

Snazzlefrag's Intro to Psychology Study Notes

Contact: <http://www.degreeforum.net/members/snazzlefrag.html>

Hosted at: <http://www.free-clep-prep.com>

Notable Figures:

Bandura: Social-Cognitive. Social Learning. Observational learning, imitation of models.

Binet: Intelligence tests.

Descartes: Interactive Dualism. Mind/Body interact but processes are different.

Dewey: Functionalism

Freud: Psychoanalysis. Eros/Thanatos. ID (pleasure), Ego (reality), Superego (idealistic - Conscience/Morals).

Oral(0-18m), Anal(18m-3), Phallic(3-6), Latency(6-pub), Genital(puberty+)

Horney: 10 Neurotic Needs (causes of Anxiety, Depression).

Harlow: Monkeys. Learning Set (set way to solve problems).

James: Functionalism, Harvard, Classroom study. Philosopher not Psychologist.

Kohlberg's Morality: Preconventional(Punish,Reward) Conventional(good,authority)

Postconventional(Contract,Morals)

Locke: British Empiricism. Blank slate....experience.

Piaget: Cognitive Development (accomodation of schemas).

Rogers: Humanism. Reaction to behaviorism. Put "person" back into Psychology. I/ME

Skinner: Behaviorism. Psychology = study of Observable Behavior

Titchener: Structuralism/Introspection. First Lab (USA)

Watson. Behaviorism. Phys reaction to env stimuli. Study of mental process=unscientific. "Father"

Wertheimer: Gestalt. Whole is greater than the parts. Totality (not indiv components).

Wundt: Structuralism/Introspection. Scientific Method. First Lab (Germany), experimental psychology.

Schools of Psychology:

Behaviorist: Learned responses to stimuli. Study animals. **Watson, Skinner, Pavlov**

Biological: Genes, Nervous System, Hormones, Neurotransmitters.

Cognitive: (react to Behav) thinking, problem-solving, memory, language, etc. **Piaget, Bandura**

Functionalist: What is the purpose/function of our mental experiences. **Dewey, James**

Humanistic: People = Basically good. Self-actualization. Unique individuals. **Rogers, Maslow**

Psychoanalytic: Innate drives, society's restriction on expression.
Unconscious/childhood

Freud, Jung, Adler, Horney, Erikson

Structuralist: Introspection, what ingredients make up our mental experiences. **Wundt**

Neurons: Individual Nerve Cells.

Dendrites > Soma > Axon (Myelin) > Axon Terminal (Neurotransmitters) > Synapse (cleft)

Axon: SENDS messages to nearby neurons, glands, or muscles.

Dendrites: RECEIVE messages from nearby neurons...send toward cell body (soma)

Glial Cells: Create Myelin, support, guide, repair neurons.

Interneurons (association): Carry impulses WITHIN the brain or spinal cord. Neuron to Neuron.

Motor Neurons (efferent): Carry impulses AWAY from brain or spinal cord toward muscles and glands.

Sensory Neurons (afferent): Take in info and carry impulses TOWARDS brain or spinal cord.

Absolute Refractory Period: Resting pause, neurons pump positively charged sodium back out.

Brain:

Parts of the brain - Stem>Thalamus/Hypothalamus>Reticular Formation>Cerebellum>Cerebral Cortex>Corpus Collosum.

Amygdala (in Limbic System): Emotion (fear/aggression), Evaluation of stimuli.

Basal Ganglia: Muscle contractions, movements

Brain Stem: (separates brain and spinal cord) Medulla & Nuclei (basic life reflexes).

Broca's Area: Brain. Controls muscles involved in speaking.

Central Nervous System: All neurons/nerve fibers surrounding brain and spinal cord.

Cerebral Cortex: Outer Covering, Receives sensory info and transmits motor info.

Temporal(sound), **Frontal**(spch/lrning/thnk/decis/abstract),

Parietal(sensory/attention), **Occipital**(vision).

Cerebellum: Voluntary fine motor movements.

Endocrine System: (hormones). Network of glands that affect behavior.

