hemisphere controls the right side.

melatonin A hormone that induces sleep.

memory illusion Memories for events that never occurred.

menarche The first menstrual period.

mental imagery Mental representations that are picture-like. Not the same as eidetic imagery.

mental model A concrete mental representation of a problem situation that may be useful in solving the problem.

mental rotation The notion that a mental image of an object can be rotated in the mind in fashion analogous to rotating the real object.

mental set A disposition to organize knowledge in a particular way.

mere exposure effect The finding that familiarity all by itself increases liking.

meta-analysis A form of literature review in which authors use statistical techniques to combine and draw conclusions about studies previously conducted.

metacognition Thinking about thinking.

metamers A pair of such matching lights – that is, two lights with different physical makeups that appear identical.

methadone An agonist drug used in treating heroin-dependent individuals.

method of loci An aid to serial memory. Verbal material is transformed into mental images, which are then located at successive positions along a visualized route, such as an imaged walk through the house or down a familiar street.

midbrain The middle of the brain.

middle ear The part of the ear that transmits sound waves from the eardrum to the oval window of the inner ear by means of three tiny connecting bones (malleus, incus, and stapes).

minimal risk The principle that risks anticipated in the research should be no greater than those ordinarily encountered in daily life.

minimalist appraisal theories A group of appraisal theories that are based on reducing the number of appraisal dimensions to minimum, often based on fundamental themes.

Minnesota Multiphasic Personality Inventory (MMPI) A pencil-and-paper version of a psychiatric interview that consists of more than 550 statements concerning attitudes, emotional reactions, physical and psychological symptoms, and experiences. Test takers respond to each statement by answering, 'True', 'False', or 'Cannot say'.

minority influence Minorities can move majorities toward their point of view if they present a consistent position without appearing rigid, dogmatic, or arrogant.

misattribution of arousal Lingered physiological arousal can be mistakenly attributed to subsequent circumstances and intensify our emotional reactions to those circumstances.

mnemonic system A strategy or set of strategies for efficiently remembering things.

model of the environment A representation of the world within our brains that we use to consciously perceive, make decisions, and behave.

monoamine oxidase (MAO) inhibitors One of the enzymes responsible for the breakdown of a group of neurotransmitters

called biogenic amines (norepinephrine, dopamine, and serotonin are examples); believed to be important in the regulation of emotion. Drugs that inhibit the action of this enzyme (MAO inhibitors) are used in treating depression.

monoamine oxidase inhibitor (MAOI) A class of drugs used to treat depression; the drug inhibits the action of an enzyme (monoamine oxidase) that breaks down certain neurotransmitters (such as dopamine, norepinephrine, and serotonin), thereby prolonging the action of these neurotransmitters.

monochromatism Total color blindness, the visual system being achromatic. A rare disorder.

monozygotic Monozygotic (or 'identical') twins have developed from a single fertilized egg cell and share exactly the same genes.

mood disorders Mental disorders characterized by disturbances of mood. Depression, mania (exaggerated excitement), and bipolar disorders in which the individual experiences both extremes of mood are examples.

moods Free-floating and diffuse affective states.

moral judgment Children's understanding of moral rules and social conventions.

morpheme Any small linguistic unit that carries meaning.

motivation A condition that energizes behavior and gives it direction.

motor neuron A neuron that carries outgoing signals from the central nervous system to muscles and glands.

multivariate experiment A type of experiment that involves the simultaneous manipulation of several independent variables.

Munsell system A scheme for specifying colored surfaces by assigning them one of 10 hue names and two numbers, one indicating saturation and the other brightness.

myelin sheath A sheet of glial cells wrapped around the axon.

N

naïve realism People's tendency to take their constructed, subjective realities to be faithful renderings of an objective world.

naltrexone An antagonist drug that blocks the action of heroin because it has a greater affinity for the opioid receptors than does heroin itself.

narcolepsy Recurring, irresistible attacks of drowsiness with the likelihood of falling asleep at any time.

narrative review A form of literature review in which authors use words to describe studies previously conducted and to discuss the strength of the available psychological evidence.

nature view The view that human beings enter the world with an inborn store of knowledge and understanding of reality.

nature–nurture debate The problem of determining the relative importance of heredity (nature) and the result of upbringing in a particular environment (nurture) on behavior.

negative hallucinations In a hypnotic state, when a person does not perceive something that normally would be perceived.

negative punishment Decreasing the response frequency by the removal of a pleasant or appetitive stimulus following the response.

negative reinforcement Reinforcing a response by the removal of an aversive stimulus.

negatively correlated As the value of one variable increases, the value of another decreases.

nerve A bundle of elongated axons belonging to hundreds or thousands of neurons.

nervous system The full system of neural tissue.

neural plasticity The ability of the neural system to change in response to experience.

neural sensitization Potentially permanent changes in the brain that follow drug addition whereby dopamine neurons are activated more highly by drugs and drug-related stimuli.

neuron A specialized cell that transmits neural impulses or messages to other neurons, glands, and muscles.

neurosis (pl. neuroses) A mental disorder in which the individual is unable to cope with anxieties and conflicts and develops symptoms that he or she finds distressing, such as obsessions, compulsions, phobias, or anxiety attacks. In Freud's psychoanalytic theory, neurosis results from the use of defense mechanisms to ward off anxiety caused by unconscious conflicts. No longer a diagnostic category of DSM-IV.

neurotic anxiety Fear that is out of proportion to the actual danger posed (such as stage fright).

