

# AP Psychology Study Guide

## History and Approaches (2-4%)

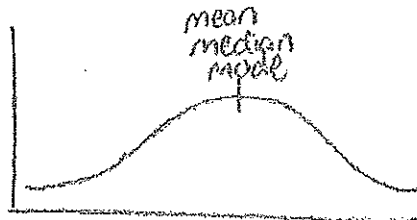
- **Psychology is derived from physiology (biology) and philosophy**
- **EARLY APPROACHES**
  - **Structuralism** – used **INTROSPECTION** (act of looking inward to examine mental experience) to determine the underlying **STRUCTURES** of the mind
  - **Functionalism** – need to analyze the **PURPOSE** of behavior
- **APPROACHES KEY WORDS**
  - **Evolutionary** – Genes
  - **Humanistic** – free will, choice, ideal, actualization
  - **Biological** – Brain, NTs
  - **Cognitive** – Perceptions, thoughts
  - **Behavioral** – learned, reinforced
  - **Psychoanalytic/dynamic** – unconscious, childhood
  - **Sociocultural** – society
  - **Biopsychosocial** – combo of above
- **PEOPLE:**
  - **Mary Calkins:** First Fem. Pres. of APA
  - **Charles Darwin:** Natural selection & evolution
  - **Dorothea Dix:** Reformed mental institutions in U.S.
  - **Stanley Hall:** 1<sup>st</sup> pres. of APA 1<sup>st</sup> journal
  - **William James:** Father of *American Psychology* – functionalist
  - **Wilhelm Wundt:** Father of Modern Psychology – structuralist
  - **Margaret Floy Washburn** – 1<sup>st</sup> fem. PhD
  - **Christine Ladd Franklin** – 1<sup>st</sup> fem.

## Research Methods (8-10%)

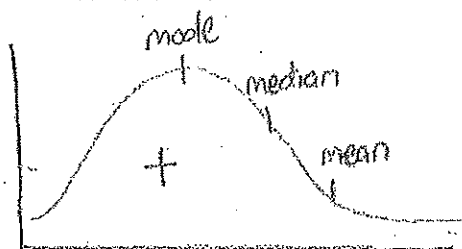
- **EXPERIMENT:** Adv: researcher controls variables to establish **cause and effect** Disadv: difficult to generalize
  - **Independent Variable:** manipulated by the researcher
    - **Experimental Group:** received the treatment (part of the IV)
    - **Control Group:** placebo, baseline (part of the IV)
    - **Placebo Effect:** show behaviors associated with the exp. group when having received placebo
    - **Double-Blind:** Exp. where neither the participant or the experimenter are aware of which condition people are assigned to
  - **Dependent Variable:** measured variable (is **DEPENDENT** on the independent variable)
- **Operational Definition:** clear, precise, typically quantifiable definition of your variables – allows **replication**
- **Confound:** error/ flaw in study

- **Random Assignment:** assigns participants to either control or experimental group at random – minimizes bias, increase chance of equal representation
- **Random Sample:** method for choosing participants – minimizes bias
- **Validity:** accurate results
- **Reliability:** same results every time
- **NATURALISTIC OBSERVATION:** Adv: real world validity (observe people in their own setting) Disadv: No cause and effect
- **CORRELATION:** Adv: identify relationship between two variables Disadv: No cause and effect (**CORRELATION DOES NOT EQUAL CAUSATION**)
  - **Positive Correlation** – Variables vary in the same direction
  - **Negative Correlation** – variables vary in opposite directions
  - **The stronger the # the stronger the relationship REGARDLESS of the pos/neg sign**
- **CASE STUDY:** Adv. Studies **ONE** person (usually) in great detail – lots of info Disadv: No cause and effect
- **DESCRIPTIVE STATS:** shape of the data
  - **Measures of Central Tendency:**
    - **Mean:** Average (use in normal distribution)
    - **Median:** Middle # (use in skewed distribution)
    - **Mode:** occurs most often

