Vocabulary

Ablation
Surgical removal of brain tissue.

Absolute stability
Consistency in the level or amount of a personality attribute over time.

Absolute threshold
The smallest amount of stimulation needed for detection by a sense.

Acceptance and commitment therapy
A therapeutic approach designed to foster nonjudgmental observation of one’s own mental processes.

Action potential
A transient all-or-nothing electrical current that is conducted down the axon when the membrane potential reaches the threshold of excitation.

Active person–environment transactions
The interplay between individuals and their contextual circumstances that occurs whenever individuals play a key role in seeking out, selecting, or otherwise manipulating aspects of their environment.

Adaptation
The fact that after people first react to good or bad events, sometimes in a strong way, their feelings and reactions tend to dampen down over time and they return toward their original level of subjective well-being.

Adherence
In health, it is the ability of a patient to maintain a health behavior prescribed by a physician. This might include taking medication as prescribed, exercising more, or eating less high-fat food.

Adoption study
A behavior genetic research method that involves comparison of adopted children to their adoptive and biological parents.

Affect
Feelings that can be described in terms of two dimensions, the dimensions of arousal and valence (Figure 2). For example, high arousal positive states refer to excitement, elation, and enthusiasm. Low arousal positive states refer to calm, peacefulness, and relaxation. Whereas “actual affect” refers to the states that people actually feel, “ideal affect” refers to the states that people ideally want to feel.

Afferent nerves
Nerves that carry messages to the brain or spinal cord.

Age effects
Differences in personality between groups of different ages that are related to maturation and development instead of birth cohort differences.

Age identity
How old or young people feel compared to their chronological age; after early adulthood, most people feel younger than their chronological age.

Agnosia
Loss of the ability to perceive stimuli.

Agnosias
Due to damage of Wernicke’s area. An inability to recognize objects, words, or faces.

Agonists
A drug that increases or enhances a neurotransmitter’s effect.

Agoraphobia
A sort of anxiety disorder distinguished by feelings that a place is uncomfortable or may be unsafe because it is significantly open or crowded.

Agreeableness
A personality trait that reflects a person’s tendency to be compassionate, cooperative, warm, and caring to others. People low in agreeableness tend to be rude, hostile, and to pursue their own interests over those of others.

Agreeableness
A core personality trait that includes such dispositional characteristics as being sympathetic, generous, forgiving, and helpful, and behavioral tendencies toward harmonious social relations and likeability.

Alogia
A reduction in the amount of speech and/or increased pausing before the initiation of speech.

Altruism
A motivation for helping that has the improvement of another’s welfare as its ultimate goal, with no expectation of any benefits for the helper.

Ambulatory assessment
An overarching term to describe methodologies that assess the behavior, physiology, experience, and environments of humans in naturalistic settings.

Anhedonia
Loss of interest or pleasure in activities one previously found enjoyable or rewarding.

Anhedonia/amotivation
A reduction in the drive or ability to take the steps or engage in actions necessary to obtain the potentially positive outcome.

Anosmia
Loss of the ability to smell.

Antagonist
A drug that blocks a neurotransmitter’s effect.

Anterograde amnesia
Inability to form new memories for facts and events after the onset of amnesia.

Antisocial
A pervasive pattern of disregard and violation of the rights of others. These behaviors may be aggressive or destructive and may involve breaking laws or rules, deceit or theft.

Anxiety
A mood state characterized by negative affect, muscle tension, and physical arousal in which a person apprehensively anticipates future danger or misfortune.

Aphasia
Due to damage of the Broca’s area. An inability to produce or understand words.

Arcuate fasciculus
A fiber tract that connects Wernicke’s and Broca’s speech areas.

Arousal: cost–reward model
An egoistic theory proposed by Piliavin et al. (1981) that claims that seeing a person in need leads to the arousal of unpleasant feelings, and observers are motivated to eliminate that aversive state, often by helping the victim. A cost–reward analysis may lead observers to react in ways other than offering direct assistance, including indirect help, reinterpretation of the situation, or fleeing the scene.

Attraction
A connection between personality attributes and aspects of the environment that occurs because individuals with particular traits are drawn to certain environments.

Attributional style
The tendency by which a person infers the cause or meaning of behaviors or events.

Attrition
A connection between personality attributes and aspects of the environment that occurs because individuals with particular traits drop out from certain environments.

Audition
Ability to process auditory stimuli. Also called hearing.

Auditory canal
Tube running from the outer ear to the middle ear.

Auditory hair cells
Receptors in the cochlea that transduce sound into electrical potentials.
Authoritative
A parenting style characterized by high (but reasonable) expectations for children’s behavior, good communication, warmth and nurturance, and the use of reasoning (rather than coercion) as preferred responses to children’s misbehavior.

Autobiographical memory
Memory for the events of one’s life.

Autobiographical narratives
A qualitative research method used to understand characteristics and life themes that an individual considers to uniquely distinguish him- or herself from others.

Autobiographical reasoning
The ability, typically developed in adolescence, to derive substantive conclusions about the self from analyzing one’s own personal experiences.

Automatic bias
Automatic biases are unintended, immediate, and irresistible.

Automatic thoughts
Thoughts that occur spontaneously; often used to describe problematic thoughts that maintain mental disorders.

Autonomic nervous system
A part of the peripheral nervous system that connects to glands and smooth muscles. Consists of sympathetic and parasympathetic divisions.

Average life expectancy
Mean number of years that 50% of people in a specific birth cohort are expected to survive. This is typically calculated from birth but is also sometimes re-calculated for people who have already reached a particular age (e.g., 65).

Aversive racism
Aversive racism is unexamined racial bias that the person does not intend and would reject, but that avoids inter-racial contact.

Avoidant
A pervasive pattern of social inhibition, feelings of inadequacy, and hypersensitivity to negative evaluation.

Awareness
A conscious experience or the capability of having conscious experiences, which is distinct from self-awareness, the conscious understanding of one’s own existence and individuality.

Axial plane
See “horizontal plane.”

Axon
Part of the neuron that extends off the soma, splitting several times to connect with other neurons; main output of the neuron.

Balancing between goals
Shifting between a focal goal and other goals or temptations by putting less effort into the focal goal—usually with the intention of coming back to the focal goal at a later point in time.

Basal ganglia
Subcortical structures of the cerebral hemispheres involved in voluntary movement.

Behavioral genetics
The empirical science of how genes and environments combine to generate behavior.

Behavioral medicine
A field similar to health psychology that integrates psychological factors (e.g., emotion, behavior, cognition, and social factors) in the treatment of disease. This applied field includes clinical areas of study, such as occupational therapy, hypnosis, rehabilitation or medicine, and preventative medicine.

Big Five
A broad taxonomy of personality trait domains repeatedly derived from studies of trait ratings in adulthood and encompassing the categories of (1) extraversion vs. introversion, (2) neuroticism vs. emotional stability, (3) agreeable vs. disagreeable, (4) conscientiousness vs. nonconscientiousness, and (5) openness to experience vs. conventionality. By late childhood and early adolescence, people’s self-attributions of personality traits, as well as the trait attributions
made about them by others, show patterns of intercorrelations that confirm with the five-factor structure obtained in studies of adults.

Big-C Creativity
Creative ideas that have an impact well beyond the everyday life of home or work. At the highest level, this kind of creativity is that of the creative genius.

Binocular disparity
Difference is images processed by the left and right eyes.

Binocular vision
Our ability to perceive 3D and depth because of the difference between the images on each of our retinas.

Biofeedback
The process by which physiological signals, not normally available to human perception, are transformed into easy-to-understand graphs or numbers. Individuals can then use this information to try to change bodily functioning (e.g., lower blood pressure, reduce muscle tension).

Biological vulnerability
A specific genetic and neurobiological factor that might predispose someone to develop anxiety disorders.

Biomedical Model of Health
A reductionist model that posits that ill health is a result of a deviation from normal function, which is explained by the presence of pathogens, injury, or genetic abnormality.

Biopsychosocial Model of Health
An approach to studying health and human function that posits the importance of biological, psychological, and social (or environmental) processes.

Birth cohort
Individuals born in a particular year or span of time.

Blatant biases
Blatant biases are conscious beliefs, feelings, and behavior that people are perfectly willing to admit, are mostly hostile, and openly favor their own group.

Blocking
In classical conditioning, the finding that no conditioning occurs to a stimulus if it is combined with a previously conditioned stimulus during conditioning trials. Suggests that information, surprise value, or prediction error is important in conditioning.

Borderline
A pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity.

“Bottom-up” or external causes of happiness
Situational factors outside the person that influence his or her subjective well-being, such as good and bad events and circumstances such as health and wealth.

Bottom-up processing
Building up to perceptual experience from individual pieces.

Bouncing balls illusion
The tendency to perceive two circles as bouncing off each other if the moment of their contact is accompanied by an auditory stimulus.

Brain stem
The “trunk” of the brain comprised of the medulla, pons, midbrain, and diencephalon.

Broca’s area
An area in the frontal lobe of the left hemisphere. Implicated in language production.

Bystander intervention
The phenomenon whereby people intervene to help others in need even if the other is a complete stranger and the intervention puts the helper at risk.

Callosotomy
Surgical procedure in which the corpus callosum is severed (used to control severe epilepsy).

Case study
A thorough study of a patient (or a few patients) with naturally occurring lesions.

Catatonia
Behaviors that seem to reflect a reduction in responsiveness to the external environment. This can include holding unusual postures for long periods of time, failing to respond to verbal or motor prompts from another person, or excessive and seemingly purposeless motor activity.

**Categorize**
To sort or arrange different items into classes or categories.

**Cause-and-effect**
Related to whether we say one variable is causing changes in the other variable, versus other variables that may be related to these two variables.

**Cell membrane**
A bi-lipid layer of molecules that separates the cell from the surrounding extracellular fluid.

**Central route to persuasion**
Persuasion that employs direct, relevant, logical messages.

**Central sulcus**
The major fissure that divides the frontal and the parietal lobes.

**Cerebellum**
The distinctive structure at the back of the brain, Latin for “small brain.”

**Cerebellum**
A nervous system structure behind and below the cerebrum. Controls motor movement coordination, balance, equilibrium, and muscle tone.

**Cerebral cortex**
The outermost gray matter of the cerebrum; the distinctive convolutions characteristic of the mammalian brain.

