Glossarv

Absent-mindedness Forgetting caused by lapses in attention.

Absolute threshold The amount of stimulation necessary for a stimulus to be detected. In practice, this means that the presence or absence of a stimulus is detected correctly half the time over many trials.

Abu Ghraib Prison Prison in Iraq made famous by revelation of photos taken by Army Reserve MP guards in the acts of humiliating and torturing prisoners.

Accommodation A mental process that modifies schemas in order to include (or accommodate) new information.

Acoustic encoding The conversion of information, especially semantic information, to sound patterns in working memory.

Acquisition The initial learning stage in classical conditioning, during which the conditioned response comes to be elicited by the conditioned stimulus.

Action potential The nerve impulse caused by a change in the electrical charge across the cell membrane of the axon. When the neuron "fires," this charge travels down the axon and causes neurotransmitters to be released by the terminal buttons.

Activation-synthesis theory The theory that dreams begin with random electrical activation coming from the brain stem. Dreams, then, are the brain's attempt to make sense of—to synthesize—this random activity.

Active listener A person who gives the speaker feedback in such forms as nodding, paraphrasing, maintaining an expression that shows interest, and asking questions for clarification.

Acute stress A temporary state of arousal, caused by a stressor, with a distinct onset and limited duration.

Addiction A condition in which a person continues to use a drug despite its adverse effects—often despite repeated attempts to discontinue using the drug. Addiction may be based on physical or psychological dependence. Adolescence In industrial societies, a developmental period beginning at puberty and ending (less clearly) at adulthood.

Adoption study A method of separating the effect of nature and nurture—by which investigators compare characteristics of adopted children with those of individuals in their biological and adoptive families.

Affect Emotion or mood.

Afterimages Sensations that linger after the stimulus is removed. Most visual afterimages are *negative afterimages*, which appear in reversed colors.

Agonists Drugs or other chemicals that enhance or mimic the effects of neuro-transmitters.

Agoraphobia A fear of public places and open spaces, commonly accompanying panic disorder.

Alarm phase First phase of the GAS, during which body resources are mobilized to cope with the stressor.

Algorithms Problem-solving procedures or formulas that guarantee a correct outcome, if correctly applied.

All-or-none principle Refers to the fact that the action potential in the axon occurs either completely or not at all.

Alzheimer's disease A degenerative brain disease usually noticed first by its debilitating effects on memory of the elderly.

Ambiguous figures Images that are capable of more than one interpretation. There is no "right" way to see an ambiguous figure.

Amplitude The physical strength of a wave. This is shown on graphs as the height of the wave.

Amygdala A limbic system structure involved in memory and emotion, particularly fear and aggression. Pronounced *a*-*MIG-da-la*.

Analysis of transference The Freudian technique of analyzing and interpreting the patient's relationship with the therapist, based on the assumption that this relationship mirrors unresolved conflicts in the patient's past.

Analytical intelligence According to Sternberg, the ability measured by most

IQ tests; includes the ability to analyze problems and find correct answers.

Anchoring bias A faulty heuristic caused by basing (anchoring) an estimate on a completely irrelevant quantity.

Animistic thinking A preoperational mode of thought in which inanimate objects are imagined to have life and mental processes.

Anorexia nervosa An eating disorder involving persistent loss of appetite that endangers an individual's health and stemming from emotional or psychological reasons rather than from organic causes.

Antagonists Drugs or other chemicals that inhibit the effects of neurotransmitters.

Anterograde amnesia The inability to form new memories (as opposed to retrograde amnesia, which involves the inability to remember information previously stored in memory).

Antianxiety drugs A category of medicines that includes the barbiturates and benzodiazepines, drugs that diminish feelings of anxiety.

Antidepressants Medicines that treat depression, usually by their effects on the serotonin and/or norepinephrine pathways in the brain.

Antipsychotics Medicinea that diminish psychotic symptoms, usually by their effects on the dopamine pathways in the brain.

Anxious-ambivalent attachment One of two primary response patterns seen in insecurely attached children—in which a child wants contact with the caregiver, shows excessive distress when separated from the caregiver, and proves difficult to console even when reunited.

Anxiety disorder Mental problem characterized mainly by anxiety. Anxiety disorders include panic disorder, specific phobias, and obsessive-compulsive disorder.

Applied psychologists Psychologists who use the knowledge developed by experimental psychologists to solve human problems.

Aptitudes Innate potentialities (as contrasted with abilities acquired by learning). Archetype One of the ancient memory images in the collective unconscious. Archetypes appear and reappear in art, literature, and folktales around the world. Emphasized by Carl Jung.

Artificial concepts Concepts defined by rules, such as word definitions and mathematical formulas.

Asch effect A form of conformity in which a group majority influences individual judgments of unambiguous stimuli, as with line judgments.

Assimilation A mental process that incorporates new information into existing schemas.

Association cortex Cortical regions throughout the brain that combine information from various other parts of the brain.

Attachment The enduring socio-emotional relationship between a child and a parent or other regular caregiver.

Attention A process by which consciousness focuses on a single item or "chunk" in working memory.

Attention-deficit hyperactivity disorder or ADHD A psychological disorder involving poor impulse control, difficulty concentrating on a task for a sustained period of time, high distractability, and excessive activity.

Authoritarian parent One of the four parenting styles, characterized by demands for conformity and obedience, with little tolerance for discussion of rules, which the parent enforces with punishment or threats of punishment.

Authoritative parent One of the four parenting styles, characterized by high expectations of the children, which the parent enforces with consequences, rather than punitive actions. Authoritative parents combine high standards with warmth and respect for the child's views.

Autism A developmental disorder marked by disabilities in language, social interaction, and the ability to understand another person's state of mind.

Autokinetic effect The perceived motion of a stationary dot of light in a totally dark room. Used by Muzafir Sherif to study the formation of group norms.

Autonomic nervous system (ANS) The portion of the peripheral nervous system that sends communications between the central nervous system and the internal organs and glands.

Autonomy In Erikson's theory, autonomy is the major developmental task of the second stage in childhood. Achieving autonomy involves developing a sense of independence, as opposed to being plagued by *self-doubt*.

Availability bias A faulty heuristic strategy that estimates probabilities based on information that can be recalled (made readily available) from personal experience.

Aversion therapy As a classical conditioning procedure, aversive counterconditioning involves presenting the individual with an attractive stimulus paired with unpleasant (aversive) stimulation to condition a repulsive reaction.

Avoidant attachment One of two primary response patterns seen in insecurely attached children—in which a child shows no interest in contact with the caregiver and displays neither distress when separated from the caregiver nor happiness when reunited.

Axon In a nerve cell, an extended fiber that conducts information from the soma to the terminal buttons. Information travels along the axon in the form of an electric charge, called the *action potential*.

Babbling The production of repetitive syllables, characteristic of the early stages of language acquisition.

Basic anxiety An emotion, proposed by Karen Horney, that gives a sense of uncertainty and loneliness in a hostile world and can lead to maladjustment.

Basilar membrane A thin strip of tissue sensitive to vibrations in the ear's cochlea. The basilar membrane contains hair cells connected to neurons. When a sound wave causes the hair cells to vibrate, the associated neurons become excited. As a result, the sound waves are converted (transduced) into nerve activity.

Behavior modification Another term for behavior therapy.

Behavior therapy Any form of psychotherapy based on the principles of behavioral learning, especially operant conditioning and classical conditioning.

Behavioral learning Forms of learning, such as classical conditioning and operant conditioning, that can be described in terms of stimuli and responses.

Behavioral medicine Medical field specializing in the link between lifestyle and disease. Behavioral perspective A psychological viewpoint that finds the source of our actions in environmental stimuli, rather than in inner mental processes.

Behaviorism A historical school (as well as a modern perspective) that has sought to make psychology an objective science that focused only on behavior—to the exclusion of mental processes.

Benefit-finding The second phase of finding meaning in a stressful situation, which involves seeing some ultimate benefit from the stressor.

Binding problem Refers to the process used by the brain to combine (or "bind") the results of many sensory operations into a single percept. This occurs, for example, when sensations of color, shape, boundary, and texture are combined to produce the percept of a person's face. No one knows exactly how the brain does this. Thus, the binding problem is one of the major unsolved mysteries in psychology.

Binocular cues Information taken in by both eyes that aids in depth perception, including binocular convergence and retinal disparity.

Biological perspective The psychological perspective that searches for the causes of behavior in the functioning of genes, the brain and nervous system, and the endocrine (hormone) system.

Biomedical therapy Treatment that focuses on altering the brain, especially with drugs, psychosurgery, or electroconvulsive therapy.

Biopsychology The specialty in psychology that studies the interaction of biology, behavior, and mental processes.

Bipolar disorder A mental abnormality involving swings of mood from mania to depression.

Blind spot The point where the optic nerve exits the eye and where there are no photoreceptors. Any stimulus that falls on this area cannot be seen.

Blocking Forgetting that occurs when an item in memory cannot be accessed or retrieved. Blocking is caused by interference.

Bottom-up processing Perceptual analysis that emphasizes characteristics of the stimulus, rather than our concepts and expectations. "Bottom" refers to the stimulus, which occurs at step one of perceptual processing.

Brain stem The most primitive of the brain's three major layers. It includes the medulla, pons, and the reticular formation.

Brightness A psychological sensation caused by the intensity (amplitude) of light waves.

Bulimia nervosa An eating disorder characterized by eating binges followed by "purges," induced by vomiting or laxatives; typically initiated as a weight-control measure.

Bullying The act of tormenting others, in school classrooms or work settings, by one or more others, for personal, sadistic pleasure. It qualifies as a form of ordinary or everyday evil.

Burnout A syndrome of emotional exhaustion, physical fatigue, and cognitive weariness, often related to job stress.

Bystander intervention problem Laboratory and field study analogues of the difficulties faced by bystanders in real emergency situations.

Cannon–Bard theory The counterproposal that an emotional feeling and an internal physiological response occur at the same time: One is not the cause of the other. Both were believed to be the result of cognitive appraisal of the situation.