neuroticism The name of the emotional instability–stability dimension in Eysenck's factor-analytic theory of personality. Moody, anxious, and maladjusted individuals are at the neurotic or unstable end; calm, well-adjusted individuals are at the other.

neurotransmitter A chemical that diffuses across the synaptic gap and stimulates the next neuron.

neutral stimulus In classical conditioning, any stimulus that does not naturally elicit the conditioned response.

nodes of Ranvier Small interruptions in the myelin sheath.

noise Anything in the environment irrelevant to what the observer is trying to detect.

non-associative learning Learning about a single stimulus.

non-REM sleep (or NREM sleep) Refers to the other four sleep stages (besides REM) in which eye movements are virtually absent, heart and breathing rates decrease markedly, the muscles are relaxed, and the brain's metabolic rate decreases 25 to 30 percent compared to wakefulness.

normality Appropriate perception of reality, ability to exercise voluntary control over behavior, self-esteem and acceptance, ability to form affectionate relationships, and productivity.

normative social influence We conform to a group's social norms or typical behaviors to become liked and accepted.

noun phrase A phrase that centers on a noun and specifies the subject of an underlying proposition.

nuclei (sing. nucleus) A collection of nerve cell bodies grouped in the brain or spinal cord.

nurture view The view that human knowledge is acquired through experiences and interactions with the world.

O

obese Being 30 percent or more above the weight level that would be appropriate for a person's body structure and height.

object recognition Determining what an object is based on its physical characteristics.

object permanence The awareness that an object continues to exist even when it is not present.

object relations theory An outgrowth of psychoanalytic theory that deals with the person's attachments to others over the course of development. Emphasizes ego functioning more than did classical psychoanalytic theory.

objectification theory A sociocultural account of how being raised in a culture that sexually objectifies the female body fundamentally alters girls' and women's self-views and well-being.

objective anxiety Fear that is proportionate to the danger posed.

observational learning People can learn by observing the actions of others and noting the consequences of those actions.

obsessions Persistent intrusions of unwelcome thoughts, images, or impulses that elicit anxiety.

obsessive-compulsive disorder An anxiety disorder taking one of three forms: (a) persistent intrusions of unwelcome thoughts, images, or impulses that elicit anxiety (obsessions); (b) irresistible urges to carry out certain acts or rituals that reduce anxiety (compulsions); (c) both of these in combination.

Oedipal conflict In Freud's psychoanalytic theory, the conflict that arises during the phallic stage of psychosexual development in which the individual is sexually attracted to the parent of the opposite sex and perceives the same-sex parent as a rival.

olfactory bulb A region of the brain involved in olfaction (smell); it is a way station between the receptors in the nasal passage and the olfactory cortex.

olfactory cortex The area in the brain responsible for the sense of smell. Located on the inside of the temporal lobes.

olfactory system The receptors in the nasal passage, certain regions of the brain, and interconnecting neural pathways.

omission training Behavior that prevents an appetitive stimulus.

operant conditioning Certain responses are learned because they operate on, or affect, the environment.

operation A mental routine for separating, combining, and otherwise transforming information in a logical manner.

opiates Drugs that diminish physical sensation and the capacity to respond to stimuli by depressing the central nervous system.

opponent-color theory A theory of color perception that postulates two types of color-sensitive units that respond in opposite ways to the two colors of an opponent pair. One type of unit responds to red or green, the other to blue or yellow. Since a unit cannot respond in two ways at once, reddish-greens and yellowish-blues cannot occur.

opponent-process model of sleep and wakefulness A theory that states that the brain possesses two opponent processes that govern the tendency to fall asleep or remain awake: the homeostatic sleep drive and the clock-dependent alerting process.

oral stage In Freud's psychoanalytic theory, the first stage of psychosexual development; pleasure derives from the lips and mouth, as in sucking at the mother's breast.

organizational psychologist A psychologist concerned with selecting people who are most suitable for particular jobs or designing structures that facilitate collaboration and teamwork.

outer ear The external ear and auditory canal, whose purpose is to funnel sound waves towards the inner ear.

oval window A membrane on the cochlea of the inner ear that receives vibrations from the ear drum via three connecting bones (malleus, incus, and stapes). Vibrations at the oval window set up similar vibrations in the internal fluid of the cochlea, ultimately activating the hair cells that serve as auditory receptors.

overextension Tendency to apply a new word too widely.

overjustification effect Explaining one's own behavior with too much emphasis on salient situational causes and not enough emphasis on personal causes, like intrinsic interest.

P

pain threshold The minimum intensity of a stimulus that is perceived as painful.

pain tolerance The maximum intensity of a painful stimulus that can be endured.

panic attack An episode of acute and overwhelming apprehension or terror.

panic disorder An anxiety disorder in which the individual has sudden and inexplicable episodes of terror and feelings of impending doom accompanied by physiological symptoms of fear (such as heart palpitations, shortness of breath, muscle tremors, faintness).

paranoid An individual who has delusions of persecution.

parapsychology Phenomena that are 'beside psychology', including telepathy, clairvoyance, precognition, psychokinesis.

parasympathetic nervous system A division of the automatic nervous system, the nerve fibers of which originate in the cranial and sacral portions of the spinal cord. Active in relaxed or quiescent states of the body and to some extent antagonistic to the sympathetic division, or system.

partial-report procedure An experiment devised by George Sperling in which a varied array of letters is flashed to observers for a brief period.

passion The motivational component of love which consists of sexual attraction and the romantic feeling of being 'in love'.

passionate love Contrasted with companionate love. An intensely emotional state in which tender and sexual feelings, elation and pain, anxiety and relief, altruism and jealousy coexist in a confusion of feelings.