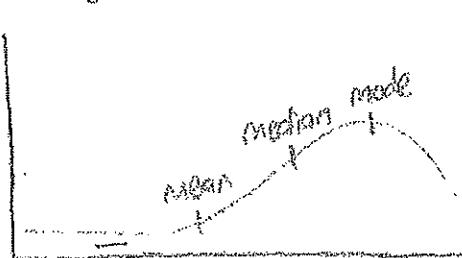
○ Normal Distribution:



○ Positive Skew:



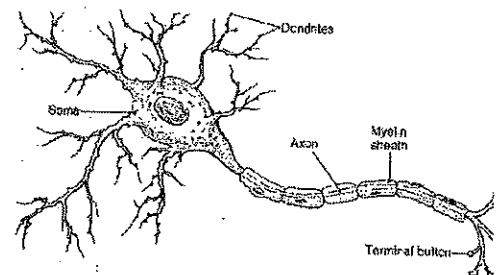
○ Negative Skew:



- **INFERENTIAL STATISTICS:** establishes significance (meaningfulness) Significant results = **NOT** due to chance
- **ETHICAL GUIDELINES (APA)**
  - Confidentiality
  - Informed Consent
  - Debriefing
  - Deception must be warranted

## Biological Basis (8-10%)

- **NEURON:** Basic cell of the NS
  - **Dendrites:** Receive incoming signal
  - **Soma:** Cell body (includes nucleus)
  - **Axon:** AP travels down this
  - **Myelin Sheath:** speeds up signal down axon
  - **Terminals:** release NTs – send signal onto next neuron
  - **Synapse:** gap b/w neurons



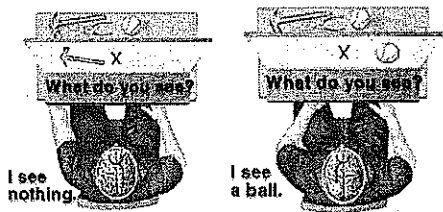
- **Action Potential:** movement of sodium and potassium ions across a membrane sends an electrical charge down the axon
  - **All or none law:** stimulus must trigger the AP past its threshold, but does not increase the intensity of the response (flush the toilet)
  - **Refractory period:** neuron must rest and reset before it can send another AP (toilet resets)

- **Sensory neurons – receive signals**
- **Afferent neurons – Accept signals**
- **Motor neurons – send signals**
- **Efferent neurons – signal Exits**

- **CENTRAL NS:** Brain and spinal cord
- **PERIPHERAL NS:** Rest of the NS
  - **Somatic NS:** Voluntary movement
  - **Autonomic NS:** Involuntary (heart, lungs, etc)
    - **Sympathetic NS:** Arouses the body for fight/flight (generally activates)
    - **Parasympathetic NS:** established homeostasis after a sympathetic response (generally inhibits)

- **NEUROTRANSMITTERS (NTS):** Chemicals released in synaptic gap, received by neurons
  - **GABA:** Major inhibitory NT
  - **Glutamate:** Major Excitatory NT
  - **Dopamine:** Reward & movement
  - **Serotonin:** Moods and emotion

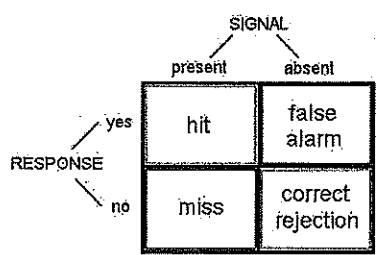
- **Acetylcholine (ACh):** Memory
- **Epinephrine & Norepinephrine:** sympathetic NS arousal
- **Endorphins:** pain control, happiness
- **Oxytocin:** love and bonding