Case study Research involving a single individual (or, at most, a few individuals).

Catastrophic event A sudden, violent calamity, either natural or man-made, that causes trauma.

Catharsis A theory suggesting that emotional pressure can be relieved by expressing feelings directly or indirectly.

Central nervous system The brain and the spinal cord.

Centration A preoperational thought pattern involving the inability to take into account more than one factor at a time.

Cerebellum The "little brain" attached to the brain stem. The cerebellum is responsible for coordinated movements.

Cerebral cortex The thin gray matter covering the cerebral hemispheres, consisting of a 1/4-inch layer dense with cell bodies of neurons. The cerebral cortex carries on the major portion of our "higher" mental processing, including thinking and perceiving.

Cerebral dominance The tendency of each brain hemisphere to exert control

over different functions, such as language or perception of spatial relationships.

Cerebral hemispheres The large symmetrical halves of the brain located atop the brain stem.

Chameleon effect The tendency to mimic other people, named after the animal that changes its skin color to fit into its varied environments.

Change blindness A perceptual failure to notice changes occurring in one's visual field.

Childhood amnesia The inability to remember events during the first two or three years of life.

Chromosome Tightly coiled threadlike structure along which the genes are organized, like beads on a necklace. Chromosomes consist primarily of DNA.

Chronic stressor Long-lasting stressful condition.

Chronological age (CA) The number of years since the individual's birth.

Chunking Organizing pieces of information into a smaller number of meaningful units (or chunks)—a process that frees up space in working memory.

Circadian rhythm Physiological pattern that repeats approximately every 24 hours—such as the sleep–wakefulness cy-cle.

Classical conditioning A form of behavioral learning in which a previously neutral stimulus acquires the power to elicit the same innate reflex produced by another stimulus.

Client-centered therapy A humanistic approach to treatment developed by Carl Rogers, emphasizing an individual's tendency for healthy psychological growth through self-actualization.

Closure The Gestalt principle that identifies the tendency to fill in gaps in figures and to see incomplete figures as complete.

Cochlea The primary organ of hearing; a coiled tube in the inner ear, where sound waves are transduced into nerve messages.

Cognitive appraisal Our interpretation of a stressor and our resources for dealing with it.

Cognitive–behavioral therapy A newer form of psychotherapy that combines the techniques of cognitive therapy with those of behavioral therapy. **Cognitive development** The global term for the development of thought processes from childhood through adulthood.

Cognitive dissonance A highly motivating state in which people have conflicting cognitions, especially when their voluntary actions conflict with their attitudes or values. Leon Festinger was its originator.

Cognitive map In Tolman's work a cognitive map was a mental representation of a maze or other physical space. Psychologists often use the term *cognitive map* more broadly to include an understanding of connections among concepts. (Note that your *Grade Aid* study guide uses the related term *concept map* for the diagrams showing the relationships among concepts in every chapter.) Thus, a cognitive map can represent either a physical or a mental "space."

Cognitive neuroscience An interdisciplinary field involving cognitive psychology, neurology, biology, computer science, linguistics, and specialists from other fields who are interested in the connection between mental processes and the brain.

Cognitive perspective Another of the main psychological viewpoints distinguished by an emphasis on mental processes, such as learning, memory, perception, and thinking, as forms of information processing.

Cognitive restructuring Reappraising a stressor with the goal of seeing it from a more positive perspective.

Cognitive therapy Emphasizes rational thinking (as opposed to subjective emotion, motivation, or repressed conflicts) as the key to treating mental disorder.

Cohesiveness Solidarity, loyalty, and a sense of group membership.

Collective unconscious Jung's addition to the unconscious, involving a reservoir for instinctive "memories," including the archetypes, which exist in all people.

Collectivism The view, common in Asia, Africa, Latin America, and the Middle East, that values group loyalty and pride over individual distinction.

Collectivism The view, common in Asia, Africa, Latin America, and the Middle East, that values group loyalty and pride over individual distinction.

Color Also called *hue*. Color is not a property of things in the external world. Rather, it is a *psychological sensation* created in the brain from information ob-

tained by the eyes from the wavelengths of visible light.

Color blindness Typically a genetic disorder (although sometimes the result of trauma, as in the case of Jonathan) that prevents an individual from discriminating certain colors. The most common form is red-green color blindness.

Coma An unconscious state, during which a person lacks the normal cycles of sleep and wakefulness, that usually lasts only a few days. The comatose state differs from the minimally conscious state and the persistent vegetative state.

Combination therapy A therapeutic approach that involves both psychological and medical techniques-most often a drug therapy with a behavioral or cognitive-behavioral therapy.

Community mental health movement An effort to deinstitutionalize mental patients and to provide therapy from outpatient clinics. Proponents of community mental health envisioned that recovering patients could live with their families, in foster homes, or in group homes.

Compassion fatigue A state of exhaustion experienced by medical and psychological professionals, as well as caregivers, which leaves the individual feeling stressed, numb, or indifferent.

Compassion satisfaction A sense of appreciation felt by a caregiver, medical or psychological professional, of the work he or she does.

Computer metaphor The idea that the brain is an information-processing organ that operates, in some ways, like a computer.

Concept hierarchies Levels of concepts, from most general to most specific, in which a more general level includes more specific concepts-as the concept of "animal" includes "dog," "giraffe," and "butterfly."

Concepts Mental groupings of similar objects, ideas, or experiences.

Concrete operational stage The third of Piaget's stages, when a child understands conservation but still is incapable of abstract thought.

Conditioned reinforcer or secondary reinforcer SA simulus, such as money or tokens, that acquires its reinforcing power by a learned association with primary reinforcers.

Conditioned response (CR) In classical conditioning, a response elicited by a previously neutral stimulus that has become associated with the unconditioned stimulus.

Conditioned stimulus (CS) In classical conditioning, a previously neutral stimulus that comes to elicit the conditioned response. Customarily, in a conditioning experiment, the neutral stimulus is called a conditioned stimulus when it is first paired with an unconditioned stimulus (UCS).

Cones Photoreceptors in the retina that are especially sensitive to colors but not to dim light. You may have guessed that the cones are cone-shaped.

Confirmation bias The tendency to attend to evidence that complements and confirms our beliefs or expectations, while ignoring evidence that does not.

Conformity The tendency for people to adopt the behaviors, attitudes, and opinions of other members of a group.

Conscious motivation A motive of which one is aware.

Consciousness The process by which the brain creates a mental model of our experience. The most common, or ordinary, consciousness occurs during wakefulness, although there are can be altered states of consciousness.

Conservation The understanding that the physical properties of an object or substance do not change when appearances change but nothing is added or taken away.

Consolidation The process by which short-term memories are changed to longterm memories over a period of time.

Contact comfort Stimulation and reassurance derived from the physical touch of a caregiver.

Contingency management An operant conditioning approach to changing behavior by altering the consequences, especially rewards and punishments, of behavior.

Continuous reinforcement A type of reinforcement schedule by which all correct responses are reinforced.

Control group Participants who are used as a comparison for the experimental group. The control group is not given the special treatment of interest.

Conversion disorder A type of somatoform disorder, marked by paralysis, weak-

ness, or loss of sensation but with no discernible physical cause.

Coping Taking action that reduces or eliminates the causes of stress, not merely its symptoms.

Coping strategy Action that reduces or eliminates the impact of stress.

Corpus callosum The band of nerve cells that connects the two cerebral hemispheres.

Correlational study A form of research in which the relationship between variables is studied, but without the experimental manipulation of an independent variable. Correlational studies cannot determine cause-and-effect relationships.

Cortisol A steroid produced by the fightor-flight response.

Creative intelligence According to Sternberg, the form of intelligence that helps people see new relationships among concepts; involves insight and creativity.

Creativity A mental process that produces novel responses that contribute to the solutions of problems.

Critical incident stress debriefing (CISD) A specific type of psychological debriefing that follows a strict, step-by-step agenda, but is without any empirical support.

Critical thinking skills This book emphasizes six critical thinking skills, based on the following questions: What is the source? Is the claim reasonable or extreme? What's the evidence? Could bias contaminate the conclusion? Does the reasoning avoid common fallacies? Does the issue require multiple perspectives?

Cross-cultural psychologists Those who work in this specialty are interested in how psychological processes may differ among people of different cultures.

Crystallized intelligence The knowledge a person has acquired, plus the ability to access that knowledge.

CT scanning or computerized tomography A computerized imaging technique that uses X-rays passed through the brain at various angles and then combined into an image.

Culture A complex blend of language, beliefs, customs, values, and traditions developed by a group of people and shared with others in the same environment.

Cytokine Hormonelike chemical that fights infection and facilitates communicaton between the brain and immune system.

Data Pieces of information, especially information gathered by a researcher to be used in testing a hypothesis. (Singular: da-tum.)

Daydreaming A common (and quite normal) variation of consciousness in which attention shifts to memories, expectations, desires, or fantasies and away from the immediate situation.

Declarative memory A division of LTM that stores explicit information; also known as *fact memory*. Declarative memory has two subdivisions, episodic memory and semantic memory.

Defending Efforts taken to reduce the symptoms of stress or one's awareness of them.

Dehumanization The psychological process of thinking about certain other people or groups as less than human, as like feared or hated animals. A basic process in much prejudice and mass violence.

Deinstitutionalization The policy of removing patients, whenever possible, from mental hospitals.

Delusion An extreme disorder of thinking, involving persistent false beliefs. Delusions are the hallmark of paranoid disorders.

Dendrite Branched fiber that extends outward from the cell body and carries information into the neuron.

Dependent variable The measured outcome of a study; the responses of the participants in a study.

Depersonalization Depriving people of their identity and individuality by treating them as objects rather than as individuals. Depersonalization can be a result of labeling.

Depersonalization disorder An abnormality involving the sensation that mind and body have separated, as in an "out-ofbody" experience.

Depressant Drug that slows down mental and physical activity by inhibiting transmission of nerve impulses in the central nervous system.

Developmental perspective One of the six main psychological viewpoints, distinguished by its emphasis on nature and nurture and on predictable changes that occur across the lifespan.