PCP Sold as a hallucinogen (under such street names as 'angel dust', 'Shermans', and 'superacid'), this drug is technically a dissociative anesthetic.

peak experiences Transient moments of self-actualization.

perception Constructing an internal model of the world based on bottom-up sensory processes combined with top-down real-world knowledge.

perceptual interference The finding that objects had to eventually be more focused for the observers to recognize them in the very-out-of-focus condition than in the moderately-out-of-focus condition.

periaqueductal gray A section of the brain in which neurons are connected to other neurons that inhibit cells that would normally carry the pain signals arising in the pain receptors. This area appears to be the main place where strong painkillers such as morphine affect neural processing.

peripheral nervous system The nerves connecting the brain and spinal cord to other parts of the body.

peripheral route When an individual responds to noncontent cues in a communication or to the context of a communication.

personal constructs The dimensions that individuals themselves use to interpret themselves and their social worlds.

personality The distinctive and characteristic patterns of thought, emotion, and behavior that define an individual's personal style of interacting with the physical and social environment.

personality disorders Ingrained habitual, and rigid patterns of behavior or character that severely limit the individual's adaptive potential; often society sees the behavior as maladaptive whereas the individual does not.

personality inventory An inventory for self-appraisal, consisting of many statements or questions about personal characteristics and behavior that the person judges to apply or not to apply to him or her.

personality psychologist A psychologist whose area of interest focuses on classifying individuals and studying the differences between them. This specialty overlaps both developmental and social psychologists to some extent.

person-environment relationship The objective situation in which a person finds herself.

- perspective (as a depth cue)** When parallel lines in a scene appear to converge in the image, they are perceived as vanishing in the distance.
- pervasive developmental disorders** Disorders characterized by severe and persisting impairment in several areas of development.
- phallic stage** In Freud's psychoanalytic theory, the third stage of psychosexual development in which gratification is associated with stimulation of the sex organs and sexual attachment is to the parent of the opposite sex.
- phasic pain** The kind of sharp pain experienced immediately upon suffering an injury; usually brief with a rapid increase in intensity followed by a decrease.
- phenothiazines** A group of antipsychotic drugs that relieve the symptoms of schizophrenia by blocking the access of the neurotransmitter dopamine to its receptors. Chlorpromazine (Thorazine) and fluphenazine (Prolixin) are examples.
- pheromones** Chemicals that float through the air to be sniffed by other members of the species.
- phobia** Intense fear of a stimulus or situation that most people do not consider particularly dangerous.
- phoneme** Discrete speech categories.
- phonological loop** The part of working memory in which auditory repetition takes place.
- photon** The smallest unit of light energy.
- physical description (of an object)** A listing of all the information necessary to completely reproduce the object.
- physiology** The study of the functions of the living organism and its parts.
- pitch** A sensation based on the frequency of sound.
- place theory of pitch perception** A theory of hearing that associates pitch with the place on the basilar membrane where activation occurs.
- pluralistic ignorance** The phenomenon in which everybody in a group misleads everybody else by defining an ambiguous situation as a nonemergency.
- polarized** If the electric potential across the neuron's cell membrane is such that the inside of a neuron is more negatively charged than the outside, the neuron is in a polarized state.
- polygenic** Traits determined by a combination of many genes are polygenic.
- pons** A brain structure (sitting above the medulla) which is important for the control of attentiveness, as well as the timing of sleep
- positive hallucinations** In a hypnotic state, when a person sees objects or hears voices that are not actually present.
- positive psychology** The study of how positive experiences, emotions, and personality traits promote human flourishing.
- positive punishment** Decreasing the response frequency by the delivery of an unpleasant or aversive stimulus following the response.
- positive reinforcement** Reinforcing a response by the presentation of a positive stimulus.
- positively correlated** The values of two variables either increase together or decrease together.
- positron emission tomography (PET)** A computer-based scanning procedure to measure brain activity using a radioactive tracer mixed with glucose.
- postconventional level of moral development** Level of moral development in which children evaluate actions in terms of higher-order ethical principles.
- posterior system (for attention)** Represents the perceptual features of an object, such as its location in space, shape, and color, responsible for selecting one object among many on the basis of the features associated with that object.
- post-event information** Information about an event obtained after the event is over that can be added to memory.
- post-event memory construction** During memory formation, we may add new information that is suggested to us by others.
- posthypnotic amnesia** A particular form of posthypnotic suggestion in which the hypnotized person forgets what has happened during the hypnosis until signaled to remember.
- posthypnotic response** A response that occurs when a subject who has been roused from hypnosis responds with movement to a prearranged signal by the hypnotist.
- post-traumatic stress disorder** An anxiety disorder in which a stressful event that is outside the range of usual human experience, such as military combat or a natural disaster, brings in its aftermath such symptoms as a re-experiencing of the trauma and avoidance of stimuli associated with it, a feeling of estrangement, a tendency to be easily startled, nightmares, recurrent dreams, and disturbed sleep.
- power function** The relation between **Y** and **F**, which is (basically) $Y = fr$.
- pragmatic rules** Rules used in deductive reasoning that are less abstract than logical rules, but still applicable to many different domains of life. An example is the permission rule.
- preconscious** All the information that is not currently 'on our mind' but that we could bring into consciousness if called upon to do so.
- preconscious memories** Memories that are accessible to consciousness.
- preconventional level of moral development** Level of moral development in which children evaluate actions as right or wrong on the basis of anticipated punishment.
- predictability** The degree to which we know if and when an event will occur.
- preferential looking method** A method of examining infants' perceptual preferences by presenting them two stimuli simultaneously and noting the amount of time the infants gaze at each object.
- prefrontal lobes** The lobes just behind the forehead.
- preoperational stage** Piaget's second stage of cognitive development. The child thinks in terms of symbols, but does not yet comprehend certain rules or operations.
- primacy effect** The tendency for first information we receive to have a greater impact on our overall impressions.
- primary reinforcer** A reinforcer that is able to act as a reward independently of prior learning.
- priming** The increased accessibility or retrievability of information stored in memory produced by the prior presentation of relevant cues.
- primitive features** Qualities such as shape and color.
- proactive interaction** The interaction between individuals and their environments that arises because different individuals choose to enter different situations and to shape those situations differently after entering them.
- problem-focused coping** Reducing anxiety or stress by dealing in some way with the anxiety-producing situation. Escaping the situation or finding a way to alter it are examples.
- production of language** Producing language by starting with a thought that translates into a sentence and ends up with sounds that express the sentence.
- projection** Repressing one's own unacceptable impulses and expressing hostile attitudes toward others who are perceived to possess those impulses.

