

1. History, Approaches & Methods of Psychology

1.1. History of Psychology

1.2. Approaches: Biological, Behavioral, Cognitive, Humanistic, Psychodynamic

1.3. Research Methods: Experimental, Clinical, Correlational

1.4. Ethics in Research

1.1. History of Psychology

- **What is Psychology?**
- **Psyche**
 - **Greek word for mind, spirit, or soul**
- **Ology**
 - **Greek word for “study of”**

- **Psychology is the scientific study of human behavior and mental processes**

- **Structuralism**
 - **Wilhelm Wundt**
 - **1879 First Psychology Lab in Leipzig, Germany**
 - **Introspection**
- **Functionalism**
 - **William James**

1.2. Psychological Approaches

- **Biological approach**
 - **physiological and biochemical explanation of behavior**
 - **behavior as a result of genes, nervous system, hormones, neurotransmitters and other biological functions**

- **Behavioral approach**
 - learned responses to predictable patterns of external stimuli
 - **Pavlov's classical conditioning**
 - **Skinner's operant conditioning**



- **Psychodynamic approach**
 - **Sigmund Freud**



- **Psychodynamic approach**

- **Unmet needs/unresolved conflicts from childhood determine personality**
- **Behavior as a result of unconscious, attachment and interpersonal connection**

- **Psychodynamic approach**

- **Sigmund Freud**

- **id, ego, superego**

- **defense mechanisms**

- **sexual and aggressive urges drive behavior, thoughts and feelings**

- **Cognitive approach**

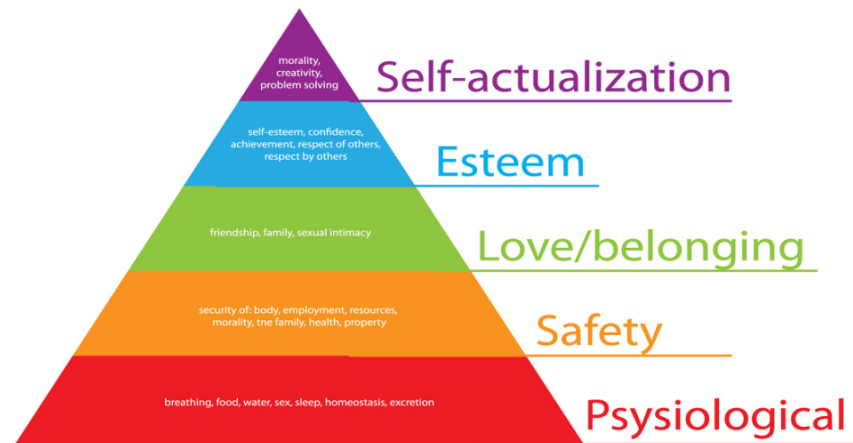
- **Developed in reaction to behaviorism (focused on observable events)**

- **Cognitive approach**
 - Behavior as a result of “expectations”, “feelings” and “thoughts”
 - Study problem solving, attention, memory and other thought processes

- **Humanistic approach**
 - developed in reaction to Behaviorist and Psychodynamic models
 - people are motivated by desire for growth and development

- **Humanistic approach**
 - **Abraham Maslow's Hierarchy of Needs**
 - **Self actualization**
 - **Carl Rogers-believed people are basically good**
 - **unconditional positive regard**

- **Humanistic approach**



Maslow's Hierarchy of Needs

1.3. Research Methods

- **Experimental**

- **Cause and effect relationship between two variables**

- **Independent variable**

- **The variable being manipulated**
 - **The “cause”**

- **Dependent variable**

- **The variable being measured for change**
 - **The “effect”**

- **Experimental**

- **Experimental group**

- **Exposed to the “cause”**
 - **Receives the independent variable**

- **Control group**

- **Not exposed to the “cause”**
 - **Receives no treatment or some treatment that should have no effect**

- **Random Assignment**
- **Blind and Double Blind Study**
- **Placebo and Placebo Effect**

- **Clinical**
 - **Case studies**
 - **Freud used this method to develop psychoanalytic theory**
 - **Naturalistic observation**
 - **agreement among observers**
 - **Clinical interviews**
 - **inter-rater reliability**

- **Correlational**
 - **How two variables relate to one another**
 - **No manipulation of variables**
 - **Does NOT measure cause and effect**

- **Correlational**
 - **Positive Correlation**
 - **Negative Correlation**
 - **Correlation Coefficient**
 - 1.0-----0-----1.0
 - **Self-reporting surveys**

- **Surveys**
 - **Self-reporting**
 - **Subject to bias**

1.4. Ethics in Research

- **Participants must be treated morally and respectfully**
- **Purpose of study, duration and process**
- **Any possible harm or adverse effects should be disclosed**

2. Biological Bases for Behavior

Now we will discuss the field of behavioral neuroscience. This section will cover how the body and communication among its parts influences behavior as well as how information is moved throughout the body.

2.1. Endocrine system

2.2. Etiology

**2.3. Functional organization of
the nervous system**

2.4. Genetics

2.5. Neuroanatomy

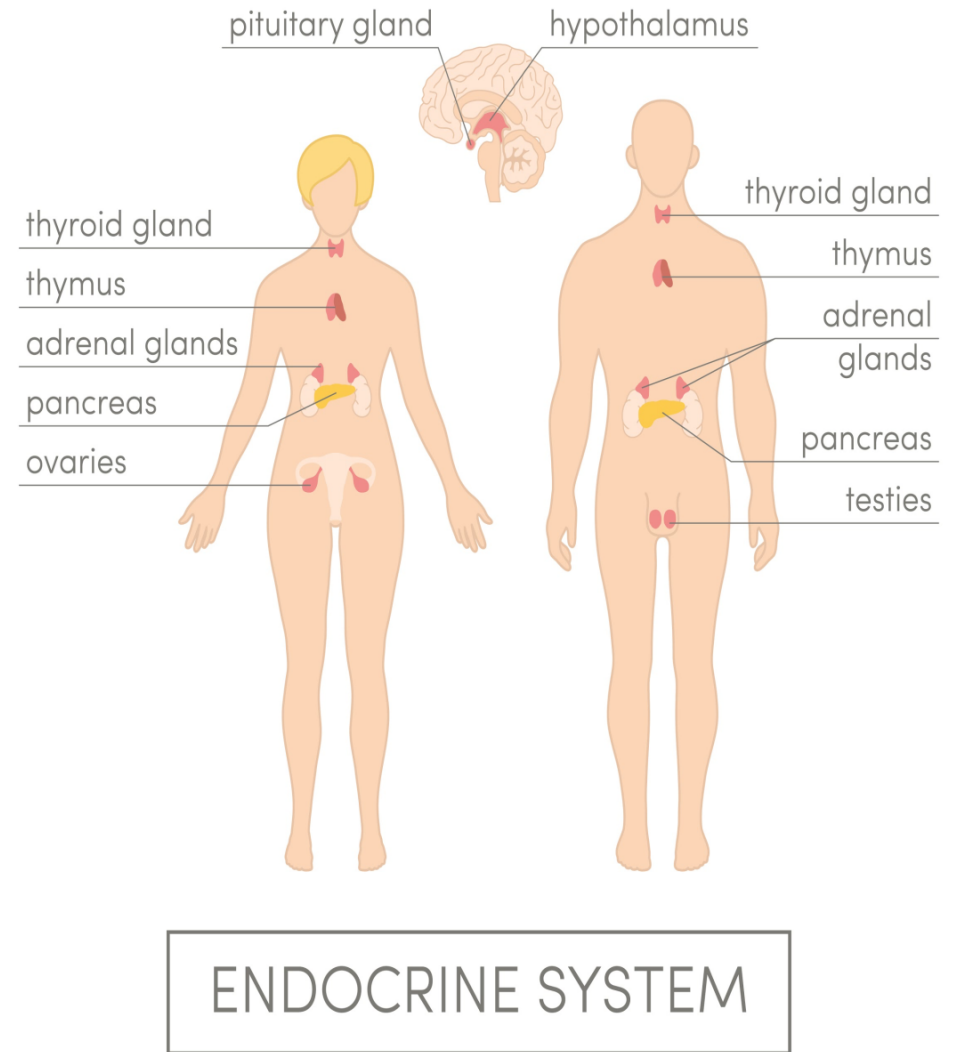
2.6. Physiological techniques

2.1 Endocrine System

- **Made up of glands located throughout the body that secrete hormones into the bloodstream**
- **Hormones are chemical messengers secreted into the bloodstream to regulate bodily functions**
- **Processes regulated include metabolism, growth rate, digestion, blood pressure, sexual development and reproduction**

- **Pituitary gland**

- **master gland of the endocrine system**
- **when activated by hypothalamus activates other glands throughout the body**



2.2 Etiology

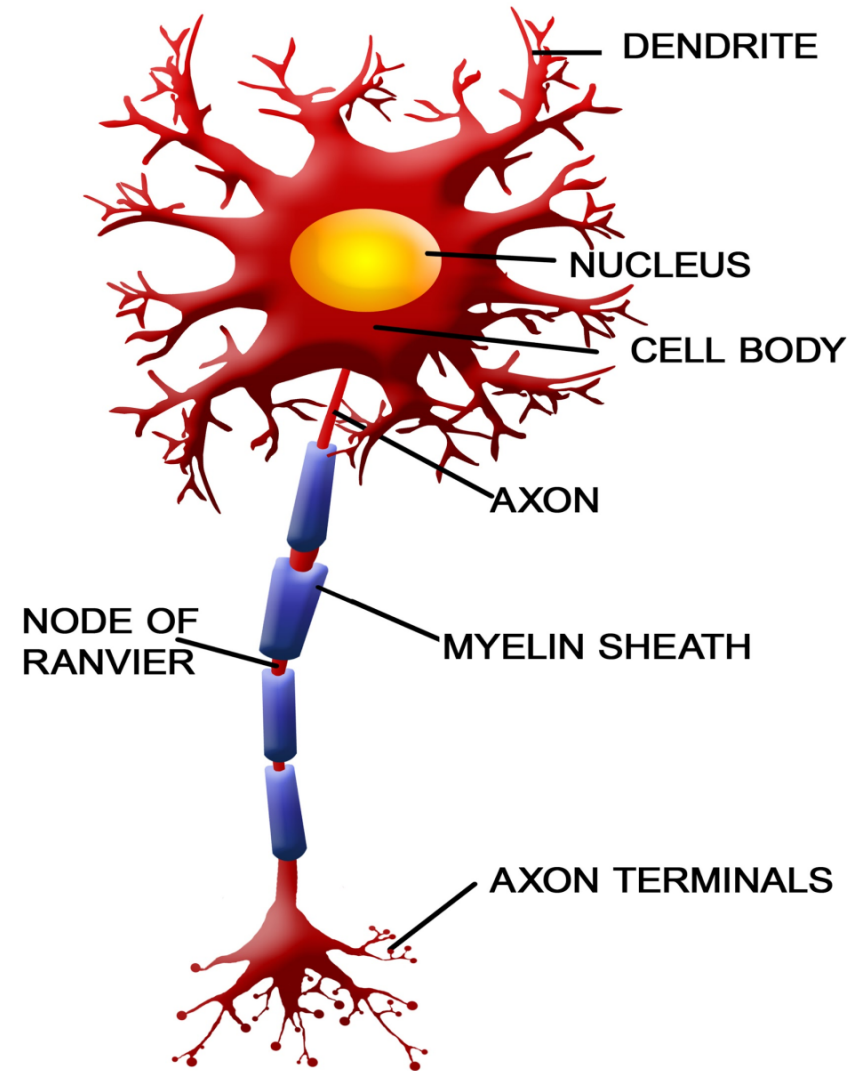
- **Biological explanation for mental disorders within psychology**
- **Genetic predisposition and hereditary links**
 - schizophrenia, alcoholism, bipolar disorder
- **Malfunctioning brain chemistry, neuroanatomic pathology**