Developmental psychology The psychological specialty that studies how organisms grow and change over time as the result of biological and environmental influences.

Diathesis–stress hypothesis In reference to schizophrenia, the proposal that says that genetic factors place the individual at risk while environmental stress factors transform this potential into an actual schizophrenic disorder.

Difference threshold The smallest amount by which a stimulus can be changed and the difference be detected half the time.

Diffusion of responsibility Dilution or weakening of each group member's obligation to act when responsibility is perceived to be shared with all group members or accepted by the leader.

Discrimination A negative action taken against an individual as a result of his or her group or categorical membership. It is the behavior that prejudice generates.

Disenfranchised grief The emotion surrounding a loss that others do not support, share, or understand.

Display rules The permissible ways of displaying emotions in a particular society.

Disposition Relatively stable personality pattern, including temperaments, traits, and personality types.

Dispositional theory A general term that includes the temperament, trait, and type approaches to personality.

Dispositionism A psychological orientation that focuses primarily on the inner characteristics of individuals, such as personality dispositions, values, character, and genetic makeup. Contrasted with situationism, the focus is on external causes of behavior.

Dissociative amnesia A psychologically induced loss of memory for personal information, such as one's identity or residence.

Dissociative disorders A group of pathologies involving "fragmentation" of the personality, in which some parts of the personality have become detached, or dissociated, from other parts.

Dissociative fugue Essentially the same as dissociative amnesia but with the addition of "flight" from one's home, family, and job. *Fugue* (pronounced *FEWG*) means "flight."

Dissociative identity disorder A condition in which an individual displays mul-

tiple identities, or personalities; formerly called "multiple personality disorder."

Distributed learning A technique whereby the learner spaces learning sessions over time, rather than trying to learn the material all in one study period.

DNA A long, complex molecule that encodes genetic characteristics. DNA is an abbreviation for deoxyribonucleic acid.

Double-blind study An experimental procedure in which both researchers and participants are uninformed about the nature of the independent variable being administered.

Downward social comparison Comparison between one's own stressful situation and others in a similar situation who are worse off, with the goal of gaining a more positive perspective on one's own situation.

Drive Biologically instigated motivation.

Drive theory Developed as an alternative to instinct theory, drive theory explains motivation as a process in which a biological *need* produces a *drive*, a state of tension or energy that moves an organism to meet the need. For most drives this process returns the organism to a balanced condition, known as *homeostasis*.

DSM-IV The fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders*, published by the American Psychiatric Association; the most widely accepted psychiatric classification system in the United States.

Dyslexia A reading disability, thought by some experts to involve a brain disorder.

Eclectic Either switching theories to explain different situations or building one's own theory of personality from pieces borrowed from many perspectives.

Ecological model Similar to the socialcognitive-behavioral model but with an emphasis on the social and cultural context.

Ego The conscious, rational part of the personality, charged with keeping peace between the superego and the id.

Ego defense mechanism A largely unconscious mental strategy employed to reduce the experience of conflict or anxiety.

Egocentrism In Piaget's theory, the selfcentered inability to realize that there are other viewpoints beside one's own. **Ego-integrity** In Erikson's theory, the developmental task of late adulthood—involving the ability to look back on life without regrets and to enjoy a sense of wholeness.

Eidetic imagery An especially clear and persistent form of memory that is quite rare; sometimes known as "photographic memory."

Elaborative rehearsal A working-memory process in which information is actively reviewed and related to information already in LTM.

Electroconvulsive therapy (ECT) A treatment used primarily for depression and involving the application of an electric current to the head, producing a generalized seizure. Sometimes called "shock treatment."

Electroencephalograph(EEG) A device for recording brain waves, typically by electrodes placed on the scalp. The record produced is known as an electroencephalogram (also called an EEG).

Electromagnetic spectrum The entire range of electromagnetic energy, including radio waves, X-rays, microwaves, and visible light.

Embryo In humans, the name for the developing organism during the first eight weeks after conception.

Emerging adulthood A transition period between adolescence and adulthood.

Emotion A four-part process that involves physiological arousal, subjective feelings, cognitive interpretation, and behavioral expression. Emotions help organisms deal with important events.

Emotional bias The tendency to make judgments based on attitudes and feelings, rather than on the basis of a rational analysis of the evidence.

Emotional intelligence Contrasted (by Dan Goleman) with IQ, as a broader social-emotional form of understanding and responding.

Emotion-focused coping Regulating one's emotional response to a stressor.

Empirical investigation An approach to research that relies on sensory experience and observation as research data.

Encoding The first of the three basic tasks of memory, involving the modification of information to fit the preferred format for the memory system.

Encoding specificity principle The doctrine that memory is encoded and stored with specific cues related to the context in which it was formed. The more closely the retrieval cues match the form in which the information was encoded, the better it will be remembered.

Endocrine system The hormone system—the body's chemical messenger system, including the endocrine glands: pituitary, thyroid, parathyroid, adrenals, pancreas, ovaries, and testes.

Engram The physical changes in the brain associated with a memory. It is also known as the *memory trace*.

Episodic memory A subdivision of declarative memory that stores memory for personal events, or "episodes."

Event-related potentials Brain waves shown on the EEG in response to stimulation.

Evolution The gradual process of biological change that occurs in a species as it adapts to its environment.

Evolutionary psychology A relatively new specialty in psychology that sees behavior and mental processes in terms of their genetic adaptations for survival and reproduction.

Exhaustion phase Third phase of the GAS, during which the body's resources become depleted.

Expectancy bias The researcher unknowingly allows his or her expectations to affect the outcome of a study.

Expectancy-value theory A social psychology theory that states how people decide whether to pursue a relationship by weighing the potential value of the relationship against their expectation of success in establishing the relationship.

Experiment A kind of research in which the researcher controls all the conditions and directly manipulates the conditions, including the independent variables, and measures the dependent outcomes.

Experimental group Participants in an experiment who are exposed to the treatment of interest.

Experimental neurosis A pattern of erratic behavior resulting from a demanding discrimination learning task, typically one that involves aversive stimuli.

Experimental psychologists Psychologists who do research on basic psychological processes—as contrasted with applied psy-

chologists; also called research psychologists.

Experts Individuals who possess wellorganized funds of knowledge, including the effective problem-solving strategies, in a field.

Explicit memory A memory that has been processed with attention and can be consciously recalled.

Exposure therapy A form of desensitization therapy in which the patient directly confronts the anxiety-provoking stimulus (as opposed to imagining the stimulus).

Externals People with an external locus of control who believe they can do little to influence their life outcomes.

Extinction (in classical conditioning) The weakening of a conditioned response in the absence of an unconditioned stimulus.

Extinction (in operant conditioning) A process by which a response that has been learned is weakened by the absence or removal of reinforcement. (Compare with *extinction in classical conditioning.*)

Extraversion The Jungian personality dimension that involves turning one's attention outward, toward others.

Extrinsic motivation The desire to engage in an activity to achieve an external consequence, such as a reward.

Family systems theory A perspective on personality and treatment that emphasizes the family, rather than the individual, as the basic unit of analysis.

Feature detectors Cells in the cortex that specialize in extracting certain features of a stimulus.

Fetal alcohol syndrome (FAS) A set of physical and mental problems seen in children whose mothers drink exessive amounts of alcohol during pregnancy.

Fetus In humans, the term for the developing organism between the embryonic stage and birth.

Fight-or-flight response Sequence of internal responses preparing an organism for struggle or escape.

Figure The part of a pattern that commands attention. The figure stands out against the ground.

Five-factor theory A trait perspective suggesting that personality is composed of five fundamental personality dimensions (also known as the Big Five): openness to

experience, conscientiousness, extraversion, agreeableness, and neuroticism.

Fixation Occurs when psychosexual development is arrested at an immature stage.

Fixed-action patterns Genetically based behaviors, seen across a species, that can be set off by a specific stimulus. The concept of fixed-action patterns has replaced the older notion of instinct.

Fixed interval (FI) schedule A program by which reinforcement is contingent upon a certain, fixed time period.

Fixed ratio (FR) schedule A program by which reinforcement is contingent on a certain, unvarying number of responses.

Flashbulb memory A clear and vivid long-term memory of an especially meaningful and emotional event.

Flow In Csikszentmihalyi's theory, an intense focus on an activity, accompanied by increased creativity and near-ecstatic feelings. Flow involves intrinsic motivation.

Fluid intelligence The ability to see complex relationships and solve problems.

fMRI or **functional magnetic resonance imaging** A newer form of magnetic resonance imaging that reveals different activity levels in different parts of the brain.

Forgetting curve A graph plotting the amount of retention and forgetting over time for a certain batch of material, such as a list of nonsense syllables. The typical forgetting curve is steep at first, becoming flatter as time goes on.

Formal operational stage The last of Piaget's stages, during which abstract thought appears.

Fovea The tiny area of sharpest vision in the retina.

Frequency The number of cycles completed by a wave in a second.

Frontal lobes Cortical regions at the front of the brain that are especially involved in movement and in thinking.

Fully functioning person Carl Rogers's term for a healthy, self-actualizing individual, who has a self-concept that is both positive and congruent with reality.

Functional fixedness The inability to perceive a new use for an object associated with a different purpose; a form of constrained mental set.

Functionalism A historical school of psychology that believed mental processes could best be understood in terms of their adaptive purpose and function.

Fundamental attribution error (FAE) The dual tendency to overemphasize internal, dispositional causes and minimize external, situational pressures. The FAE is more common in individualistic cultures than in collectivistic cultures.

g factor A general ability, proposed by Spearman, as the main factor underlying all intelligent mental activity.

Gate-control theory An explanation for pain control that proposes we have a neural "gate" that can, under some circumstances, block incoming pain signals.

Gender similarities hypothesis Hyde's notion that males and females are similar on most, but not all, psychological variables.

Gene Segment of a chromosome that encodes the directions for the inherited physical and mental characteristics of an organism. Genes are the functional units of a chromosome.

General adaptation syndrome (GAS) A three-phase pattern of physical responses to a chronic stressor.