- **AGONIST:** drug that mimics a NT
- **ANTAGONIST:** drug that blocks a NT
- **REUPTAKE:** Unused NTs are taken back up into the sending neuron. SSRIs (selective serotonin reuptake inhibitors) block reuptake – treatment for depression
- **AREAS OF THE BRAIN:**
  - **Hindbrain:** oldest part of the brain
    - **Cerebellum** – movement (what does it take to ring a bell)
    - **Medulla** – vital organs (HR, BP)
    - **Pons** – sleep/arousal (Ponzzzzzz)
  - **Midbrain**
    - **Reticular formation:** attention (if you can't pay attention, **You R F'd**)
  - **Forebrain:** higher thought processes
    - **Limbic System**
      - **Amygdala:** emotions, fear (Amy, da! You're so emotional!)
      - **Hippocampus:** memory (if you saw a hippo on campus you'd remember it!)
    - **Thalamus:** relay center
    - **Hypothalamus:** Reward/pleasure center, eating behaviors
    - **Broca's Area:** Inability to produce speech (Broca – Broken speech)
    - **Wernicke's Area:** Inability to comprehend speech (Wernicke's what?)
    - **Cerebral Cortex:** outer portion of the brain – higher order thought processes
      - **Occipital Lobe:** located in the back of the head - vision
      - **Frontal Lobe:** decision making, planning, judgment, movement, personality
      - **Parietal Lobe:** located on the top of the head - sensations
      - **Temporal Lobe:** located on the sides of the head (temples) – hearing and face recognition
      - **Somatosensory Cortex:** map of our sensory receptors –in parietal lobe
      - **Motor Cortex:** map of our motor receptors – located in frontal lobe
  - **Corpus Callosum:** bundle of nerves that connects the 2 hemispheres – sometimes severed in patients with severe seizures – leads to “split-brain patients”
    - **Lateralization:** the brain has some specialized features – language is processed in the L Hemisphere
    - **Split-brain experiments:** done by Sperry & Gazzanaga.
      - Images shown to the right hemisphere will be processed in the left (& vice versa), patient can verbally identify what they saw
- **BRAIN PLASTICITY:** Brain can “heal” itself
- **NATURE VS. NURTURE: ANSWER IS BOTH**
  - **Twin Studies:**
    - Identical twins – Monozygotic (MZ)
    - Fraternal twins – Dizygotics (DZ)
  - **Genetics:** MZ twins will have a higher percentage of also developing a disease
  - **Environment:** MZ twins raised in different environments show differences
- **ENDOCRINE SYSTEM:** sends hormones throughout the body
  - **Pituitary Gland:** Controlled by hypothalamus. release growth hormones
  - **Adrenal Glands:** related to sympathetic NS: releases adrenaline

**Sensation & Perception**  
(6 – 8%)

- **ABSOLUTE THRESHOLD:** detection of signal 50% of time (is it there)
- **DIFFERENCE THRESHOLD (also called a just noticeable difference (JND) and follows WEBER'S LAW:** two stimuli must differ by a constant minimum proportion. (Can you tell a change?)
- **SIGNAL DETECTION THEORY**



- **Sensory Adaptation:** diminished sensitivity as a result of constant stimulation (can you feel your underwear?)
- **Perceptual Set:** tendency to see something as part of a group – speeds up signal processing
- **Inattentional Blindness:** failure to notice something b/c you're so focused on another task (gorilla video)
- **Cocktail party effect:** notice your name across the room when its spoken, when you weren't previously paying attention
- **VISUAL SYSTEM:**
  - Pathway of vision: light → cornea → pupil/iris → lens → retina → rods/cones → bipolar cells → ganglion cells → optic nerve → optic chiasm → occipital lobe