**Cerebral hemispheres**
The cerebral cortex, underlying white matter, and subcortical structures.

**Cerebrum**
Consists of left and right hemispheres that sit at the top of the nervous system and engages in a variety of higher-order functions.

**Chemical senses**
Our ability to process the environmental stimuli of smell and taste.

**Chronic disease**
A health condition that persists over time, typically for periods longer than three months (e.g., HIV, asthma, diabetes).

**Chronic stress**
Discrete or related problematic events and conditions which persist over time and result in prolonged activation of the biological and/or psychological stress response (e.g., unemployment, ongoing health difficulties, marital discord).

**Chunk**
The process of grouping information together using our knowledge.

**Chutes and Ladders**
A numerical board game that seems to be useful for building numerical knowledge.

**Cingulate gyrus**
A medial cortical portion of the nervous tissue that is a part of the limbic system.

**Classical conditioning**
The procedure in which an initially neutral stimulus (the conditioned stimulus, or CS) is paired with an unconditioned stimulus (or US). The result is that the conditioned stimulus begins to elicit a conditioned response (CR). Classical conditioning is nowadays considered important as both a behavioral phenomenon and as a method to study simple associative learning. Same as Pavlovian conditioning.

**Classical conditioning**
Describes stimulus-stimulus associative learning.

**Cochlea**
Spiral bone structure in the inner ear containing auditory hair cells.

**Cognitive bias modification**
Using exercises (e.g., computer games) to change problematic thinking habits.

Cognitive-behavioral therapy (CBT)
A family of approaches with the goal of changing the thoughts and behaviors that influence psychopathology.

Cohort
Group of people typically born in the same year or historical period, who share common experiences over time; sometimes called a generation (e.g., Baby Boom Generation).

Cohort effects
Differences in personality that are related to historical and social factors unique to individuals born in a particular year.

Collective efficacy
The shared beliefs among members of a group about the group’s ability to effectively perform the tasks needed to attain a valued goal.

Collective self-esteem
Feelings of self-worth that are based on evaluation of relationships with others and membership in social groups.

Commitment
The sense that a goal is both valuable and attainable.

Common knowledge effect
The tendency for groups to spend more time discussing information that all members know (shared information) and less time examining information that only a few members know (unshared).

Comorbidity
Describes a state of having more than one psychological or physical disorder at a given time.

Computerized axial tomography
A noninvasive brain-scanning procedure that uses X-ray absorption around the head.

Concrete operations stage
Piagetian stage between ages 7 and 12 when children can think logically about concrete situations but not engage in systematic scientific reasoning.

Conditioned compensatory response
In classical conditioning, a conditioned response that opposes, rather than is the same as, the unconditioned response. It functions to reduce the strength of the unconditioned response. Often seen in conditioning when drugs are used as unconditioned stimuli.

Conditioned response
A learned reaction following classical conditioning, or the process by which an event that automatically elicits a response is repeatedly paired with another neutral stimulus (conditioned stimulus), resulting in the ability of the neutral stimulus to elicit the same response on its own.

Conditioned response (CR)
The response that is elicited by the conditioned stimulus after classical conditioning has taken place.

Conditioned stimulus (CS)
An initially neutral stimulus (like a bell, light, or tone) that elicits a conditioned response after it has been associated with an unconditioned stimulus.

Cones
Photoreceptors of the retina sensitive to color. Located primarily in the fovea.

Confidence interval
An interval of plausible values for a population parameter; the interval of values within the margin of error of a statistic.

Conformity
Changing one’s attitude or behavior to match a perceived social norm.

Confounds
Factors that undermine the ability to draw causal inferences from an experiment.

Conscience
The cognitive, emotional, and social influences that cause young children to create and act consistently with internal standards of conduct.

Conscientiousness
A personality trait that reflects a person’s tendency to be careful, organized, hardworking, and to follow rules.

Conscientiousness
A personality trait consisting of self-control, orderliness, industriousness, and traditionalism.

Conscious experience
The first-person perspective of a mental event, such as feeling some sensory input, a memory, an idea, an emotion, a mood, or a continuous temporal sequence of happenings.

Conscious goal activation
When a person is fully aware of contextual influences and resulting goal-directed behavior.

Conservation problems
Problems pioneered by Piaget in which physical transformation of an object or set of objects changes a perceptually salient dimension but not the quantity that is being asked about.

Consolidation
Process by which a memory trace is stabilized and transformed into a more durable form.

Consoliation
The process occurring after encoding that is believed to stabilize memory traces.

Contemplative science
A research area concerned with understanding how contemplative practices such as meditation can affect individuals, including changes in their behavior, their emotional reactivity, their cognitive abilities, and their brains. Contemplative science also seeks insights into conscious experience that can be gained from first-person observations by individuals who have gained extraordinary expertise in introspection.

Context
Stimuli that are in the background whenever learning occurs. For instance, the Skinner box or room in which learning takes place is the classic example of a context. However, “context” can also be provided by internal stimuli, such as the sensory effects of drugs (e.g., being under the influence of alcohol has stimulus properties that provide a context) and mood states (e.g., being happy or sad). It can also be provided by a specific period in time—the passage of time is sometimes said to change the “temporal context.”

Continuous development
Ways in which development occurs in a gradual incremental manner, rather than through sudden jumps.

Continuous distributions
Characteristics can go from low to high, with all different intermediate values possible. One does not simply have the trait or not have it, but can possess varying amounts of it.

Contralateral
Literally “opposite side”; used to refer to the fact that the two hemispheres of the brain process sensory information and motor commands for the opposite side of the body (e.g., the left hemisphere controls the right side of the body).

Control
Feeling like you have the power to change your environment or behavior if you need or want to.

Convergent thinking
The opposite of divergent thinking, the capacity to narrow in on the single “correct” answer or solution to a given question or problem (e.g., giving the right response on an intelligence test).

Converging evidence
Similar findings reported from multiple studies using different methods.

Convoy Model of Social Relations
Theory that proposes that the frequency, types, and reciprocity of social exchanges change with age. These social exchanges impact the health and well-being of the givers and receivers in the convoy.

Coronal plane
A slice that runs from head to foot; brain slices in this plane are similar to slices of a loaf of bread, with the eyes being the front of the loaf.

Correlation
Measures the association between two variables, or how they go together.

Corresponsive principle
The idea that personality traits often become matched with environmental conditions such that an individual’s social context acts to accentuate and reinforce their personality attributes.

Cost–benefit analysis
A decision-making process that compares the cost of an action or thing against the expected benefit to help determine the best course of action.

Crossmodal phenomena
Effects that concern the influence of the perception of one sensory modality on the perception of another.

Crossmodal receptive field
A receptive field that can be stimulated by a stimulus from more than one sensory modality.

Crossmodal stimulus
A stimulus with components in multiple sensory modalities that interact with each other.

Cross-sectional studies
Research method that provides information about age group differences; age differences are confounded with cohort differences and effects related to history and time of study.

Cross-sectional study/design
A research design that uses a group of individuals with different ages (and birth cohorts) assessed at a single point in time.

Crowds
Adolescent peer groups characterized by shared reputations or images.

Crystallized intelligence
Type of intellectual ability that relies on the application of knowledge, experience, and learned information.

Cue overload principle
The principle stating that the more memories that are associated to a particular retrieval cue, the less effective the cue will be in prompting retrieval of any one memory.

Culture
Shared, socially transmitted ideas (e.g., values, beliefs, attitudes) that are reflected in and reinforced by institutions, products, and rituals.

Cumulative continuity principle
The generalization that personality attributes show increasing stability with age and experience.

Daily Diary method
A methodology where participants complete a questionnaire about their thoughts, feelings, and behavior of the day at the end of the day.

Daily hassles
Irritations in daily life that are not necessarily traumatic, but that cause difficulties and repeated stress.

Dark adaptation
Adjustment of eye to low levels of light.

Day reconstruction method (DRM)
A methodology where participants describe their experiences and behavior of a given day retrospectively upon a systematic reconstruction on the following day.

Decay
The fading of memories with the passage of time.

Declarative memory
Conscious memories for facts and events.

Deliberative phase
The first of the two basic stages of self-regulation in which individuals decide which of many potential goals to pursue at a given point in time.

Delusions
False beliefs that are often fixed, hard to change even in the presence of conflicting information, and often culturally influenced in their content.

Dendrite
Part of a neuron that extends away from the cell body and is the main input to the neuron.

Dependent
A pervasive and excessive need to be taken care of that leads to submissive and clinging behavior and fears of separation.

**Dependent variable**
The variable the researcher measures but does not manipulate in an experiment.

**Depth perception**
The ability to actively perceive the distance from oneself of objects in the environment.

**Descriptive norm**
The perception of what most people do in a given situation.

**Deviant peer contagion**
The spread of problem behaviors within groups of adolescents.

**Diagnostic criteria**
The specific criteria used to determine whether an individual has a specific type of psychiatric disorder. Commonly used diagnostic criteria are included in the Diagnostic and Statistical Manual of Mental Disorder, 5th Edition (DSM-5) and the Internal Classification of Disorders, Version 9 (ICD-9).

**Dialectical behavior therapy (DBT)**
A treatment often used for borderline personality disorder that incorporates both cognitive-behavioral and mindfulness elements.

**Dialectical worldview**
A perspective in DBT that emphasizes the joint importance of change and acceptance.

**Dichotic listening**
An experimental task in which two messages are presented to different ears.

**Differential stability**
Consistency in the rank-ordering of personality across two or more measurement occasions.

**Differential susceptibility**
Genetic factors that make individuals more or less responsive to environmental experiences.

**Differential threshold**
The smallest difference needed in order to differentiate two stimuli. (See Just Noticeable Difference (JND))

**Diffuse optical imaging (DOI)**
A neuroimaging technique that infers brain activity by measuring changes in light as it is passed through the skull and surface of the brain.

**Diffusion**
The force on molecules to move from areas of high concentration to areas of low concentration.

**Diffusion of responsibility**
When deciding whether to help a person in need, knowing that there are others who could also provide assistance relieves bystanders of some measure of personal responsibility, reducing the likelihood that bystanders will intervene.

**Discontinuous development**

**Discrimination**
Behavior or dress that is outside the norm for almost all subcultures. This would include odd dress, odd makeup (e.g., lipstick outlining a mouth for 1 inch), or unusual rituals (e.g., repetitive hand gestures).

