AP Psychology 2021-2022 Progression of Understanding Word Wall

History and Approaches (10-14%)

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

- o Psychoanalytic/dynamic unconscious, childhood
- o *Behavioral* learned, reinforced
- o *Humanistic* free will, choice, ideal, actualization
- o *Cognitive* Perceptions, thoughts
- o *Evolutionary* Genes
- o *Biological* Brain, NTs
- Sociocultural society
- o *Biopsychosocial* combo of above

PEOPLE:

- o Mary Calkins: First Fem. Pres. of APA
- o Charles Darwin: Natural selection & evolution
- o Dorothea Dix: Reformed mental institutions in U.S.
- Stanley Hall: 1st pres. of APA1st journal

• William James: Father of American Psychology – functionalist

- Wilhem Wundt: Father of Modern Psychology – structuralist
- o Margaret Floy Washburn-1st fem. PhD
- Christine Ladd Franklin 1st fem.

RANDOM TERMS

- o *Basic research* purpose is to increase knowledge (rats)
- o *Applied research* purpose is to help people
- Psychologist research or counseling MS or PhD
- o Psychiatrist prescribe medications and diagnose - M.D.

Research Design

EXPERIMENT:

Adv: researcher controls variables to establish cause and effect Disadv: difficult to generalize

- o *Independent Variable*: purposefully altered by researcher to look for effect
 - Experimental Group: received the treatment (part of the IV); can have multiple exp, groups
 - Control Group: placebo, baseline (part of the IV); can only have 1
 - *Placebo Effect:* show behaviors associated with the exp. group when having received placebo
- o Dependent Variable: measured variable (is DEPENDENT on the independent variable)

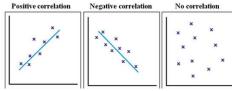
D Dependent variable R Responds to the change Plotted on Y-axis Manipulated to Plotted on the cause change Independent variable

- *Double-Blind:* Exp. where neither the participant or the experimenter are aware of which condition people are assigned to (drug studies)
- Single-Blind: only participant blind used if experimenter can't be blind (gender, age, etc)
- Operational Definition: clear, precise, typically quantifiable definition of your variables – allows **replication**
- *Confound:* error/ flaw in study
- Often confused Random Assignment: assigns participants to either control or experimental group at random minimizes bias, increase chance of equal representation among groups
- **Random Sample:** method for choosing participants for your study – minimizes bias, everyone has a chance to take part
 - o Assignment and sampling can be done via names in a hat, computer generation
- Representative Sample: Sample mimics the general pop. (ethnic, gender, age)

CORRELATION:

Adv: identify relationship between two variables Disadv: No cause and effect (CORRELATION DOES NOT EQUAL **CAUSATION**)

- **Positive Correlation** variables increase & decrease together
- Negative Correlation as one variable increases the other decreases
- The stronger the # the stronger the relationship REGARDLESS of the pos/neg sign. Cannot be < or > than 1.



- 3rd variable problem (lurking variable) - diff. variable is responsible for relationship (breast implants & suicide)
- Illusory correlation belief of correlation that doesn't exist (old man predicts rain from arthritis)

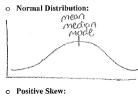
• NATURALISTIC OBSERVATION:

Adv: real world validity (observe people in their own setting) Disady: No cause and effect

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



mode median mean

Negative Skew:



- **INFERENTIAL STATISTICS:** establishes significance (meaningfulness)
- **STATISTICAL SIGNIFANCE** = results not due to chance, exp.manipulation caused the difference in means

ETHICAL GUIDELINES (APA)

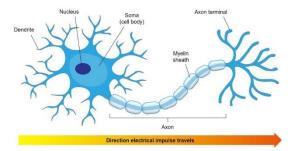
- Confidentiality: names kept secret
- Informed Consent: must agree to be part of study
- Debriefing: must be told the true purpose of the study (done after for deception)
- Deception must be warranted
- No harm- mental/physical

Biological Basis (8-10%)

*NT = neurotransmitter, AP = action potential, NS = nervous system

- **NEURON:** Basic cell of the NS
 - o Dendrites: Receive incoming signal
 - **Soma:** Cell body (includes nucleus)
 - **Axon:** AP travels down this
 - Myelin Sheath: speeds up AP down axon, protects axon, MS destroys this
 - *Terminals:* release NTs send signal onto next neuron
 - Vesicles: sacs inside terminal contain NTs (rhymes w/?)
 - Synapse: gap b/w neurons

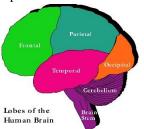
- Action Potential: movement of Na and K ions across membrane sends an electrical charge down the axon (more Na outside – like a salty banana)
 - o All or none law: stimulus must trigger the AP past its threshold, but does not increase the intensity of the response (flush the toilet)
 - **Refractory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



