

Psychology is the scientific study of behavior and mental proc

It helps understand how people think, feel, and act.

Example: Studying how stress affects decision-making.



Goals of psychology:

- Describe-observe behvaior and note what happens.
- Explain understand why behavior occurs.
- Predict anticipate behavior based on patterns.
- Control/Influence apply knowledge to improve lives.

Major Perspectives in Psychology:

Biological: How brain, genes, and nervous system influence behavior

Behavioral: How the environment shapes behavior through learning.

Cognitive: Focus on thinking, memory, problem-solving

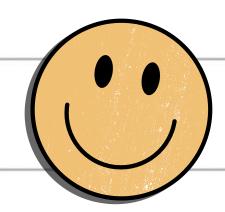
Psychodynamic: Role of unconscious thoughts and early experiences.

Humanistic: Emphasis on personal growth and free will.

Sociocultural: How society and culture affect behavior.

Evolutionary: How natural selection influences behavior and mental

processes.



Why research Matters:

Psychology uses research to study behavior

scientifically. It helps avoid bias, test ideas,

and confirm facts.

Descriptive Research:

Describes behavior without changing anything. Case studies

examine one person or group depth. Naturalistic observation

watches behavior in real-life settings. Surveys collect self-

Correlational Rsearch:

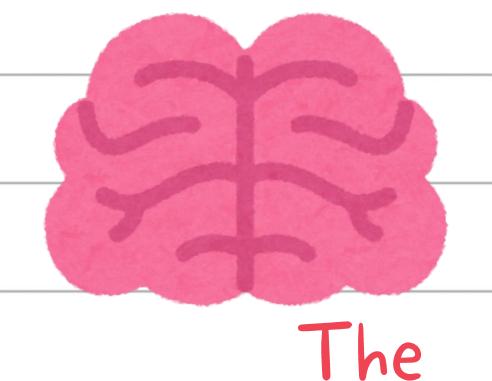
reported information from many people

Looks at relationships between variables. A correlation can

be positive, negative, or zero. Important: Correlation does

not mean causation.





Neurons:

brain:

The nervous system thoughts, feelings, and actions. It has two blocks of nervous system. main parts: the central nervous They transmit information system (CNS), which includes the brain and spinal cord, and to the rest of the body

Neurons are the building using electrical and chemical and decision-making. The signals. Key parts include the limbic system manages the peripheral nervous system dendrites (receive message), emotions and motivation. (PNS), which connects the CNS axon (sends messages), and synapse (gap where signals pass between neurons).

The brain several major areas. The cerebal cortex hormones to send handles thinking, memory, messages through The brainstem controls basic life functions like breathing and heartbeat.

The system uses the bloodstream. It works closely with the nervous system to regulate growth, metabolism, and stress.

Sensation:

Sensation is the process of detecting physical energy from the environment through our senses. This vision, hearing, taste, smell, and touch. Sensory organs convert stimuli into signals the brain can understand.

Percerption:

Perception is how the brain organizes and interprets sensory information. It allows us to make sense of the world, like recognizing faces or understanding speech

Other Senses:

Taste: Detected by taste buds; basic tastes consist of sweet, sour, salty, bitter, and umami

Smell: Detected by receptors in the nose; closely linked to memory.

Touch: Includes pressure, temperature, pain, and vibration.

Vestibular sense: Balance, controlled by inner ear.

Kinesthetic Sense: Awareness of body position and movement.



Classical Conditioning:

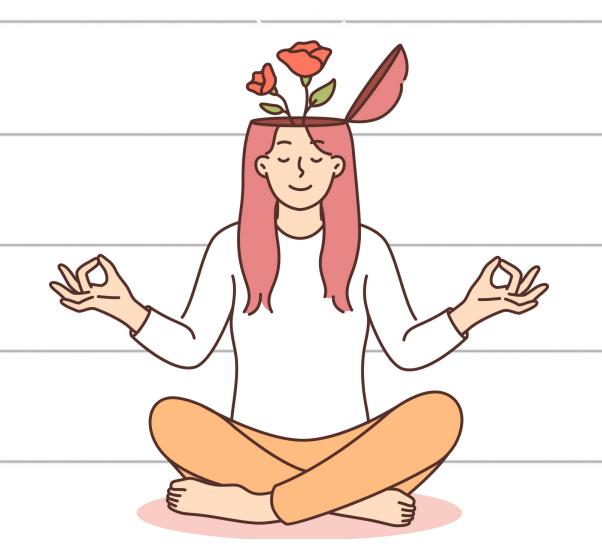
A type of learning where a neutral stimulus becomes associated with a meaningful stimulus, producing a similar response. Example: Pavlov's dog learned to salivate at the sound of a bell.

Operant Coditioning: Learning in which behavior is shaped by consequences.

- Reinforcement increases behavior (positive: add reward, negative: remove unpleasant stimulus).
- Punishment decreases behavior (positive: add unpleasant stimulus, negative: remove reward).

Cognitive Aspects of Learning:

Learning is not always visible. People may form mental maps or expectations, which influence behavior even without immediate rewards.



CHAPTER 6

Memory is process of encoding, storing, and retrieving information.