**Disorganized behavior**
Behavior that is difficult to follow, either because answers do not clearly follow questions or because one sentence does not logically follow from another.
Distinctiveness
The principle that unusual events (in a context of similar events) will be recalled and recognized better than uniform (nondistinctive) events.

Distribution
The pattern of variation in data.

Divergent thinking
The opposite of convergent thinking, the capacity for exploring multiple potential answers or solutions to a given question or problem (e.g., coming up with many different uses for a common object).

Divided attention
The ability to flexibly allocate attentional resources between two or more concurrent tasks.

Dopamine
A neurotransmitter in the brain that is thought to play an important role in regulating the function of other neurotransmitters.

Dorsal pathway
Pathway of visual processing. The “where” pathway.

Double flash illusion
The false perception of two visual flashes when a single flash is accompanied by two auditory beeps.

Early adversity
Single or multiple acute or chronic stressful events, which may be biological or psychological in nature (e.g., poverty, abuse, childhood illness or injury), occurring during childhood and resulting in a biological and/or psychological stress response.

Ecological momentary assessment
An overarching term to describe methodologies that repeatedly sample participants’ real-world experiences, behavior, and physiology in real time.

Ecological validity
The degree to which a study finding has been obtained under conditions that are typical for what happens in everyday life.

Ectoderm
The outermost layer of a developing fetus.

Efferent nerves
Nerves that carry messages from the brain to glands and organs in the periphery.

Effortful control
A temperament quality that enables children to be more successful in motivated self-regulation.

Ego
Sigmund Freud’s conception of an executive self in the personality. Akin to this module’s notion of “the I,” Freud imagined the ego as observing outside reality, engaging in rational though, and coping with the competing demands of inner desires and moral standards.

Ego depletion
The state of diminished willpower or low energy associated with having exerted self-regulation.

Ego-depletion
The exhaustion of physiological and/or psychological resources following the completion of effortful self-control tasks, which subsequently leads to reduction in the capacity to exert more self-control.

Egoism
A motivation for helping that has the improvement of the helper’s own circumstances as its primary goal.

Electroencephalography
A technique that is used to measure gross electrical activity of the brain by placing electrodes on the scalp.

Electroencephalography (EEG)
A neuroimaging technique that measures electrical brain activity via multiple electrodes on the scalp.

Electronically activated recorder, or EAR
A methodology where participants wear a small, portable audio recorder that intermittently records snippets of ambient sounds around them.

**Electrostatic pressure**
The force on two ions with similar charge to repel each other; the force of two ions with opposite charge to attract to one another.

**Emotion-focused coping**
Coping strategy aimed at reducing the negative emotions associated with a stressful event.

**Emotions**
Changes in subjective experience, physiological responding, and behavior in response to a meaningful event. Emotions tend to occur on the order of seconds (in contrast to moods which may last for days).

**Empathic concern**
According to Batson’s empathy–altruism hypothesis, observers who empathize with a person in need (that is, put themselves in the shoes of the victim and imagine how that person feels) will experience empathic concern and have an altruistic motivation for helping.

**Empathy–altruism model**
An altruistic theory proposed by Batson (2011) that claims that people who put themselves in the shoes of a victim and imagining how the victim feel will experience empathic concern that evokes an altruistic motivation for helping.

**Empirical methods**
Approaches to inquiry that are tied to actual measurement and observation.

**Encoding**
The initial experience of perceiving and learning events.

**Encoding**
The process by which information gets into memory.

**Encoding**
The process of putting information into memory.

**Encoding specificity principle**
The hypothesis that a retrieval cue will be effective to the extent that information encoded from the cue overlaps or matches information in the engram or memory trace.

**Engrams**
A term indicating the change in the nervous system representing an event; also, memory trace.

**Enzyme**
A protein produced by a living organism that allows or helps a chemical reaction to occur.

**Enzyme induction**
Process through which a drug can enhance the production of an enzyme.

**Episodic memory**
Memory for events in a particular time and place.

**Episodic memory**
The ability to learn and retrieve new information or episodes in one’s life.

**Ethics**
Professional guidelines that offer researchers a template for making decisions that protect research participants from potential harm and that help steer scientists away from conflicts of interest or other situations that might compromise the integrity of their research.

**Event-related potentials**
A physiological measure of large electrical change in the brain produced by sensory stimulation or motor responses.

**Evocative person–environment transactions**
The interplay between individuals and their contextual circumstances that occurs whenever attributes of the individual draw out particular responses from others in their environment.

**Excitatory postsynaptic potentials**
A depolarizing postsynaptic current that causes the membrane potential to become more positive and move towards the threshold of excitation.

**Experience-sampling method**
A methodology where participants report on their momentary thoughts, feelings, and behaviors at different points in time over the course of a day.
Experimenter expectations
When the experimenter’s expectations influence the outcome of a study.

Exposure therapy
A form of intervention in which the patient engages with a problematic (usually feared) situation without avoidance or escape.

External cues
Stimuli in the outside world that serve as triggers for anxiety or as reminders of past traumatic events.

External validity
The degree to which a finding generalizes from the specific sample and context of a study to some larger population and broader settings.

Extinction
Decrease in the strength of a learned behavior that occurs when the conditioned stimulus is presented without the unconditioned stimulus (in classical conditioning) or when the behavior is no longer reinforced (in instrumental conditioning). The term describes both the procedure (the US or reinforcer is no longer presented) as well as the result of the procedure (the learned response declines). Behaviors that have been reduced in strength through extinction are said to be “extinguished.”

Extraversion
A personality trait that reflects a person’s tendency to be sociable, outgoing, active, and assertive.

Extrinsic motivation
Motivation stemming from the benefits associated with achieving a goal such as obtaining a monetary reward.

Facets
Broad personality traits can be broken down into narrower facets or aspects of the trait. For example, extraversion has several facets, such as sociability, dominance, risk-taking and so forth.

Factor analysis
A statistical technique for grouping similar things together according to how highly they are associated.

False memories
Memory for an event that never actually occurred, implanted by experimental manipulation or other means.

Family Stress Model
A description of the negative effects of family financial difficulty on child adjustment through the effects of economic stress on parents’ depressed mood, increased marital problems, and poor parenting.

Fear conditioning
A type of classical or Pavlovian conditioning in which the conditioned stimulus (CS) is associated with an aversive unconditioned stimulus (US), such as a foot shock. As a consequence of learning, the CS comes to evoke fear. The phenomenon is thought to be involved in the development of anxiety disorders in humans.

Feelings
A general term used to describe a wide range of states that include emotions, moods, traits and that typically involve changes in subjective experience, physiological responding, and behavior in response to a meaningful event. Emotions typically occur on the order of seconds, whereas moods may last for days, and traits are tendencies to respond a certain way across various situations.

Fight or flight response
A biological reaction to alarming stressors that prepares the body to resist or escape a threat.

First-person perspective
Observations made by individuals about their own conscious experiences, also known as introspection or a subjective point of view. Phenomenology refers to the description and investigation of such observations.

Five-Factor Model
Five broad domains or dimensions that are used to describe human personality.

Five-Factor Model
The Five-Factor Model is a widely accepted model of personality traits. Advocates of the model believe that much of the variability in people’s thoughts, feelings, and behaviors can be summarized with five broad traits. These five traits are Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.

Fixed action patterns (FAPs)
Sequences of behavior that occur in exactly the same fashion, in exactly the same order, every time they are elicited.

Flashback
Sudden, intense re-experiencing of a previous event, usually trauma-related.

Flashbulb memory
Vivid personal memories of receiving the news of some momentous (and usually emotional) event.

Flat affect
A reduction in the display of emotions through facial expressions, gestures, and speech intonation.

Flavor
The combination of smell and taste.

Fluid intelligence
Type of intelligence that relies on the ability to use information processing resources to reason logically and solve novel problems.

Foils
Any member of a lineup (whether live or photograph) other than the suspect.

Foot in the door
Obtaining a small, initial commitment.

Forebrain
A part of the nervous system that contains the cerebral hemispheres, thalamus, and hypothalamus.

Foreclosure
Individuals commit to an identity without exploration of options.

Formal operations stage
Piagetian stage starting at age 12 years and continuing for the rest of life, in which adolescents may gain the reasoning powers of educated adults.

Fornix
(plural form, fornices) A nerve fiber tract that connects the hippocampus to mammillary bodies.

Free association
In psychodynamic therapy, a process in which the patient reports all thoughts that come to mind without censorship, and these thoughts are interpreted by the therapist.

Frontal lobe
The front most (anterior) part of the cerebrum; anterior to the central sulcus and responsible for motor output and planning, language, judgment, and decision-making.

Frontal lobe
The most forward region (close to forehead) of the cerebral hemispheres.

Full-cycle psychology
A scientific approach whereby researchers start with an observational field study to identify an effect in the real world, follow up with laboratory experimentation to verify the effect and isolate the causal mechanisms, and return to field research to corroborate their experimental findings.

Functional capacity
The ability to engage in self-care (cook, clean, bathe), work, attend school, and/or engage in social relationships.

Functional distance
The frequency with which we cross paths with others.

Functional magnetic resonance imaging
(or fMRI) A noninvasive brain-imaging technique that registers changes in blood flow in the brain during a given task (also see magnetic resonance imaging).

Functional magnetic resonance imaging (fMRI)
Functional magnetic resonance imaging (fMRI): A neuroimaging technique that infers brain activity by measuring changes in oxygen levels in the blood.
The general factor common to all cognitive ability measures, “a very general mental capacity that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly, and learn from experience. It is not merely book learning, a narrow academic skill, or test-taking smarts. Rather, it reflects a broader and deeper capability for comprehending our surroundings—‘catching on,’ ‘making sense of things,’ or ‘figuring out’ what to do” (Gottfredson, 1997, p. 13).

Gender schemas
Organized beliefs and expectations about maleness and femaleness that guide children’s thinking about gender.

General Adaptation Syndrome
A three-phase model of stress, which includes a mobilization of physiological resources phase, a coping phase, and an exhaustion phase (i.e., when an organism fails to cope with the stress adequately and depletes its resources).

Generalizability
Related to whether the results from the sample can be generalized to a larger population.

Generalize
Generalizing, in science, refers to the ability to arrive at broad conclusions based on a smaller sample of observations. For these conclusions to be true the sample should accurately represent the larger population from which it is drawn.