Pituitary(brain, master), Thyroid(neck, metabolism), Adrenal(kidneys, emotions/stress/threat)

Hippocampus (in Limbic System): Long-term and Spatial memory.

Hypothalamus (in Limbic System): Controls motivated behavior (hunger, thirst, sex, temperature regulation)

Limbic System: Lower brain. Motivational/emotional stress. Response to threat of attack.

Medulla: Breathing, Waking, Heartbeat, Swallowing, Balance.

Peripheral Nervous System: Two parts.

Somatic Nervous System: Voluntary Muscles, Sensory organs (eyes, ears, skin, etc.)

Autonomic Nervous System: Involuntary actions, internal organs etc.

Sympathetic (excites), Parasympathetic (relaxes).

Pituitary Gland (in Limbic System): Master Gland, controls hormones from other glands

Pons: Facial expressions, sleep, dreaming.

Reticular Formation (in brain stem): Arousal level (Eg, alert or asleep). NOT fear/aggression (amygdala)

Thalamus: Relays sensory info to cortex.

Wernicke's Area: Brain. Sounds are decoded and interpreted.

Sensation & Perception: Psychophysics

Absolute Threshold: Minimum amount to detect 50% of time.

Difference Threshold: Just Noticeable Difference (JND) between two stimuli.

Weber's Law: Harder to notice differences if more intense stimuli (louder, brighter etc.) Proportion/%

Grouping: Closure, Similarity, Proximity, Continuity

Visual Cliff: 6 months.

Cornea: Protective covering where reflected light first enters the eye.

Color Vision: Two Theories (Trichromatic Theory, Opponent-process Theory)

Trichromatic Theory (Young-Helmholtz): 3 cones=3 wavelengths (RGB). Not explain neg afterimages.

Opponent-process Theory (Hering): Paired Receptor Cells (RG, BY, BW). Stimulate 1 = Inhibit other.

Iris: Colored part. Contains the pupil.

Lens: Bends (refracts) light. Focuses a flipped, inverted image onto retina.

Light Waves: Electromagnetic waves, stimulate receptors in the eye.

Intensity: Amount of Energy per unit of time (brightness)

Wavelength: Distance between two crests (color)

Optic Nerve: Carries visual info to lateral geniculate nucleus of the Thalamus.

Blind Spot: Where optic nerve exits the eye. No receptor cells = no vision.

Retina: Thin structure, back of eye. 2 types of receptor cells:

Rods: Periphery of retina, black and white. Best in low light, motion.

Cones: Middle of retina (**fovea**), color/details. Best in daytime, more visual acuity. Detects Wavelengths.

Outer Ear (pinna): Collects sound from air and directs it through the ear canal.

Tympanic Membrane (eardrum): Vibrates when sound hits it.

Oval Window: Membrane separates middle ear from inner ear. Sends vibrations to cochlea.

Cochlea: Fluid-filled membrane in inner ear. Pressure changes stimulate hair cells.

Sound Waves: Vibrations (change in air pressure) that stimulates auditory receptors.

Amplitude: Height of Wave (loudness). **Frequency:** Length of Wave (repetitions, pitch)

Place Theory: Hair cells respond to frequency based on location in cochlea.

Frequency Theory: Hair cells fire at different frequencies in the cochlea, so we sense pitch.

Smell (olfaction): Chemical. Inhaled molecules excite receptors in the epithelium.

Taste (gustation): Chemical. Taste buds on tongue. Salty, Sour, Bitter, Sweet.

Skin Sense (somesthesis/touch): Mechanical. Pressure, Pain, Warmth, Cold.

Vestibular Sense: Mechanical. Inner ear. Orientation, Balance, Location of head in

space.

Kinesthetic Sense: Receptors in muscles, tendons, joints, relay information about our limbs.

Consciousness: Being Aware. Awake/Sleep Circadian Rhythm.

Temperature: Rises early in morning, peaks around midday, dips mid-afternoon, drops late evening.

Sleep: 5 Stages (90 minute cycle):

Awake: **Alpha** Waves but relaxed (slow, regular)

Stage 1 (5 mins): **Theta** Waves. Slower breathing, irregular brain waves.

'hypnagogic' (falling).