General anesthetic Substance that suppresses consciousness and awareness of pain. Most anesthetics also produce sedation and immobility.

Generalized anxiety disorder A psychological problem characterized by persistent and pervasive feelings of anxiety, without any external cause.

Generativity The process of making a commitment beyond oneself to family, work, society, or future generations. In Erikson's theory, generativity is the developmental challenge of midlife.

Genetic leash Edward Wilson's term for the constraints placed on development by heredity.

Genotype An organism's genetic makeup.

Gestalt psychology From a German word (pronounced *gush-TAWLT*) that means "whole" or "form" or "configuration." (A Gestalt is also a *percept*.) The Gestalt psychologists believed that much of perception is shaped by innate factors built into the brain.

Giftedness Often conceived as representing the upper 2% of the IQ range, commencing about 30 points above average (at about 130 IQ points). Gist (pronounced *JIST*) The sense or meaning, as contrasted with the exact details.

Glial cell One of the cells that bind the neurons together. Glial cells also provide an insulating covering (the myelin sheath) of the axon for some neurons, which facilitates the electrical impulse.

Goal-directed behavior An ability that emerges during the sensorimotor period by which infants develop the ability to keep a simple goal in mind as they pursue it.

Grammar The rules of a language, specifying how to use the elements of language and word order to produce understandable sentences.

Grief The emotional response to loss, which includes sadness, anger, helplessness, guilt, and despair.

Ground The part of a pattern that does not command attention; the background.

Group therapy Any form of psychotherapy done with more than one client/patient at a time. Group therapy is often done from a humanistic perspective.

Groupthink The term for the poor judgments and bad decisions made by members of groups that are overly influenced by perceived group consensus or the leader's point of view.

Gustation The sense of taste, from the same word root as "gusto"; also called the *gustatory sense*.

Habituation Learning not to respond or adapt to the repeated presentation of a stimulus.

Hallucination A false sensory experience that may suggest mental disorder. Hallucinations can have other causes, such as drugs or sensory isolation.

Hallucinogen A drug that creates hallucinations or alters perceptions of the external environment and inner awareness.

Hardiness Attitude of resistance to stress, based on a sense of challenge (welcoming change), commitment (engagement), and control (maintaining an internal guide for action).

Hassle Situation that causes minor irritation or frustration.

Health psychology Psychological specialty devoted to understanding how people stay healthy, why they become ill, and how they respond when ill. Heritability The amount of trait variation within a group, raised under the same conditions, that can be attributed to genetic differences. Heritability tells us nothing about between-group differences.

Heroes People whose actions help others in emergencies or challenge unjust or corrupt systems, doing so without concern for reward or likely negative consequences for them by acting in deviant ways.

Heuristics Cognitive strategies or "rules of thumb" used as shortcuts to solve complex mental tasks. Unlike algorithms, heuristics do not guarantee a correct solution.

Hierarchy of needs In Maslow's theory, the notion that needs occur in priority order, with the biological needs as the most basic.

Hindsight bias The tendency, after learning about an event, to "second guess" or believe that one could have predicted the event in advance.

Hippocampus A component of the limbic system, involved in establishing long-term memories.

Homeostasis The body's tendency to maintain a biologically balanced condition, especially with regard to nutrients, water, and temperature.

Hormones Chemical messengers used by the endocrine system. Many hormones also serve as neurotransmitters in the nervous system.

Humanistic psychology A clinical approach emphasizing human ability, growth, potential, and free will.

Humanistic theories Personality theories that focus on human growth and potential, rather than on mental disorder. All emphasize the functioning of the individual in the present, rather than on the influence of past events.

Humanistic therapy Treatment technique based on the assumption that people have a tendency for positive growth and self-actualization, which may be blocked by an unhealthy environment that can include negative self-evaluation and criticism from others.

Humors Four body fluids—blood, phlegm, black bile, and yellow bile—that, according to an ancient theory, control personality by their relative abundance.

Hypnosis An induced state of altered awareness, usually characterized by

heightened suggestibility, deep relaxation, and highly focused attention.

Hypochondriasis A somatoform disorder involving excessive concern about health and disease; also called hypochondria.

Hypothalamus That part of the brain that links the nervous system to the endocrine system via the pituitary gland. Its main function is maintaining the body's status quo.

Hypothesis A statement predicting the outcome of a scientific study; a statement describing the expected relation among variables in a study.

Id The primitive, unconscious portion of the personality that houses the most basic drives and stores repressed memories.

Identification The mental process by which an individual tries to become like another person, especially the same-sex parent.

Identity In Erikson's theory, identity is a sense of who one is—a coherent self. Developing a sense of identity is the main goal of adolescence.

Illusion You have experienced an illusion when you have a demonstrably incorrect perception of a stimulus pattern, especially one that also fools others who are observing the same stimulus. (If no one else sees it the way you do, you could be having a *hallucination*.

Immunosuppression Impairment in the function of the immune system.

Implicit memory A memory that was not deliberately learned or of which you have no conscious awareness.

Implicit personality theory A person's set of unquestioned assumptions about personality, used to simplify the task of understanding others.

Imprinting A primitive form of learning in which some young animals follow and form an attachment to the first moving object they see and hear.

Independent variable A stimulus condition so named because the experimenter changes it independently of all the other carefully controlled experimental conditions.

Individualism The view, common in the Euro-American world, that places a high value on individual achievement and distinction.

GLOSSARY

Individualism The view, common in the Euro-American world, that places a high value on individual achievement and distinction.

Industry Erikson's term for a sense of confidence that characterizes the main goal of the fourth developmental stage in childhood. Children who do not develop industry (confidence) will slip into a self-perception of *inferiority*.

Infancy In humans, infancy spans the time between the end of the neonatal period and the establishment of language—usually at about 18 months to 2 years.

Information-processing model A cognitive understanding of memory, emphasizing how information is changed when it is encoded, stored, and retrieved.

In-group The group with which an individual identifies.

Initiative In Erikson's theory, initiative is the major developmental task in the third stage of childhood. Initiative is characterized by the ability to initiate activities oneself, rather than merely responding to others or feeling *guilt* at not measuring up to other's expectations.

Innate ability Capability of an infant that is inborn or biologically based.

Innate reflex Reflexive response present at birth.

Insanity A legal term, not a psychological or psychiatric one, referring to a person who is unable, because of a mental disorder or defect, to conform his or her behavior to the law.

Insight learning A form of cognitive learning, originally described by the Gestalt psychologists, in which problem solving occurs by means of a sudden reorganization of perceptions.

Insight therapy Psychotherapy in which the therapist helps the patient/client understand (gain insight into) his or her problems.

Insomnia The most common of sleep disorders—involving insufficient sleep, the inability to fall asleep quickly, frequent arousals, or early awakenings.

Instinct theory The now-outmoded view that certain behaviors are completely determined by innate factors. The instinct theory was flawed because it overlooked the effects of learning and because it employed instincts merely as labels, rather than as explanations for behavior.

G-8

Instinctive drift The tendency of an organism's innate (instinctive) responses to interfere with learned behavior.

Integration A final phase of grieving, in which the loss becomes incorporated into the self.

Intelligence The mental capacity to acquire knowledge, reason, and solve problems effectively.

Intelligence quotient (IQ) A numerical score on an intelligence test, originally computed by dividing the person's mental age by chronological age and multiplying by 100.

Intermittent reinforcement A type of reinforcement schedule by which some, but not all, correct responses are reinforced; also called partial reinforcement.

Internals People with an internal locus of control who believe they can do much to influence their life outcomes.

Interneuron A nerve cell that relays messages between nerve cells, especially in the brain and spinal cord.

Interval schedule A program by which reinforcement depends on the time interval elapsed since the last reinforcement.

Intimacy In Erikson's theory, the main developmental task of early adulthood, involving the capacity to make a full commitment—sexual, emotional, and moral—to another person.

Intrinsic motivation The desire to engage in an activity for its own sake, rather than for some external consequence, such as a reward.

Introspection The process of reporting on one's own conscious mental experiences.

Introversion The Jungian dimension that focuses on inner experience—one's own thoughts and feelings—making the introvert less outgoing and sociable than the extravert.

Intuition The ability to make judgments without consciously reasoning.

Inverted U function A term that describes the relationship between arousal and performance. Both low and high levels of arousal produce lower performance than does a moderate level of arousal.

Irreversibility The inability, in the preoperational child, to think through a series of events or mental operations and then mentally reverse the steps.

James–Lange theory The proposal that an emotion-provoking stimulus produces a physical response that, in turn, produces an emotion.

Kinesthetic sense The sense of body position and movement of body parts relative to each other (also called *kinesthesis*).

Labeling Refers to the undesirable practice of attaching diagnoses of mental disorders to people and then using them as stereotypes—treating the afflicted individuals as if the labels explained their whole personalities. Psychiatric labels can also stigmatize people.

Language acquisition device (LAD) A biologically organized mental structure in the brain that facilitates the learning of language because (according to Chomsky) it is innately programmed with some of the fundamental rules of grammar.

Latent content The symbolic meaning of objects and events in a dream. Latent content is usually an interpretation based on Freud's psychoanalytic theory or one of its variants.

Lateralization of emotion Different influences of the two brain hemispheres on various emotions. The left hemisphere apparently influences positive emotions (for example, happiness), and the right hemisphere influences negative emotions (anger, for example).

Law of common fate The Gestalt principle that we tend to group similar objects together that share a common motion or destination.

Law of continuity The Gestalt principle that we prefer perceptions of connected and continuous figures to disconnected and disjointed ones.

Law of effect The idea that responses that produced desirable results would be learned, or "stamped" into the organism.

Law of Prägnanz The most general Gestalt principle, which states that the simplest organization, requiring the least cognitive effort, will emerge as the figure. *Prägnanz* shares a common root with *pregnant*, and so it carries the idea of a "fully developed figure."

Law of proximity The Gestalt principle that we tend to group objects together when they are near each other. *Proximity* means "nearness."

Law of similarity The Gestalt principle that we tend to group similar objects together in our perceptions.