Generalized anxiety disorder (GAD)
Excessive worry about everyday things that is at a level that is out of proportion to the specific causes of worry.

Global subjective well-being
Individuals’ perceptions of and satisfaction with their lives as a whole.

Globus pallidus
A nucleus of the basal ganglia.

Goal
The cognitive representation of a desired state (outcome).

Goal priming
The activation of a goal following exposure to cues in the immediate environment related to the goal or its corresponding means (e.g., images, words, sounds).

Goal-directed behavior
Instrumental behavior that is influenced by the animal’s knowledge of the association between the behavior and its consequence and the current value of the consequence. Sensitive to the reinforcer devaluation effect.

Goodness of fit
The match or synchrony between a child’s temperament and characteristics of parental care that contributes to positive or negative personality development. A good “fit” means that parents have accommodated to the child’s temperamental attributes, and this contributes to positive personality growth and better adjustment.

Gradually escalating commitments
A pattern of small, progressively escalating demands is less likely to be rejected than a single large demand made all at once.

Grandiosity
Inflated self-esteem or an exaggerated sense of self-importance and self-worth (e.g., believing one has special powers or superior abilities).

Gray matter
The outer grayish regions of the brain comprised of the neurons’ cell bodies.

Gray matter
Composes the bark or the cortex of the cerebrum and consists of the cell bodies of the neurons (see also white matter).

Group cohesion
The solidarity or unity of a group resulting from the development of strong and mutual interpersonal bonds among members and group-level forces that unify the group, such as shared commitment to group goals.

Group level
A focus on summary statistics that apply to aggregates of individuals when studying personality development. An example is considering whether the average score of a group of 50 year olds is higher than the average score of a group of 21 year olds when considering a trait like conscientiousness.

**Group polarization**
The tendency for members of a deliberating group to move to a more extreme position, with the direction of the shift determined by the majority or average of the members’ predeliberation preferences.

**Groupthink**
A set of negative group-level processes, including illusions of invulnerability, self-censorship, and pressures to conform, that occur when highly cohesive groups seek concurrence when making a decision.

**Gustation**
Ability to process gustatory stimuli. Also called taste.

**Gyri**
(plural) Folds between sulci in the cortex.

**Gyrus**
(plural form, gyri) A bulge that is raised between or among fissures of the convoluted brain.

**Habit**
Instrumental behavior that occurs automatically in the presence of a stimulus and is no longer influenced by the animal’s knowledge of the value of the reinforcer. Insensitive to the reinforcer devaluation effect.

**Habituation**
Occurs when the response to a stimulus decreases with exposure.

**Happiness**
The popular word for subjective well-being. Scientists sometimes avoid using this term because it can refer to different things, such as feeling good, being satisfied, or even the causes of high subjective well-being.

**Hawthorne Effect**
An effect in which individuals change or improve some facet of their behavior as a result of their awareness of being observed.

**Hawthorne Studies**
A series of well-known studies conducted under the leadership of Harvard University researchers, which changed the perspective of scholars and practitioners about the role of human psychology in relation to work behavior.

**Health**
According to the World Health Organization, it is a complete state of physical, mental, and social well-being and not merely the absence of disease or infirmity.

**Health behavior**
Any behavior that is related to health—either good or bad.

**Hedonic well-being**
Component of well-being that refers to emotional experiences, often including measures of positive (e.g., happiness, contentment) and negative affect (e.g., stress, sadness).

**Helpfulness**
A component of the prosocial personality orientation; describes individuals who have been helpful in the past and, because they believe they can be effective with the help they give, are more likely to be helpful in the future.

**Helping**
Prosocial acts that typically involve situations in which one person is in need and another provides the necessary assistance to eliminate the other’s need.
Heritability coefficient
   An easily misinterpreted statistical construct that purports to measure the role of genetics in the explanation of differences among individuals.

Heterogeneity
   Inter-individual and subgroup differences in level and rate of change over time.

Heterotypic stability
   Consistency in the underlying psychological attribute across development regardless of any changes in how the attribute is expressed at different ages.

Heuristics
   Mental shortcuts that enable people to make decisions and solve problems quickly and efficiently.

HEXACO model
   The HEXACO model is an alternative to the Five-Factor Model. The HEXACO model includes six traits, five of which are variants of the traits included in the Big Five (Emotionality [E], Extraversion [X], Agreeableness [A], Conscientiousness [C], and Openness [O]). The sixth factor, Honesty-Humility [H], is unique to this model.

Highlighting a goal
   Prioritizing a focal goal over other goals or temptations by putting more effort into the focal goal.

Hippocampus
   (plural form, hippocampi) A nucleus inside (medial) the temporal lobe implicated in learning and memory.

Histrionic
   A pervasive pattern of excessive emotionality and attention seeking.

Homo habilis
   A human ancestor, handy man, that lived two million years ago.

Homo sapiens
   Modern man, the only surviving form of the genus Homo.

Homophily
   Adolescents tend to associate with peers who are similar to themselves.

Homotypic stability
   Consistency of the exact same thoughts, feelings, and behaviors across development.

Horizontal plane
   A slice that runs horizontally through a standing person (i.e., parallel to the floor); slices of brain in this plane divide the top and bottom parts of the brain; this plane is similar to slicing a hamburger bun.

Hostile attribution bias
   The tendency of some individuals to interpret ambiguous social cues and interactions as examples of aggressiveness, disrespect, or antagonism.

Hostility
   An experience or trait with cognitive, behavioral, and emotional components. It often includes cynical thoughts, feelings of emotion, and aggressive behavior.

Hypersomnia
   Excessive daytime sleepiness, including difficulty staying awake or napping, or prolonged sleep episodes.

Hypothalamus
   Part of the diencephalon. Regulates biological drives with pituitary gland.

Hypotheses
   A logical idea that can be tested.

Identity
   Sometimes used synonymously with the term “self,” identity means many different things in psychological science and in other fields (e.g., sociology). In this module, I adopt Erik Erikson’s conception of identity as a developmental task for late adolescence and young adulthood. Forming an identity in adolescence and young adulthood involves exploring alternative roles, values, goals, and relationships and eventually committing to a realistic agenda for life that productively situates a person in the adult world of work and love. In addition, identity formation entails commitments to new social roles and reevaluation of old traits, and importantly, it brings with it a sense of temporal continuity in life, achieved though the construction of an integrative life story.
Identity achievement
   Individuals have explored different options and then made commitments.
Identity diffusion
   Adolescents neither explore nor commit to any roles or ideologies.
Imaginal performances
   When imagining yourself doing well increases self-efficacy.
Immunocytochemistry
   A method of staining tissue including the brain, using antibodies.
Implemental phase
   The second of the two basic stages of self-regulation in which individuals plan specific actions related to their selected goal.
Implicit Association Test
   Implicit Association Test (IAT) measures relatively automatic biases that favor own group relative to other groups.
Implicit learning
   Occurs when we acquire information without intent that we cannot easily express.
Implicit memory
   A type of long-term memory that does not require conscious thought to encode. It's the type of memory one makes without intent.
Inattentinal blindness
   The failure to notice a fully visible object when attention is devoted to something else.
Incidental learning
   Any type of learning that happens without the intention to learn.
Independent
   Two characteristics or traits are separate from one another--a person can be high on one and low on the other, or vice-versa. Some correlated traits are relatively independent in that although there is a tendency for a person high on one to also be high on the other, this is not always the case.
Independent self
   A model or view of the self as distinct from others and as stable across different situations. The goal of the independent self is to express and assert the self, and to influence others. This model of self is prevalent in many individualistic, Western contexts (e.g., the United States, Australia, Western Europe).
Independent variable
   The variable the researcher manipulates and controls in an experiment.
Individual level
   A focus on individual level statistics that reflect whether individuals show stability or change when studying personality development. An example is evaluating how many individuals increased in conscientiousness versus how many decreased in conscientiousness when considering the transition from adolescence to adulthood.
Industrial/Organizational psychology
   Scientific study of behavior in organizational settings and the application of psychology to understand work behavior.
Information processing theories
   Theories that focus on describing the cognitive processes that underlie thinking at any one age and cognitive growth over time.
Informational influence
   Conformity that results from a concern to act in a socially approved manner as determined by how others act.
Inhibitory functioning
   Ability to focus on a subset of information while suppressing attention to less relevant information.
Inhibitory postsynaptic potentials
   A hyperpolarizing postsynaptic current that causes the membrane potential to become more negative and move away from the threshold of excitation.
Instrumental conditioning
Process in which animals learn about the relationship between their behaviors and their consequences. Also known as operant conditioning.

Integrated
The process by which the perceptual system combines information arising from more than one modality.

Integrative or eclectic psychotherapy
Also called integrative psychotherapy, this term refers to approaches combining multiple orientations (e.g., CBT with psychoanalytic elements).

Intentional learning
Any type of learning that happens when motivated by intention.

Interdependent self
A model or view of the self as connected to others and as changing in response to different situations. The goal of the interdependent self is to suppress personal preferences and desires, and to adjust to others. This model of self is prevalent in many collectivistic, East Asian contexts (e.g., China, Japan, Korea).

Interference
Other memories get in the way of retrieving a desired memory.

Internal bodily or somatic cues
Physical sensations that serve as triggers for anxiety or as reminders of past traumatic events.

Internal validity
The degree to which a cause-effect relationship between two variables has been unambiguously established.

Interoceptive avoidance
Avoidance of situations or activities that produce sensations of physical arousal similar to those occurring during a panic attack or intense fear response.

Intra- and inter-individual differences
Different patterns of development observed within an individual (intra-) or between individuals (inter-).

Intrinsic motivation
Motivation stemming from the benefits associated with the process of pursuing a goal such as having a fulfilling experience.

Ion channels
Proteins that span the cell membrane, forming channels that specific ions can flow through between the intracellular and extracellular space.

Ionotropic receptor
Ion channel that opens to allow ions to permeate the cell membrane under specific conditions, such as the presence of a neurotransmitter or a specific membrane potential.

Just noticeable difference (JND)
The smallest difference needed in order to differentiate two stimuli. (see Differential Threshold)

Kin selection
According to evolutionary psychology, the favoritism shown for helping our blood relatives, with the goals of increasing the likelihood that some portion of our DNA will be passed on to future generations.