Stage 2 (20 mins): Deeper relaxation, occasional burst of brain activity (**Sleep Spindles**)

Stage 3: **Delta** Waves (Slow-wave Sleep - hard to awaken). Large, slow waves. Transition into Stage 4.

Stage 4 (30 mins): Stronger, consistent Delta Waves (Slow-wave Sleep - hard to awaken)

Then (after 1 hour)... Stage 3....Stage 2....then REM

REM (10 mins): 1950s Kleitman & Aserinsky. "Paradoxical Sleep", like when awake, dreams.

Sleep Spindles: Brief, high amplitude bursts of electrical energy. Person is asleep but easily awakened.

Dreams:

Freud: Manifest Content=Actual Images, Latent Content=Real meaning (sexual, aggressive).

Activation-synthesis Theory: Neurons Random fire, dreams attempt to make sense of images.

Information-processing: Consolidate day's events and stamp into memory.

Learning:

Associative Learning: Learning a connection between two stimuli (CC), or a stimuli and a response (OC)

Cattell: Crystallized Knowledge, Fluid Knowledge.

Non-associative Learning: Repeated presentation of a single stimulus.

Habituation: Getting used to repeated noises, or hum of lights etc.

Sensitization: Repeated/Intense presentation = respond to even weaker stimuli.

Cognition: "Problem-solving Activities" - Thinking, Language, Memory, Intelligence.

Confirmation Bias: Look for info to back up your belief.

Functional Fixedness: Can't see new uses for familiar objects. (Eg, quarter works as a screwdriver).

Heuristics: Mental rules of thumb/Shortcuts. Estimates, likelihood. "Representativeness & Availability".

Language:

Babbling Stage: (4-6month to 1yr). Practice sounds. No longer recognize foreign

language sounds

One-word Stage: (1yr to 18months). Word PLUS gestures = **Telegraphic Speech** (also in Two-word Stage)

Two-word Stage: (18+ months). Noun + Verb (Doggie..bite), later Adjective + Noun (Bad Doggie).

Language Acquisition Device (Noam Chomsky): Universal built-in mental system helps us learn language.

Morphemes: Words or parts of words that convey meaning.

Semantics: Rules for mapping morphemes onto the ideas they represent.

Syntax: Rules for combining morphemes in meaningful ways.

Memory: Sensory > Short-term > Long-term (ie, Procedural, Semantic. Episodic, Metamemory)

Levels of Processing Model: One Memory w/ different degrees, levels, depths.

Intelligence: Binet. IQ: Mental Age/Chrono Age * 100. **Spearman "g"**=General Intelligence.

Development:

Cross-sectional (different ages at same point in time), Longitudinal (same group over time), or Cross-sequential = best.

Piaget's Cognitive Development: Conservation=Different shape but same mass, **Permanence**=Out of sight means gone.

Disequilibrium: When new info doesn't fit into existing schema. **Assimilation:** Incorporates new info into existing schema.

Accomodation: Changes schema to fit new schema.

Sensorimotor (0-2) No object permanence. causality.

Pre-Operational (2-6) No conservation. Object Permanence, Symbolic language, Egocentric, Intuition rather than logic.

Concrete Operational (6-12) Conservation, think logically, logical concepts/rules to solve concrete problems.

Formal Operational (12+) Scientific, Hypothetical thinking about abstract thoughts/symbolism.

2m: lift head **3m:** roll over **4m:** sit propped **6m:** sit up **7m:** stand supported **9m:** walk supported **10m:** stand moment

11m: stand confident **12m:** walk **14m:** walk backward **17m:** walk up steps **18m:** manipulate objects while walking

Erikson's Psycho-social Development: Tension (disequilibrium) is necessary for change.

Trust v. Mistrust (0-1) Depend on others: Are others reliable?

Autonomy v. Doubt/Shame (1-3) Capable fo Self-control: Allowed to exercise it?

Initiative v. Guilt (3-5) Can set goals: Is that encouraged?

Industry v. Inferiority (6-11) Can reason, likes success: Praised and taught?

Identity v. Role Confusion (12-18) Identity/multiple roles: Integrate all roles?