- **Cornea** – protects the eye
- **Pupil/iris** – controls amount of light entering eye
- **Lens** – focuses light on retina
- **Fovea**–area of best vision(cones here)
- **Rods** – black/white, dim light
- **Cones** – color, bright light
- **Bipolar cells** – connect rods/cones and ganglion cells
- **Ganglion cells** – opponent-processing occurs here
- **Blind spot** – occurs where the optic nerve leaves the eye
- **Feature detectors** – specialized cells that see motion, shapes, lines, etc. (experiments by Hubel & Weisel)
- **THEORIES OF COLOR VISION:**
  - **Trichromatic** – three cones for receiving color (blue, red, green)
    - Explains color blindness - they are missing a cone type
  - **Opponent Process** – complementary colors are processed in ganglion cells – explains why we see an after image
- **Visual Capture:** Visual system overwhelms all others (nauseous in an IMAX theater – vision trumps vestibular)
- **Constancies:** recognize that objects do not physically change despite changes in sensory input (size, shape, brightness)
- **Phi Phenomenon:** adjacent lights blink on/off in succession – looks like movement (traffic signs with arrows)
- **Stroboscopic movement:** motion produced by a rapid succession of slightly varying images (animations)
- **MONOCULAR CUES (how we form a 3D image from a 2D image)**
  - **Interposition:** overlapping images appear closer
  - **Relative Size:** 2 objects that are usually similar in size, the smaller one is further away
  - **Relative Clarity:** hazy objects appear further away
  - **Texture Gradient:** coarser objects are closer
  - **Relative Height:** things higher in our field of vision look further away
  - **Linear Perspective:** parallel lines converge with distance (think railroad tracks)
- **BINOCULAR CUES:** (how both eyes make up a 3D image)
  - **Retinal Disparity:** Image is cast slightly different on each retinal, location of image helps us determine depth
  - **Convergence:** Eyes strain more (looking inward) as objects draw nearer
- **TOP-DOWN PROCESSING:** Whole → smaller parts
- **BOTTOM-UP PROCESSING:** Smaller Parts → Whole



- **CONTINGENCY MODEL: Rescorla & Wagner** – classical conditioning involves cognitive processes
- **CONDITIONED TASTE AVERSION (ONE-TRIAL LEARNING): John Garcia** – Innate predispositions can allow classical conditioning to occur in one trial (food poisoning)
- **COUNTERCONDITIONING: Little Albert and John Watson (father of behaviorism)** – conditioned a fear in a baby (only to countercondition – remove it- later on)
  - **OPERANT CONDITIONING: SKINNER!**
- **LAW OF EFFECT (Thorndike):** Behaviors followed by pos. outcomes are strengthened, neg. outcomes weaken a behavior (cat in the puzzle box)
- **PRINCIPLES OF OPERANT COND:**
  - **Pos. Reinforcement:** Add something nice to increase a behavior (gold star for turning in HW)
  - **Neg. Reinforcement:** Take away something bad/annoying to increase a behavior (put on seatbelt to take away annoying car signal)
  - **Pos. Punishment:** Add something bad to decrease a behavior (spanking)
  - **Neg. Punishment:** Take away something good to decrease a behavior (take away car keys)
  - **Primary Reinforcers:** innately satisfying (food and water)
  - **Secondary Reinforcers:** everything else (stickers, high-fives)
    - **Token Reinforcer:** type of secondary- can be exchanged for other stuff (game tokens or money)
  - **Generalization:** respond to similar stimulus for reward
  - **Discrimination:** stimulus signals when behavior will or will not be reinforced (light on means response are accepted)
  - **Extinction / Spontaneous Recovery:** same as classical conditioning
  - **Premack Principle:** high probability activities reinforce low probability activities (get extra min at recess if you everyone turns in their HW)
  - **Overjustification Effect:** reinforcing behaviors that are intrinsically motivating causes you to stop doing them (give a child 5\$ for reading when they already like to read – they stop reading)
  - **Shaping:** use successive approximations to train behavior (reward desired behaviors to teach a response – rat basketball)
  - **Chaining:** tie together several behaviors