2.3 Functional Organization of the Nervous System

- **Communication throughout the nervous system takes place via neurons, cells that are highly specialized to receive and transmit information across the body**

- **Structure of Neurons**
 - **Cell body- helps keep the cell alive and functioning**
 - **Dendrites- take information in from outside of the cell**
 - **Axons- pass information along to other nerve cells, muscles or glands**

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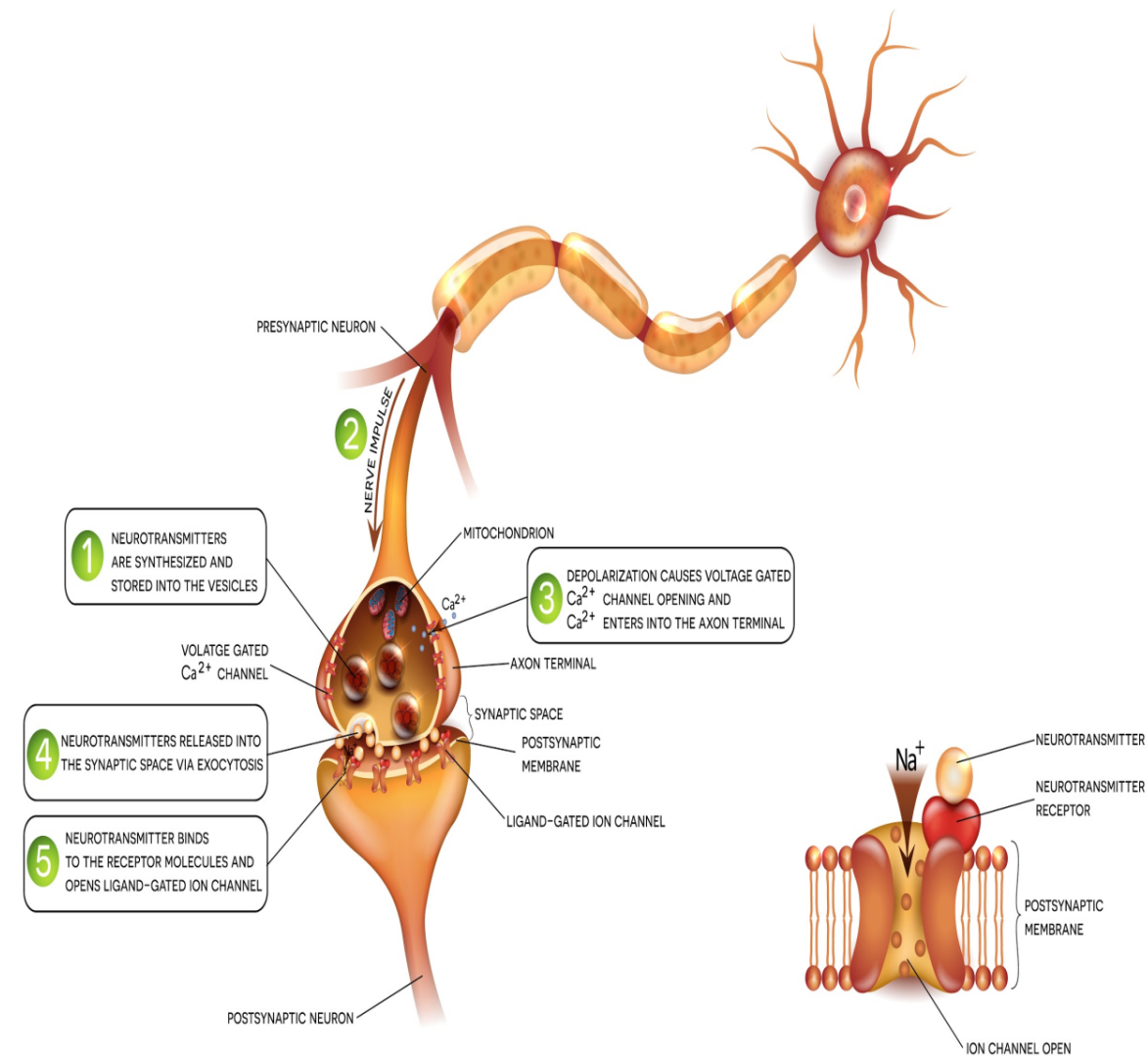
- **Myelin sheath covers the axon on some neurons (but not all)**
 - **accelerates the transmission of information**

- **Sensory/Afferent Neurons**
 - take in information from body tissues and sense organs
 - transmit to spinal cord and brain
- **Motor/Efferent Neurons**
 - send information from spinal cord and brain to body tissue, muscles, and sense organs
- **Inter/Association Neurons**
 - neurons that communicate with other neurons
 - Most common

- **Neurons work through use of electrical impulses and neurotransmitters**
- **Neurotransmitters are chemical molecules contained in vesicles within the axon terminal**
 - **communicate across the synapse gap- the space between two neurons**

THE SYNAPSE

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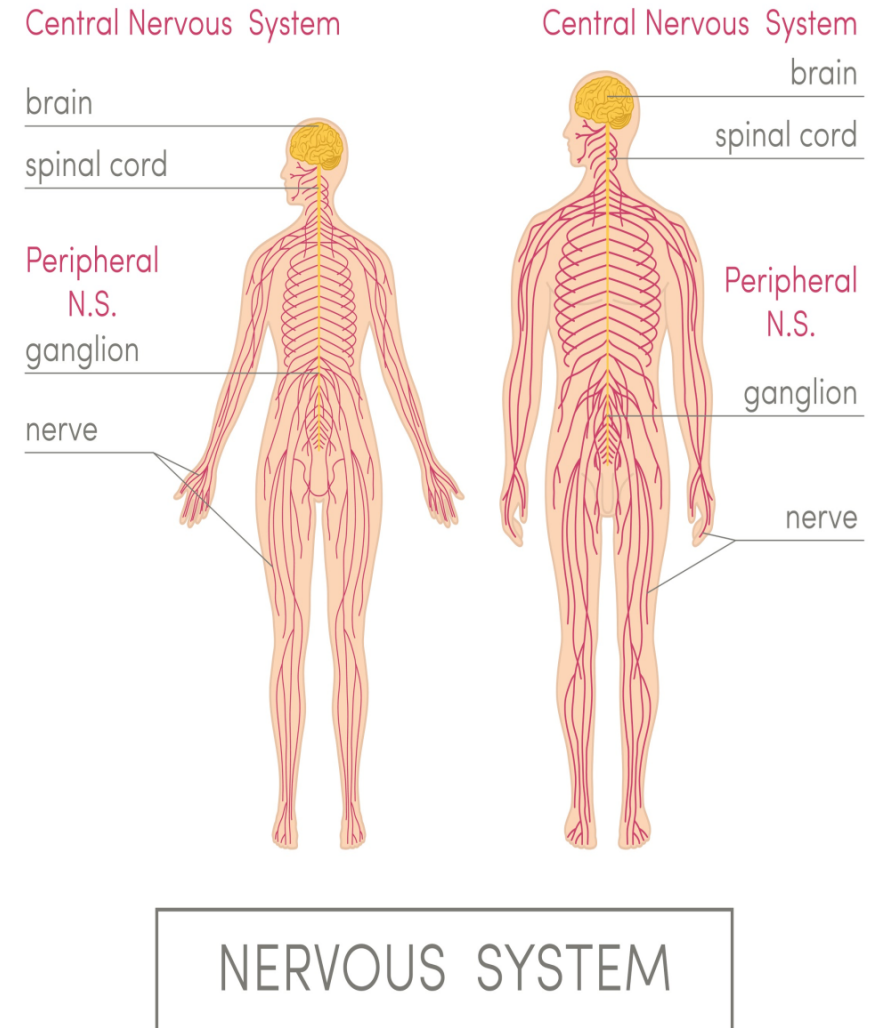


- **Any neurotransmitter left in synaptic gap is broken down or absorbed back into the neuron which is called reuptake**

- **Each neurotransmitter affects behavior differently**
 - Serotonin – mood, emotional states, sleep
 - Dopamine – attention, movement, pleasure sensations
- **Drugs mimic behavior of neurotransmitter**
 - Agonist- increase neural activity flow and effect
 - Antagonist- decrease neural activity and effect

- **The nervous system is made up of different divisions that have unique functions**
- **Central nervous system (CNS) includes the brain and spinal cord**
 - **Suspended in cerebrospinal fluid**
 - **reflexive behavior**
 - **Relies on sensory, motor, and interneuron communication**

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- **Peripheral nervous system connects the brain and spinal cord to the rest of the body**
 - **Two subdivisions**
- **Somatic nervous system**
 - **carries information from muscles, sense organs and skin to the CNS**
 - **carries messages from CNS to skeletal muscle**

- **Autonomic nervous system**
 - **controls internal environment of the body**
 - **glands, organs and some muscles**
 - **sympathetic nervous system prepares you for action**
 - **parasympathetic nervous system is in operation during states of relaxation**