- Sensory neurons receive signals
- Afferent neurons Accept signals
- Motor <u>neurons</u> <u>send signals</u>
- <u>Efferent neurons signal Exits</u>
- *Interneurons* cells in spinal cord responsible for reflex loop
- **CENTRAL NS:** Brain and spinal cord
- **PERIPHERAL NS:** Rest of the NS
 - o Somatic NS: Voluntary movement
 - o *Autonomic NS*: Involuntary (heart, lungs, etc)
 - Sympathetic NS: Arouses the body fight/flight (generally activates sympathetic to you getting eaten by tiger helps you run away)
 - Parasympathetic NS: established homeostasis after a sympathetic response (generally inhibits)
- **NEUROTRANSMITTERS (NT):** Chemicals released in synaptic gap, received by neurons
 - o **GABA:** Major inhibitory NT
 - **GlutamatE:** Major **E**xcitatory NT (get excited when seeing your mates!
 - Dopamine: Reward & movement
 - Serotonin: Moods and emotion
 - Acetylcholine (ACh): Memory 0
 - Epinephrine & Norepinephrine: sympathetic NS arousal
 - Endorphins: pain control
 - **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
- o Cerebellum movement/balance (walking a tightrope balancing a bell)
- Medulla vital organs (HR, BP)
- o Pons sleep/arousal (Ponzzzzzz)
- Midbrain
- o Reticular formation: alertness
- Forebrain: higher thought processes
- o Limbic System
 - Amygdala: emotions, fear (Amy, da! You're so emotional!)
 - Hippocampus: memory (if you saw a hippo on campus you'd remember it!)
 - Hypothalamus: Reward/pleasure center, eating behaviors - link to endocrine system
 - Thalamus: relay center for all but smell (you MUST (thalaMUST) use your thalamus, unless its MUSTY – smell)
- Cerebral Cortex: outer portion of the brain – higher order thought processes
 - Occipital Lobe: vision mom's eyes!
 - Frontal Lobe: decision making, planning, judgment, movement, personality
- Parietal Lobe: sensations
- Temporal Lobe: 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



Non-REM stage 3 (formerly stage 3 & 4) damage results in aphasia (damaged

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- Broca's Area: Inability to produce O speech (Broca - Broken speech)
- Wernicke's Area: can't comprehend speech (Wernicke's what?)



o <u>Left hemisphere only –</u>

Must include bio response (HR

/ decrease) for FRQ



- o Corpus Callosum: bundle of nerves that connects the 2 hemispheres – sometimes severed in patients with severe seizures leads to "split-brain patients"
- Split-brain experiments: done by *Sperry* & Gazzaniga.
 - Image shown to R eye processed in L hemi – patient can say what they saw;

- image shown to L eye processed in R hemi, can't say what was seen
- BRAIN PLASTICITY: Brain can "heal" itself (brain is malleable)

NATURE VS. NURTURE: ANSWER IS BOTH

- o Twin Studies:
 - Identical twins Monozygotic (MZ)
 - Fraternal twins Dizygotics (DZ)
- o Genetics: MZ twins will have a higher percentage of also developing a disease
- o Environment: MZ twins raised in different environments show differences

ENDOCRINE SYSTEM: sends hormones throughout the body

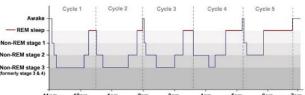
- o Pituitary Gland: Controlled by hypothalamus. release growth hormones
- o Adrenal Glands: related to sympathetic NS: releases adrenaline

• BRAIN IMAGING:

- o EEG: brain activity not specific
- o XRAY: not useful, doesn't show tissues
- o CT / MRI: shows structures (tumors)
- o PET: glucose shows brain activity (when in doubt pick this one)
- o fMRI: glucose shows activity: real time
- o lesion destruction of brain tissue

STATES of CONSCIOUSNESS:

- Higher-Level: controlled processes totally aware
- o Lower-Level: automatic processing (daydreaming, phone numbers)
- o Altered States: produced through drugs, fatigue, hypnosis
- o Subconscious: Sleeping and dreaming
- o No awareness: Knocked out



SLEEP:

Beta Waves: awake (you betta be awake for the exam)

Alpha Waves: high amp., drowsy NREM (non REM) stages-

Stage 1: light sleep

Stage 2: bursts of sleep spindles

Stage 3 Delta waves: Deep sleep

Rapid Eve Movement (REM):

dreaming, cognitive procesing

Entire cycle takes 90 minutes, REM occurs inb/w each cycle. REM lasts longer throughout the night

• CIRCADIAN RHYTHM: 24 hour biological clock

- Body temp & sleep
- Controlled by the Suprachiasmatic nucleus (SCN) in the brain
- Explains jet lag

• SLEEP DISORDERS

- o <u>Insomnia:</u> Inability to fall asleep (due to stress/anxiety)
- o <u>Sleep walking/talking:</u> (due to fatigue, drugs, alcohol) NOT during REM
- Night terrors: extreme nightmares NOT in REM sleep – typical in children
- <u>Narcolepsy:</u> fall asleep out of nowhere (due to deficiency in orexin)
- Sleep Apnea: stop breathing suddenly while asleep (due to obesity usually)