projective test Presents an ambiguous stimulus to which the person may respond as he or she wishes.

proposition A statement that expresses a factual claim.

propositional thought Expresses a proposition or claim.

prosopagnosia A loss in the ability to recognize faces that results from brain damage.

prototype The properties that describe the best examples of the concept.

proximity The physical distance between two people, a key predictor of interpersonal attraction.

psi Processes of information and/or energy exchange that are not currently explicable in terms of known science.

psychoactive drugs Drugs that affect behavior, consciousness, and/or mood.

psychoanalysis (a) The method developed by Freud and extended by his followers for treating mental disorders. (b) The theory of personality which grew out of experiences with the psychoanalytic method of treatment. The theory emphasizes the role of unconscious processes in personality development and in motivation.

psychoanalytic perspective An approach to psychology that tries to explain certain kinds of behaviors in terms of unconscious beliefs, fears, and desires.

psychoanalytic theory The premise that much of what we think and do is driven by unconscious processes.

psychodynamic therapies A style of therapy based on the idea that a person's current problems cannot be resolved successfully without a thorough understanding of their unconscious basis in early relationships with parents and siblings.

psychological determinism The doctrine that all thoughts, emotions, and actions have causes.

psychological perspective A distinct approach or way of looking at topics within psychology.

psychological perspectives (of abnormality) A group of theories that see mental disorders as problems in the functioning of the mind.

psychology The scientific study of behavior and mental processes.

psychoneuroimmunology The study of how the body's immune system is affected by stress and other psychological variables.

psychophysical function Performance as a function of stimulus intensity.

psychophysical procedures Procedures used to determine thresholds of sensory modalities.

psychophysiological disorders Physical disorders in which emotions are believed to play a central role.

psychosexual stages Freud's term for the stages (oral, anal, phallic) during the first five years of life in which the individual progresses through developmental periods that affect his or her personality.

psychosis (pl. psychoses) A severe mental disorder in which thinking and emotion are so impaired that the individual is seriously out of contact with reality. No longer a major diagnostic category in DSM-IV.

psychotherapy The treatment of mental disorders by psychological (rather than physical or biological) means.

puberty The period of sexual maturation that transforms a child into a biologically mature adult capable of sexual reproduction.

punishment A procedure used to decrease the strength of a response by presenting an aversive stimulus whenever the response occurs.

pupil In the eye, a circular opening in the iris (the colored part of the eye) that expands and contracts, varying according to the intensity of light present.

Q

Q-sort An assessment technique by which a rater provides a systematic description of an individual's personality by sorting a set of personality statements (for example, 'Has a wide range of interests') into groups, ranging from those that are least descriptive to those that are most descriptive of the individual.

quality A sensory description of what a particular stimulus is like.

R

random assignment A system for assigning participants to experimental and control groups so that each participant has an equal chance of being assigned to any group.

ratio schedules Reinforcement schedules where reinforcement depends on the number of responses the organism makes.

rationalization A defense mechanism in which self-esteem is maintained by assigning plausible and acceptable reasons for conduct entered on impulsively or for less acceptable reasons.

reaction formation A defense mechanism in which a person denies a disapproved motive through giving strong expressions to its opposite.

reactive interaction The interaction between individuals and their environments that arises because different individuals interpret, experience, and react to situations in different ways.

recall test When a person is asked to produce a memorized item using minimal retrieval cues.

receptor A specialized cell sensitive to particular kinds of stimuli and connected to nerves composed of afferent neurons (such as the retina of the eye). Used more loosely, the organ containing these sensitive portions (such as the eye or the ear).

recognition test When a person must decide whether he or she has seen a particular item before.

reconstructive processes The processes by which memory, once formed, is systematically altered based on inference and post-event information.

reductionism Reducing psychological notions to biological ones.

reference groups Groups with which we identify; we refer to them in order to evaluate and regulate our opinions and actions.

reflectance characteristic Property of colored paper that determines how it reflects some wavelengths more than others.

refractory period The brief period (a millisecond or so) after an action potential has been generated, during which another action potential cannot be generated.

rehearsal The conscious repetition of information in short-term memory, usually involving speech. The process facilitates the short-term recall of information and its transfer to long-term memory.