Intimacy v. Isolation (18-35) Break from family, new rels: Willing to share yourself?

Generativity v. Stagnation (36-55) Kids are gone (free): Show interest in others?

Integrity v. Despair (55+) Reflecting on life: Accept it all?
Young-old: 65-74, Middle-old: 75-84, Old-old: 85+
Kohlberg Moral Development: Preconventional/self (0-9) Conventional/other (9-pub)
Postconventional (adult)
Kubler-Ross: Denial, Anger, Bargaining, Depression, Acceptance

Abnormal:

Anxiety: Generalized Anxiety, Panic, Phobias, OCD.

Dissociative: Amnesia, Fugue (wake up in new place), Dissociative Identity Disorder (MPD).

Mood: Depressions, Bipolar, Seasonal Affective Disorder.

Personality: Paranoid, Antisocial, Borderline, (relationships/self-image/emotions), Narcissistic (praise me).

Schizophrenia: Psychosis, Hallucinations, Delusions, Catatonia, Paranoia, Echolalia (repeat back)

Somatiform: Associated with disease or physical disorder. Conversion, Hypochondriac.

Behavioral: Learned behaviors. Classical/Operant Conditioning. Problem Behavior = Conditioned Response.

Counterconditioning, Systematic Desensitization (gradual), Flooding, Averse Conditioning, Token Economy.

Biological:

Dep (Prozac/Paxil/Zoloft=SSRI), Anx (Librium/Valium=CNS suppress) Psychotic (Clozapine/Thorazine=Dopamine)

Cognitive: Abnormal thinking. Change thoughts (accurate, rational, positive). Lead to healthy, fulfilling goals.

Humanistic: "Client", Rogers. Client-centered. Unconditional Positive Regard. Active Listening.

Psychoanalytical: Unconscious conflicts, childhood, anxiety. Free Association (reveals inner conflict). Catharsis.

Social Cognition: How we process information about other people.

Attribution (explain behavior of others): Dispositional (intelligence, personality), Situational (luck, outside help)

Fundamental Attribution Error: Other's behavior=Disposition (internal), but Own Behavior=Situational(external)

Cognitive Dissonance Theory: Feel bad about behavior, so = caused by Situation/external, or change own attitude

Normative Social Influence (Asch): Three lines = same length (subject went with choice of majority 2/3 of time).

Informal Social Influence: Wait to see how others react to a joke before laughing.

Milgram (Shock Experiment): 63% continued with shocks until "XXX DANGER" (450 volts).

Aggression: Frustration-aggression Hypothesis (debunked): Frustration always leads to aggression (not true)

Altruism: Murder of Kitty Genovese (1964). 38 witnesses but nobody helped.

Social-exchange Theory (minimax principle): Goal in life is to maximize reward and minimize cost.

Motivation:

Hunger: Low Glucose/High Insulin. Hypothalamus (Ventromedial=less hungry, Lateral=more hungry).

Emotions:

General Adaptation Syndrome: STRESS: Alarm, Resistance/Adaptation, Exhaustion

Cannon-Bard Theory: Crazy Dog = Arousal AND Fear simultaneously (not causing one another).

Drive Reduction Theory: Hull. Drive is essential in order for responses to occur (must WANT to learn).

James-Lange Theory: Crazy Dog = Arousal LEADS US TO FEEL Fear

Lazarus Theory: A thought always precedes an emotion.

Two-factor Theory (Schacter): Arousal+Label LEADS US TO FEEL Fear/Anger/Love (depends how we label our arousal)

Sexual response stages: Excitement, Plateau, Orgasm, Resolution (refractory period=recovery after orgasm)

Testing:

Reliability: Consistency of scores.

Test-retest: Second time same? (Correlation $+0.70$ =good)

Internal Consistency: Score on two halves, or odd v. even Q's. (Cronbach's Alpha)

Validity: Does it measure what it is supposed to? (Can be reliable but not valid).

Independent Variable (cause/doesn't change), Dependent Variable (effect/changes).

Correlation: -1 to 1 (0 =pure chance). Pos=/ Neg=\

Statistical Significance: Difference that would show up 5% of the time or less if correlation is 0.00 .