Laws of perceptual grouping The Gestalt principles of similarity, proximity, continuity, and common fate. These "laws" suggest how our brains prefer to group stimulus elements together to form a percept (Gestalt).

Learned helplessness A condition in which depressed individuals learn to attribute negative events to their own personal flaws or external conditions that the person feels helpless to change. People with learned helplessness can be thought of as having an extreme form of *external locus of control*.

Learning A lasting change in behavior or mental processes that results from experience.

Learning-based inference The view that perception is primarily shaped by learning (or experience), rather than by innate factors.

Levels-of-processing theory The explanation for the fact that information that is more thoroughly connected to meaningful items in long-term memory (more "deeply" processed) will be remembered better.

Libido The Freudian concept of psychic energy that drives individuals to experience sensual pleasure.

Limbic system The middle layer of the brain, involved in emotion and memory. The limbic system includes the hippocampus, amygdala, hypothalamus, and other structures.

Locus of control An individual's sense of whether control over his or her life is internal or external.

Long-term memory (LTM) The third of three memory stages, with the largest capacity and longest duration; LTM stores material organized according to meaning.

Long-term potentiation A biological process involving physical changes that strengthen the synapses in groups of nerve cells that is believed to be the neural basis of learning.

Loudness A sensory characteristic of sound produced by the *amplitude* (intensity) of the sound wave.

Maintenance rehearsal A working-memory process in which information is merely repeated or reviewed to keep it from fading while in working memory. Maintenance rehearsal involves no active elaboration. Major depression A form of depression that does not alternate with mania.

Manifest content The story line of a dream, taken at face value without interpretation.

Matching hypothesis The prediction that most people will find friends and mates that are perceived to be of about their same level of attractiveness.

Maturation The process by which the genetic program manifests itself over time.

Medical model The view that mental disorders are diseases that, like ordinary physical diseases, have objective physical causes and require specific treatments.

Meditation A state of consciousness often induced by focusing on a repetitive behavior, assuming certain body positions, and minimizing external stimulation. Meditation may be intended to enhance self-knowledge, well-being, and spirituality.

Medulla A brain-stem structure that controls breathing and heart rate. The sensory and motor pathways connecting the brain to the body cross in the medulla.

Memory Any system—human, animal, or machine—that encodes, stores, and retrieves information.

Menarche The onset of menstruation.

Mental age (MA) The average age at which normal (average) individuals achieve a particular score.

Mental operation Solving a problem by manipulating images in one's mind.

Mental representation The ability to form internal images of objects and events.

Mental retardation Often conceived as representing the lower 2% of the IQ range, commencing about 30 points below average (below about 70 points). More sophisticated definitions also take into account an individual's level of social functioning and other abilities.

Mental set The tendency to respond to a new problem in the manner used for a previous problem.

Mere exposure effect A nonconscious preference for stimuli to which we have been previously exposed.

Method of loci A mnemonic technique that involves associating items on a list with a sequence of familiar physical locations.

Mimicry The imitation of other people's behaviors.

Mirror neuron A recently discovered class of neuron that fires in response to ("mirroring") observation of another person's actions or emotions.

Misattribution A memory fault that occurs when memories are retrieved but are associated with the wrong time, place, or person.

Misinformation effect The distortion of memory by suggestion or misinformation.

MMPI-2 A widely used personality assessment instrument that gives scores on ten important clinical traits. Also called the *Minnesota Multiphasic Personality Inventory*.

Mnemonic strategy Technique for improving memory, especially by making connections between new material and information already in long-term memory, often by imagery and sounds.

Moderator Factor that helps prevent stressors from causing stress.

Monocular cues Information about depth that relies on the input of just one eye—includes relative size, light and shadow, interposition, relative motion, and atmospheric perspective.

Mood-congruent memory A memory process that selectively retrieves memories that match (are congruent with) one's mood.

Mood disorder Abnormal disturbance in emotion or mood, including bipolar disorder and unipolar disorder. Mood disorders are also called affective disorders.

Morpheme A meaningful unit of language that makes up words. Some whole words are morphemes (example: *word*); other morphemes include grammatical components that alter a word's meaning (examples: *-ed*, *-ing*, and *un-*).

Motivation Refers to all the processes involved in initiating, directing, and maintaining physical and psychological activities.

Motive An internal mechanism that arouses the organism and then selects and directs behavior. The term *motive* is often used in the narrower sense of a motivational process that is learned, rather than biologically based (as are drives).

Motor cortex A narrow vertical strip of cortex in the frontal lobes, lying just in front of the central fissure; controls voluntary movement.

Motor neuron A nerve cell that carries messages *away* from the central nervous

system toward the muscles and glands. Also called *efferent neurons*.

MRI or magnetic resonance imaging An imaging technique that relies on cells' responses in a high-intensity magnetic field.

Multiple intelligences A term used to refer to Gardner's theory, which proposes that there are seven (or more) forms of intelligence.

Myers–Briggs Type Indicator (MBTI) A widely used personality test based on Jungian types.

Narcolepsy A disorder of REM sleep, involving sleep-onset REM periods and sudden daytime REM-sleep attacks usually accompanied by cataplexy.

Narrative A personal account of a stressful event that describes our interpretation of what happened and why.

Natural concepts Mental representations of objects and events drawn from our direct experience.

Natural killer cell Cell produced by the immune system that attacks foreign cells.

Natural language mediator Word associated with new information to be remembered.

Natural selection The driving force behind evolution, by which the environment "selects" the fittest organisms.

Naturalistic observation A form of descriptive research involving behavioral assessment of people or animals in their home surroundings.

Nature–nurture issue The long-standing discussion over the relative importance of nature (heredity) and nurture (environment) in their influence on behavior and mental processes.

Necker cube An ambiguous two-dimensional figure of a cube that can be seen from different perspectives.

Need In drive theory, a need is a biological imbalance (such as dehydration) that threatens survival, if the need is left unmet. Biological needs are believed to produce drives.

Need for achievement (*n Ach*) In Murray and McClelland's theory, a mental state that produces a psychological motive to excel or to reach some goal.

Negative correlation A correlation coefficient indicating that the variables change simultaneously in opposite directions: As one becomes larger, the other gets smaller.

G-10

Negative punishment The removal of an attractive stimulus after a response.

Negative reinforcement The removal of an unpleasant or aversive stimulus, contingent on a particular behavior. Compare with *punishment*.

Neo-Freudian Literally "new Freudian"; refers to theorists who broke with Freud but whose theories retain a psychodynamic aspect, especially a focus on motivation as the source of energy for the personality.

Neo-Freudian psychodynamic therapy Therapy for a mental disorder that was developed by psychodynamic theorists who embraced some of Freud's ideas but disagreed with others.

Neonatal period In humans, the neonatal (newborn) period extends through the first month after birth.

Nervous system The entire network of neurons in the body, including the central nervous system, the peripheral nervous system, and their subdivisions.

Neural pathways Bundles of nerve cells that follow generally the same route and employ the same neurotransmitter.

Neuron Cell specialized to receive and transmit information to other cells in the body—also called a *nerve cell*. Bundles of many neurons are called *nerves*.

Neuroscience The field devoted to understanding how the brain creates thoughts, feelings, motives, consciousness, memories, and other mental processes.

Neurosis Before the *DSM-IV*, this term was used as a label for subjective distress or self-defeating behavior that did not show signs of brain abnormalities or grossly irrational thinking.

Neurotic needs Signs of neurosis in Horney's theory, the ten needs are normal desires carried to a neurotic extreme.

Neurotransmitter Chemical messenger that relays neural messages across the synapse. Many neurotransmitters are also hormones.

Neutral stimulus Any stimulus that produces no conditioned response prior to learning. When it is brought into a conditioning experiment, the researcher will call it a conditioned stimulus (CS). The assumption is that some conditioning occurs after even one pairing of the CS and UCS.

Night terrors Deep sleep episodes that seem to produce terror, although any ter-

rifying mental experience (such as a dream) is usually forgotten on awakening. Night terrors occur mainly in children.

Nonconscious process Any brain process that does not involve conscious processing, including both preconscious memories and unconscious processes.

Non-REM (NREM) sleep The recurring periods, mainly associated with the deeper stages of sleep, when a sleeper is not showing rapid eye movements.

Normal distribution (normal curve) A bell-shaped curve, describing the spread of a characteristic throughout a population.

Normal range Scores falling near the middle of a normal distribution.

Object permanence The knowledge that objects exist independently of one's own actions or awareness.

Observational learning A form of cognitive learning in which new responses are acquired after watching others' behavior and the consequences of their behavior.

Observational learning A form of cognitive learning in which new responses are acquired after watching others' behavior and the consequences of their behavior.

Obsessive-compulsive disorder (CCD) A condition characterized by patterns of persistent, unwanted thoughts and behaviors.

Occipital lobes The cortical regions at the back of the brain, housing the visual cortex.

Oedipus complex According to Freud, a largely unconscious process whereby boys displace an erotic attraction toward their mother to females of their own age and, at the same time, identify with their fathers.

Olfaction The sense of smell.

Operant chamber A boxlike apparatus that can be programmed to deliver reinforcers and punishers contingent on an animal's behavior. The operant chamber is often called a "Skinner box."

Operant conditioning A form of behavioral learning in which the probability of a response is changed by its consequences—that is, by the stimuli that follow the response.

Operational definitions Objective descriptions of concepts involved in a scientific study. Operational definitions may restate concepts to be studied in behavioral terms (e.g., fear may be operationally defined as moving away from a stimulus).

Operational definitions also specify the procedures used to produce and measure important variables under investigation (e.g., "attraction" may be measured by the amount of time one person spends looking at another).

Opiate Highly addictive drug, derived from opium, that can produce a profound sense of well-being and have strong pain-relieving properties.

Opponent-process theory The idea that cells in the visual system process colors in complementary pairs, such as red or green or as yellow or blue. The opponentprocess theory explains color sensation from the bipolar cells onward in the visual system.

Optic nerve The bundle of neurons that carries visual information from the retina to the brain.

Optimism An attitude that interprets stressors as external in origin, temporary, and specific in their effects. Also a generally positive world view.