reinforcement (a) In classical conditioning, the experimental procedure of following the conditioned stimulus by the unconditioned stimulus. (b) In operant conditioning, the analogous procedure of following the occurrence of the operant response by the reinforcing stimulus. (c) The process that increases the strength of conditioning as a result of these arrangements.

relative height (as a depth cue) In perception, a monocular cue for depth. Among identical objects, those that are higher in an image are perceived as being farther away.

relative motion (as a depth cue) The different speeds of two objects can be a depth cue.

relative size (as a depth cue) In perception, a monocular cue for depth. If an image contains an array of objects of similar shape, the smaller objects are perceived as being farther away.

relaxation training Training in various techniques for relaxing muscle tension. The procedure is based on Jacobson's progressive relaxation method, in which the person learns how to relax muscle groups one at a time, the assumption being that muscular relaxation is effective in bringing about emotional relaxation.

reliability Yielding reproducible and consistent results.

REM sleep The period of sleep during which rapid eye movements occur.

representativeness heuristic The assumption that each case is representative of its category.

repression The ego pushes a threatening thought or forbidden impulse out of awareness into the unconscious.

resonance The degree to which a sound of a particular frequency reverberates over a mathematically matched distance.

response generalization The more similar stimuli are to the original conditioned stimulus, the more likely they are to evoke the same response.

responses to emotion How people cope with or react to their own emotion or the situation that elicited it.

resting membrane potential The electrical potential across the nerve cell membrane when it is in its resting state (in other words, not responding to other neurons); the inside of the cell membrane is slightly more negative than the outside.

resting potential The electric potential of a neuron at rest; for most neurons the resting potential is around -70 millivolts (mV).

restructuring Reorganizing the mental representation of a situation – often an important step in solving a problem.

reticular formation A system of ill-defined nerve paths and connections within the brain stem, lying outside the well-defined nerve pathways, and important as an arousal mechanism.

retina The portion of the eye sensitive to light, containing the rods and the cones.

retrieval stage Occurs when one attempts to pull from one's memory information that was previously encoded and stored there.

Rett's disorder Pervasive developmental disorder in which children develop normally for the first five months of life but later show permanent loss of basic skills in social interactions, language, and/or movement.

reuptake The process by which a neurotransmitter is 'taken up' again (reabsorbed) by the synaptic terminals from which it had been released.

right to privacy Information about a person acquired during a study must be kept confidential and not made available to others without his or her consent.

rods In the eye, an element of the retina mediating achromatic sensation only; particularly important in peripheral vision and night vision.

Rorschach Test A projective test developed by the Swiss psychiatrist Hermann Rorschach, consisting of a series of ten cards, each of which displays a rather complex inkblot.

S

saccade The quick movement of the eyes between eye fixations.

saltatory conduction Occurs when the nerve impulse jumps from one node of Ranvier to the next.

saturation The purity of a color.

schema (pl. schemas) Theory about how the physical and social worlds operate (Chapter 3); a mental representation of a class of people, objects, events, or situations (Chapter 8); a cognitive structure that helps us perceive, organize, process, and utilize information (Chapter 13); organized beliefs and knowledge about people, objects, events, and situations.

schematic processing The cognitive process of searching for the schema in memory that is most consistent with the incoming information.

schizophrenia A group of disorders characterized by severe personality disorganization, distortion of reality, and inability to function in daily life.

Scholastic Assessment Test (SAT) An example of a group-administered general-ability test.

school psychologist A professional psychologist employed by a school or school system, with responsibility for testing, guidance, research, and so on.

scientific Research methods used to collect data are scientific when they are (1) unbiased (do not favor one hypothesis over another) and (2) reliable (other qualified people can repeat the observations and obtain the same results).

second-order conditioning In classical conditioning, a conditioned stimulus (CS) is used as the unconditioned stimulus (US) in a new conditioning procedure.

secondary reinforcer A reinforcer that gains its status as a reward at least partly through learning about its relationship with other events.

securely attached Term used to describe a child who seeks to interact with his or her caretaker during a reunion episode.

selective adaptation In perception, a loss of sensitivity to motion that occurs when we view motion. The adaptation is selective because we lose sensitivity to the motion viewed, and to similar motions, but not to motion that differs significantly in direction or speed. Presumably the result of fatigued neurons in the cerebral cortex.

selective attention The process of attending to a particular part of the environment while ignoring the rest.

selective breeding A method of studying genetic influences by mating animals that display certain traits and selecting for breeding from among their offspring those that express the trait. If the trait is primarily determined by heredity, continued selection for a number of generations will produce a strain that breeds true for that trait.

selective reinforcement Strengthening of specific desired behaviors.

self All the ideas, perceptions, and values that characterize 'I' or 'me'.

self-concept An individual's fundamental sense of self or beliefs about the self.

self-efficacy An individual's belief in his or her own effectiveness.

self-expansion An increase in our potential abilities and resources.

self-esteem An individual's evaluation of the worthiness of the self.

self-fulfilling prophecy Once activated, stereotypes can set in motion a chain of behavioral processes that serve to draw out from others behavior that confirms the initial stereotype.

self-help groups Groups that are conducted without a professional therapist.

self-objectification When a person thinks about and values her own body more from a third-person perspective, focusing on observable body attributes ('How do I look?'), rather than from a first-person perspective, focusing on privileged, or unobservable body attributes ('How do I feel?').