- **Continuous Reinforcement schedule:** Receive reward for every response
- **Fixed Ratio schedule:** Reward every X number of response (every 10 envelopes stuffed get \$\$)
- **Fixed Interval schedule:** Reward every X amount of time passed (every 2 weeks get a paycheck)
- **Variable Ratio schedule:** Rewarded after a random number of responses (slot machine)
- **Variable Interval schedule:** Rewarded after a random amount of time has passed (fishing)
- **Variable schedules are most resistant to extinction** (how long will keep playing a slot machine before you think its broken?)
  - **SOCIAL (OBSERVATIONAL) LEARNING: BANDURA!**
  - **Modeling Behaviors:** Children model (imitate) behaviors. Study used BoBo dolls to demonstrate the following
    - **Prosocial** – helping behaviors
    - **Antisocial** – mean behaviors
      - **MISC LEARNING TYPES**
    - **Latent learning (Tolman!)** – learning is hidden until useful (rats in maze get reinforced half way through, performance improved)
      - **Cognitive maps** – mental representation of an area, allows navigation if blocked
    - **Insight learning (Kohler!)** – some learning is through simple intuition (chimps with crates to get bananas)
    - **Learned Helplessness (Seligman!)** – no matter what you do you never get a positive outcome so you just give up (word scrambles)

Cognition  
(8 – 10%)

#### **ENCODING: Getting info into memory**

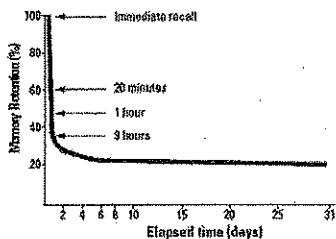
- **Automatic encoding** – requires no effort (what did you have for breakfast?)
- **Effortful encoding** – requires attention (school work)
- Shallow, intermediate, deep processing: the more emphasis on MEANING the deeper the processing, and the better remembered
- **Imagery** – attaching images to information makes it easier to remember (shoe w/ spaghetti laces)
- **Self-referent encoding** – we better remember what we're interested in (you'd remember someone's phone number who you found extremely attractive)
- **Dual encoding** – combining different types of encoding aids in memory
- **Chunking** – break info into smaller units to aid in memory (like a phone #)

- **Mnemonics** – shortcuts to help us remember info easier
  - Acronyms – using letter to remember something (PEMDAS)
  - Method of loci – using locations to remember a list of items in order
- **Context dependent memory** – where you learn the info you best remember the info (scuba divers testing)
- **State dependent memory** – the physical state you were in when learning is the way you should be when testing (study high, test high)
- STORAGE: Retaining info over time**
- **Information Processing Model** – Sensory memory, short term memory, long term memory model
- **Sensory Memory** – stores all incoming stimuli that you receive (first you have to pay attention)
  - **Iconic Memory** – visual memory, lasts 0.3 seconds
  - **Echoic Memory** – auditory memory, lasts 2-3 seconds
- **Short Term Memory** – info passes from sensory memory to STM – lasts 30 secs, and can remember  $7 \pm 2$  items
  - **Rehearsal** (repeating the info) resets the clock
- **Working Memory Model** splits STM into 2 – visual spatial memory (from iconic mem) and phonological loop (from echoic mem). A “central executive” puts it together before passing it to LTM
- **Long term memory** – lasts a life time
  - **Explicit (Declarative):** Conscious recollection
    - **Episodic:** events
    - **Semantic:** facts
  - **Implicit (Nondeclarative):** unconscious recollection
    - **Classical conditioning**
    - **Priming:** info that is seen earlier “primes” you to remember something later on (octopus, assassin, climate, bogeyman)
    - **Procedural:** skills
- **Memory organization**
  - **Hierarchies:** memory is stored according to a hierarchy
  - **Semantic networks:** linked memories are stored together
  - **Schemas:** preexisting mental concept of how something should look (like a restaurant)
- **Memory storage**
  - **Acetylcholine neurons in the hippocampus** for most memories
  - **Cerebellum** for procedural memories

- **Long-term potentiation:** neural basis of memory – connections are strengthened over time with repeated stimulation (more firing of neurons)