• DREAM THEORIES:

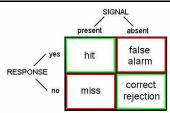
- Freud's Unconscious Wish
 Fulfillment: Dreaming is gratification of unconscious desires and needs
 - Latent Content: hidden meaning
 - Manifest Content: obvious storyline
- <u>Activation Synthesis:</u> Brain produces random bursts of energy stimulating lodged memories in limbic sys. Dreams start random then develop meaning

• PSYCHOACTIVE DRUGS:

- o Triggers dopamine release in the brain
- o <u>Depressants:</u> Alcohol, barbiturates, tranquilizers, opiates (narcotics)
 - Decrease sympathetic NS activation, highly addictive
- <u>Stimulants:</u> Amphetamines, Cocaine, MDMA (ecstasy), Caffeine, Nicotine
 - Increase sympathetic NS activation, highly addictive
- o Hallucinogens: LSD, Marijuana
 - Causes hallucinations, less addictive
- o *Tolerance:* Needing more of a drug to achieve the same effects
- Dependence: Become addicted to the drug – must have it to avoid withdrawal symptoms
- Withdrawal: Psychological and physiological symptoms associated with sudden stoppage. Unpleasant – can kill you.

Sensation & Perception (6 – 8%)

- <u>ABSOLUTE THRESHOLD:</u> 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



- <u>Sensory Adaptation:</u> diminished sensitivity as a result of constant stimulation (can you feel your underwear?)
 - Sensory Habituation: diminished sensitivity due to regular exposure (do you notice the train?)
- <u>Perceptual Set (mental set):</u> tendency to see something as part of a group speeds up signal processing



- <u>Inattentional Blindness:</u> failure to notice something added b/c you're so focused on another task (gorilla video)
- <u>Change Blindness:</u> failure to notice a change in the scene (door study)
- <u>Cocktail party effect</u>: notice your name across the room when its spoken, when you weren't previously paying attention

VISUAL SYSTEM:

Pathway of light follows this direction

 \downarrow

- o Cornea protects the eye
- **Pupil/iris** controls amount of light entering eye
- o **Lens** focuses light on retina
- o **Retina** contains rods and cones
- Fovea—area of best vision(cones here)
- o **Rods** black/white, dim light
- Cones color, bright light (red, green, blue)
- o **Bipolar cells** connect rods/cones and ganglion cells
- o 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. located in occipital lobe (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
- o Opponent Process complementary colors are processed in ganglion cells explains why we see an after image
- <u>Visual Capture:</u> Visual system overwhelms all others (nauseous in an IMAX theater vision trumps vestibular)
- <u>Constancies:</u> recognize that objects do not physically change despite changes in sensory input (size, shape, brightness)
- <u>Phi Phenomenon:</u> adjacent lights blink on/off in succession looks like movement (traffic signs with arrows)
- <u>Stroboscopic movement:</u> motion produced by a rapid succession of slightly varying images (animations)

- MONOCULAR CUES (how we form a 3D image from a 2D image)
 - <u>Interposition:</u> overlapping images appear closer
 - Relative Size: 2 objects that are usually similar in size, the smaller one is further away
 - <u>Relative Clarity:</u> hazy objects appear further away
 - <u>Texture Gradient:</u> coarser objects are closer
 - o <u>Relative Height:</u> things higher in our field of vision look further away
 - <u>Linear Perspective:</u> 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 retina, location of image helps us determine depth Convergence: Eyes strain more (looking inward) as objects draw nearer
- <u>TOP-DOWN PROCESSING:</u> Whole → smaller parts (painting w/ faces)
- BOTTOM-UP PROCESSING: Smaller Parts → Whole (dog of bunch of dots)

• AUDITORY SYSTEM:

- Pathway of sound: sound → pinna → auditory canal → ear drum (tympanic membrane) → hammer, anvil, stirrup (HAS) → oval window → cochlea → auditory nerve → temporal lobes
- o Outer Ear: pinna (ear), auditory canal
- Middle Ear: ear drum, HAS (bones vibrate to send signal)
- o **Inner Ear:** cochlea like COCHELLA (sounds 1st processed here)
- THEORIES OF HEARING: both occur in the cochlea
 - Place theory location where hair cells bends determines sound (high pitches)
 - Frequency theory rate at which action potentials are sent determines sound (low pitches)

• OTHER SENSES:

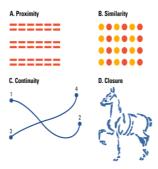
- Touch: Mechanoreceptors → spinal cord
 → thalamus → somatosensory cortex
- Pain (nociception): Gate-control theory: we have a "gate" to control how much pain is experienced
- Kinesthetic (proprioception): Sense of body position (neurons in ligaments & body tell you this)
- Vestibular: Sense of balance (semicircular canals in the inner ear effect this)
- Taste (gustation): 5 taste receptors: bitter, salty, sweet, sour, umami (savory)
- Smell (olfaction): Only sense that does NOT route through the thalamus 1st.
 Goes to temporal lobe and amygdala

All associated w/ classical conditioning

• **GESTALT PSYCHOLOGY:** Whole is greater than the sum of its parts

Gestalt Principles:

- <u>Figure/ground</u>: organize information into figures objects (figures) that stand apart from surrounds (back ground)
- Closure: mentally fill in gaps
- <u>Proximity</u>: group things together that appear near each other
- Similarity: group things together based off of looks
- Continuity: tendency to mentally form a continuous line



Learning (7-9 %)

CLASSICAL CONDITIONING: PAVLOV!