Latent inhibition
The ability to filter out extraneous stimuli, concentrating only on the information that is deemed relevant. Reduced latent inhibition is associated with higher creativity.

Lateral geniculate nucleus
(or LGN) A nucleus in the thalamus that is innervated by the optic nerves and sends signals to the visual cortex in the occipital lobe.

Lateral sulcus
The major fissure that delineates the temporal lobe below the frontal and the parietal lobes.

Lateralized
To the side; used to refer to the fact that specific functions may reside primarily in one hemisphere or the other (e.g., for the majority individuals, the left hemisphere is most responsible for language).

Law of effect
The idea that instrumental or operant responses are influenced by their effects. Responses that are followed by a pleasant state of affairs will be strengthened and those that are followed by discomfort will be weakened. Nowadays, the term refers to the idea that operant or instrumental behaviors are lawfully controlled by their consequences.

Lesion
A region in the brain that suffered damage through injury, disease, or medical intervention.

Lesion studies
A surgical method in which a part of the animal brain is removed to study its effects on behavior or function.

Lexical hypothesis
The lexical hypothesis is the idea that the most important differences between people will be encoded in the language that we use to describe people. Therefore, if we want to know which personality traits are most important, we can look to the language that people use to describe themselves and others.

Life course theories
Theory of development that highlights the effects of social expectations of age-related life events and social roles; additionally considers the lifelong cumulative effects of membership in specific cohorts and sociocultural subgroups and exposure to historical events.

Life satisfaction
A person reflects on their life and judges to what degree it is going well, by whatever standards that person thinks are most important for a good life.

Life span theories
Theory of development that emphasizes the patterning of lifelong within-and between-person differences in the shape, level, and rate of change trajectories.

Light adaptation
Adjustment of eye to high levels of light.

Limbic system
A loosely defined network of nuclei in the brain involved with learning and emotion.

Limbic system
Includes the subcortical structures of the amygdala and hippocampal formation as well as some cortical structures; responsible for aversion and gratification.

Limited capacity
The notion that humans have limited mental resources that can be used at a given time.

Linguistic inquiry and word count
A quantitative text analysis methodology that automatically extracts grammatical and psychological information from a text by counting word frequencies.

Little-c creativity
Creative ideas that appear at the personal level, whether the home or the workplace. Such creativity needs not have a larger impact to be considered creative.

Lived day analysis
A methodology where a research team follows an individual around with a video camera to objectively document a person’s daily life as it is lived.

Longitudinal studies
Research method that collects information from individuals at multiple time points over time, allowing researchers to track cohort differences in age-related change to determine cumulative effects of different life experiences.

Longitudinal study
A study that follows the same group of individuals over time.

Longitudinal study/design
A research design that follows the same group of individuals at multiple time points.

Magnetic resonance imaging
A set of techniques that uses strong magnets to measure either the structure of the brain (e.g., gray matter and white matter) or how the brain functions when a person performs cognitive tasks (e.g., working memory or episodic memory) or other types of tasks.

Magnetic resonance imaging
Or MRI is a brain imaging noninvasive technique that uses magnetic energy to generate brain images (also see fMRI).

Magnification factor
Cortical space projected by an area of sensory input (e.g., mm of cortex per degree of visual field).

Manipulation
A connection between personality attributes and aspects of the environment that occurs whenever individuals with particular traits actively shape their environments.

Margin of error
The expected amount of random variation in a statistic; often defined for 95% confidence level.

Maturity principle
The generalization that personality attributes associated with the successful fulfillment of adult roles increase with age and experience.

McGurk effect
An effect in which conflicting visual and auditory components of a speech stimulus result in an illusory percept.

Means
Activities or objects that contribute to goal attainment.

Mechanoreceptors
Mechanical sensory receptors in the skin that respond to tactile stimulation.

Medial temporal lobes
Inner region of the temporal lobes that includes the hippocampus.

Medulla oblongata
An area just above the spinal cord that processes breathing, digestion, heart and blood vessel function, swallowing, and sneezing.

Memory traces
A term indicating the change in the nervous system representing an event.

Mere-exposure effect
The notion that people like people/places/things merely because they are familiar with them.

Metabolism
Breakdown of substances.

Metabolite
A substance necessary for a living organism to maintain life.

Metacognition
Describes the knowledge and skills people have in monitoring and controlling their own learning and memory.

Mind–body connection
The idea that our emotions and thoughts can affect how our body functions.

Mindfulness
A process that reflects a nonjudgmental, yet attentive, mental state.

Mindfulness-based therapy
A form of psychotherapy grounded in mindfulness theory and practice, often involving meditation, yoga, body scan, and other features of mindfulness exercises.

Misinformation effect
A memory error caused by exposure to incorrect information between the original event (e.g., a crime) and later memory test (e.g., an interview, lineup, or day in court).

Misinformation effect
When erroneous information occurring after an event is remembered as having been part of the original event.

Mnemonic devices
A strategy for remembering large amounts of information, usually involving imaging events occurring on a journey or with some other set of memorized cues.

Mock witnesses
A research subject who plays the part of a witness in a study.

**Monitoring**
Keeping track of a target behavior that is to be regulated.

**Moratorium**
State in which adolescents are actively exploring options but have not yet made identity commitments.

**Motivation**
The psychological driving force that enables action in the course of goal pursuit.

**Motor cortex**
Region of the frontal lobe responsible for voluntary movement; the motor cortex has a contralateral representation of the human body.

**Multicultural experiences**
Individual exposure to two or more cultures, such as obtained by living abroad, emigrating to another country, or working or going to school in a culturally diverse setting.

**Multimodal**
Of or pertaining to multiple sensory modalities.

**Multimodal perception**
The effects that concurrent stimulation in more than one sensory modality has on the perception of events and objects in the world.

**Multimodal phenomina**
Effects that concern the binding of inputs from multiple sensory modalities.

**Multisensory convergence zones**
Regions in the brain that receive input from multiple unimodal areas processing different sensory modalities.

**Multisensory enhancement**
See “superadditive effect of multisensory integration.”

**Myelin**
Fatty tissue, produced by glial cells (see module, “Neurons”) that insulates the axons of the neurons; myelin is necessary for normal conduction of electrical impulses among neurons.

**Myelin sheath**
Substance around the axon of a neuron that serves as insulation to allow the action potential to conduct rapidly toward the terminal buttons.

**Narcissistic**
A pervasive pattern of grandiosity (in fantasy or behavior), need for admiration, and lack of empathy.

**Narrative identity**
An internalized and evolving story of the self designed to provide life with some measure of temporal unity and purpose. Beginning in late adolescence, people craft self-defining stories that reconstruct the past and imagine the future to explain how the person came to be the person that he or she is becoming.

**Nature**
The genes that children bring with them to life and that influence all aspects of their development.

**Negative feelings**
Undesirable and unpleasant feelings that people tend to avoid if they can. Moods and emotions such as depression, anger, and worry are examples.

**Negative state relief model**
An egoistic theory proposed by Cialdini et al. (1982) that claims that people have learned through socialization that helping can serve as a secondary reinforcement that will relieve negative moods such as sadness.

**Neural crest**
A set of primordial neurons that migrate outside the neural tube and give rise to sensory and autonomic neurons in the peripheral nervous system.

**Neural induction**
A process that causes the formation of the neural tube.

**Neuroblasts**
Brain progenitor cells that asymmetrically divide into other neuroblasts or nerve cells.

**Neurodevelopmental**
Processes that influence how the brain develops either in utero or as the child is growing up.

**Neuroepithelium**
The lining of the neural tube.

**Neuroticism**
A personality trait that reflects the tendency to be interpersonally sensitive and the tendency to experience negative emotions like anxiety, fear, sadness, and anger.

**Neurotransmitter**
A chemical substance produced by a neuron that is used for communication between neurons.

**Neurotransmitters**
Chemical substance released by the presynaptic terminal button that acts on the postsynaptic cell.

**Nociception**
Our ability to sense pain.

**Nomenclature**
Naming conventions.

**Nonassociative learning**
Occurs when a single repeated exposure leads to a change in behavior.

**Nonconscious goal activation**
When activation occurs outside a person’s awareness, such that the person is unaware of the reasons behind her goal-directed thoughts and behaviors.

**Normative influence**
Conformity that results from a concern for what other people think of us.

**Nucleus**
Collection of nerve cells found in the brain which typically serve a specific function.

**Numerical magnitudes**
The sizes of numbers.

**Nurture**
The environments, starting with the womb, that influence all aspects of children’s development.

**Obedience**
Responding to an order or command from a person in a position of authority.

**Object permanence task**
The Piagetian task in which infants below about 9 months of age fail to search for an object that is removed from their sight and, if not allowed to search immediately for the object, act as if they do not know that it continues to exist.

**Observational learning**
Learning by observing the behavior of others.

**Obsessive-compulsive**
A pervasive pattern of preoccupation with orderliness, perfectionism, and mental and interpersonal control, at the expense of flexibility, openness, and efficiency.

**Obsessive-compulsive disorder (OCD)**
A disorder characterized by the desire to engage in certain behaviors excessively or compulsively in hopes of reducing anxiety. Behaviors include things such as cleaning, repeatedly opening and closing doors, hoarding, and obsessing over certain thoughts.

**Occipital lobe**
The back most (posterior) part of the cerebrum; involved in vision.

**Occipital lobe**
The back part of the cerebrum, which houses the visual areas.

**Odorants**
Chemicals transduced by olfactory receptors.

**Olfaction**
Ability to process olfactory stimuli. Also called smell.

**Olfactory epithelium**
Organ containing olfactory receptors.
O*Net
A vast database of occupational information containing data on hundreds of jobs.

Openness to Experience
A personality trait that reflects a person’s tendency to seek out and to appreciate new things, including thoughts, feelings, values, and experiences.

Openness to experience
One of the factors of the Big Five Model of personality, the factor assesses the degree that a person is open to different or new values, interests, and activities.

Operant
A behavior that is controlled by its consequences. The simplest example is the rat’s lever-pressing, which is controlled by the presentation of the reinforcer.

Operant conditioning
See instrumental conditioning.

Operant conditioning
Describes stimulus-response associative learning.

Operational definitions
How researchers specifically measure a concept.

Opponent-process theory
Theory proposing color vision as influenced by cells responsive to pairs of colors.

Originality
When an idea or solution has a low probability of occurrence.