Out-group Those outside the group with which an individual identifies.

Overjustification The process by which extrinsic (external) rewards can sometimes displace internal motivation, as when a child receives money for playing video games.

Oxytocin A hormone produced (by both women and men) in response to a stressor.

Panic disorder A disturbance marked by panic attacks that have no obvious connection with events in the person's present experience. Unlike generalized anxiety disorder, the victim is usually free of anxiety between panic attacks.

Paraprofessional Individual who has received on-the-job training (and, in some cases, undergraduate training) in mental health treatment in lieu of graduate education and full professional certification.

Parasympathetic division The part of the autonomic nervous system that monitors the routine operations of the internal organs and returns the body to calmer functioning after arousal by the sympathetic division.

Parietal lobes Cortical areas lying toward the back and top of the brain; involved in touch sensation and in perceiving spatial relationships (the relationships of objects in space).

Participant modeling A social learning technique in which a therapist demon-

strates and encourages a client to imitate a desired behavior.

Peer marriage Marriage in which the couple see each other as partners and friends, as contrasted with the older stereotypic roles of "husband" and "wife."

Percept The meaningful product of perception—often an image that has been associated with concepts, memories of events, emotions, and motives.

Perception A process that makes sensory patterns meaningful. It is perception that makes these words meaningful, rather than just a string of visual patterns. To make this happen, perception draws heavily on memory, motivation, emotion, and other psychological processes.

Perceptual constancy The ability to recognize the same object as remaining "constant" under different conditions, such as changes in illumination, distance, or location.

Perceptual set Readiness to detect a particular stimulus in a given context—as when a person who is afraid interprets an unfamiliar sound as a threat.

Peripheral nervous system All parts of the nervous system lying outside the central nervous system. The peripheral nervous system includes the autonomic and somatic nervous systems.

Permissive parent One of the four parenting styles, characterized by setting few rules and allowing children to make their own decisions. While they may be caring and communicative, permissive parents give most decision-making responsibility to their children.

Persistence A memory problem in which unwanted memories cannot be put out of mind.

Personal unconscious Jung's term for that portion of the unconscious corresponding roughly to the Freudian id.

Personality The psychological qualities that bring continuity to an individual's behavior in different situations and at different times.

Personality disorder Condition involving a chronic, pervasive, inflexible, and maladaptive pattern of thinking, emotion, social relationships, or impulse control.

Personality process The internal working of the personality, involving motivation, emotion, perception, and learning, as well as unconscious processes.

Personality type Similar to a trait, but instead of being a *dimension*, a type is a *category* that is believed to represent a common cluster of personality characteristics.

PET scanning or **positron emission tomography** An imaging technique that relies on the detection of radioactive sugar consumed by active brain cells.

Phenomenal field Our psychological reality, composed of one's perceptions and feelings.

Phenotype An organism's observable physical and behavioral characteristics.

Pheromones Chemical signals released by organisms to communicate with other members of their species. Pheromones are often used by animals as sexual attractants. It is unclear whether or not humans employ pheromones.

Phobia One of a group of anxiety disorders involving a pathological fear of a specific object or situation.

Photoreceptors Light-sensitive cells (neurons) in the retina that convert light energy to neural impulses. The photoreceptors are as far as light gets into the visual system.

Physical dependence A process by which the body adjusts to, and comes to need, a drug for its everyday functioning.

Pitch A sensory characteristic of sound produced by the *frequency* of the sound wave.

Pituitary gland The "master gland" that produces hormones influencing the secretions of all other endocrine glands, as well as a hormone that influences growth. The pituitary is attached to the brain's hypothalamus, from which it takes its orders.

Placebo (*pla-SEE-bo*) Substance that appears to be a drug but is not. Placebos are often referred to as "sugar pills" because they might contain only sugar, rather than a real drug.

Placebo effect A response to a placebo (a fake drug), caused by the belief that they are real drugs. Also when beliefs are about reality change functioning to fit those beliefs.

Placenta The organ interface between the embryo or fetus and the mother. The placenta separates the bloodstreams, but it allows the exchange of nutrients and waste products.

Plasticity The nervous system's ability to adapt or change as the result of experi-

GLOSSARY

ence. Plasticity may also help the nervous system adapt to physical damage.

Pons A brain-stem structure that regulates brain activity during sleep and dreaming. The name pons derives from the Latin word for "bridge."

Positive correlation A correlation coefficient indicating that the variables change simultaneously in the same direction: As one grows larger or smaller, the other grows or shrinks in a parallel way.

Positive lifestyle choices Deliberate decisions about long-term behavior patterns that increase resistance to both stress and illness.

Positive psychology A recent movement within psychology, focusing on desirable aspects of human functioning, as opposed to an emphasis on psychopathology. Emphasizes strengths and virtues.

Positive psychotherapy (PPT) A relatively new form of cognitive-behavioral treatment that seeks to emphasize growth, health, and happiness.

Positive punishment The application of an aversive stimulus after a response.

Positive reinforcement A stimulus presented after a response and increasing the probability of that response happening again.

Posttraumatic stress disorder (PTSD) A delayed stress reaction in which an individual involuntarily reexperiences emotional, cognitive, and behavioral aspects of past trauma.

Practical intelligence According to Sternberg, the ability to cope with the environment; sometimes called "street smarts."

Preconscious Freud's notion that the mind has a special unconscious storehouse for information not currently in consciousness but available to consciousness. Example: your telephone number is stored in the preconscious.

Prejudice A negative attitude toward an individual based solely on his or her membership in a particular group or category, often without any direct evidence.

Premack principle The concept, developed by David Premack, that a more-preferred activity can be used to reinforce a less-preferred activity.

Prenatal period The developmental period before birth.

Preoperational stage The second stage in Piaget's theory, marked by well-devel-

G-12

oped mental representation and the use of language.

Preparedness hypothesis The notion that we have an innate tendency, acquired through natural selection, to respond quickly and automatically to stimuli that posed a survival threat to our ancestors.

Primary control Efforts aimed at controlling external events.

Primary reinforcer A reinforcer, such as food or sex, that has an innate basis because of its biological value to an organism.

Priming A technique for cuing implicit memories by providing cues that stimulate a memory without awareness of the connection between the cue and the retrieved memory.

Principle of proximity The notion that people at work will make more friends among those who are nearby—with whom they have the most contact. *Proximity* means "nearness."

Proactive interference A cause of forgetting by which previously stored information prevents learning and remembering new information.

Problem-focused coping Action taken to clarify and resolve a stressor.

Procedural memory A division of LTM that stores memories for how things are done.

Projective test Personality assessment instrument, such as the Rorschach and TAT, which is based on Freud's ego defense mechanism of projection.

Prospective memory The aspect of memory that enables one to remember to take some action in the future—as remembering a doctor's appointment.

Prototype An ideal or most representative example of a conceptual category.

Pseudopsychology Erroneous assertions or practices set forth as being scientific psychology.

Psychiatry A medical specialty dealing with the diagnosis and treatment of mental disorders.

Psychic determinism Freud's assumption that all our mental and behavioral responses are caused by unconscious traumas, desires, or conflicts.

Psychoactive drug Chemical that affects mental processes and behavior by its effect on the brain.

Psychoanalysis An approach to psychology based on Sigmund Freud's assertions, which emphasize unconscious processes. The term is used to refer broadly both to Freud's psychoanalytic theory and to his psychoanalytic treatment method.

Psychoanalysis The form of psychodynamic therapy developed by Sigmund Freud. The goal of psychoanalysis is to release conflicts and memories from the unconscious.

Psychoanalytic theory Freud's theory of personality and mental disorder.

Psychodynamic psychology A clinical approach emphasizing the understanding of mental disorders in terms of unconscious needs, desires, memories, and conflicts.

Psychodynamic theories A group of theories that originated with Freud. All emphasize motivation—often unconscious motivation—and the influence of the past on the development of mental disorders.

Psychological debriefing Brief, immediate strategy focusing on venting emotions and discussing reactions to a trauma.

Psychological dependence A desire to obtain or use a drug, even though there is no physical dependence.

Psychological therapy Therapy based on psychological principles (rather than on the biomedical approach); often called "psychotherapy."

Psychology The science of behavior and mental processes.

Psychoneuroimmunology Multidisciplinary field that studies the influence of mental states on the immune system.

Psychopathology Any pattern of emotions, behaviors, or thoughts inappropriate to the situation and leading to personal distress or the inability to achieve important goals. Other terms having essentially the same meaning include *mental illness*, *mental disorder*, and *psychological disorder*.

Psychosexual stages Successive, instinctive developmental phases in which pleasure is associated with stimulation of different bodily areas at different times of life.

Psychosis A disorder involving profound disturbances in perception, rational thinking, or affect.

Psychosocial stage In Erikson's theory, the developmental stages refer to eight major challenges that appear successively across the lifespan, which require an indi-

vidual to rethink his or her goals, as well as relationships with others.

Psychosurgery The general term for surgical intervention in the brain to treat psychological disorders.

Puberty The onset of sexual maturity.

Punishment An aversive consequence which, occurring after a response, diminishes the strength of that response. (Compare with *negative reinforcement*.)

Random assignment A process used to assign individuals to various experimental conditions by chance alone.

Ratio schedule A program by which reinforcement depends on the number of prior correct responses.

Rational–emotive behavior therapy (REBT) Albert Ellis's brand of cognitive therapy, based on the idea that irrational thoughts and negative emotions are the cause of mental disorders.

Recall A retrieval method in which one must reproduce previously presented information.

Reciprocal determinism The process in which cognitions, behavior, and the environment mutually influence each other.

Recognition A retrieval method in which one must identify present stimuli as having been previously presented.

Redemptive self A common self-narrative identified by McAdams in generative Americans. The redemptive self involves a sense of being called to overcome obstacles in the effort to help others.

Reflection of feeling Carl Rogers's technique of paraphrasing the clients' words, attempting to capture the emotional tone expressed.

Reflex Simple unlearned response triggered by stimuli—such as the knee-jerk reflex set off by tapping the tendon just below your kneecap.