- Unconditioned Stimulus (UCS): causes response w/o needing to be learned (food)
- Unconditioned Response (UCR): response that naturally occurs w/o training (salivate)
- o **Neutral Response** (**NS**): stimulus that normally doesn't evoke a response (bell)
- Conditioned Stimulus (CS): once NS that now brings about a response (bell)
- o **Conditioned Response** (**CR**): response after conditioning, follows a CS (salivate)
- o **Contiguity:** Timing of the pairing, NS/CS must be presented .5-1 sec BEFORE the US
- Acquisition: process of learning the response pairing
- Extinction: previously conditioned response dies out over time
- Spontaneous Recovery: After a period of time the CR comes back out of nowhere
- Generalization: CR to like stimuli (similar sounding bell)
- O Discrimination: CR to ONLY the CS
 CONTINGENCY MODEL: Rescorla & Wagner classical conditioning involves cognitive processes

CONDITIONED TASTE AVERSION (ONE-TRIAL LEARNING): John

<u>Garcia</u> – Innate predispositions can allow classical conditioning to occur in one trial (food poisoning)

John Watson (father of behaviorism) and Little Albert — conditioned a fear in a baby — eventually leads to behavioral treatments for fear (counterconditioning)

All operant conditioning

OPERANT CONDITIONING: SKINNER!

O 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:

- O **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)
- O **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)
- O **Secondary Reinforcers:** everything else (stickers, high-fives)
- Token Reinforcer: type of secondary- can be exchanged for other stuff (game tokens or money)
- O **Generalization:** respond to similar stimulus for reward
- O **Discrimination:** stimulus signals when behavior will or will not be reinforced (light on means response are accepted)
- O Extinction / Spontaneous Recovery: same as classical conditioning
- 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)
- O Continuous Reinforcement schedule: Receive reward for every response
- Fixed Ratio schedule: Reward every X number of response (every 10 envelopes stuffed get \$\$)
- O **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
- O **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
- O **Prosocial** helping behaviors
- O 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 (13 – 17%)

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
 - o Peg-word using a rhyme w/ imagery to remember lists 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)

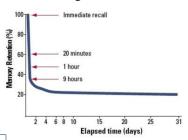
STORAGE: Retaining info over time

- *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 a 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 ± 2 items
 - o **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: eventsSemantic: facts
 - Implicit (Nondeclarative): unconscious recollection
 - Classical conditioning
 - Priming: info that is seen earlier "primes" you to remember something later on
 - 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 (primacy effect) and the end (recency effect) 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 blocks new
- Retroactive interference NEW blocks *old*
- Misinformation effect: distortion of memory by suggestion or misinformation (Loftus lost in the mall, Disney land)
- **Framing** the way a question is framed impacts how info is recalled / perceived
- **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 caries meaning (-ed *means* past tense)
- **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: 1st stage of speech
- One-word stage: duh
- Two-word stage: duh duh (telegraphic speech)
- 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: NOAM CHOMSKY – says that language is innate; 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 have no words for past, do not think about the past) developed by WHORF

THINKING

- **Metacognition:** thinking about (reflecting upon) the way you think
- 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
- Confirmation bias: look for evidence to support what we already believe
- Inductive reasoning: data driven decisions, specific to general
- **Deductive reasoning:** driven by logic, general to specific
- **Divergent thinking:** ability to think about many different things at once (Creative)

Convergent thinking: <u>limits creativity</u> – one answer

INDIVIDUAL THEORIES ABOUT INTELLIGENCE

- GALTON: 1st to suggest intelligence was inherited. Intelligence based on muscle strength, size of head, reaction time, etc.
- CATTELL: 2 clusters of mental abilities
 - Crystalized intelligence: reasoning and verbal skills - what you learn in school – the cold hard (like crystals!) facts, increase w/ time
 - Fluid intelligence: spatial abilities, rote memory, things that come natural to you

 can't learn in school, decrease over time

- <u>SPEARMAN'S G FACTOR:</u> said a general intelligence (g) underlies all mental abilities (typical IQ of today)
- GARDNER: multiple intelligences (8): linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, intrapersonal (self), interpersonal (social), naturalist
- STERNBERG: TRIARCHIC THEORY
 - Analytical: mental components to solve problems, what IQ tests assess (book smarts)
 - Practical: ability to size up new situations and adapt to real-life demands (street smarts)
 - Creative: intellectual and motivational processes that lead to novel solutions, idea, products
- <u>BINET</u>: developed 1st intelligence test, combined with **TERMAN** developed the **STANFORD-BINET IQ TEST**