**RETRIEVAL: Taking info out of storage**

- **Serial Position Effect:** tendency to remember the beginning and the end of the list best
- **Recall:** remember what you've been told w/o cues (essays)
- **Recognition:** remember what you've been told w/ cues (MC)
- **Flashbulb memories:** particularly vivid memories for highly important events (9/11 attacks)
- **Repressed memories:** unconsciously buried memories – are unreliable
- **Encoding failure:** forget info b/c you never encoded it (paid attention to it) in the first place (which is the real penny)
- **Encoding specificity principle:** the more closely retrieval cues match the way we learned the info, the better we remember the info (like state dependent memory)
- **Forgetting curve:** recall decreases rapidly at first, then reaches a plateau after which little more is forgotten (**EBBINGHAUS**)



- **Proactive interference:** old info blocks new
- **Retroactive interference:** new info blocks old
- **Misinformation effect:** distortion of memory by suggestion or misinformation (**Loftus** – lost in the mall, Disney land)
- **Anterograde amnesia:** amnesia moves forward (forget new info – 50 first dates)
- **Retrograde amnesia:** amnesia moves backwards (forget old info)
- **ALZHEIMER'S DISEASE:** caused by destruction of acetylcholine in hippocampus

**LANGUAGE**

- **Phonemes:** smallest unit of sound (ch sound in chat)
- **Morpheme:** smallest unit that carries meaning (syllable)
- **Grammar:** rules in a language that enable us to communicate
- **Semantics:** set of rules by which we derive meaning (adding -ed makes something past tense)
- **Syntax:** rules for combining words into sentences (white house vs casa blanca)

- **Babbling stage:** infants babble 1<sup>st</sup> stage of speech
- **One-word stage:** duh
- **Two-word stage:** duh duh
- **Theories of language development:**
  - **Imitation:** Kids repeat what they hear – but they don't do it perfectly
    - \* **Overregularization:** grammar mistake where children over use certain morphemes (I go-ed to the park)
  - **Operant conditioning:** reinforced for language use
  - **Inborn universal grammar:** theory comes from **NOAM CHOMSKY** – says that language is innate and we are predisposed to learn it
  - **Critical period:** period of time where something must be learned or else it cannot ever happen (language must be learned young – Genie the Wild Child)
  - **Linguistic determinism:** language influences the way we think (Hopi people do not have words for the past, thus cannot easily think about the past) developed by **WHORF**

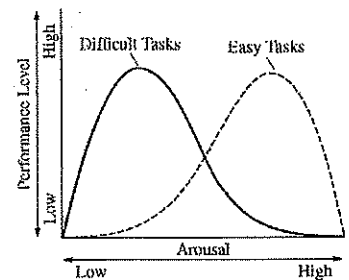
**THINKING**

- **Concepts:** mental categories used to group objects, events, characteristics
- **Prototypes:** all instances of a concept are compared to an ideal example (what you first think of)
- **Algorithms:** step by step strategies that guarantee a solution (formula)
- **Heuristics:** short cut strategy (rule of thumb)
  - **Representative Heuristic:** make inferences based on your experience (like a stereotype) – assume someone must be a librarian b/c they're quiet
  - **Availability heuristic:** relying on availability to judge the frequency of something (over estimating death due to plane crashes due to recent events)
- **Functional Fixedness:** keep using one strategy – cannot think outside of the box
- **Belief bias:** tendency of one's preexisting beliefs to distort logical reasoning by making invalid conclusions
- **Belief perseverance:** tendency to cling to our beliefs in the face on contrary evidence
- **Inductive reasoning:** data driven decisions, general → specific
- **Deductive reasoning:** driven by logic, specific → general
- **Divergent thinking:** ability to think about many different things at once