2.4 Genetics

- **Genetics play a large role in how and when learning, growing and development occur**
- **Human behavior is a product of genetics and environment**
 - **nature vs nurture**
- **Genes do not determine behavior but can have a significant impact on what we do and why we do it**

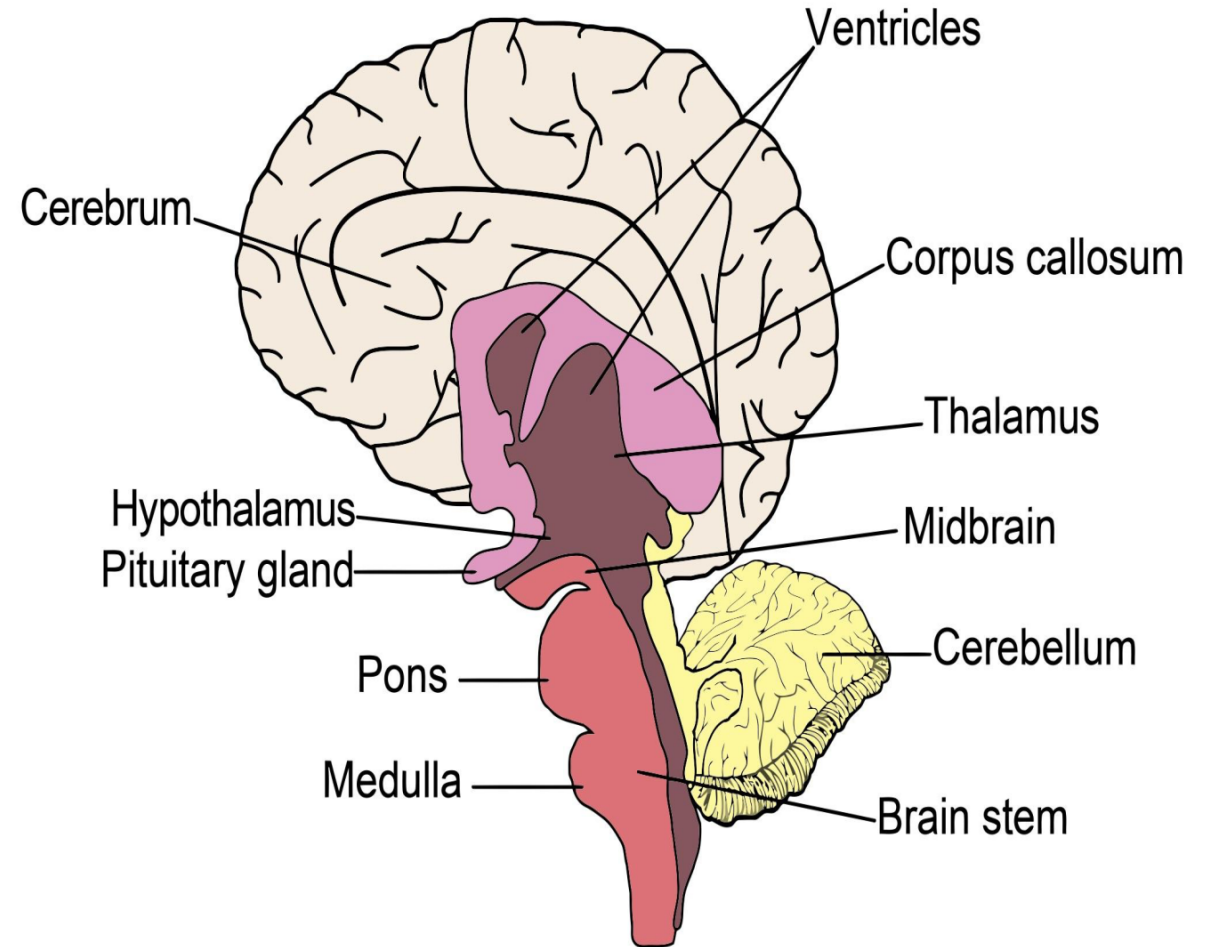
2.5 Neuroanatomy

- **Neurons in the brain work together as neural networks**
- **Different parts of the brain utilize different functions that influence thoughts, feelings and behaviors**
- **Malfunctioning or damage in different areas of the brain impact their designated functions**

- **Brainstem is where the spinal cord enters the skull and is the oldest part of the brain**
 - **cerebellum- coordination of voluntary movement**
- **Thalamus is on top of the brainstem**
 - **receives information about taste, touch, sight and hearing**

HUMAN BRAIN

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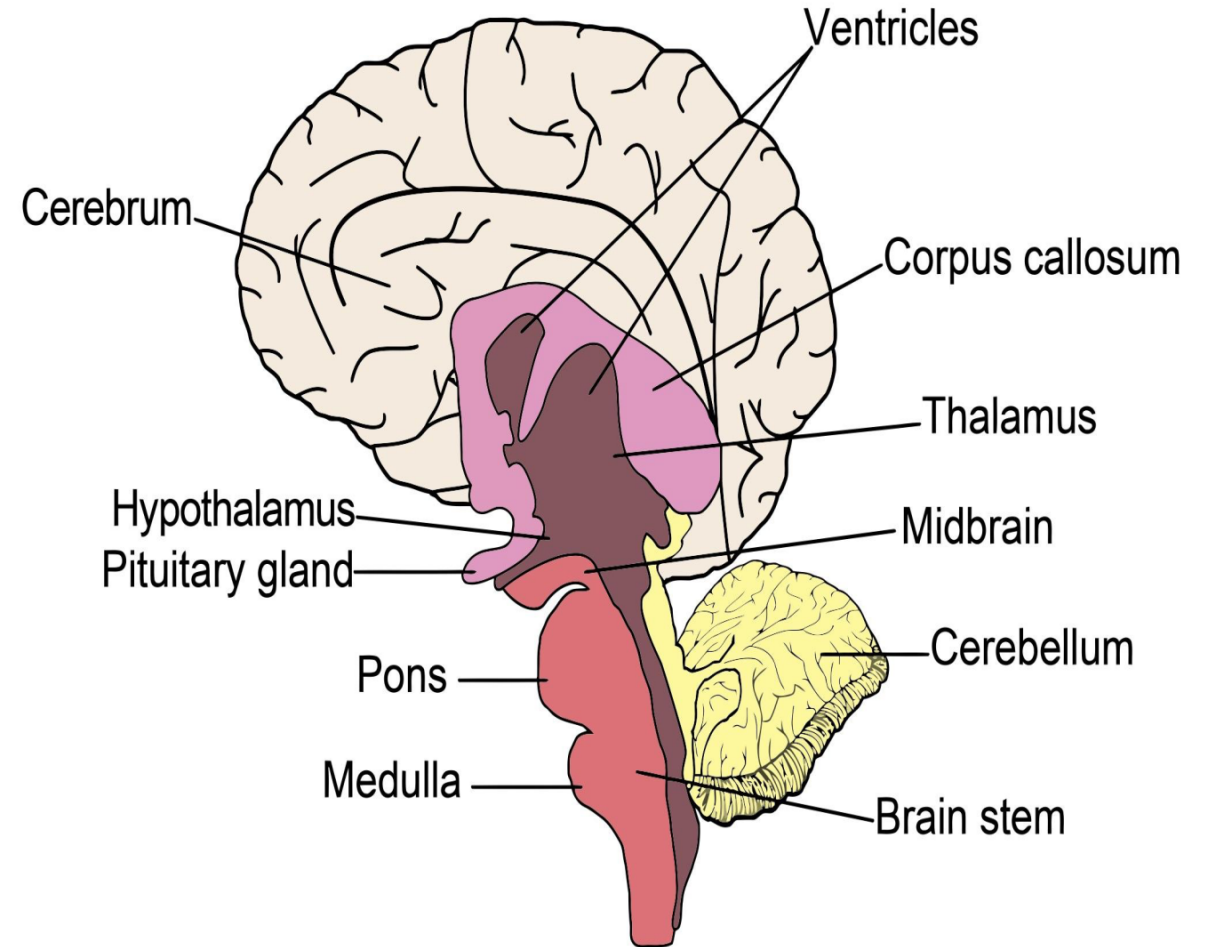


- **Reticular formation runs through thalamus and brainstem**
 - **controls arousal and sleep**
 - **filters incoming stimuli and sends to other parts of brain**
- **Limbic system sits between brainstem and cerebral cortex- more recently evolved part of the brain**

- **Limbic system components**
 - **hippocampus- processes memory**
 - **amygdala- fear and anger**
 - **hypothalamus- hunger, thirst, sexual behavior**
 - **controls pituitary gland**
- **Cerebral cortex is the outer covering of the brain**
 - **motor, cognitive and sensory processes**
 - **divided into two hemispheres**

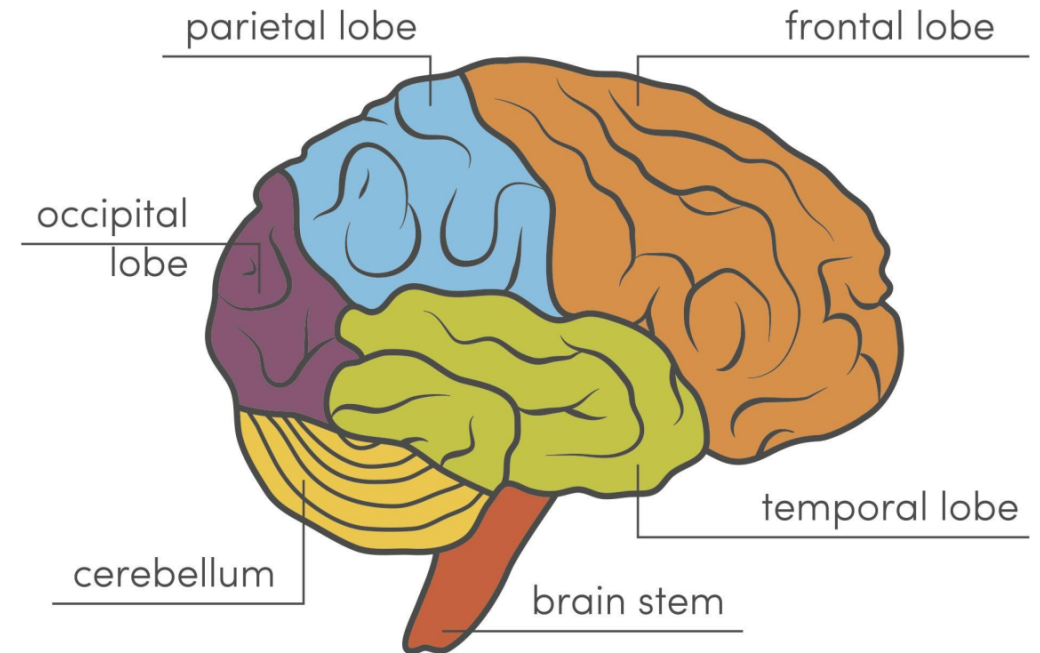
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- **Cerebral cortex hemispheres are divided into 4 regions**
 - **frontal lobes- coordinating movement, higher level functioning and speech**
 - **Broca's area**
 - **Wernicke's area**
 - **parietal lobes- sense of touch- hands and feet**
 - **temporal lobes- hearing**
 - **occipital lobes-vision**

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human brain

2.6 Physiological Techniques

- **Physiological techniques are used examine the interrelationship between a person's brain and their behavior**
- **Examples:**
 - **EEG**
 - **MRI**
 - **CAT scan**
 - **PET scan**

3. Sensory and Perception

Now we will discuss the topics of sensation and perception. This section will cover the different perceptual processes as well as its development.