$IQ = \frac{\text{mental age}}{\text{chronological age}} X 100$

- Chronological age = actual age
- Mental age = tested age compared to other of that age
- o 100 is average
- <u>WECHSLER:</u> developed the WAIS and WISC most commonly used today
- <u>FLYNN effect:</u> IQ has steadily risen over the past 80 years – probably due to education standards and better IQ tests
- Extremes of Intelligence: high IQ = above 135; intellectually disadvantage = below 70
- Causes of mild intellectual disadvantage:
 - PKU liver fails to produce an enzyme needed to breakdown chemicals – leads to brain damage
 - Down syndrome extra copy of 21st chromosome
 - Fragile X higher chance in boys due to ONE X chromosome

• Influence on IQ:

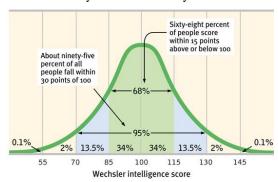
- Genetics: MZ twins have similar IQ, adopted kids more similar to biological parents
- Environment: early neglect leads to lower IQ, good schooling to higher IQ
- Types of Tests:
- Aptitude: predicts your abilities to learn a new skill (ASVAB)
- o Achievement: tests what you know(SAT)

• TEST CREATION:

- Standardization: administer a test to a representative sample of future test takers to establish a basis for meaningful comparison (test it out 1st)
- Should be <u>reliable:</u> same results over
 - Split-half reliability: compare two halves of the test
- Test-retest reliability: use the same test on 2 different occasions

- Should be <u>valid</u>: test is accurate measures what it is intended to
 - Content validity: test measures what you want it to (an IQ test actually measures IQ)
 - Predictive validity: test is able to accurately predict a trait (high math scores predicts good engineer)
- Standardized tests establish a normal distribution
- Standard deviations are used to compare scores.

Standard deviation measures how much the scores vary from the mean. The percentages stay the same in every curve



Development (7-9%)

- Prenatal Development:
 - \circ **Zygote:** 0 14 days, cells are dividing
 - o **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 disability, 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, babinski
 - Eyes have the most limited development, takes till 1 year
 - Visual cliff: babies have to learn depth perception, so they will cross a "cliff"
 - o 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 (aSSimlation same stuff)

- Accommodation: adjust existing schemas to incorporate new information (ACcommodation - All Change)
- <u>Sensorimotor Stage:</u> 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)
 - <u>Dev. Sense of Self:</u> by 2 yrs can recognize themselves in the mirror (blush test)
- <u>Pre-operational Stage:</u> 2 7 years: use pretend play, developing language, using intuitive reasoning
 - Lack Conservation: recognize that substances remain the same despite changes in shape, length, or position (girls with juice in glasses)
 - o *Lack Reversibility:* cannot do reverse operations (count out both 4+2 and 2+4)
 - Are egocentric: inability to distinguish one's own perspective from another's – think everyone sees what they see
- <u>Concrete Operational Stage:</u> 7-11 yrs: use operational thinking, classification, and can think logical in concrete context
- <u>Formal Operational Stage</u>: 11-15 yrs: use abstract and idealist thoughts, hypothetical-deductive reasoning
- <u>Problems with Piaget's theory</u>: stages to discrete, dev. differs b/w kids
- VYGOTSKY'S THEORY: cognitive development is a social process too, need to interact w/ others
 - Zone of Proximal Development: gap b/w what a child can do on their own and w/ support. Need scaffolding (teachers)
 SOCIOEMOTIONAL DEVELOPMENT
- <u>Temperament:</u> patterns of emotional reactions and babies (precursor to personality)
- <u>Imprinting:</u> baby geese believe the first thing they see after hatching is their mom – happens during a **critical period** (from LORENZ)
- HARRY HARLOW: discovered that contact comfort is more important than feeding (monkeys fed on wire or cloth mothers). Monkeys raised in isolation couldn't socialize
- **BAUMRIND:** parenting styles
 - Authoritarian: rules & obedience, "my way or the highway" – kids lack initiative in college
 - Permissive: kids do whatever no rules
 kids lack initiative in college
 - Authoritative: give and take w/ kids kids become socially competent and reliable

- MARY AINSWORTH: developed the strange situation paradigm (children left alone in a room w/ a stranger, then reunited w/ mom determines your attachment style
 - Secure attachment (60% of infants): upset when mom leaves, easily calmed on return. Tend to be more stable adults
 - Avoidant attachment (20% infants): actively avoids mom, doesn't care when she leaves
 - Ambivalent attachment(10% infants): actively avoids mom, freaks out when she leaves
 - Disorganized attachment (5%):
 confused, fearful, dazed result of abuse