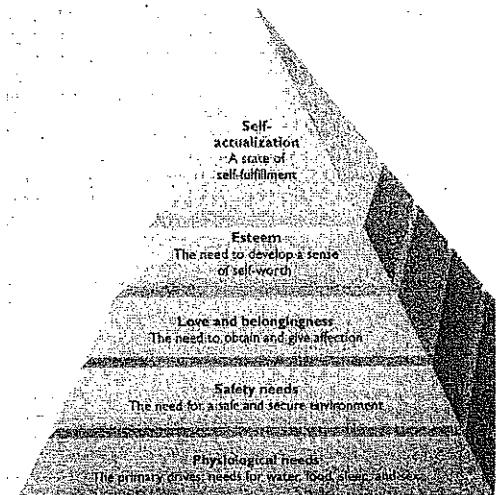
**Motivation & Emotion (6-8%)**

**THEORIES OF MOTIVATION**

- **INSTINCT:** complex behaviors have fixed patterns and are not learned (explains animal motivation)
- **DRIVE REDUCTION:** physiological need creates aroused tension (drive) that motivates you to satisfy the need (driven by **homeostasis:** equilibrium)
  - **Primary drive:** unlearned drive based on survival (hunger, thirst)
  - **Secondary drive:** learned drive (wealth or success)
- **OPTIMUM AROUSAL:** humans aim to seek optimum levels of arousal – easier tasks requires more arousal, harder tasks need less



- **HIERARCHY OF NEEDS:** theory derived by **MASLOW** – needs lower in the pyramid have priority over needs higher in the pyramid



- **Intrinsic motivation:** inner motivation – you do it b/c you like it
- **Extrinsic motivation:** motivation to obtain a reward (trophy)

## HUNGER

- **Signals of hunger:**
  - Stomach contractions tell us we're hungry
  - **Glucose** (sugar) level is maintained by the **pancreas** (endocrine system).
  - **Insulin** decreases glucose. Too little glucose makes us hungry.
  - **Orexin** is released by the **hypothalamus** – telling us to eat.
  - Other chemicals include **ghrelin**, **obestatin**, and **PPY**
  - **Lateral hypothalamus:** when stimulated makes you hungry, when lesioned you will never eat again. (I'm LATE for lunch. I'm hungry. The LATERAL hypothalamus makes you hungry.)
  - **Ventromedial hypothalamus:** when stimulated you feel full, when destroyed you eat eat eat eat (fat woman and cake)
  - **Leptin:** leptin signals the brain to reduce appetite
- **Obesity:**
  - Increased risk of **heart attack**, **hypertension**, **atherosclerosis**, **diabetes**
  - Can be genetic – adopted children resemble their biological parents
  - **Set point:** there is a control system that dictates how much fat you should carry – every person is different
- **Eating Disorders:**
  - **Anorexia:** weight loss of at least 15% ideal weight, distorted body image
    - **Causes:** overly critical parents, perfectionist tendencies, societal ideals
  - **Bulimia:** usually normal body weight, go through a binge-purge eating pattern (eat massive amounts, then throw up)
    - **Causes:** same as anorexia

## SEXUALITY

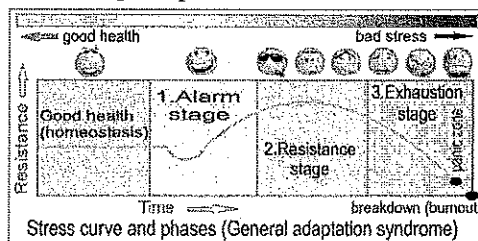
- **Biology of sex:**
  - **Hypothalamus:** stimulation increases sexual behavior, destruction leads to sexual inhibition
  - **Pituitary gland:** monitors, initiates, and restricts hormones
    - **Males – testosterone**
    - **Females – estrogen**
  - **Sexual Response Pattern:** Excitement phase, plateau, orgasm, refractory period (resolution phase) (cannot “fire” again until you reset, guys only)
  - **Alfred Kinsey:** 1<sup>st</sup> researcher to conduct studies in sex, suggested that people were very promiscuous. Studies lacked a representative sample, created scale of homosexuality
  - **Homosexuality:** biological roots: differences in the brain, identical twins more likely to both be gay, later sons more likely to be (hormones from mom)