It will also cover the components of sensory mechanisms and other senses we experience.

The sections in this unit are:

- **3.1. Attention**
- **3.2. Other senses: somesthesis, olfaction, gustation, vestibular system**
- **3.3. Perceptual development**
- **3.4. Perceptual processes**
- **3.5. Receptor processes: vision, audition**

3.1 Attention

- **Sensation- transforming energy from outside stimuli into neural energy**
- **Perception- taking neural energy and creating an image of outside world**

- **Psychophysics**
 - **levels of intensity we can detect stimuli**
 - **how sensitive we are to changes in stimulation**
 - **how psychological factors influence our ability to sense stimuli**

- **Psychological factors such as motivation, past experience and expectation impact our ability to notice stimuli**
 - **signal detection theory**
- **Important to detect differences between stimuli as well as their absence or presence**

- **The amount of information we can hold in our awareness is less than what exists in the given environment**
- **Selective attention- our ideas about reality are chosen, organized and interpreted**
- **Perception is constructing meaning out of sensation**

3.2 Other Senses

- **Somesthesis is the body's sense of touch and is broken down into three systems:**
 - **the skin sense- keep bodily fluids in and germs out**
 - **the kinesthetic sense- knowing how your body is moving without visually observing it**
 - **vestibular sense- keeps the body balanced- sense of balance**

- **Olfaction is the body's sense of smell**
- **Chemical compounds of a specific "smell" travel through the nose to the brain**
 - **first processed by the olfactory bulb**
 - **olfactory bulb has direct connections to amygdala and hippocampus which are strongly implicated in emotion and memory**

- **Gustation is the body's sense of taste**
- **Promotes nutritional needs and protects from poisonous food**
- **Bitter, sweet, salty, sour and unami (savory) are the five main types of taste**

- **Vestibular system-sensory information pertaining to motion, equilibrium and spatial orientation**
- **Located in each ear- utricle, saccule and three semicircular canals**
 - **utricle and saccule detect gravity and linear movement**
- **Keeps eyes on target when head moves**

3.3 Perceptual Development

- **Nature VS Nurture:**
 - **Ecological (nature)**
 - **some abilities are present at birth and fine-tuning of perceptual processes occurs throughout the lifespan**

- **Nature VS Nurture:**
 - **Constructivism (nurture)**
 - **construction of perception through learning and reliant on specific experiences**

3.4 Perceptual Processes

- **Depth Perception allows us to estimate distances between ourselves and objects we see**
 - **binocular cues- both eyes**
 - **Retinal Disparity**
 - **monocular cues- one eye**
 - **Linear Perspective**

- **Motion parallax refers to the apparent movement of stable objects when we are moving**
- **Interposition is when one object partially blocks out another**

- **Perceptual cues are hardwired but our experiences also shape our perception**
 - **sensory restriction- only has an effect in childhood when systems are forming**
 - **suggest a critical period for certain perceptions to be developed**

- **Processing of information occurs in:**
 - **bottom-up- simple sensory receptors to complex neural networks**
 - **top- down- expectations, motives and contextual cues to raw sensory data**

3.5 Receptor Processes

- **Vision allows for the processing of visual detail through use of the eyes**
 - **detects and interprets information from visual light to build representation of the surrounding environment**

- **Audition is the process of taking in sound through the ear and having it travel to the brain**
 - **taken to language center of brain to be interpreted**

4. States of Consciousness

We will now review different states of consciousness.

4.1. Sleeping and dreaming

4.2. Hypnosis and meditation

4.3. Psychoactive drug effects

4.1 Sleep and Dreaming

- **Consciousness**
 - **A state of awareness about ourselves and our environment**
 - **Many varieties of consciousness, both natural and induced**

- **Circadian Rhythms**
 - **Body's natural cycle of fluctuations of natural processes**
 - **Temperature**
 - **Hormone levels**
 - **Level of wakefulness**
 - **~25 hour clock when under "Free Running" conditions**

- **Biological rhythms of sleep as measured by EEG**
- **Five stages of sleep and differing brain waves**
 - **Stage 1: Alpha waves**
 - **hypnagogic sensations**

 - **Stage 2: Theta waves**
 - **sleep spindles,**
 - **K-complexes**

- **Brain waves –cont.**
 - **Stage 3: delta waves**
 - **Stage 4: slow wave sleep**
 - **REM- paradoxical sleep**

- **Sleep disorders**
 - **insomnia**
 - **hypersomnia**
 - **narcolepsy**
 - **sleep apnea**

- **Dreams occur during REM**
- **REM rebound**
 - **dreams appear necessary**
 - **if REM deprived, longer periods will occur**

- **Freud's theory of dreams**
 - manifest content disguised as latent content
- **Activation- synthesis theory**
 - Constructed story to explain images from random neural activation
- **Information- processing model**
 - dreams are a way to consolidate information

- **Hypnosis**
 - **induced state of consciousness**
 - **deep relaxation and heightened suggestibility**
 - **dissociation- split in consciousness**

4.2. Hypnosis and meditation

- **Meditation**
 - **awareness**
 - **practice of acknowledging content of the mind**
 - **promote relaxation, energy and compassion**

4.3. Psychoactive Drug Effects

- **Produce a different state of consciousness by mimicking, inhibiting or stimulating activity of neurotransmitter**

- **Depressants**
 - alcohol, barbiturates, opiates
- **Stimulants**
 - cocaine, amphetamines
- **Hallucinogens**
 - LSD, mescaline, psilocybin

5. Learning

Now we will study the different processes of learning.

This section will cover classical conditioning, observational learning and operant conditioning as well as cognitive processes that occur during learning.

5.1. Biological bases

5.2. Classical conditioning

5.3. Cognitive process in learning

5.4. Observational learning

5.5. Operant conditioning

5.1 Biological Bases

- **Unlearned behaviors one is born with**
 - **reflexes- motor or neural reaction**
 - **instincts- innate behaviors triggered by events**
 - **help organism adapt to environment and survive**

5.2 Classical Conditioning

- **Ivan Pavlov- physiologist**
- **Unconscious**
- **Process of learning in which associate stimuli and, consequently, anticipated events**



- **Unconditioned stimulus**→
unconditioned response
- **Neutral stimulus becomes**
conditioned stimulus
- **Conditioned stimulus**→
conditioned response

- **Expectation**

- **unconditioned stimulus will show up after conditioned stimulus**

- **Extinction**

- **conditioned stimulus present without unconditioned stimulus**
- **conditioned response goes away**

5.3 Cognitive Process of Learning

- **Complex interaction of conscious and unconscious processes**
- **Associative learning**
- **Non-associative learning**
 - **habituation**
 - **sensitization**

- **Attention**
- **Sensory register- holds information for a few seconds**
- **Short-term and long-term memory**
- **Encoding and retrieval of information**

5.4 Observational Learning



- **Modeling**
 - watching what others do are say and mimicking behavior
- **Learning occurs vicariously**
- **Bandura**
 - attention, retention, reproduction, motivation
 - prosocial and antisocial effects

5.5 Operant Conditioning

- **B.F Skinner- building off of classical conditioning**
- **Learning an association between a stimulus and response that follows it**
- **Based on Law of Effect**
 - **positive consequence more likely to repeat behavior**



- **Reinforcement**

- **positive- something is added to increase likelihood of behavior**
- **negative- something is removed to increase likelihood of behavior**

- **Punishment**

- **positive- something is added to decrease likelihood of behavior**
- **negative- something is removed to decrease likelihood of behavior**

- **Reinforcement schedule**
 - **ratio schedule- how many times response has been made**
 - **interval schedule- amount of time between reinforcements**
 - **Fixed or variable**

6. Cognition

We will now study the different areas of cognition. This section will cover intelligence, creativity, language, memory, thinking and problem-solving.