• KOHLBERG'S MORAL DEV

- Preconventional morality: Children: they follow rules to avoid punishment
- Conventional morality: adolescents: follow rules b/c rules exist to keep order
- Postconventional morality: adults: they do what they believe is right (even if it goes against society)
- <u>Carol Gilligan:</u> said moral reasoning and moral behaviors are two different things (what you say isn't always what you do)
- Also said mean use "justice" for postcon. women use "caring for others"
- ERIKSON'S SOCIOEMOTINAL DEV.: 8 stages, each stage represents a crisis that must be resolved, results in competence or weakness
 - <u>Trust vs Mistrust</u> (birth 18 months): if needs are dependably met infants dev basic trust
 - Autonomy vs shame&doubt (1 -3 yrs): toddlers learn to exercise their will and think for themselves
 - <u>Initiative vs guilt</u> (3-6 yrs): learn to initiate tasks and carry out plans
 - Industry vs inferiority (6 yrs to puberty): learn the pleasure of applying themselves to tasks
 - <u>Identity vs role confusion</u>: (adolescence thru 20s): refine a sense of self by testing roles and forming an identity
 - Intimacy vs isolation: (20s—40s): form close relationships and gain capacity for love
 - Generativity vs stagnation: (40s-60s): discover sense of contributing to the world, thru family & work
 - Integrity vs despair: (60s and up): reflect on your life, feel satisfaction or failure
- <u>PUBERTY!</u> (rapid skeletal and sexual maturation)
 - Primary sex characteristics: necessary structures for reproduction (ovaries, testicles, vagina, penis)
 - Secondary sex characteristics: nonreproductive characteristics that dev during puberty (breasts, hips, deepening of voice, body hair)

- Frontal lobe continuous dev (not fully developed till 25)
- <u>GENDER DEVELOPMENT:</u> sex = chromosomes, gender = what you identify yourself as
 - Gender roles: expected behaviors (norms) for men/women
 - Social learning theory: we learn gender roles and identity from those around us

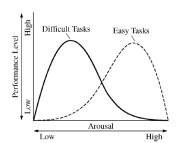
AGING

- Cellular clock theory: cells have a maximum # of divisions before they can't divide anymore
- Free-radical theory: unstable oxygen molecules w/in cells damage DNA
- Over time skills decrease (reaction time, memory)
- <u>CROSS-SECTIONAL STUDY</u>: studies ppl of different ages at the same point in time
 - o Adv: inexpensive & quick
 - Disadv: can be differences due to generational gap
- **LONGITUDINAL STUDY:** studies same ppl over time
 - Adv: eliminates groups differences, lots of detail
 - Disadv: expensive, time consuming, high drop out rates

Motivation, Emotion, and Personality (11-15%)

THEORIES OF MOTIVATION

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



• <u>HIERARCHY OF NEEDS:</u> theory derived by MASLOW – needs lower in the pyramid have priority over needs higher in the pyramid



- <u>Intrinsic motivation:</u> 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).
- <u>Insulin</u> decreases glucose. Too little glucose makes us hungry.
- o **Hormones signal eat:** orexin, Ghrelin
- o **Hormones signal stop:** PYY, leptin
- <u>Lateral hypothalamus:</u> stimulated makes you hungry; 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 (fat woman and cake)

• Obesity:

- Increased risk of heart attack, hypertension, atherosclerosis, diabetes
- Can be genetic adopted children resemble their biological parents
- Set point: control system 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

<u>SEXUALITY</u>

• Biology of sex:

- Hypothalamus: stimulation increases sexual behavior, destruction leads to sexual inhibition
 - Males <u>testosterone</u>
 - Females estrogen
- Sexual Response Pattern: Excitement phase, plateau, orgasm, refractory period (resolution phase) (cannot "fire" again until you reset, guys only)

- o Alfred Kinsey: created Kinsey scale of homosexuality (ranges on a spectrum) Studies lacked a representative sample
- o Homosexuality: biological roots: differences in the brain, identical twins more likely to both be gay, later sons more likely to be (hormones from mom)

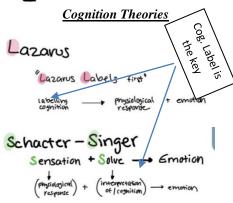
THORIES OF EMOTIONS

Emotion Theories



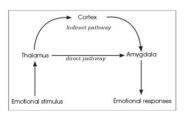






Biological Theory (Le Doux)

• 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, feat) seen across ALL cultures (Eckman's theory)
- 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 (cartoon study with pen in mouth)

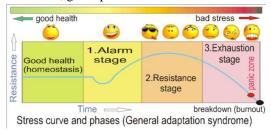
INDUSTRIAL/ORGANIZATIONAL PSYCH

- Industrial / Organizational Psych: psychof the work – employee recruitment, 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 (teacher teaches when principal comes in)
- Theory X management: manager controls employees, enforces rules. Good for lower level jobs
- Theory Y management: manger gives employees responsibility, looks for input. Good for high level jobs