Ossicles
A collection of three small bones in the middle ear that vibrate against the tympanic membrane.

Ostracism
Excluding one or more individuals from a group by reducing or eliminating contact with the person, usually by ignoring, shunning, or explicitly banishing them.

Other-oriented empathy
A component of the prosocial personality orientation; describes individuals who have a strong sense of social responsibility, empathize with and feel emotionally tied to those in need, understand the problems the victim is experiencing, and have a heightened sense of moral obligations to be helpful.

Panic disorder (PD)
A condition marked by regular strong panic attacks, and which may include significant levels of worry about future attacks.

Parameter
A numerical result summarizing a population (e.g., mean, proportion).

Paranoid
A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent.

Parasympathetic nervous system
A division of the autonomic nervous system that is slower than its counterpart—that is, the sympathetic nervous system—and works in opposition to it. Generally engaged in “rest and digest” functions.

Parietal lobe
The part of the cerebrum between the frontal and occipital lobes; involved in bodily sensations, visual attention, and integrating the senses.

Parietal lobe
An area of the cerebrum just behind the central sulcus that is engaged with somatosensory and gustatory sensation.

Participant demand
When participants behave in a way that they think the experimenter wants them to behave.

Pavlovian conditioning
See classical conditioning.

Perceived social support
A person’s perception that others are there to help them in times of need.

Perception
The psychological process of interpreting sensory information.

Perceptual learning
Occurs when aspects of our perception changes as a function of experience.

Performance experiences
When past successes or failures lead to changes in self-efficacy.

Peripheral route to persuasion
Persuasion that relies on superficial cues that have little to do with logic.

Personal distress
According to Batson’s empathy–altruism hypothesis, observers who take a detached view of a person in need will experience feelings of being “worried” and “upset” and will have an egoistic motivation for helping to relieve that distress.

Personality
Characteristic, routine ways of thinking, feeling, and relating to others.

Personality
Enduring predispositions that characterize a person, such as styles of thought, feelings and behavior.

Personality disorders
When personality traits result in significant distress, social impairment, and/or occupational impairment.

Personality traits
Enduring dispositions in behavior that show differences across individuals, and which tend to characterize the person across varying types of situations.

Person-centered therapy
A therapeutic approach focused on creating a supportive environment for self-discovery.

Person–environment transactions
The interplay between individuals and their contextual circumstances that ends up shaping both personality and the environment.

Person-situation debate
The person-situation debate is a historical debate about the relative power of personality traits as compared to situational influences on behavior. The situationist critique, which started the person-situation debate, suggested that people overestimate the extent to which personality traits are consistent across situations.

Phantom limb
The perception that a missing limb still exists.

Phantom limb pain
Pain in a limb that no longer exists.

Pharmacokinetics
The action of a drug through the body, including absorption, distribution, metabolism, and excretion.

Phonemic awareness
Awareness of the component sounds within words.

Photo spreads
A selection of normally small photographs of faces given to a witness for the purpose of identifying a perpetrator.

Phrenology
A now-discredited field of brain study, popular in the first half of the 19th century that correlated bumps and indentations of the skull with specific functions of the brain.

Piaget’s theory
Theory that development occurs through a sequence of discontinuous stages: the sensorimotor, preoperational, concrete operational, and formal operational stages.

Pinna
Outermost portion of the ear.

Placebo effect
When receiving special treatment or something new affects human behavior.

Pluralistic ignorance
Relying on the actions of others to define an ambiguous need situation and to then erroneously conclude that no help or intervention is necessary.

**Polypharmacy**
- The use of many medications.

**Pons**
- A bridge that connects the cerebral cortex with the medulla, and reciprocally transfers information back and forth between the brain and the spinal cord.

**Population**
- A larger collection of individuals that we would like to generalize our results to.

**Positive feelings**
- Desirable and pleasant feelings. Moods and emotions such as enjoyment and love are examples.

**Positron emission tomography**
- A technique that uses radio-labelled ligands to measure the distribution of different neurotransmitter receptors in the brain or to measure how much of a certain type of neurotransmitter is released when a person is given a specific type of drug or does a particularly cognitive task.

**Positron Emission Tomography**
- (or PET) An invasive procedure that captures brain images with positron emissions from the brain after the individual has been injected with radio-labeled isotopes.

**Positron emission tomography (PET)**
- A neuroimaging technique that measures brain activity by detecting the presence of a radioactive substance in the brain that is initially injected into the bloodstream and then pulled in by active brain tissue.

**Posttraumatic stress disorder (PTSD)**
- A sense of intense fear, triggered by memories of a past traumatic event, that another traumatic event might occur. PTSD may include feelings of isolation and emotional numbing.

**Prediction error**
- When the outcome of a conditioning trial is different from that which is predicted by the conditioned stimuli that are present on the trial (i.e., when the US is surprising). Prediction error is necessary to create Pavlovian conditioning (and associative learning generally). As learning occurs over repeated conditioning trials, the conditioned stimulus increasingly predicts the unconditioned stimulus, and prediction error declines. Conditioning works to correct or reduce prediction error.

**Prejudice**
- Prejudice is an evaluation or emotion toward people merely based on their group membership.

**Preoperational reasoning stage**
- Period within Piagetian theory from age 2 to 7 years, in which children can represent objects through drawing and language but cannot solve logical reasoning problems, such as the conservation problems.

**Preparedness**
- The idea that an organism’s evolutionary history can make it easy to learn a particular association. Because of preparedness, you are more likely to associate the taste of tequila, and not the circumstances surrounding drinking it, with getting sick. Similarly, humans are more likely to associate images of spiders and snakes than flowers and mushrooms with aversive outcomes like shocks.

**Prevention focus**
- One of two self-regulatory orientations emphasizing safety, responsibility, and security needs, and viewing goals as “oughts.” This self-regulatory focus seeks to avoid losses (the presence of negatives) and approach non-losses (the absence of negatives).

**Primary auditory cortex**
- Area of the cortex involved in processing auditory stimuli.

**Primary auditory cortex**
- A region of the cortex devoted to the processing of simple auditory information.

**Primary Motor Cortex**
- A strip of cortex just in front of the central sulcus that is involved with motor control.

**Primary somatosensory cortex**
- Area of the cortex involved in processing somatosensory stimuli.
Primary Somatosensory Cortex
A strip of cerebral tissue just behind the central sulcus engaged in sensory reception of bodily sensations.

Primary visual cortex
A region of the cortex devoted to the processing of simple visual information.

Primary visual cortex
Area of the cortex involved in processing visual stimuli.

Principle of Inverse Effectiveness
The finding that, in general, for a multimodal stimulus, if the response to each unimodal component (on its own) is weak, then the opportunity for multisensory enhancement is very large. However, if one component—by itself—is sufficient to evoke a strong response, then the effect on the response gained by simultaneously processing the other components of the stimulus will be relatively small.

Problem-focused coping
A set of coping strategies aimed at improving or changing stressful situations.

Processing speed
The speed with which an individual can perceive auditory or visual information and respond to it.

Progress
The perception of reducing the discrepancy between one’s current state and one’s desired state in goal pursuit.

Promotion focus
One of two self-regulatory orientations emphasizing hopes, accomplishments, and advancement needs, and viewing goals as “ideals.” This self-regulatory focus seeks to approach gains (the presence of positives) and avoid non-gains (the absence of positives).

Prosocial behavior
Social behavior that benefits another person.

Prosocial personality orientation
A measure of individual differences that identifies two sets of personality characteristics (other-oriented empathy, helpfulness) that are highly correlated with prosocial behavior.

Psychometric approach
Approach to studying intelligence that examines performance on tests of intellectual functioning.
Psychomotor agitation
- Increased motor activity associated with restlessness, including physical actions (e.g., fidgeting, pacing, feet tapping, handwringing).

Psychomotor retardation
- A slowing of physical activities in which routine activities (e.g., eating, brushing teeth) are performed in an unusually slow manner.

Psychoneuroimmunology
- A field of study examining the relationship among psychology, brain function, and immune function.

Psychopathology
- Illnesses or disorders that involve psychological or psychiatric symptoms.

Psychosomatic medicine
- An interdisciplinary field of study that focuses on how biological, psychological, and social processes contribute to physiological changes in the body and health over time.

Psychotropic drug
- A drug that changes mood or emotion, usually used when talking about drugs prescribed for various mental conditions (depression, anxiety, schizophrenia, etc.).

Punisher
- A stimulus that decreases the strength of an operant behavior when it is made a consequence of the behavior.

P-value
- The probability of observing a particular outcome in a sample, or more extreme, under a conjecture about the larger population or process.

Qualitative changes
- Large, fundamental change, as when a caterpillar changes into a butterfly; stage theories such as Piaget’s posit that each stage reflects qualitative change relative to previous stages.

Quantitative changes
- Gradual, incremental change, as in the growth of a pine tree’s girth.

Quantitative genetics
- Scientific and mathematical methods for inferring genetic and environmental processes based on the degree of genetic and environmental similarity among organisms.

Quantitative law of effect
- A mathematical rule that states that the effectiveness of a reinforcer at strengthening an operant response depends on the amount of reinforcement earned for all alternative behaviors. A reinforcer is less effective if there is a lot of reinforcement in the environment for other behaviors.

Quasi-experimental design
- An experiment that does not require random assignment to conditions.

Random assignment
- Assigning participants to receive different conditions of an experiment by chance.

Random sampling
- Using a probability-based method to select a subset of individuals for the sample from the population.

Reactive person–environment transactions
- The interplay between individuals and their contextual circumstances that occurs whenever attributes of the individual shape how a person perceives and responds to their environment.

Reappraisal, or Cognitive restructuring
- The process of identifying, evaluating, and changing maladaptive thoughts in psychotherapy.

Recall
- Type of memory task where individuals are asked to remember previously learned information without the help of external cues.

Received social support
- The actual act of receiving support (e.g., informational, functional).

Receptive field
- The portion of the world to which a neuron will respond if an appropriate stimulus is present there.
Reciprocal altruism
According to evolutionary psychology, a genetic predisposition for people to help those who have previously helped them.

Recoding
The ubiquitous process during learning of taking information in one form and converting it to another form, usually one more easily remembered.

Recognition
Type of memory task where individuals are asked to remember previously learned information with the assistance of cues.