- self-perception theory** The theory that attitudes and beliefs are influenced by observations of one's own behavior; sometimes we judge how we feel by observing how we act.
- self-regulation** Monitoring, or observing, one's own behavior.
- self-schema (pl. self-schemas)** Cognitive generalizations about the self, derived from past experience, that organize and guide the processing of self-related information.
- sensations** Experiences associated with simple stimuli.
- sensitive periods** Periods that are optimal for a particular kind of development.
- sensitive responsiveness** A characteristic of a caretaker who responds promptly when a baby cries and behaves affectionately when they pick up the baby. The caregiver also tailors their response to the baby's needs.
- sensitivity** The inclination of a sensory system to respond to a stimulus.
- sensitization** The process by which an organism learns to strengthen its reaction to a stimulus if a threatening or painful stimulus follows.
- sensorimotor stage** A period in which infants are busy discovering the relationships between their actions and the consequences of those actions.
- sensory coding** How stimuli are transmitted from the sensory receptors to the brain.
- sensory memory** A very brief photograph-like memory that outlasts the physical stimulus by a second or less.
- sensory neuron** A neuron that transmits impulses received by receptors to the central nervous system.
- sensory response** The magnitude of nervous activity, which rises and then falls.
- sensory store** The place in the memory where information arriving from the environment is first placed.
- sentence unit** Grammatical units that can be either a sentence or a phrase.
- separation anxiety** Distress when a caretaker is not nearby.
- serial search (of memory)** Comparing a test stimulus in sequence to each item in short-term memory.
- serotonin reuptake inhibitors** A class of antidepressant drugs that work by increasing levels of the neurotransmitter serotonin in the synapse.
- set point** The point at which body weight is set and that the body strives to maintain.
- sex-linked trait** Genetically determined characteristics and disorders that are linked to the 23rd chromosome pair.
- sex typing** The acquisition of behaviors and characteristics that a culture considers appropriate to one's sex.
- sexual orientation** The degree to which an individual is sexually attracted to members of the opposite sex and/or to members of the same sex.
- sexual selection** A special case of natural selection that yields traits that promote reproductive success in the sex with the greater potential reproductive rate.
- shading and shadows (as a depth cue)** The configuration of shading and shadows provides information about an object's depth.
- shadowing** Repeating back one auditory message.
- sham feeding** A result of a surgical procedure so that whenever something is eaten, it will fall out of the body rather than be digested.
- shaping** Reinforcing only variations in response that deviate in the direction desired by the experimenter.
- short-term memory** Memory held in consciousness that, if not rehearsed, decays within about 20 seconds.
- signal** What the observer is trying to detect in an experiment, as opposed to 'noise'.
- signal detection theory** A theory of the sensory and decision processes involved in psychophysical judgments, with special reference to the problem of detecting weak signals in noise.
- similarity heuristic** The use of similarity – to a specific case or to a prototype – to estimate the probability of an event.
- simple cell** A cell in the visual cortex that responds to a bar of light or straight edge of a particular orientation and location in the visual field.
- simple phobia** Excessive fear of a specific object, animal, or situation in the absence of real danger.
- situational attribution** Attributing a person's actions to factors in the situation or environment, as opposed to internal attitudes and motives.
- sleep disorder** When inability to sleep well produces impaired daytime functioning or excessive sleepiness.
- slow to warm up temperament** Term used to describe a child who is relatively inactive, tends to withdraw from new situations in a mild way, and requires more time than easy infants to adapt to new situations.
- Snellen acuity** Acuity measured relative to a viewer who does not need to wear glasses.
- spinal cord** The bundle of nerves extending from the brain through the spinal canal, encased in the spinal column (the backbone).
- social cognition** The examination of people's subjective interpretations of their social experiences, as well as their modes of thinking about the social world.
- social-cognitive theory (of personality)** Reciprocal determinism, in which external determinants of behavior (such as rewards and punishments) and internal determinants (such as beliefs, thoughts, and expectations) are part of a system of interacting influences that affect both behavior and other parts of the system.
- social desirability effects** A particular form of bias that can occur during a survey when some people try to present themselves in a favorable light.
- social facilitation** The effects of coaction and the presence of an audience.
- social identity approach** An approach that assumes that people can identify themselves in various ways, for instance, as a human being, as a member of a social group, or as an individual. The most salient social identity in a given situation influences a person's behavior in that situation.
- social inhibition** The sometimes derailing effects of coactors and audiences on performance.
- social-learning theory** The application of learning theory to the problems of personal and social behavior (syn. social behavior theory).
- social neuroscience** The study of how stereotyping, attitudes, person perception, and self-knowledge are executed in the brain.
- social norms** Implicit rules and expectations that dictate what we ought to think and how we ought to behave.
- social phobia** Extreme insecurity in social situations accompanied by an exaggerated fear of embarrassing oneself.
- social psychologist** A psychologist who studies social interaction and the ways in which individuals influence one another.
- social psychology** The study of how people think and feel about their social world and how they interact and influence one another.