STRESS AND HEALTH

- Problem-focused coping: solving or doing something to alter the course of stress (planning, acceptance)
- Emotion-focused coping: reducing the emotional distress (denial, disengagement)
- **GENERAL ADAPTATION SYNDROME** (**GAS**): three phases of a stress response (SELYE came up w/ this)
 - o **Alarm:** body/you freak out in response to stress
 - o Resistance: body/you are dealing with
 - o **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

Theories of Conflict (Lewin)

- **Approach approach conflict:** win win situation; conflict is which win you have to choose (you can eat out at ONE of your two favorite restaurants – you can only choose one though)
- Approach avoidance conflict: win lose situation; outcome has positive and negative aspects (marriage)
- Avoidance avoidance conflict: lose lose; both outcomes are bad but you have to choose one (clean your room or do your homework)
- Multiple approach avoidance conflict: two (or more) win-lose situations; conflict is which to choose (College A is good for your major but no scholarship, College B is bad for your major but has a scholarship)

PERSONALITY THEORIES PSYCHODYNAMIC EXPLANATION

SIGMUND FREUD said personality was largely unconscious.

- Conscious: immediate awareness of current environment
- Preconscious: available to awareness (phone #s)
- Unconscious: unavailable to awareness
- id: our hidden true animalistic wants and desires – operates on the pleasure principle, all about rewards and avoiding pain (devil on your shoulder – entirely unconscious)
- **superego:** our moral conscious (angel on your shoulder, all 3 consciousness)
- ego: reality principle, has to deal w/ society, stuck mediating b/w the id and superego (its *you! – conscious and preconscious)*

When ego cannot mediate b/w the id and superego, we use defense mechanisms

- Repression: push memories back into the unconscious mind (sexual abuse is too traumatic to deal w/ so you repress it)
- **Projection:** attribute personal shortcomings & faults on to others (man who wants to have an affair accuses his wife of having one)
- **Denial:** refuse to acknowledge reality (refuse to believe you have cancer) Displacement; shift feelings from an unacceptable object to a more acceptable one (can't tell at teacher, go home and yell at the dog)
- **Reaction formation:** transform unacceptable motive into his opposite woman who fears sexual urges becomes a Not valid today religious zealot)

Regression: transform into an earlier development period in the face of stress (during exam week you start to suck your thumb)

- Rationalization: replace a less acceptable reasoning with a more acceptable one (don't get into your college - justify it was a sucky college anyway)
- Sublimation: replace unacceptable impulse w/ a socially acceptable one (man w/ strong sexual urges paints nudes. Dexter)

FREUD'S PSYCHOSEXUAL STAGES

- Oral stage (0-18 months): pleasure focuses on the mouth (id)
- Anal stage (18 36 months): pleasure involves eliminative functions (ego forms)
- Phallic stage (3-6 yrs): pleasure focuses on genitals (superego forms)
 - Oedipal complex: young boys learn to identify w/ their father out of fear of retribution (castration anxiety)
 - o **Electra complex:** young girls learn to identify w/ their mother b/c they cannot with their father (penis envy)
- Latency stage (6 yrs to puberty): psychic time out – personality is set

- Genital State (*adulthood*): sexual reawakening oedipal and electra "feelings" are repressed, turn sexual wants onto an appropriate person
- **FIXATION:** can become "stuck" in an earlier stage influences personality (oral stage smokes/drinks, anal is "anal retentive", phallic is promiscuous)

What's wrong w/ Freud theory? — unverifiable, descriptive not predictive What's good about it? — 1st theory about personality, sparked psychoanalysis

How do we test this approach?

- **Psychoanalysis:** analyze a person's unconscious motives thru the use of:
 - Free Association: say aloud everything that comes to mind w/o hesitation
 - Transference: looks for feelings to transferred to psychoanalyst
 - Dream interpretation: analyze the manifest (seen message) and latent (hidden messages) content
 - Projective Tests: ambiguous stimuli shown to look at your unconscious motives (THESE SUCK B/C THEY ARE VERY SUBJECTIVE)
 - Thematic apperception test (TAT): tell a story about a picture (when someone has a tattoo (tatt) you ask what it means
 - Rorschach inkblot: show an inkblot

NEO-FREUDIANS

- **CARL JUNG:** believed in the *collective unconscious* (shared inherited reservoir of memory explains common myths across civilizations & time)
- KAREN HORNEY: said personality develops in context of social relationships, NOT sexual urges (security not sex is motivation, men get womb envy)

TRAIT PERSPECTIVE

- **Traits** are enduring personality characteristics, people can be described by these have strong or weak tendencies. They are stable, genetic, and predict other attributes.
- Use **factor analysis** to find these: statistical procedure used to identify similar components

• TRAIT THEORIES:

- <u>Big Five: (by Costa & McCrae)</u> (acronym OCEAN) You vary on each of these
 - Openness: high levels = imaginative, independent, like variety
 - <u>C</u>onscientiousness: high levels = organized, careful, disciplined
 - <u>E</u>xtraversion: high levels = sociable, funloving, affectionate (opposite is introversion: shy, timid, reserved)
 - Agreeableness: high levels = soft hearted, trusting, helpful
- <u>N</u>euroticism (emotional stability): low neuroticism (high stability) = calm, secure

What's wrong with trait theory? – ignores the role of the situation in behavior
What's good about it? – identifying traits gives us perspectives about careers, relationships, health

How do we test this approach?