6.1. Intelligence and creativity

6.2. Language

6.3. Memory

**6.4. Thinking and problem
solving**

6.1 Intelligence and Creativity

- **Intelligence is our inherent potential for learning**
 - **how well you solve problems**
- **Alfred Binet**
 - **first intelligence test**
 - **intelligence quotient (IQ)**
 - **comparison between test taker score and average**

- **g-factor theory of intelligence**
 - **Charles Spearman**

- **Triarchic theory of intelligence**
 - **Robert Sternberg**
 - **analytic intelligence**
(academic skills)
 - **practical intelligence**
(problem solving)
 - **creative intelligence**

- **Multiple intelligences theories**
- **Raymond Cattell**
 - **Fluid intelligence**
 - **How fast you can learn new things; respond to your environment; puzzle ability**
 - **Crystallized intelligence**
 - **Using skills, experience and learned knowledge to solve problems**

- **What leads to differing levels of intelligence?**
- **Nature vs nurture**
 - **intelligence hereditary**
 - **learning environment**
- **Learning disabilities**
 - **dysgraphia**
 - **dyslexia**

- **Creativity**
 - **ability to generate, create or discover new ideas, solutions and possibilities**
 - **divergent thinking-
“outside of the box”**
 - **facet of intelligence-
difficult to measure
objectively**

6.2 Language

- **Use of words and systematic rules to transmit information (and solve problems)**
- **Form of communication used uniquely by humans**
- **Way of getting ideas from one person to another**

6.2. Language

- **Spoken, written or signed**
- **Components of Language**
 - **lexicon and grammar**
 - **phoneme and morphemes combined to form words**
 - **syntax and semantics used to construct language**

6.2. Language

- **Noam Chomsky**
 - **Language Acquisition Device**
 - **Universal Built-in System**

6.3 Memory

- **Sensory memory**
- **Short-term/working memory**
 - information left in the mind long enough to solve problems
 - Capacity of 7 items +/- 2
- **Long-term memory**
 - extra effort required to transfer from short-term
 - Unlimited capacity

- **Mnemonic strategies**
 - can be deliberate or unconscious
 - method of getting information into long-term memory or keeping more in short-term
 - rehearsal, chunking, spelling

6.4 Thinking and Problem Solving

- **Heuristics**
 - **representativeness heuristic**
 - **availability heuristic**
- **Trial and Error**
- **Algorithm**
- **Problem solving pitfalls**
 - **Biases**
 - **confirmation**
 - **hindsight**
 - **representative**
 - **availability**
- **Functional fixedness**
 - **Can a quarter tighten a screw?**

7. Motivation and Emotion

**We will now study
motivation and emotion.
We will cover the different
theories of motivation and
emotion, their biological
bases and their specific
components.**

The sections in this unit are:

7.1. Theories of emotion

7.2. Theories of motivation

**7.3. Biological bases of
Hunger, thirst, sex, pain**

7.4. Social motivation

7.1 Theories of Emotion

- **Emotion**
 - a psychological state involving three distinct components:
 - i. subjective experience
 - ii. physiological response
 - iii. behavioral or expressive feature

- **Mood**
 - prolonged, less explicit, affective state
 - not usually determined by a single event

- **James-Lange theory**
 - stimulus causes arousal → emotion
 - facial feedback hypothesis

- **Cannon- Bard theory**
 - relevant stimulus generate arousal
 - information sent to central nervous system and cortex

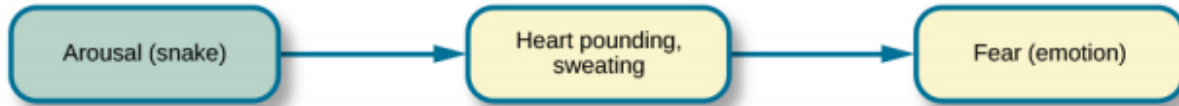
- **Two-factor theory**
 - quality of emotional experience depends on how arousal is labeled
 - excitation transfer



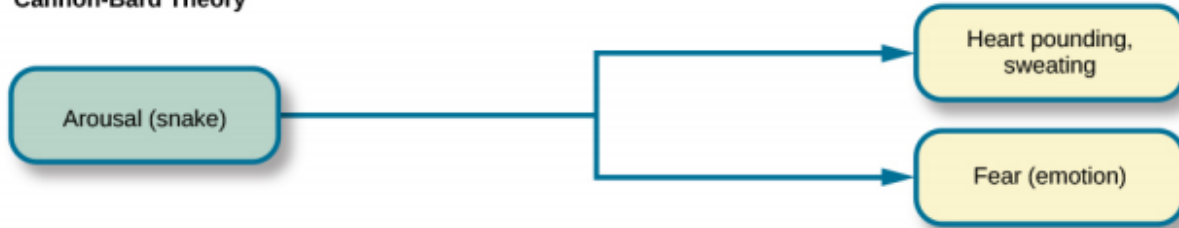
Time



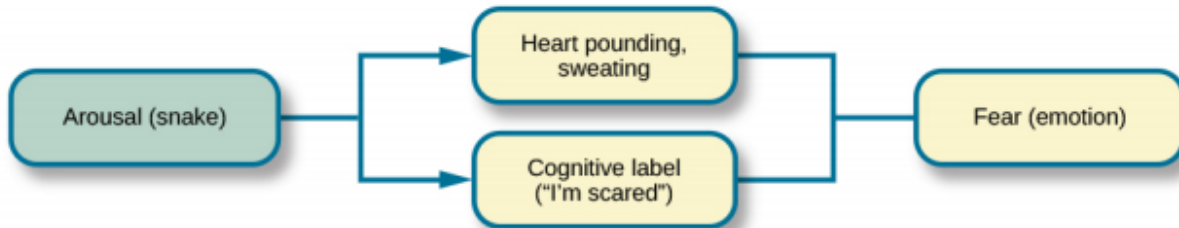
James-Lange Theory



Cannon-Bard Theory



Schachter-Singer Two-Factor Theory



Lazarus' Cognitive-mediational Theory



7.2 Theories of Motivation

What drives us? What makes us behave as we do?

- **Motivation**
 - **Describes the wants or needs that direct behavior towards a goal**

- **Drive theory**

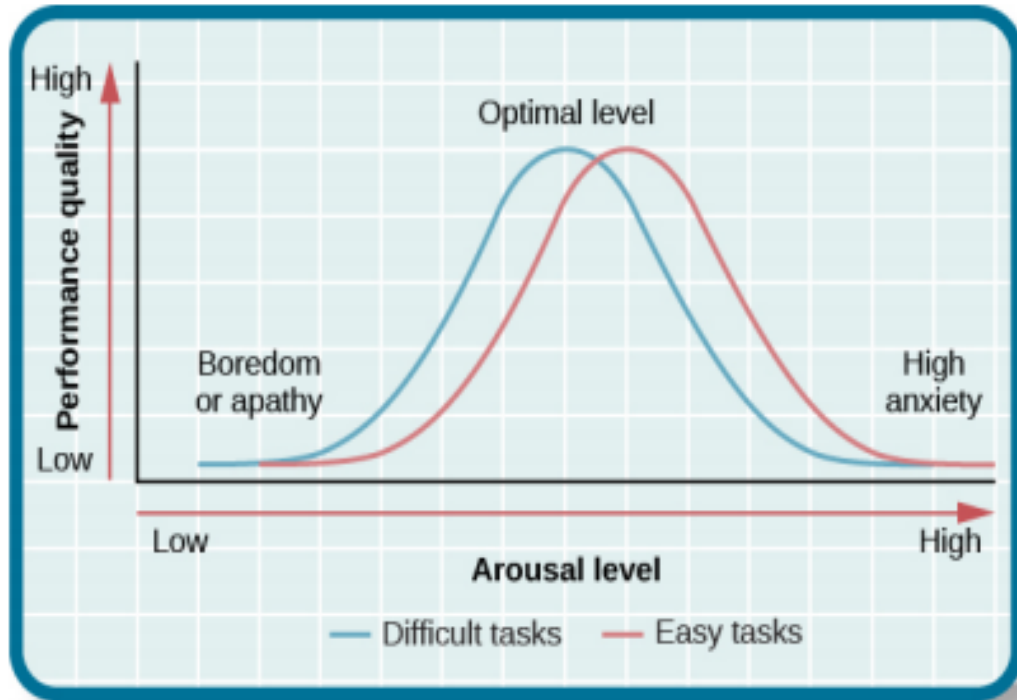
- **deviations from homeostasis create physiological needs to regain balance**

- **e.g., no food → ↓ blood sugar → hunger**

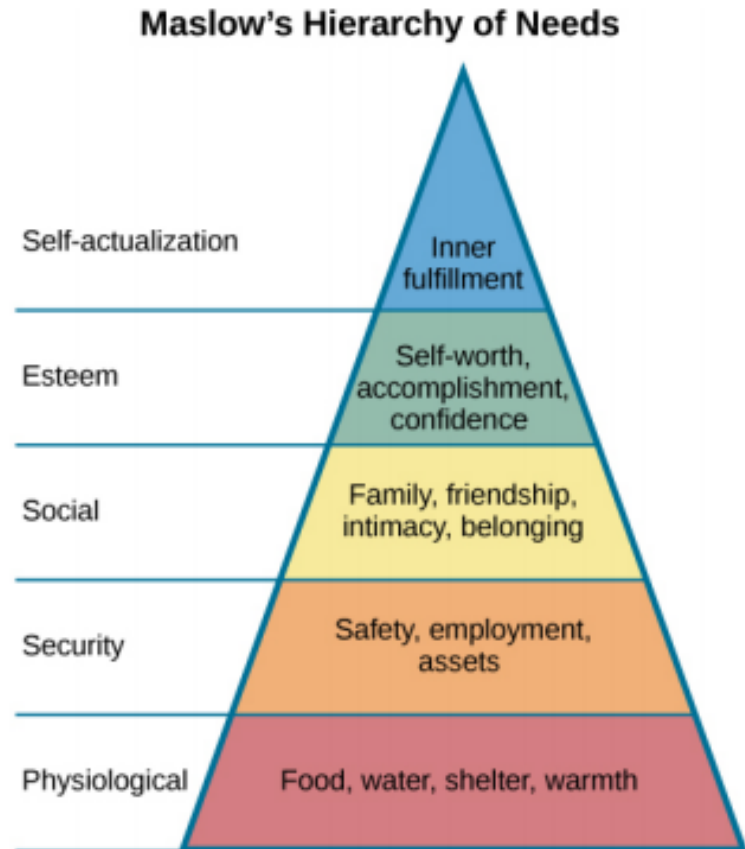
- **habit- likely to engage in previous behaviors that met need**

- **Yerkes-Dodson law**

- optimal arousal levels depend on complexity and difficulty of task
- complex task → low arousal
- simple task → high arousal



- **Maslow's hierarchy of needs**
 - **physiological needs** → **basic needs** → **self-actualization**
 - **ongoing lifelong process**



7.3 Biological Bases: Hunger, Thirst, Sex, Pain

• **Hunger**

- **biological instinct for survival**
- **empty stomach → hunger pains and chemicals that initiate hunger in brain**
- **glucose= blood sugar from food that provides energy for body**
- **insulin= helps reduce glucose levels thus impacting hunger**

- **Hunger**

- **hypothalamus**
- **set-point- weight your body works to maintain**
- **Eating Disorders**
 - **social and cultural pressures for ideal beauty**
 - **anorexia, bulimia, binge eating disorder**

- **Thirst**

- **Produced by depletion of fluid outside and within cells**
- **Peripheral and central nervous system**
 - **subfornical organ and lateral hypothalamic nucleus**
- **Angiotensin- produced by the kidneys**