Redemptive narratives
Life stories that affirm the transformation from suffering to an enhanced status or state. In American culture, redemptive life stories are highly prized as models for the good self, as in classic narratives of atonement, upward mobility, liberation, and recovery.

Reflexivity
The idea that the self reflects back upon itself; that the I (the knower, the subject) encounters the Me (the known, the object). Reflexivity is a fundamental property of human selfhood.

Reinforced response
Following the process of operant conditioning, the strengthening of a response following either the delivery of a desired consequence (positive reinforcement) or escape from an aversive consequence.

Reinforcer
Any consequence of a behavior that strengthens the behavior or increases the likelihood that it will be performed it again.

Reinforcer devaluation effect
The finding that an animal will stop performing an instrumental response that once led to a reinforcer if the reinforcer is separately made aversive or undesirable.

Remote associations
Associations between words or concepts that are semantically distant and thus relatively unusual or original.

Renewal effect
Recovery of an extinguished response that occurs when the context is changed after extinction. Especially strong when the change of context involves return to the context in which conditioning originally occurred. Can occur after extinction in either classical or instrumental conditioning.

Resilience
The ability to “bounce back” from negative situations (e.g., illness, stress) to normal functioning or to simply not show poor outcomes in the face of adversity. In some cases, resilience may lead to better functioning following the negative experience (e.g., post-traumatic growth).

Resting membrane potential
The voltage inside the cell relative to the voltage outside the cell while the cell is a rest (approximately -70 mV).

Retina
Cell layer in the back of the eye containing photoreceptors.

Retrieval
The process of accessing stored information.

Retrieval
Process by which information is accessed from memory and utilized.

Retroactive interference
The phenomenon whereby events that occur after some particular event of interest will usually cause forgetting of the original event.

Retrograde amnesia
Inability to retrieve memories for facts and events acquired before the onset of amnesia.

Right-wing authoritarianism
Right-wing authoritarianism (RWA) focuses on value conflicts but endorses respect for obedience and authority in the service of group conformity.

Rods
Photoreceptors of the retina sensitive to low levels of light. Located around the fovea.
Rostrocaudal
A front-back plane used to identify anatomical structures in the body and the brain.

Rubber hand illusion
The false perception of a fake hand as belonging to a perceiver, due to multimodal sensory information.

SAD performance only
Social anxiety disorder which is limited to certain situations that the sufferer perceives as requiring some type of performance.

Sagittal plane
A slice that runs vertically from front to back; slices of brain in this plane divide the left and right side of the brain; this plane is similar to slicing a baked potato lengthwise.

Sample
The collection of individuals on which we collect data.

Satisfaction
Correspondence between an individual’s needs or preferences and the rewards offered by the environment.

Satisfactoriness
Correspondence between an individual’s abilities and the ability requirements of the environment.

Schema
A mental representation or set of beliefs about something.

Schema (plural: schemata)
A memory template, created through repeated exposure to a particular class of objects or events.

Schizoid
A pervasive pattern of detachment from social relationships and a restricted range of expression of emotions in interpersonal settings.

Schizotypal
A pervasive pattern of social and interpersonal deficits marked by acute discomfort with, and reduced capacity for, close relationships as well as perceptual distortions and eccentricities of behavior.

Scientist-practitioner model
The dual focus of I/O psychology, which entails practical questions motivating scientific inquiry to generate knowledge about the work-person interface and the practitioner side applying this scientific knowledge to organizational problems.

Security of attachment
An infant’s confidence in the sensitivity and responsiveness of a caregiver, especially when he or she is needed. Infants can be securely attached or insecurely attached.

Selection
A connection between personality attributes and aspects of the environment that occurs whenever individuals with particular attributes choose particular kinds of environments.

Selective attention
The ability to select certain stimuli in the environment to process, while ignoring distracting information.

Self as autobiographical author
The sense of the self as a storyteller who reconstructs the past and imagines the future in order to articulate an integrative narrative that provides life with some measure of temporal continuity and purpose.

Self as motivated agent
The sense of the self as an intentional force that strives to achieve goals, plans, values, projects, and the like.

Self as social actor
The sense of the self as an embodied actor whose social performances may be construed in terms of more or less consistent self-ascribed traits and social roles.

Self-categorization theory
Self-categorization theory develops social identity theory’s point that people categorize themselves, along with each other into groups, favoring their own group.

Self-control
The capacity to control impulses, emotions, desires, and actions in order to resist a temptation and adhere to a valued goal.

**Self-efficacy**
The belief that you are able to effectively perform the tasks needed to attain a valued goal.

**Self-efficacy**
The belief that one can perform adequately in a specific situation.

**Self-esteem**
The extent to which a person feels that he or she is worthy and good. The success or failure that the motivated agent experiences in pursuit of valued goals is a strong determinant of self-esteem.

**Self-perceptions of aging**
An individual’s perceptions of their own aging process; positive perceptions of aging have been shown to be associated with greater longevity and health.

**Self-regulation**
The process of altering one’s responses, including thoughts, feelings, impulses, actions, and task performance.

**Self-regulation**
The processes through which individuals alter their emotions, desires, and actions in the course of pursuing a goal.

**Self-regulation**
The complex process through which people control their thoughts, emotions, and actions.

**Self-report measure**
A type of questionnaire in which participants answer questions whose answers correspond to numerical values that can be added to create an overall index of some construct.

**Semantic memory**
The more or less permanent store of knowledge that people have.

**Sensation**
The physical processing of environmental stimuli by the sense organs.

**Sensitization**
Occurs when the response to a stimulus increases with exposure.

**Sensorimotor stage**
Period within Piagetian theory from birth to age 2 years, during which children come to represent the enduring reality of objects.

**Sensory adaptation**
Decrease in sensitivity of a receptor to a stimulus after constant stimulation.

**Sensory modalities**
A type of sense; for example, vision or audition.

**Shadowing**
A task in which the individual is asked to repeat an auditory message as it is presented.

**Shape theory of olfaction**
Theory proposing that odorants of different size and shape correspond to different smells.

**Shared mental model**
Knowledge, expectations, conceptualizations, and other cognitive representations that members of a group have in common pertaining to the group and its members, tasks, procedures, and resources.

**Signal detection**
Method for studying the ability to correctly identify sensory stimuli.

**Social anxiety disorder (SAD)**
A condition marked by acute fear of social situations which lead to worry and diminished day to day functioning.

**Social comparison**
The process of contrasting one’s personal qualities and outcomes, including beliefs, attitudes, values, abilities, accomplishments, and experiences, to those of other people.

**Social constructivism**
Social constructivism proposes that knowledge is first created and learned within a social context and is then adopted by individuals.

**Social dominance orientation**
Social dominance orientation (SDO) describes a belief that group hierarchies are inevitable in all societies and even good, to maintain order and stability.

Social facilitation
Improvement in task performance that occurs when people work in the presence of other people.

Social identity theory
A theoretical analysis of group processes and intergroup relations that assumes groups influence their members’ self-concepts and self-esteem, particularly when individuals categorize themselves as group members and identify with the group.

Social identity theory
Social identity theory notes that people categorize each other into groups, favoring their own group.

Social integration
The size of your social network, or number of social roles (e.g., son, sister, student, employee, team member).

Social Learning Theory
The theory that people can learn new responses and behaviors by observing the behavior of others.

Social loafing
The reduction of individual effort exerted when people work in groups compared with when they work alone.

Social models
Authorities that are the targets for observation and who model behaviors.

Social network
Network of people with whom an individual is closely connected; social networks provide emotional, informational, and material support and offer opportunities for social engagement.

Social proof
The mental shortcut based on the assumption that, if everyone is doing it, it must be right.

Social referencing
The process by which one individual consults another’s emotional expressions to determine how to evaluate and respond to circumstances that are ambiguous or uncertain.

Social reputation
The traits and social roles that others attribute to an actor. Actors also have their own conceptions of what they imagine their respective social reputations indeed are in the eyes of others.

Social support
The perception or actuality that we have a social network that can help us in times of need and provide us with a variety of useful resources (e.g., advice, love, money).

Social zeitgeber
Zeitgeber is German for “time giver.” Social zeitgebers are environmental cues, such as meal times and interactions with other people, that entrain biological rhythms and thus sleep-wake cycle regularity.

Society for Industrial and Organizational Psychology (SIOP)
A professional organization bringing together academics and practitioners who work in I/O psychology and related areas. It is Division 14 of the American Psychological Association (APA).

Sociocultural theories
Theory founded in large part by Lev Vygotsky that emphasizes how other people and the attitudes, values, and beliefs of the surrounding culture influence children’s development.

Socioeconomic status (SES)
A person’s economic and social position based on income, education, and occupation.

Socioemotional Selectivity Theory
Theory proposed to explain the reduction of social partners in older adulthood; posits that older adults focus on meeting emotional over information-gathering goals, and adaptively select social partners who meet this need.

Sociometer model
A conceptual analysis of self-evaluation processes that theorizes self-esteem functions to psychologically monitor one’s degree of inclusion and exclusion in social groups.

Sodium-potassium pump
An ion channel that uses the neuron’s energy (adenosine triphosphate, ATP) to pump three Na+ ions outside the cell in exchange for bringing two K+ ions inside the cell.

Soma
- Cell body of a neuron that contains the nucleus and genetic information, and directs protein synthesis.

Somatic nervous system
- A part of the peripheral nervous system that uses cranial and spinal nerves in volitional actions.

Somatosensation
- Ability to sense touch, pain and temperature.

Somatosensory (body sensations) cortex
- The region of the parietal lobe responsible for bodily sensations; the somatosensory cortex has a contralateral representation of the human body.

Somatotopic map
- Organization of the primary somatosensory cortex maintaining a representation of the arrangement of the body.

Sound waves
- Changes in air pressure. The physical stimulus for audition.

Spatial principle of multisensory integration
- The finding that the superadditive effects of multisensory integration are observed when the sources of stimulation are spatially related to one another.

Spatial resolution
- A term that refers to how small the elements of an image are; high spatial resolution means the device or technique can resolve very small elements; in neuroscience it describes how small of a structure in the brain can be imaged.

Specific abilities
- Cognitive abilities that contain an appreciable component of g or general ability, but also contain a large component of a more content-focused talent such as mathematical, spatial, or verbal ability; patterns of specific abilities channel development down different paths as a function of an individual’s relative strengths and weaknesses.