- social stereotype** Personality traits or physical attributes given to a whole class of people.
- sociocultural approach** An approach to development that characterizes the child not as a physical scientist seeking ‘true’ knowledge but as a newcomer to a culture who seeks to become a native by learning how to look at social reality through the lens of that culture.
- somatic system** Carries messages to and from the sense receptors, muscles, and the surface of the body.
- sound wave** A wave defined by periodically varying air pressure over time.
- source monitoring** Keeping track of where various components of memory originally came from.
- source wavelengths** Wavelengths coming from some light source.
- span of apprehension** The number of immediately recallable items.
- spontaneous recovery** A phenomenon in classical conditioning discovered by Pavlov. When an organism undergoes execution of a conditioned response and is then moved to a new context, the conditioned response may reappear.
- stages of development** Developmental periods, usually following a progressive sequence, that appear to represent qualitative changes in either the structure or the function of the organism (such as Freud’s psychosexual stages, Piaget’s cognitive stages).
- standard** An arbitrary level of stimulus intensity against which other intensities are judged.
- Stanford-Binet Intelligence Scale** Stanford revision of the Binet test which measures the kinds of changes in intelligence ordinarily associated with growing older.
- stapes** One of three small bones located in the middle ear.
- statistical significance** The trustworthiness of an obtained statistical measure as a statement about reality; for example, the probability that the population mean falls within the limits determined from a sample. The expression refers to the reliability of the statistical finding and not to its importance.
- statistics** The discipline that deals with sampling data from a population of individuals and then drawing inferences about the population from those data.
- stereotype** A set of inferences about the personality traits or physical attributes of a whole class of people; schemas of classes of people.
- stereotype threat** The mere threat of being identified with a stereotype can raise an individual’s anxiety level, which in turn degrades his or her performance.
- Sternberg’s triarchic theory** This theory has three parts or subtheories. The componential subtheory, which deals with thought processes; the experiential subtheory, which deals with the effects of experience on intelligence; and the contextual subtheory, which considers the effects of the individual’s environment and culture.
- stimulant drugs** Drugs used to treat attention deficit hyperactivity disorder.
- stimulants** Drugs that increase alertness and general arousal.
- stimulus discrimination** The less similar stimuli are to the original conditioned stimulus, the less likely they are to evoke the same response.
- storage stage** The maintenance of stored information over time.
- strange situation** An experimental paradigm for assessing children’s attachment to adults, in which the adult (usually a parent) leaves the room, and the child’s reaction to the adult is observed when the adult returns.
- stress** Experiencing events that are perceived as endangering one’s physical or psychological well-being.
- stress responses** Reactions to events an individual perceives as endangering his or her well-being. These may include bodily changes that prepare for emergency (the fight-or-flight response) as well as such psychological reactions as anxiety, anger and aggression, apathy and depression, and cognitive impairment.
- stressors** Events that an individual perceives as endangering his or her physical or psychological well-being.
- stroboscopic motion** An illusion of motion resulting from the successive presentation of discrete stimulus patterns arranged in a progression corresponding to movement, such as motion pictures.
- Stroop effect** The Stroop effect or interference results because word reading is such a dominant and automatic response among skilled readers that it is difficult for them to ignore a printed word and name the word’s ink color when the word is a color that is different from the color of the ink.
- structuralism** The analysis of mental structures.
- subjective experience** The affective state or feeling tone.
- subjectivist perspective** An orientation toward understanding behavior and mental processes in terms of the subjective realities people actively construct.
- superego** The part of personality that judges whether actions are right or wrong.
- suppression** Active attempt to push thoughts or images out of consciousness.
- suprathreshold conditions** Conditions in which stimulus intensity is above threshold.
- survey method** A method of obtaining information by questioning a large sample of people.
- sylogism** In logic, a deductive argument consisting of three propositions: two premises and one conclusion.
- symbol** Anything that stands for or refers to something other than itself.
- sympathetic nervous system** A division of the autonomic nervous system, characterized by a chain of ganglia on either side of the spinal cord, with nerve fibers originating in the thoracic and lumbar portions of the spinal cord. Active in emotional excitement and to some extent antagonistic to the parasympathetic division.
- synapse** The close functional connection between the axon of one neuron and the dendrites or cell body of another neuron.
- synaptic gap** The slight gap between the terminal button and the cell body or dendrites of the receiving neuron.
- synaptic plasticity** Changes in the morphology and/or physiology of synapses involved in learning and memory.
- syntax** A specification of the relationships between words in phrases and sentences.
- systematic desensitization** A behavior therapy technique in which hierarchies of anxiety-producing situations are imagined (or sometimes confronted in reality) while the person is in a state of deep relaxation. Gradually the situations become dissociated from the anxiety response.
- T**
- tabula rasa** Latin, meaning ‘blank slate’. The term refers to the view that human beings are born without any innate knowledge or ideas; all knowledge is acquired through learning and experience. Proposed by the seventeenth- and eighteenth-century British empiricists (Locke, Hume, Berkeley, Hartley).
- tardive dyskinesia** Involuntary movements of the tongue, face, mouth, or jaw.

taste receptors Receptors for taste located in clusters on the tongue and around the mouth. Also called taste buds.

temperament Mood-related personality characteristics.

temporal contiguity Events A and B are temporally contiguous if they occur close together in time.

temporal pattern The spacing sequence of electrical impulses.

temporal theory of sound A theory of pitch perception which assumes that the frequency of neural impulses traveling up the auditory nerve correspond to the frequency of a tone.

terminal buttons The small swellings at the end of the branches of an axon, containing neurotransmitters.

test Presents a uniform situation to a group of people who vary in a particular trait.

thalamus Two groups of nerve cell nuclei located just above the brain stem and inside the cerebral hemispheres. Considered a part of the central core of the brain. One area acts as a sensory relay station, the other plays a role in sleep and waking; this portion is considered part of the limbic system.