Reinforcement contingencies Relationships between a response and the changes in stimulation that follow the response.

Reinforcer A condition (involving either the presentation or removal of a stimulus) that occurs after a response and strengthens that response.

Reliability An attribute of a psychological test that gives consistent results.

REM rebound A condition of increased REM sleep following REM-sleep deprivation.

REM sleep A stage of sleep that occurs approximately every 90 minutes, marked by bursts of rapid eye movements occurring under closed eyelids. REM sleep periods are associated with dreaming.

Replication In research, this refers to doing a study over to see whether the same results are obtained. As a control for bias, replication is often done by someone other than the researcher who performed the original study.

Representativeness bias A faulty heuristic strategy based on the presumption that, once people or events are categorized, they share all the features of other members in that category.

Repression An unconscious process that excludes unacceptable thoughts and feelings from awareness and memory.

Resilience The capacity to adapt, achieve well-being, and cope with stress, in spite of serious threats to development.

Resistance phase Second phase of the GAS, during which the body adapts to and maintains resources to cope with the stressor.

Resting potential The electrical charge of the axon in its inactive state, when the neuron is ready to "fire."

Reticular formation A pencil-shaped structure forming the core of the brain stem. The reticular formation arouses the cortex to keep the brain alert and attentive to new stimulation.

Retina The thin light-sensitive layer at the back of the eyeball. The retina contains millions of photoreceptors and other nerve cells.

Retrieval The third basic task of memory, involving the location and recovery of information from memory.

Retrieval cue Stimulus that is used to bring a memory to consciousness or to cue a behavior.

Retroactive interference A cause of forgetting by which newly learned information prevents retrieval of previously stored material.

Retrograde amnesia The inability to remember information previously stored in memory. (Compare with anterograde amnesia.)

Revolution in aging A change in the way people think about aging in modern industrialized nations. This new perspective grows out of increased longevity, better health care, and more lifestyle choices available to older adults. It has also stimulated the psychological study of adult development.

Reward theory of attraction A social learning view that predicts we like best those who give us maximum rewards at minimum cost.

Rite of passage Social ritual that marks the transition between developmental stages, especially between childhood and adulthood.

Rods Photoreceptors in the retina that are especially sensitive to dim light but not to colors. They are rod-shaped.

Romantic love A temporary and highly emotional condition based on infatuation and sexual desire.

Rorschach Inkblot Technique A projective test requiring subjects to describe what they see in a series of ten inkblots.

Rumination Dwelling on negative thoughts in response to stress, a behavior which compromises the immune system.

Savant syndrome Found in individuals having a remarkable talent (such as the ability to determine the day of the week for any given date) even though they are mentally slow in other domains.

Scapegoating Blaming an innocent person or a group for one's own troubles and then discriminating against or abusing them.

Schedule of reinforcement A program specifying the frequency and timing of re-inforcements.

Schema Cluster of related information that represents ideas or concepts in semantic memory. Schemas provide a context for understanding objects and events.

Schizophrenia (pronounced *skits-o-FRENNY-a*) A psychotic disorder involving distortions in thoughts, perceptions, and/or emotions. Biologically based.

Schlesinger Report Report issued by one of the official investigations of the Abu Ghraib Prison abuses, headed by James Schlesinger, former Secretary of Defense. It highlighted the social psychological factors that contributed to creating an abusive environment.

Scientific method A five-step process for empirical investigation of a hypothesis under conditions designed to control biases and subjective judgments. Script A cluster of knowledge about sequences of events and actions expected to occur in particular settings.

Seasonal affective disorder (SAD) A form of depression believed to be caused by deprivation of sunlight.

Secondary control Efforts aimed at controlling one's reactions to external events.

Secure attachment The attachment style of children who are relaxed and comfortable with their caregivers and tolerant of strangers and new experiences—as contrasted with children who are *insecurely attached*.

Selective social interaction Choosing to restrict the number of one's social contacts to those who are the most gratifying.

Self-actualizing personality A healthy individual who has met his or her basic needs and is free to be creative and fulfill his or her potentialities.

Self-consistency bias The commonly held idea that we are more consistent in our attitudes, opinions, and beliefs than we actually are.

Self-disclosure The sharing of personal information and feelings to another person as part of the process of developing trust.

Self-fulfilling prophecy Observations or behaviors that result primarily from expectations.

Self-help support groups Groups, such as Alcoholics Anonymous, that provide social support and an opportunity for sharing ideas about dealing with common problems. Such groups are typically organized and run by laypersons, rather than professional therapists.

Self-narrative The "stories" one tells about oneself. Self-narratives help people sense a thread of consistency through their personality over time.

Self-serving bias An attributional pattern in which one takes credit for success but denies responsibility for failure. (Compare with *fundamental attribution error*.)

Semantic memory A subdivision of declarative memory that stores general knowledge, including the meanings of words and concepts.

Sensation seekers In Zuckerman's theory, individuals who have a biological need for higher levels of stimulation than do most other people.

GLOSSARY

Sensation The process by which stimulation of a sensory receptor produces neural impulses that the brain interprets as a sound, a visual image, an odor, a taste, a pain, or other sensory image. Sensation represents the first series of steps in processing of incoming information.

Sense-making One aspect of finding meaning in a stressful situation, which involves perceiving the stressor in a manner consistent with our expectations of the world as predictable, controllable, and nonrandom.

Sensitive period A span of time during which the organism is especially responsive to stimuli of a particular sort. Organisms may have sensitive or "critical" periods for exposure to certain hormones or chemicals; similarly, they may have sensitive or "critical" periods for learning language or receiving the visual stimulation necessary for normal development of vision.

Sensorimotor intelligence Piaget's term for the infant's approach to the world, relying on relatively simple physical (motor) responses to sensory experience, with very little cognition ("intelligence") involved.

Sensorimotor stage The first stage in Piaget's theory, during which the child relies heavily on innate motor responses to stimuli.

Sensory adaptation Loss of responsiveness in receptor cells after stimulation has remained unchanged for a while, as when a swimmer becomes adapted to the temperature of the water.

Sensory memory The first of three memory stages, preserving brief sensory impressions of stimuli.

Sensory neuron A nerve cell that carries messages *toward* the central nervous system from sense receptors. Also called *afferent neurons*.

Separation anxiety A common pattern of distress seen in young children when separated from their caregivers.

Serial position effect A form of interference related to the sequence in which information is presented. Generally, items in the middle of the sequence are less well remembered than items presented first or last.

Set point Refers to the tendency of the body to maintain a certain level of body fat and body weight.

Sex chromosomes The X and Y chromosomes that determine our physical sex characteristics.

Sexual orientation One's erotic attraction toward members of the same sex (a homosexual orientation), the opposite sex (heterosexual orientation), or both sexes (a bisexual orientation).

Sexual orientation The direction of one's sexual interests (usually for individuals of the same sex, the opposite sex, or both sexes).

Sexual response cycle The four-stage sequence of arousal, plateau, orgasm, and resolution occurring in both men and women.

Sexual scripts Socially learned ways of responding in sexual situations.

Shaping An operant learning technique in which a new behavior is gradually produced by reinforcing responses that are similar to the desired response.

Shyness A common temperamental condition marked by social inhibition, introversion, and social skills deficits.

Signal detection theory Explains how we detect "signals," consisting of stimulation affecting our eyes, ears, nose, skin, and other sense organs. Signal detection theory says that sensation is a judgment the sensory system makes about incoming stimulation. Often, it occurs outside of consciousness. In contrast to older theories from psychophysics, signal detection theory takes observer characteristics into account.

Similarity principle The notion that people are attracted to those who are most similar to themselves on significant dimensions.

Situationism The view that environmental conditions may influence people's behavior as much or more than their personal dispositions do, under some circumstances.

Skin senses Sensory systems for processing touch, warmth, cold, texture, and pain.

Sleep apnea A respiratory disorder in which the person intermittently stops breathing many times while asleep.

Sleep debt A sleep deficiency caused by not getting the amount of sleep that one requires for optimal functioning.

Sleep paralysis A condition in which a sleeper is unable to move any of the voluntary muscles, except those controlling the eyes. Sleep paralysis normally occurs during REM sleep.

Social–cognitive–behavioral approach A psychological alternative to the medical model that views psychological disorder through a combination of the social, cognitive, and behavioral perspectives.

Social-cognitive theories A group of theories that involve explanations of limited, but important, aspects of personality (e.g., locus of control). All grew out of experimental psychology.Social comparison A type of cognitive restructuring involving comparisons between oneself and others in similar situations.

Social context The combination of (a) people, (b) the activities and interactions among people, (c) the setting in which behavior occurs, and (d) the expectations and social norms governing behavior in that setting.

Social distance The perceived difference or similarity between oneself and another person or group.

Social neuroscience An area of research that uses methodologies from brain sciences to investigate various types of social behavior, such as stereotyping in prejudice, attitudes, self-control, and emotional regulation.

Social norms A group's expectations regarding what is appropriate and acceptable for its members' attitudes and behaviors.

Social psychology The branch of psychology that studies the effects of social variables and cognitions on individual behavior and social interactions.

Social Readjustment Rating Scale (SRRS) Psychological rating scale designed to measure stress levels by attaching numerical values to common life changes.

Social reality An individual's subjective interpretation of other people and of one's relationships with them.

Social role A socially defined pattern of behavior that is expected of persons in a given setting or group.

Social support Resources others provide to help an individual cope with stress.

Socialization The lifelong process of shaping an individual's behavior patterns, values, standards, skills, attitudes, and motives to conform to those regarded as desirable in a particular society.

Societal stressor A chronic stressor resulting from pressure in one's social, cultural, or economic environment.

Sociocultural perspective A main psychological viewpoint emphasizing the importance of social interaction, social learning, and a cultural perspective.

Soma The part of a cell (such as a neuron) containing the nucleus, which includes the chromosomes. Also called the *cell body*.

Somatic nervous system A division of the peripheral nervous system that carries sensory information to the central nervous system and also sends voluntary messages to the body's skeletal muscles.