## THEORIES OF EMOTIONS

- **JAMES-LANGE:** stimulus → physiological arousal → emotion
- **CANNON-BARD:** stimulus → physiological arousal & emotion simultaneously
- **SCHACTER TWO FACTOR:** adds in cognitive labeling (bridge experiment) stimulus → arousal → interpret external cues → label emotion
- Some stimuli are routed directly to the **amygdala** bypassing the frontal cortex (gut reaction to a cockroach)
- **Behavioral factors:** there are **SIX** universal emotions (happiness, anger, sadness, surprise, disgust, fear) seen across ALL cultures
- **Non-verbal cues:** gestures, **duchenne smile** (you can tell a real smile from a fake one)
- **Facial feedback hypothesis:** being forced to smile will make you happier (facial expressions influence emotion)

## STRESS AND HEALTH

- **GENERAL ADAPTATION SYNDROME (GAS):** three phases of a stress response (**SELYE** came up w/ this)
  - **Alarm:** body/you freak out in response to stress
  - **Resistance:** body/you are dealing with stress
  - **Exhaustion:** body/you cannot take any more, give up



- **Type A Personality:** rigid, stressful person, perfectionist. At risk for heart disease
  - **Type B Personality:** laid back, nonstressed.
- ## INDUSTRIAL/ORGANIZATIONAL PSYCH
- **Industrial / Organizational Psych:** psychological of the workplace – focuses on employee recruitment, placement, training, satisfaction, productivity
  - **Ergonomics / Human Factors:** intersection of engineering and psych – focuses on safety and efficiency of human-machine interactions
  - **Hawthorne effect:** productivity increases when workers are made to feel important
  - **Theory X management:** manager controls employees, enforces rules. Good for lower level jobs
  - **Theory Y management:** manager gives employees responsibility, looks for input. Good for high level jobs

- **Employee Commitment:**
  - **Affective:** emotional attachment (best type)
  - **Continuance:** stay due to costs of leaving
  - **Normative:** stay due to obligation (they paid for your school)
- **Meaning of Work:**
  - **Job** – no training, just do it for \$\$ . No happiness
  - **Career** – work for advancement. Some happiness
  - **Calling** – work because you love it. Lotsa happiness

## Development (7-9%)

- **Prenatal Development:**
  - **Zygote:** 0 – 14 days, cells are dividing
  - **Embryo:** until about 9 weeks, vital organs being formed
  - **Fetus:** 9 wks to birth, overall development
  - **Teratogens:** external agents that can cause abnormal prenatal development (alcohol, drugs, etc)
    - **Fetal alcohol syndrome (FAS):** large amount of alcohol leads to FAS, causes deformities, mental retardation, death
- **Physical Development:**
  - **Maturation:** natural course of development, occurs no matter what (walking)
  - **Reflexes:** innate responses we're born with
    - Rooting, sucking, swallowing, grasping, stepping
  - **Habituation:** after continual exposure you pay less attention – used to test babies
  - **Eyes have the most limited development, takes till 1 year**
    - **Visual cliff:** babies have to learn depth perception, so they will cross a “cliff”
  - **Other senses are fairly developed**
  - **Brain development continues for a few years**
- **JEAN PIAGET'S COGNITIVE DEV.**
- **Schemas** – concepts or frameworks that organize info
- **Assimilation:** incorporate new info into existing schema (aSSimilation – same stuff)
- **Accommodation:** adjust existing schemas to incorporate new information (ACcommodation - All Change)
- **Sensorimotor Stage:** Birth to 2 years: focused on exploring the world around them
  - **Lack Object Permanence:** Objects when removed from field of view are thought to disappear (peek-a-boo)
  - **Dev. Sense of Self:** by 2 yrs can recognize themselves in the mirror