Thematic Apperception Test (TAT) A participant is shown up to 20 ambiguous pictures of persons and scenes and asked to make up a story about each picture.

theory An interrelated set of propositions about a particular phenomenon.

theory of ecological optics The information from the environment – or more specifically, its two-dimensional representation on our retina – is all that is really necessary to live a normal life.

theory of mind The child's understanding of basic mental states, such as desires, percepts, beliefs, knowledge, thoughts, intentions, and feelings.

thirst The psychological manifestation of the need for water.

thought and action tendencies Urges to think and act in certain ways.

timbre Our experience of the complexity of a sound.

tolerance The need for a greater amount of a drug to achieve the same euphoria.

tonic pain The kind of steady, long-lasting pain experienced after an injury has occurred; usually produced by swelling and tissue damage. In contrast to phasic pain.

top-down feedback connections Connections that go from the higher levels to the lower levels.

top-down processes Processes in perception, learning, memory, and comprehension that are driven by the organism's prior knowledge and expectations, rather than by the input.

transduction Translate physical energy into electrical signals that can make their way to the brain.

transference The tendency for the client to make the therapist the object of emotional responses.

traumatic events Situations of extreme danger that are outside the range of usual human experience.

trial-and-error learning Learning by gradual elimination of ineffective responses (contrast with insight).

trials The 'components' of an experiment, e.g. a repetition of stimulus presentation.

triangular theory of love This theory divides love into three components: intimacy, passion, and commitment.

trichromatic theory A theory of color perception that postulates three basic color receptors (cones), a 'red' receptor, a 'green' receptor, and a 'blue' receptor. The theory explains color blindness by the absence of one or more receptor types (syn. Young-Helmholtz theory).

tricyclic antidepressants A class of antidepressants that relieve the symptoms of depression by preventing the reuptake of the neurotransmitters serotonin and norepinephrine, thereby prolonging their action. Imipramine (brand names, Tofranil and Elavil) is one drug commonly prescribed.

two-factor theory The theory that emotions result from the combination of two factors – an initial state of unexplained arousal plus a cognitive explanation (or appraisal) for that arousal.

type A pattern A behavior pattern discovered in studies of coronary heart disease. Type As are people who have a sense of time urgency, find it difficult to relax, and become impatient and angry when confronted with delays or with people whom they view as incompetent. Type As are at risk for heart disease.

U

unconditional positive regard Feeling that oneself is valued by parents and others even when their feelings, attitudes, and behaviors are less than ideal.

unconditioned response (UR) In classical conditioning, the response given originally to the unconditioned stimulus used as the basis for establishing a conditioned response to a previously neutral stimulus.

unconditioned stimulus (US) In classical conditioning, a stimulus that automatically elicits a response, typically via a reflex, without prior conditioning.

unconscious The thoughts, attitudes, impulses, wishes, motivations, and emotions of which we are unaware (Chapter 1); contains some memories, impulses, and desires that are not accessible to consciousness (Chapter 6); impulses, wishes, and inaccessible memories that affect our thoughts and behavior (Chapter 13).

undoing effect of positive emotions Positive emotions may be particularly suited for helping people recover from any lingering arousal that follows negative emotions.

V

validity Measuring what is intended to be measured.

variable Something that can occur with different values.

variable interval schedule Reinforcement still depends on a certain interval having elapsed, but the interval's duration varies unpredictably.

variable ratio schedule The organism is reinforced only after making a certain number of responses, but that number varies unpredictably.

ventromedial hypothalamic syndrome Extreme appetites caused by lesions of the ventromedial hypothalamus.

verb phrase The section of a sentence that gives the predicate of the proposition.

vicarious learning Learning by observing the behavior of others and noting the consequences of that behavior (syn. observational learning).

visceral perception Our perception of our own arousal.

visual acuity The eye's ability to resolve details.

visual cortex The part of the brain that is concerned with vision.

visual field The total visual array acting on the eye when it is directed toward a fixation point.

visual neglect A patient who, although not blind, ignores everything on one side of their visual field (usually the left side).

visual search task A task in which the observer is asked to determine whether some target object is present in a cluttered display.

visual-spatial sketchpad One of the two distinct stores of working memory that briefly stores information in a visual or spatial code.

vulnerability-stress model An interactive model of physical or mental disorders that proposes that an individual will develop a disorder only when he or she has both some constitutional vulnerability (predisposition) and experiences stressful circumstances. Same as diathesis-stress model.

W

wanting The anticipation of pleasure, as in cravings.

Weber fraction The constant of proportionality.

Wechsler Adult Intelligence Scale A verbal scale and a performance scale that yield separate scores as well as a full-scale IQ.

Wernicke's aphasia Damage to Wernicke's area leads to difficulties in speech comprehension.

Wernicke's area That portion of the left cerebral hemisphere involved in language understanding. Individuals with damage in this area are not able to comprehend words; they can hear words, but they do not know their meanings.

whole-report performance After viewing an array of letters for a brief period of time, the observer is asked to report as many letters as possible.

withdrawal The intensely aversive reaction to the cessation of drug use.

withdrawal symptoms Unpleasant physiological and psychological reactions that occur when a person suddenly stops taking an addictive drug; these range from nausea, anxiety, mild tremors, and difficulty sleeping at low levels of dependence to vomiting, cramps, hallucinations, agitation, and severe tremors or seizures at higher levels.

word salad Unrelated words and phrases and idiosyncratic word associations.

working backward A problem-solving strategy in which one works backwards from the goal towards the current state.

working memory Memories that are stored for only a few seconds.

Y

Yerkes-Dodson law This law states that complex tasks are best performed at low levels of arousal, whereas simple tasks are best performed at high levels of arousal.