- **Sexual behavior**
 - **Sexual motivation**
 - **Limbic System**
 - amygdala
 - nucleus accumbens
 - **Hormones produced in endocrine system**
 - estrogen (women)
 - testosterone (both)

- **Dr. Alfred Kinsey**
 - **Kinsey scale- used to categorize individual's sexual orientation**

- **Masters and Johnson**
 - **sexual response cycle- excitement, plateau, orgasm and resolution**

- **Biology of Pain**
- **Nociception process**
 - **contact with stimulus**
 - **reception- nerve ending sense stimulus**

- **transmission-relayed to central nervous system**
- **pain center reception-
brain further processes**

Types of Pain

- **Physical pain**
 - **physical characteristics, intensity and interpretation**
 - **acute vs chronic**

- **Social pain**
 - **pain of social disconnection**
- **Psychological pain**
 - **depression and other mental disorders**

7.4 Social Motivation

- **Human need to interact with others and be accepted by them**
 - **extrinsic**
 - **receive something from others**

- **intrinsic**
 - **biological motives**
 - **sense of personal satisfaction**
- **Albert Bandura**
 - **self-efficacy motivates behavior**

8. Developmental Psychology

**We will now study
developmental psychology.
We will cover the different
areas of development during
different stages in life.**

**We will also learn about
theories of developmental
psychology.**

The sections in this unit are:

**8.1. Research methods:
longitudinal, cross-sectional**

8.2. Theories of development

**8.3. Dimensions of development:
physical, cognitive, social, moral**

8.4. Gender identity and sex roles

8.5. Heredity-environment issues

8.1 Research Methods: Longitudinal, Cross-sectional, Cross-sequential

Cross-sectional

- **comparing people of different ages at same point in time**
- **similarities due to context of a cohort can confound findings**

Longitudinal

- tracking single cohort (age group) over long period of time
- lose participants due to life circumstances or drop out
 - threatens validity of study

Cross-sequential

- people of different ages (like cross-sectional) are followed over long periods of time (like longitudinal)
- helps to reduce confounding variables

8.2 Theories of development

Piaget's theory of cognitive development

- **sensorimotor: 0-2**
 - knowledge through the senses
 - gradually acquire object permanence
- **pre-operational: 2-6**
 - egocentric
 - use symbolic thought - words, images
 - inability to understand *conservation*

Piaget's theory of cognitive development

- **concrete operations: 6-12**
 - logical rules for concrete problems
- **formal operations: 12 +**
 - thinks scientifically and hypothetically about abstract principles

Freud's Psychosexual Theory

- **Oral: 0-1**
 - mouth pleasure center- sucking reflex
- **Anal: 1-3**
 - learn to control bodily functions- toilet training
- **Phallic: 3-6**
 - sexual desires towards opposite sex parent- Oedipus and Electra complex

Freud's Psychosexual Theory

- **Latency: 6-12**
 - **sexual instincts subside-**
develop superego and
conscious
- **Genital: 12+**
 - **sexual impulses reemerge**

Erikson's Theory of Psychosocial Development

Trust vs Mistrust	0-1 year	Hope- are others reliable?
Autonomy vs Shame and Doubt	1-3 years	Will- allowed to exercise self- control?
Initiative vs Guilt	3-5 years	Purpose- goal setting- is that encouraged?
Industry vs Inferiority	6-11 years	Competence- can reason, likes successes
Identity vs Role confusion	12- 18 years	Fidelity- who am I? integration of selves
Intimacy vs Isolation	18- 35 years	Love- new intimate relationships
Generativity vs Stagnation	36-55 years	Care- empathy, concern, caring for others
Integrity vs Despair	55 +	Wisdom- reflecting on life, who was I?

8.3 Dimensions of development: physical, cognitive, social, moral

Physical

- **Infancy to childhood**
 - **5-7 lbs and 2-3 inches per year**
 - **brain- 55% at age 2 → 90% at age 6**
 - **motor development**

Physical

- **Adolescence**
 - **maturing of adrenal and sexual glands**
 - **rapid increase in height**
 - **menarche and spermarche**

Physical

- **Adulthood**
 - **Early - physical maturation complete**
 - **Middle - gradual physical decline**
 - **Late - last stages of physical change**

Cognitive

- **Infancy to childhood**
 - **significant development of cognitive abilities and thought processes**
 - **language and communication skills**
 - **partially inborn, partially learned**

Cognitive

- **Adolescence**
 - **more complex abilities- processing speed and efficiency**
 - **more capable of abstract thought**
 - **cognitive empathy**

Cognitive

- **Adulthood**
 - **complex, ever changing**
 - **crystallized intelligence**
 - **late- decline in fluid intelligence**

Social

- **Infancy to childhood**
 - **Bowlby- attachment theory**
 - **avoidant, resistant, disorganized, secure**
 - **Sense of self and parenting style**
 - **authoritarian, authoritative, permissive, uninvolved**

Social

- **Adolescence**
 - **form identity, pull away from parents**
 - **peer relationships become central focus**

Social

- **Adulthood**
 - **need to have and find meaning**
 - **define oneself based on career**
 - **familial relationships central focus**

Moral: Kohlberg's stages of moral development

- **Infancy- right and wrong- what feels good or bad**
- **Toddler- right and wrong- what they are told by others**

Moral: Kohlberg's stages of moral development

- **Preschool- internalize family values, consequences of behaviors**
- **7-10- strong sense of “should” and “should not”**
- **Preteen/teen- reason abstractly “right” and “wrong”, aware of larger society**

8.4 Gender identity and sex roles

Gender identity

- sense of being male or female
- gender dysphoria-discomfort identifying with one's biological sex; 6 months (DSM 5)

Sex/gender roles

- **sex role beliefs → sex role stereotypes**
- **ex: men are more aggressive, women more delicate**

Sex/gender roles

- expected gender behaviors based on societal norms**
- sex role socialization: born male or female → taught to be masculine or feminine**

8.5 Heredity-environment issues

Nature vs Nurture

- **Nature/ Heredity**
 - **all genes and hereditary factors influence who we are**
 - **characteristics and traits are product of evolution**

Nature vs Nurture

- **Nurture/ Environment**
 - **everything we are and know is based on experience**
 - **behaviorism- all or most behaviors result from learning and conditioning**

Nature AND Nurture

- **How nature and nurture interact, not one or the other**

9. Personality

**We will now study
personality.**

**We will cover the theories
and approaches of
personality, research
methods and aspects that
impact personality.**

9. Personality

The sections in this unit are:

9.1 Assessment techniques

9.2 Growth and adjustment

9.3 Personality theories and approaches

9.4 Self-concept, self-esteem

**9.5 Research methods:
idiographic, nomothetic**

9.1 Assessment Techniques

Self-report inventories

- **MMPI-2 (587 questions)**
 - **reliable and valid**
 - **lie scale- “faking good”**

Projective tests

- **projection to assess unconscious**
- **Rorschach Inkblot Test**
- **Thematic apperception test (TAT)**

9.2 Growth and Adjustment

Personality growth

- proactive**
- conscious process**
- self-development**

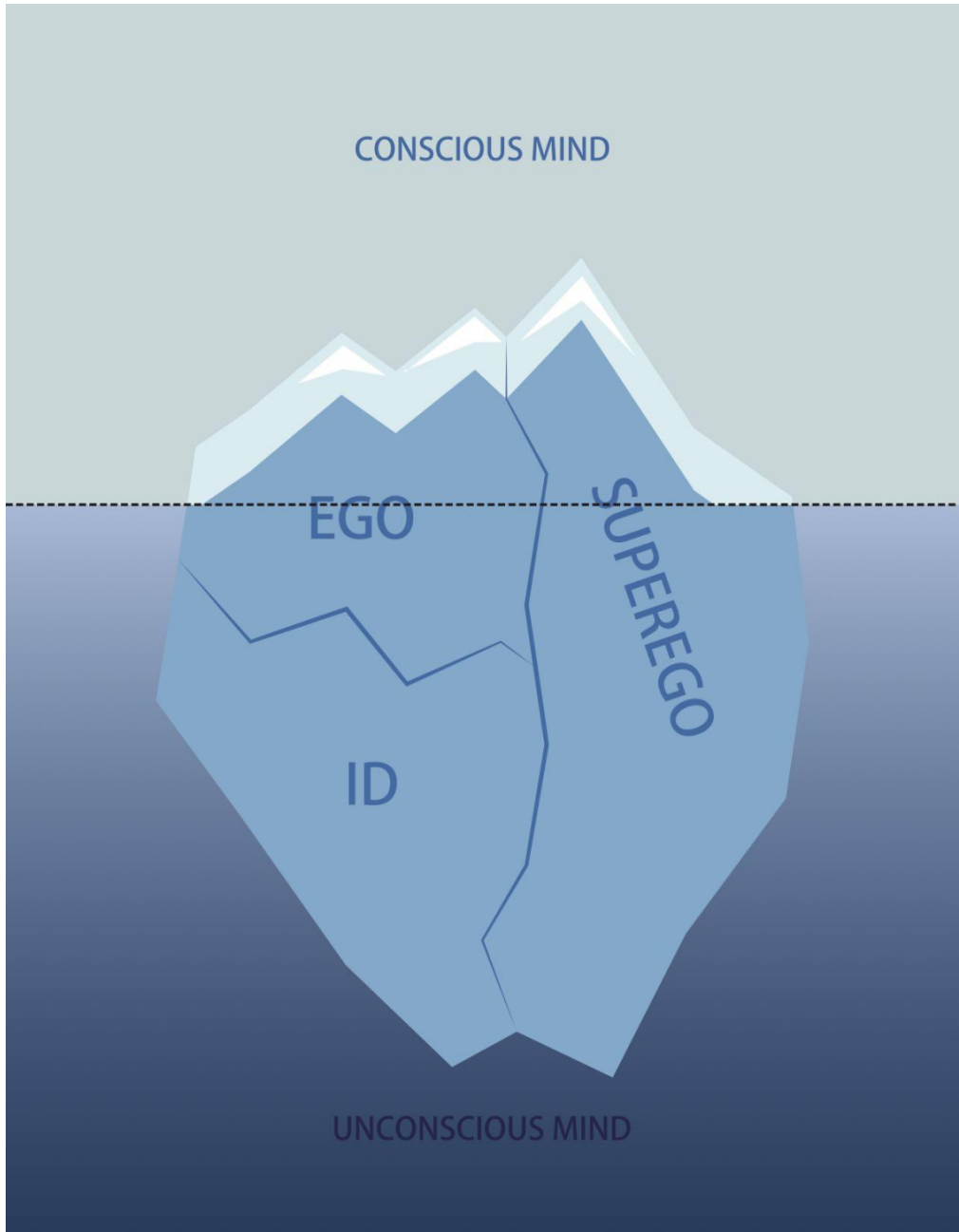
Personality adjustment

- reactive**
- coping with challenges
of life**
- cultural components**

9.3 Personality Theories and Approaches

Psychoanalytic approach: Sigmund Freud

- **Motives behind behavior:
sex and aggression**
- **Id: biological**
 - **pleasure principle**
- **Ego: realistic**
 - **reality principle**
- **Superego: social**
 - **morality principle**