Specific vulnerabilities
- How our experiences lead us to focus and channel our anxiety.

Spina bifida
- A developmental disease of the spinal cord, where the neural tube does not close caudally.

Spines
- Protrusions on the dendrite of a neuron that form synapses with terminal buttons of the presynaptic axon.

Split-brain patient
- A patient who has had most or all of his or her corpus callosum severed.

Spontaneous recovery
- Recovery of an extinguished response that occurs with the passage of time after extinction. Can occur after extinction in either classical or instrumental conditioning.

Standards
- Ideas about how things should (or should not) be.

Statistic
- A numerical result computed from a sample (e.g., mean, proportion).

Statistical significance
- A result is statistically significant if it is unlikely to arise by chance alone.

Stereotype Content Model
- Stereotype Content Model shows that social groups are viewed according to their perceived warmth and competence.

Stereotypes
- Stereotype is a belief that characterizes people based merely on their group membership.

Stimulus control
- When an operant behavior is controlled by a stimulus that precedes it.

Storage
The stage in the learning/memory process that bridges encoding and retrieval; the persistence of memory over time.

Stress
A pattern of physical and psychological responses in an organism after it perceives a threatening event that disturbs its homeostasis and taxes its abilities to cope with the event.

Stress reaction
The tendency to become easily distressed by the normal challenges of life.

Stressor
An event or stimulus that induces feelings of stress.

Subcortical
Structures that lie beneath the cerebral cortex, but above the brain stem.

Subjective age
A multidimensional construct that indicates how old (or young) a person feels and into which age group a person categorizes him- or herself

Subjective well-being
The name that scientists give to happiness—thinking and feeling that our lives are going very well.

Subjective well-being scales
Self-report surveys or questionnaires in which participants indicate their levels of subjective well-being, by responding to items with a number that indicates how well off they feel.

Subliminal perception
The ability to process information for meaning when the individual is not consciously aware of that information.

Subtle biases
Subtle biases are automatic, ambiguous, and ambivalent, but real in their consequences.

Successful aging
Includes three components: avoiding disease, maintaining high levels of cognitive and physical functioning, and having an actively engaged lifestyle.

Suicidal ideation
Recurring thoughts about suicide, including considering or planning for suicide, or preoccupation with suicide.

Sulci
(plural) Grooves separating folds of the cortex.

Sulcus
(plural form, sulci) The crevices or fissures formed by convolutions in the brain.

Sulcus
A groove separating folds of the cortex.

Superadditive effect of multisensory integration
The finding that responses to multimodal stimuli are typically greater than the sum of the independent responses to each unimodal component if it were presented on its own.

Superadditive effect of multisensory integration
The finding that responses to multimodal stimuli are typically greater than the sum of the independent responses to each unimodal component if it were presented on its own.

Support support network
The people who care about and support a person.

Sympathetic nervous system
A division of the autonomic nervous system, that is faster than its counterpart that is the parasympathetic nervous system and works in opposition to it. Generally engaged in “fight or flight” functions.

Synapse
The tiny space separating neurons.

Synapse
Junction between the presynaptic terminal button of one neuron and the dendrite, axon, or soma of another postsynaptic neuron.

Synaptic gap
Also known as the synaptic cleft; the small space between the presynaptic terminal button and the postsynaptic dendritic spine, axon, or soma.
Synaptic vesicles
Groups of neurotransmitters packaged together and located within the terminal button.

Systematic observation
The careful observation of the natural world with the aim of better understanding it. Observations provide the basic data that allow scientists to track, tally, or otherwise organize information about the natural world.

Task-specific measures of self-efficacy
Measures that ask about self-efficacy beliefs for a particular task (e.g., athletic self-efficacy, academic self-efficacy).

Tastants
Chemicals transduced by taste receptor cells.

Taste aversion learning
The phenomenon in which a taste is paired with sickness, and this causes the organism to reject—and dislike—that taste in the future.

Taste receptor cells
Receptors that transduce gustatory information.

Teamwork
The process by which members of the team combine their knowledge, skills, abilities, and other resources through a coordinated series of actions to produce an outcome.

Temperament
Early emerging differences in reactivity and self-regulation, which constitutes a foundation for personality development.

Temporal lobe
The part of the cerebrum in front of (anterior to) the occipital lobe and below the lateral fissure; involved in vision, auditory processing, memory, and integrating vision and audition.

Temporal resolution
A term that refers to how small a unit of time can be measured; high temporal resolution means capable of resolving very small units of time; in neuroscience it describes how precisely in time a process can be measured in the brain.

Temporally graded retrograde amnesia
Inability to retrieve memories from just prior to the onset of amnesia with intact memory for more remote events.

Terminal button
The part of the end of the axon that form synapses with postsynaptic dendrite, axon, or soma.

Thalamus
A part of the diencephalon that works as a gateway for incoming and outgoing information.

The Age 5-to-7 Shift
Cognitive and social changes that occur in the early elementary school years that result in the child’s developing a more purposeful, planful, and goal-directed approach to life, setting the stage for the emergence of the self as a motivated agent.

The “I”
The self as knower, the sense of the self as a subject who encounters (knows, works on) itself (the Me).

The “Me”
The self as known, the sense of the self as the object or target of the I’s knowledge and work.

The norm of reciprocity
The normative pressure to repay, in equitable value, what another person has given to us.

The rule of scarcity
People tend to perceive things as more attractive when their availability is limited, or when they stand to lose the opportunity to acquire them on favorable terms.

The triad of trust
We are most vulnerable to persuasion when the source is perceived as an authority, as honest and likable.
Theories
Groups of closely related phenomena or observations.

Theory of mind
Children’s growing understanding of the mental states that affect people’s behavior.

Theory of mind
Emerging around the age of 4, the child’s understanding that other people have minds in which are located desires and beliefs, and that desires and beliefs, thereby, motivate behavior.

Third-person perspective
Observations made by individuals in a way that can be independently confirmed by other individuals so as to lead to general, objective understanding. With respect to consciousness, third-person perspectives make use of behavioral and neural measures related to conscious experiences.

Thought-action fusion
The tendency to overestimate the relationship between a thought and an action, such that one mistakenly believes a “bad” thought is the equivalent of a “bad” action.

Threshold of excitation
Specific membrane potential that the neuron must reach to initiate an action potential.

“Top-down” or internal causes of happiness
The person’s outlook and habitual response tendencies that influence their happiness—for example, their temperament or optimistic outlook on life.

Top-down processing
Experience influencing the perception of stimuli.

Transcranial direct current stimulation (tDCS)
A neuroscience technique that passes mild electrical current directly through a brain area by placing small electrodes on the skull.

Transcranial magnetic stimulation (TMS)
A neuroscience technique whereby a brief magnetic pulse is applied to the head that temporarily induces a weak electrical current that interferes with ongoing activity.

Transduction
The conversion of one form of energy into another.

Transduction
A process in which physical energy converts into neural energy.

Transfer-appropriate processing
A principle that states that memory performance is superior when a test taps the same cognitive processes as the original encoding activity.

Transformation
The term for personality changes associated with experience and life events.

Transverse plane
See “horizontal plane.”

Trichromatic theory
Theory proposing color vision as influenced by three different cones responding preferentially to red, green and blue.

Trigger features
Specific, sometimes minute, aspects of a situation that activate fixed action patterns.

Twin studies
A behavior genetic research method that involves comparison of the similarity of identical (monozygotic; MZ) and fraternal (dizygotic; DZ) twins.

Tympanic membrane
Thin, stretched membrane in the middle ear that vibrates in response to sound. Also called the eardrum.

Type A Behavior
Type A behavior is characterized by impatience, competitiveness, neuroticism, hostility, and anger.

Type B Behavior
Type B behavior reflects the absence of Type A characteristics and is represented by less competitive, aggressive, and hostile behavior patterns.

Unconditional positive regard
In person-centered therapy, an attitude of warmth, empathy and acceptance adopted by the therapist in order to foster feelings of inherent worth in the patient.

Unconditioned response (UR)
In classical conditioning, an innate response that is elicited by a stimulus before (or in the absence of) conditioning.

Unconditioned stimulus (US)
In classical conditioning, the stimulus that elicits the response before conditioning occurs.

Under-determined or misspecified causal models
Psychological frameworks that miss or neglect to include one or more of the critical determinants of the phenomenon under analysis.

Unimodal
Of or pertaining to a single sensory modality.

Unimodal components
The parts of a stimulus relevant to one sensory modality at a time.

Unimodal cortex
A region of the brain devoted to the processing of information from a single sensory modality.

Universalism
Universalism proposes that there are single objective standards, independent of culture, in basic domains such as learning, reasoning, and emotion that are a part of all human experience.

Unusual uses
A test of divergent thinking that asks participants to find many uses for commonplace objects, such as a brick or paperclip.

Ventral pathway
Pathway of visual processing. The “what” pathway.

Verbal persuasion
When trusted people (friends, family, experts) influence your self-efficacy for better or worse by either encouraging or discouraging you about your ability to succeed.

Vestibular system
Parts of the inner ear involved in balance.

Vicarious performances
When seeing other people succeed or fail leads to changes in self-efficacy.

Vicarious reinforcement
Learning that occurs by observing the reinforcement or punishment of another person.

Visual hemifield
The half of visual space (what we see) on one side of fixation (where we are looking); the left hemisphere is responsible for the right visual hemifield, and the right hemisphere is responsible for the left visual hemifield.

Weber’s law
States that just noticeable difference is proportional to the magnitude of the initial stimulus.

Wernicke’s area
A language area in the temporal lobe where linguistic information is comprehended (Also see Broca’s area).

White coat hypertension
A phenomenon in which patients exhibit elevated blood pressure in the hospital or doctor’s office but not in their everyday lives.

White matter
The inner whitish regions of the cerebrum comprised of the myelinated axons of neurons in the cerebral cortex.

White matter
Regions of the nervous system that represent the axons of the nerve cells; whitish in color because of myelination of the nerve cells.

Work and organizational psychology
Preferred name for I/O psychology in Europe.

Working memory
Short transitory memory processed in the hippocampus.

Working memory
The ability to maintain information over a short period of time, such as 30 seconds or less.

Working memory
Memory system that allows for information to be simultaneously stored and utilized or manipulated.

Working memory
The form of memory we use to hold onto information temporarily, usually for the purposes of manipulation.