Somatoform disorders Psychological problem appearing in the form of bodily symptoms or physical complaints, such as weakness or excessive worry about disease. The somatoform disorders include conversion disorder and hypochondriasis.

Somatosensory cortex A strip of the parietal lobe lying just behind the central fissure. The somatosensory cortex is involved with sensations of touch.

Spontaneous recovery The reappearance of an extinguished conditioned response after a time delay.

Stages of moral reasoning Distinctive way of thinking about ethical and moral problems. According to Kohlberg, moral reasoning progresses through a series of developmental stages that are similar to Piaget's stages of cognitive development.

Stage theory An explanation of development that emphasizes distinctive or rather abrupt changes. A stage theory of cognitive development, then, emphasizes revolutionary changes in thought processes.

Stanford Prison Experiment Classic study of institutional power in directing normal, healthy college student volunteers playing randomly assigned roles of prisoners and guards to behave contrary to their dispositional tendencies, as cruel guards or pathological prisoners.

Stereotype threat The negative effect on performance that arises when an individual becomes aware that members of his or her group are expected to perform poorly in that domain.

Stimulant A drug that arouses the central nervous system, speeding up mental and physical responses.

Stimulus discrimination Learning to respond to a particular stimulus but not to stimuli that are similar.

Stimulus generalization The extension of a learned response to stimuli that are similar to the conditioned stimulus.

Storage The second of the three basic tasks of memory, involving the retention of encoded material over time.

Stress The physical and mental response to a stressor.

Stressor A stressful event or situation.

Structuralism A historical school of psychology devoted to uncovering the basic structures that make up mind and thought. Structuralists sought the "elements" of conscious experience.

Subjective well-being (SWB) An individual's evaluative response to life, commonly called happiness, which includes cognitive and emotional reactions.

Suggestibility The process of memory distortion as the result of deliberate or in-advertent suggestion. Occurs in hypnosis.

Superego The mind's storehouse of values, including moral attitudes learned from parents and from society; roughly the same as the common notion of the conscience.

Survey A technique used in descriptive research, typically involving seeking people's responses to a prepared set of verbal items.

Sympathetic division The part of the autonomic nervous system that sends messages to internal organs and glands that help us respond to stressful and emergency situations.

Synapse The microscopic gap that serves as a communications link between neurons. Synapses also occur between neurons and the muscles or glands they serve.

Synaptic pruning The process of trimming unused brain connections, making neurons available for future development.

Synaptic transmission The relaying of information across the synapse by means of chemical neurotransmitters.

Synchronicity The close coordination between the gazing, vocalizing, touching, and smiling of infants and caregivers.

Synesthesia The mixing of sensations across sensory modalities, as in tasting shapes or seeing colors associated with numbers.

System power Influences on behavior that come from top-down sources in the form of creating and maintaining various situations that in turn have an impact on actions of individuals in those behavioral contexts.

Systematic desensitization A behavioral therapy technique in which anxiety is extinguished by exposing the patient to an anxiety-provoking stimulus.

Tardive dyskinesia An incurable disorder of motor control, especially involving muscles of the face and head, resulting from long-term use of antipsychotic drugs.

Teachers of psychology Psychologists whose primary job is teaching, typically in high schools, colleges, and universities.

Telegraphic speech Short, simple sequences of nouns and verbs without plurals, tenses, or function words like *the* and *of*—somewhat like the language once used in telegrams.

Temperament An individual's characteristic manner of behavior or reaction—assumed to have a strong genetic basis.

Temporal lobes Cortical lobes that process sounds, including speech. The temporal lobes are probably involved in storing long-term memories.

Tend-and-befriend Stress response model proposing that females are biologically predisposed to respond to threat by nurturing and protecting offspring and seeking social support.

Teratogen Substance from the environment, including viruses, drugs, and other chemicals, that can damage the developing organism during the prenatal period.

Terminal buttons Tiny bulblike structures at the end of the axon that contain neurotransmitters that carry the neuron's message into the synapse.

Terrorism A type of disaster caused by human malevolence with the goal of disrupting society by creating fear and danger.

Thalamus The brain's central "relay station," situated just atop the brain stem. Nearly all the messages going into or out of the brain go through the thalamus.

Thematic Apperception Test (TAT) A projective test requiring subjects to make up stories that explain ambiguous pictures.

Theory A testable explanation for a set of facts or observations. In science, a theory is not just speculation or a guess.

GLOSSARY

Theory of mind An awareness that other people's behavior may be influenced by beliefs, desires, and emotions that differ from one's own.

Therapeutic alliance The relationship between the therapist and the client, with both parties working together to help the client deal with psychological or behavioral issues.

Therapeutic community Jones's term for a program of treating mental disorder by making the institutional environment supportive and humane for patients.

Therapy A general term for any treatment process; in psychology and psychiatry, therapy refers to a variety of psychological and biomedical techniques aimed at dealing with mental disorders or coping with problems of living.

Timbre The quality of a sound wave that derives from the wave's complexity (combination of pure tones). *Timbre* comes from the Greek word for "drum," as does the term *tympanic membrane*, or eardrum.

Token economy A therapeutic method, based on operant conditioning, by which individuals are rewarded with tokens, which act as secondary reinforcers. The tokens can be redeemed for a variety of rewards and privileges.

Tolerance The reduced effectiveness a drug has after repeated use.

Top-down processing Perceptual analysis that emphasizes the perceiver's expectations, concept memories, and other cognitive factors, rather than being driven by the characteristics of the stimulus. "Top" refers to a mental set in the brain—which stands at the "top" of the perceptual processing system.

TOT phenomenon The inability to recall a word, while knowing that it is in memory. People often describe this frustrating experience as having the word "on the tip of the tongue."

Trait and temperament psychology A psychological perspective that views behavior and personality as the products of enduring psychological characteristics.

Traits Multiple, stable personality characteristics that are presumed to exist within the individual and guide his or her thoughts and actions under various conditions.

Transcranial magnetic stimulation (TMS) A treatment that involves magnetic stimulation of specific regions of the brain. Unlike ECT, TMS does not produce a seizure.

Transduction Transformation of one form of information into another—especially the transformation of stimulus information into nerve signals by the sense organs.

Transience The impermanence of a longterm memory. Transience is based on the idea that long-term memories gradually fade in strength over time.

Transition An individual's redefinition or transformation of a life role.

Traumatic stressor A situation that threatens one's physical safety, arousing feelings of fear, horror, or helplessness.

Triangular theory of love A theory that describes various kinds of love in terms of three components: passion (erotic attraction), intimacy (sharing feelings and confidences), and commitment (dedication to putting this relationship first in one's life). Developed by Robert Sternberg.

Triarchic theory The term for Sternberg's theory of intelligence; so called because it combines three ("tri-") main forms of intelligence.

Trichromatic theory The idea that colors are sensed by three different types of cones sensitive to light in the red, blue, and green wavelengths. The trichromatic (threecolor) theory explains the earliest stage of color sensation. In honor of its originators, this is sometimes called the Young-Helmholtz theory.

Trust The major developmental goal during the first 18 months of life. According to Erikson's theory, the child must choose between trusting or not trusting others.

Twin study A means of separating the effects of nature and nurture by which investigators may compare identical twins to fraternal twins or compare twins separated early in life and raised in different environments.

Two-factor theory The idea that emotion results from the cognitive appraisal of both physical arousal (Factor #1) and an emotion-provoking stimulus (Factor #2).

Tympanic membrane The eardrum.

Type A Behavior pattern characterized by intense, angry, competitive, or hostile responses to challenging situations.

Tyranny of choice The impairment of effective decision making, when con-

fronted with an overwhelming number of choices.

Unconditioned response (UCR) In classical conditioning, the response elicited by an unconditioned stimulus without prior learning.

Unconditioned stimulus (UCS) In classical conditioning, UCS is the stimulus that elicits an unconditioned response.

Unconscious In Freudian theory, this is the psychic domain of which the individual is not aware but that is the storehouse of repressed impulses, drives, and conflicts unavailable to consciousness.

Unconscious motivation A motive of which one is consciously unaware. Freud's psychoanalytic theory emphasized unconscious motivation.

Uninvolved parent One of the four parenting styles, characterized by indifference or rejection, sometimes to the point of neglect or abuse.

Upward social comparison Comparison between one's own stressful situation and others in a similar situation who are coping more effectively, with the goal of learning from others' examples.

Validity An attribute of a psychological test that actually measures what it is being used to measure.

Variable interval (VI) schedule A reinforcement program by which the time period between reinforcements varies from trial to trial.

Variable ratio (VR) schedule A reinforcement program by which the number of responses required for a reinforcement varies from trial to trial.

Vestibular sense The sense of body orientation with respect to gravity. The vestibular sense is closely associated with the inner ear and, in fact, is carried to the brain on a branch of the auditory nerve.

Vicarious traumatization Severe stress caused by exposure to traumatic images or stories that cause the observer to become engaged with the stressful material.

Visible spectrum The tiny part of the electromagnetic spectrum to which our eyes are sensitive. The visible spectrum of other creatures may be slightly different from our own.

Visual cortex The visual processing areas of cortex in the occipital and temporal lobes.

Wave metaphor A way of conceptualizing cognitive development, as occurring more gradually—in "waves"—rather than abruptly, as the stage theory suggests.

Weber's law The concept that the size of a JND is proportional to the intensity of the stimulus; the JND is large when the stimulus intensity is high and small when the stimulus intensity is low.

Whole method The mnemonic strategy of first approaching the material to be learned "as a whole," forming an impres-

sion of the overall meaning of the material. The details are later associated with this overall impression.

Whole-person perspectives A group of psychological perspectives that take a global view of the person: Included are *psychodynamic psychology, humanistic psychology, and trait and temperament psychology.*

Withdrawal A pattern of uncomfortable or painful physical symptoms and cravings experienced by the user when the level of drug is decreased or the drug is eliminated.

Working memory The second of three memory stages, and the one most limited in capacity. It preserves recently perceived events or experiences for less than a minute without rehearsal.

Zygote A fertilized egg.