Psychoanalytic approach:

Sigmund Freud

- **Anxiety**
 - **conflict over how to behave**
 - **defense mechanisms**
- **Psychosexual stages (see Module 8.2)**
 - **anal, oral, phallic, latent and genital**
 - **Electra and Oedipal complex**
 - **castration anxiety and penis envy**

Humanistic approach: Carl Rogers

- **Person-centered theory**
- **Strive for Congruence:**
 - **True self:** talents, desires, thoughts and feelings we have
 - **Self concept:** what we think we're like
 - **Ideal self:** would like to be

Humanistic approach:

Carl Rogers

- **Conditions of worth - imposed by parents; “must”, “should”**
- vs.**
- **Unconditional positive regard**
 - **Empathic**
 - **Accepting and genuine**

Social-cognitive approach

- **How people think about themselves and relate to the world around them**
- **Reciprocal determinism**
 - **how people think, behave and interact with their environment determines consistency of behavior**
- **Cognitive dissonance**

Trait / Individual-difference approach

- **Measuring ways people differ**
- **Self-report questionnaires**

Trait / Individual-difference approach

- **The Big Five**
 - **factor analysis**
 - **OCEAN**
 - Openness,**
 - Conscientiousness**
 - Extraversion**
 - Agreeableness**
 - Neuroticism**



Psychological Personality Traits



9.4 Self-concept, Self-esteem

Self-concept

**–self image, self
consciousness**

**–understanding of
unchanging characteristic**

**–social, physical,
psychological**

Self-esteem

- extent accept or approve of self**
- how much value self**
- reaction of others, comparison with others, social roles, identification**

9.5 Research Methods: Idiographic, Nomothetic

- **Idiographic approach**
 - **focus on what makes us unique**
 - **qualitative methods**
 - **case studies, informal interviews, unstructured observation**
 - **humanistic**

- **Nomothetic approach**
 - **focus on what we share with others**
 - **quantitative methods**
 - **experiment, correlation, psychometric testing**
 - **behaviorists, cognitive and biological**

10. Psychological Disorders & Health

**We will now study
different psychological
disorders and theories for
treating psychopathology.**

**We will also cover health,
stress and how to cope
with them.**

The sections in this unit are:

10.0 Background and DSM-V

10.1. Affective disorders

10.2. Anxiety disorders

10.3. Somatoform disorders

10.4. Dissociative disorder

10.5. Psychoses

10.6. Personality disorders

10.7. Theories of psychopathology

10.8. Health, stress and coping

10.1 Background and DSM-V

Abnormal Psychology = Psychopathology

- branch of psychology that deals with psychological disorders and mental illness
- Includes study of symptoms, *etiology* (causes), and treatments

Psychological Disorders

- conditions characterized by abnormal thoughts, feelings, and behaviors, and

DSM-V

- The Diagnostic and Statistical Manual of Mental Disorders (5th Edition)**
- APA - American Psychiatric Association**
- Functional Impairments in multiple domains (eg, school, workplace, home, social, etc)**

10.2 Affective disorders

Depression

- **sadness, loss of pleasure, hopelessness, worthlessness**
- **types of depression**
 - **major depressive disorder**
 - **seasonal pattern**
 - **postpartum**
 - **persistent depressive disorder**
- **abnormal activity in brain**
 - **amygdala and prefrontal cortex**
 - **serotonin**

Depression

- **suicide and suicide risk**
- **diathesis-stress model**
- **cognitive theories**
 - **Beck's negative cognitive triad**
 - **Hopelessness theory**
 - **rumination**

Bipolar disorder

- mood states that vacillate between mania and depression
- manic episode
 - increase activity and energy
 - flight of ideas
 - grandiosity, engaging in risky behaviors
 - can lead to involuntary hospitalization

Bipolar disorder

- **90% comorbidity rate**
 - **anxiety disorders and substance abuse**
- **higher in men than women**
- **high suicide rates**
 - **36% attempt**
 - **15-19% complete**

10.3 Anxiety disorders

- **Unusual feelings of dread, fearfulness or terror**
- **Generalized anxiety disorder (GAD)**
 - **excessive, uncontrollable worry**
 - **unaware of source**
- **Panic disorder**
 - **recurrent and unexpected panic attacks**
 - **racing heart, breathlessness, dizziness, shortness of breath**
 - **locus coeruleus-norepinephrine**

- **Obsessive-compulsive disorder (OCD)**
 - **repetitive thoughts (obsessions) that provoke anxiety**
 - **lead to repetitive behaviors (compulsions)**
 - **orbitofrontal cortex- learning and decision making**

- **Hoarding Disorder**

- **Phobias**
 - intense and irrational fears of specific objects or events
 - go to great lengths to avoid stimulus
- **Agoraphobia**
 - avoidance of places difficult to escape or receive help with panic attack
 - public transportation, crowds, closed spaces, etc.
- **Social anxiety disorder**
 - fear, anxiety and avoidance of social situations

10.4. Somatoform Disorders

- **Somatoform Disorders -**
 - **Physical symptoms with no medical explanation**
- **Hypochondriasis**
 - **preoccupied with bodily symptoms**
 - **fear of having disease or illness**
 - **can't be reassured by doctors**
- **Conversion disorders**
 - **neurological symptoms with no medical cause**

10.5 Dissociative disorders

- **Fragmentation of personality**
- **Dissociative amnesia**
 - **unable to recall personally relevant information**
- **Dissociative fugue**
 - **suddenly and unexpectedly can't recall past or identity**
 - **may take on different identity**

- **Dissociative identity disorder (DID)**
 - **two or more distinctly different identities**
 - **most report childhood trauma**

- **Depersonalization/
Derealization Disorder**
 - **depersonalization:**
**detachment from whole self
or aspects of self**
 - **derealization: detachment
from world**
 - **individuals, objects,
surroundings**
 - **feeling like in a fog or
dream**

10.6 Psychoses

- **Schizophrenia**

- POSITIVE SYMPTOMS**

- **hallucinations**

- **convincing sensory experiences in the absence of external stimuli**

- **delusions**

- **false beliefs despite contrary evidence**
 - **paranoid, grandiose or somatic**

- **Schizophrenia**

NEGATIVE SYMPTOMS

- emotional flatness
- nonresponsiveness
- *avolition* - reduction of motivation and drive
- *alogia* - reduction of speech
- *anhedonia* - inability to experience pleasure
- social withdrawal

- **Schizophrenia**

- **Motor Symptoms**

- **Catatonia - odd movements and postures**

- **Cognitive Symptoms**

- **Disorganized thinking**
 - **word salad**

- **Other psychotic disorders**
 - **schizoaffective**
 - **schizophreniform**
 - **brief psychotic disorder**
 - **delusional**
 - **substance-induced**

10.7 Personality Disorders

- **Personality style that differs markedly from expectations of culture**
- **Pervasive and inflexible**
- **Conflict with others, difficulty maintaining relationships**

- **Cluster A- odd or eccentric**
 - **paranoid, schizoid and schizotypal personality disorder**

- **Cluster B- impulsive, dramatic, erratic**
 - **histrionic, narcissistic and borderline personality disorder, antisocial personality**

- **Cluster C- nervous, fearful**
 - **avoidant, dependent and obsessive compulsive personality disorder (OCPD)**

10.8 Theories of Psychopathology

- **Supernatural perspective**
 - **historically believed-force beyond scientific understanding**
 - **black magic or possessed by spirits**
- **Biological perspective**
 - **genetic factors, chemical imbalances, brain abnormalities**
- **Diathesis- stress model**
 - **biological and psychosocial factors**

10.9 Health, Stress and Coping

- **Stress**
 - **perception and response**
 - **events appraised as threatening**
 - **primary appraisal**
 - **secondary appraisal**
- **Eustress**
 - **good stress**
- **Distress**
 - **over optimal level of stress**
 - **feel burnt out**

- **Stress and illness**
 - **can increase sensitivity to pain**
 - **immune system**
 - **psychological disorders**
 - **cardiovascular disorders**

- **Coping styles**
 - **problem-focused**
 - **trying to alleviate source of stress**
 - **emotion-focused**
 - **reappraisal- stressor construed differently**
- **Social support**
- **Stress-reduction techniques**
 - **exercise, meditation, biofeedback**

11. Treatment of Psychological Disorders

**We will now study the
different types of treatments
and approaches for
psychological disorders.**

The sections in this unit are:

**11.1 Insight therapies:
psychodynamic and humanistic
approaches**

**11.2 Biological and drug
therapies**

11.3 Behavioral therapies

11.4 Cognitive therapies

**11.5 Community and preventative
approaches**

11.1 Insight Therapies: Psychodynamic and Humanistic Approaches

Psychodynamic

- **First practiced by Freud**
- **Free- association**
 - **reveal repressed and unconscious thoughts**
 - **insight and awareness**
- **Resolution of past conflicts**
- **Dream analysis**

Psychodynamic

- **Insight and Catharsis**
- **Resistance**
- **Transference**
- **Defense Mechanisms**
 - **Repression & Denial**

Humanistic

- **Client-centered therapy**
 - **Carl Rogers**
 - **active listening**
 - **non-directive**
 - **client makes interpretations, not therapist**
- **Self-awareness and self acceptance**
 - **results in personal growth**
- **Unconditional positive regard**

11.2 Biological and Drug Therapies

- **Drugs or surgery to alter brain functioning**
- **Psychotropic medications**
 - **antidepressants- SSRI's**
 - **prevent reuptake of serotonin**
 - **anti-anxiety**
 - **reduce arousal of central nervous system**
 - **antipsychotics**
 - **block dopamine**

- **ECT - Electroconvulsive Therapy**
- **Deep Brain Stimulation**
- **Psychosurgery - prefrontal lobotomy (no longer used)**

11.3 Behavioral Therapies

- **Behavior modification- change undesirable behavior**
- **Counterconditioning**
 - **exposure therapy**
 - **systematic desensitization**
 - **flooding**
 - **aversive conditioning**
- **Token Economy**
 - **reward based**

11.4 Cognitive Therapies

- **How you think determines how you feel and act**
- **Change dysfunctional thoughts to relieve distress**
- **Cognitive distortion**
 - **misinterpretation of a situation**
- **Find a more positive, realistic outlook**

11.5 Community and Preventative Approaches

- **Behavior as an adaptation of resources and circumstances**
- **Individuals context in community and larger society**
- **Person-environment fit**
 - **political, cultural and environmental influences-cultural diversity**
- **Emphasis on strengths and competencies**

12. Social Psychology

We will now study Social Psychology, how the behavior of individuals is influenced by others.