It allows us to learn from experience and adapt to our environment.

Stages of Memory:

 Sensory Memory - Briefly holds sensory information for a few seconds.

- Short Term Memory (STM) Holds information temporarily for about 20–30 seconds; limited capacity (~7 items).
- Long-Term Memory (LTM) Stores information indefinitely; can have unlimited capacity.

Memory Processes:

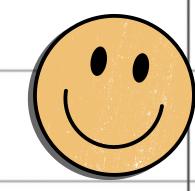
- Encoding: Converting information into a form the brain can store.
- Storage: Maintaining information over time.
- Retrieval: Accessing stored
 information when needed.

Cognition refers to mental processes such as thinking, problem-solving, decision-making, and language. It helps us understand and interact with the world.

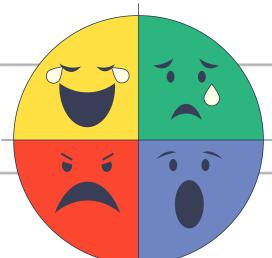


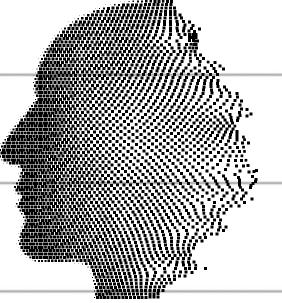
Problem Solving involves finding solutions to challenges. Strategies include trial and error, algorithms, and heuristics.

Decision Making:
Choosing between options can be influenced by biases, heuristics, and framing effects. Sometimes decisions are logical, other times they are based on intuition or emotion.









Motivation is the process that initiates, guides, and maintains behavior. It explains why we act and how hard we work toward goals.

Types of Motivation:

- Intrinsic: Driven by internal rewards, like personal satisfaction.
- Extrinsic: Driven by external rewards, like money or praise.

Theories of Motivation:

- Drive-Reduction Theory: Motivation arises from the need to reduce biological drives (e.g., hunger, thirst).
- Maslow's Hierarchy of Needs: People are motivated by a pyramid of needs, starting with basic survival and moving to self –
 actualization.
- Self-Determination Theory: Emphasizes autonomy, competence, and relatedness as key motivators

Emotion is a complex response involving physiological arousal, expressive behaviors, and conscious experience.

Theories of Emotion:

- James-Lange: Emotions result from physiological responses to stimuli.
- Cannon-Bard: Emotion and physiological reactions occur simultaneously.
- Schachter-Singer (Two-Factor): Emotion arises from arousal + cognitive interpretation.

Devlopment is the physical, cognitive, and social changes that occur throughout life, from infancy to old age.

Stages of Development:

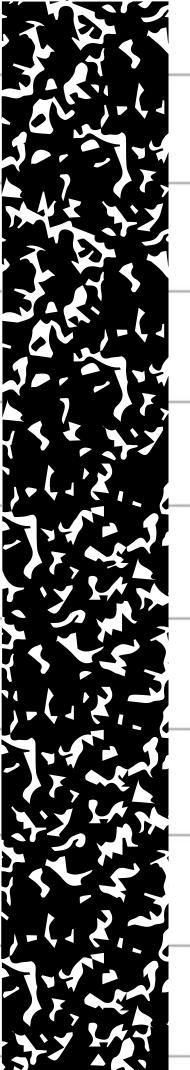
- Prenatal: Conception to birth; rapid growth and development.
- Infancy and Childhood: Learning basic skills, language, and social interaction.
- Adolescence: Identity formation, puberty, and cognitive growth.
- Adulthood: Career, relationship, and peak physical abilities.
- Older Adulthood: Aging, reflection, and coping with physical/cognitive changes.

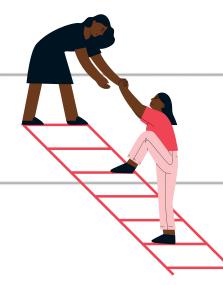
Cognitive Development:

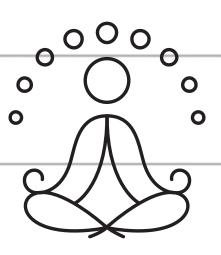
- Piaget's Stages: Sensorimotor, Preoperational, Concrete Operational, Form Operational.
- Focus on how thinking evolves from simple to complex.

Social and Emotional Development:

- Erikson's Psychosocial Stages: Life challenges influence personality (e.g., trust vs. mistrust, identity vs. role confusion).
- Attachment in infancy influences later relationships.







Personality is the unique and consistent patterns of thinking, feeling, and behaving that make each person different.

Major Theories of Personality:

Psychoanalytic (Freud): Personality shaped by unconscious desires and early experiences. Includes id, ego, and superego.

Humanistic (Rodger, Maslow): Focuses on personal growth and self-actualization. People strive to reach their full potential.

Trait Theory: Personality consists of stable traits, like the Big Five: Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism.

Social-Cognitive Theory: Behavior influenced by interaction of traits, environment, and cognition. Includes concepts liek self-efficacy.

Assessing Personality:

Self-report questionnaires: People rate their own traits (e.g., MMPI).

Projective test: People respond to ambigous stimuli (e.g., Rorschach inkblot)