We will cover the different aspects of behavior that make up Social Psychology, including....

The sections in this unit are:

12.1 Attribution processes

12.2 Attitudes and attitude change

12.3 Interpersonal perception

**12.4 Aggression/antisocial behavior
and Altruism/Prosocial behavior**

**12.5 Conformity, compliance,
obedience**

12.1 Attribution Processes

- **Attribution theory**
 - **dispositional attributions**
 - **internal and trait reasons**
 - **situational attributions**
 - **external and state reasons**

- **Attribution theory**
 - **fundamental attribution error**
 - **others behavior due to disposition, minimizing role of situation factors**
 - **actor-observer bias**
 - **viewing others faults as due to dispositional factors, but our faults as situational**
 - **cognitive dissonance theory**

12.2 Attitudes and Attitude Change

- **Attitudes**

- **evaluation or feelings towards person, idea or object**
- **positive or negative; favorable or unfavorable**
- **external and internal influences**
- **affective, behavioral and cognitive**

- **Attitude Change**
 - **cognitive dissonance**
 - internal influence
 - thoughts, feelings and behaviors in conflict
 - **persuasion**
 - process of changing our attitude toward something based on some form of communication
 - foot-in-the-door technique
 - door-in-the-face technique
 - advertising

12.3 Interpersonal Perception

- **Awareness of mental acts present within us**
- **Cognitive biases**
 - **Actor-observed bias (10.1)**
 - **Halo effect**
 - **False consensus**
 - **Psychological projection**

12.4 Aggression/Antisocial behavior, and Altruism/Prosocial behavior

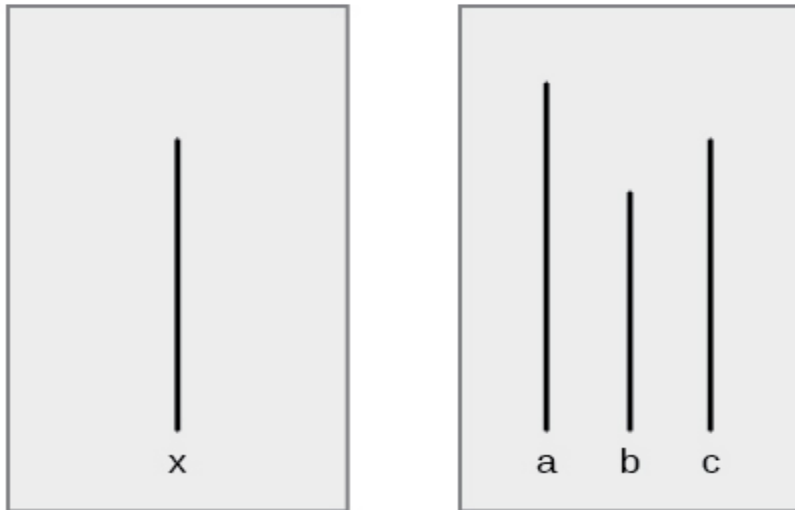
- **Frustration-aggression hypothesis**
- **Hostile aggression**
 - intent to cause pain
- **Instrumental aggression**
 - intent to achieve goal
- **Testosterone**
 - higher levels, more easily provoked

- **Antisocial behavior**
 - lack of remorse
 - no care for other people's feelings
 - anger and hostility
 - affect expressed through aggressive acts
- **Social learning theory**
- **Antisocial personality disorder**

- **Prosocial behavior**
 - **Altruism**
 - **behavior aimed at helping others without expectation of reward or recognition**
 - **Bystander Effect**
 - **Kitty Genovese (1964)**

12.5 Conformity, Compliance, Obedience

- **Conformity**
 - change in person's behavior to go along with group
 - **Solomon Asch Experiments**
 - influence of group majority on individual's judgment



- **Motivation to Conform**
 - **normative social influence**
 - conform to the group norm to fit in, to feel good, and to be accepted by the group.
 - **informational social influence**
 - conform because believe the group is competent and has the correct information, particularly when the task or situation is ambiguous

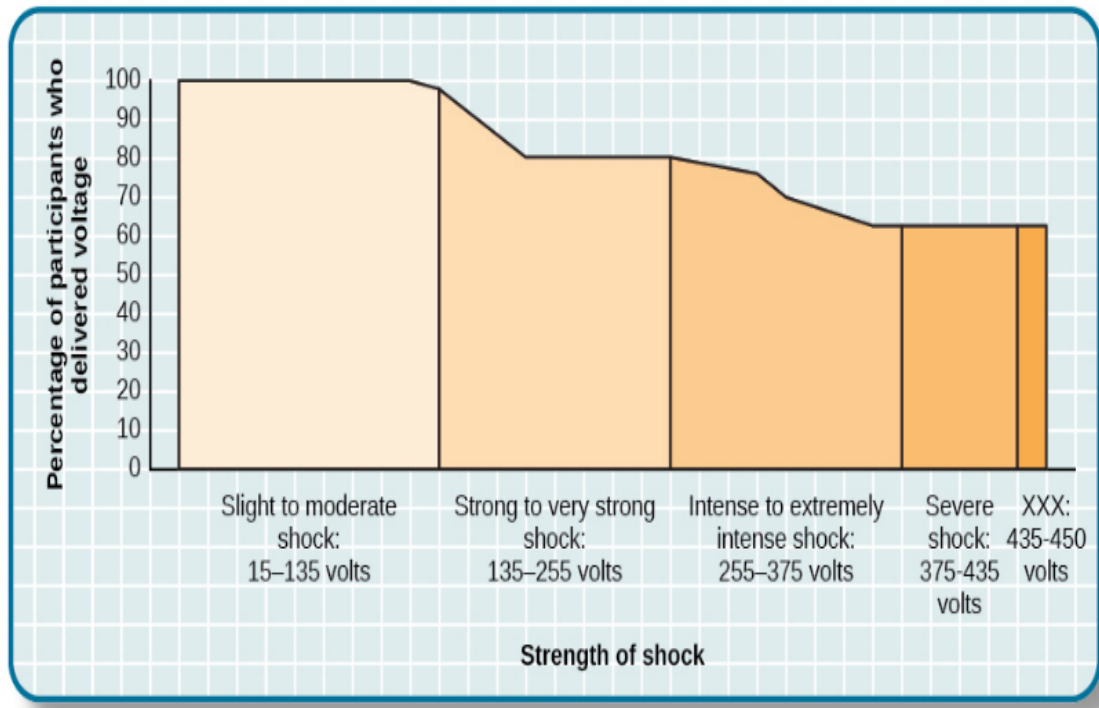
- **Compliance**

- **going along with request or demand**
- **desire to fit in, be liked and gain information about the group**
- **groupthink - going along with others to form consensus, even if wrong/disagree**
- **social loafing**
- **social facilitation**

- **social loafing - individual performance drops in presence of group (e.g., tug-of-war)**
- **social facilitation - performing better in presence of others (e.g., sports)**

- **Obedience**
 - **doing what an authority figure tells you to do**
 - **concerned about consequence if they do not comply**
 - **Stanley Milgram Experiments**

- **Stanley Milgrim Experiments**



13. Statistics, Tests and Measurements

**We will now study
statistics.**

**We will cover the different
types of measurements and
tests used in statistics.**

The sections in this unit are:

**13.1. Descriptive and Inferential
Statistics; Samples,
populations, norms**

13.2. Reliability and validity

13.3. Measurement of intelligence

13.4. Types of tests

13.1 Descriptive and Inferential Statistics

Samples, populations, norms

- **Statistics**
 - **collection, analysis, interpretation, and presentation of numeric data**

- **Samples**
 - representative subset of larger population
 - random sample
- **Populations**
 - group of people looking to study
- **Norms**
 - identifying normal behavior of group to compare to
 - standardizing

- **Descriptive Statistics**
 - used for correlational and experimental designs
 - measurements of behavior from sample
- mean- average
- mode- most commonly occurring score
- median- middle score, separates lower and upper halves of scores

- **Standard Deviation** - statistical measure of how much scores in a sample vary around the mean
 - higher SD = more variability (more spread)
 - lower SD = less variability (less spread)
- **Normal Distribution**
 - bell curve showing symmetrical alignment of two variables (e.g Intelligence)

- **Inferential Statistics**
 - inferences about population based on characteristics of sample
- **statistical significance**
 - not likely to have happened by chance
 - significant equals 5% of the time or less

13.2 Reliability and Validity

Reliability

- **stability and consistency of scores**
- **does not need to be valid to be reliable**

Types of Reliability

- **test-retest reliability**
- **internal consistency**
 - How well does a test correlate with itself
 - **split-half reliability**
 - **Cronbach's alpha** - avg correlation for every way a test can be split in half

Validity

- **how well a test measures what it is supposed to measure**
- **must be reliable to be valid**
- **types of validity**
 - **face or content validity**
 - **predictive validity**
 - **construct validity**
- **standardizing measures**

13.3 Types of Tests

- **Tests used to rule out chance**
- **t-test - computed for two means to see if they come from same population (e.g., of two groups or variables)**
- **ANOVA- analysis of variance**
- **Pearson correlation coefficient (-1.0 to +1.0)**

13.4 Measurement of Intelligence

- **Stanford-Binet Intelligence Scale**
 - **first IQ test**
 - **still widely used today**
 - **norming and standardization**
- **Wechsler Intelligence Tests**
 - **WAIS-IV**
 - **WISC-V**
 - **WPPSI-IV**
- **Flynn effect- each generation, higher IQ**