- Personality Inventories like:
 - MMPI helpful for mental health and job placement

What's wrong w/ these tests?

• They're long, social desirability can be an influence, and they're too broad

HUMANISTIC PERSPECTIVE

- Emphasized personal growth and free will. You don't like yourself? So change!
- CARL ROGERS: talked about our selfconcept (idea of who we are). Your selfconcept is the center of your personality
 - o Actual (social) self: what others see
 - o Ideal (true) self: who you WANT to be
 - A positive self-concept makes us perceive the world positively (optimist)
 - A negative self-concept makes us feel dissatisfied and unhappy

What wrong with humanistic theory? - too optimistic about human nature, abstract concepts are difficult to test

<u>What's good about it?</u> – emphasizes conscious experiences and change

- <u>Individualistic Cultures:</u> give priorities to own goals over group goals. Define your identify in terms of you (American society)
- <u>Collectivistic Cultures:</u> give priority to the goals of the group, your identity is part of that group (China)

SOCIAL-COGNITIVE PERSPECTIVE

- Behavior is a complex interaction of inner process and environmental influence – which influences personality
- Emphasizes conscious awareness, beliefs, expectations, and goals
- BANDURA! Talked about <u>RECIPROCAL</u> <u>DETERMINISM:</u> interaction of behavior, cognitions, and environment make up you.



{I'm outgoing (behavior), I choose to teach b/c it lets me be outgoing (environment),

and I have thought this through which is why I teach despite making less money (cognitive)}

- <u>Self-efficacy:</u> belief that one can succeed, so you ensure you do
- <u>Internal locus of control:</u> you control your own fate
- External locus of control: chance / outside forces control your fate

<u>What's wrong with social-cognitive? – Too</u> specific, cannot generalize

<u>What's good about it?</u> – Highlights situations, and cognitive explanations of personality

<u>How do we test it? – Observations & interviews (time consuming)</u>

Clinical Psychology (12 – 16%)

• Defining abnormal behavior:

- Requires "clinically significant" disturbance in cognition, emotional regulation or behavior AND
- Significant distress or disability social situations, occupations or other important activities
- <u>Historical causes:</u> biology, psychological issues, supernatural issues (demons)
- Medical model: emphasizes treatment of disorders, as they have a biological origin. Came through the reformation of institutions in U.S. (DORTHEA DIX)
- <u>Biopsychosocial model:</u> currently used model stress biological, psychological, and social causes

• Diagnosing abnormal behavior:

<u>DSM</u>: manual listing all currently accepted psychological disorders.
 Classifies them based on criteria – provides no explanation of causes or treatments

<u>ANXIETY DISORDERS</u> <u>Most common disorders in the U.S.</u>

- Generalized Anxiety Disorder (GAD): person is generally anxious, all the time, for NO REASON
- Panic Disorder: person is prone to frequent panic attacks (feeling like you're having a heart attack). Can come w/ agoraphobia: anxiety about being in places you cannot escape (fear of public spaces / people)
- **Phobias:** irrational fear that disrupts your

CAUSES OF ANXIETY DISORDERS:

- **Psychodynamic:** repressed thoughts & feelings manifest in anxiety and rituals
- Behaviorist: fear conditioning leads to anxiety, which is then reinforced. Phobias might be learned through observational learning

Biological: natural selection favored those with certain phobias (heights). *Twins* often share disorders. Often see **less GABA** in the brain

SOMATOFORM DISORDERS

- Psych disorders w/ no physical cause
- Conversion disorder: loss of feeling or usage of a limb or body part (sight) absolutely no physiological cause though
- <u>Illness Anxiety Disorder:</u> person interprets normal symptoms as a major disease – must disrupt their life

DISSOCIATIVE DISORDERS

• <u>Dissociative Identity Disorder:</u> formerly multiple personalities – person fractures into several distinct personalities who normally have no awareness of each other.

NOT SCHIZOPHRENIA!

- o Usually caused by childhood abuse
- Legitimacy is doubted by some, more common in those w/ good health insurance
- Treatment involves integration of the personalities
- <u>Dissociative Amnesia + Fugue:</u> following a traumatic event a person leaves, taking on a whole new life & personality w/ no memory of the previous one

<u>SCHIZOPHRENIA</u> <u>NOT MULTIPLE PERSONALITIES!</u> THEY HAVE ONE PERSONALITY!

exam

favorite

• SYMPTOMS

- Positive Symptoms (not good means something added))
 - Hallucinations: sensory experiences w/o sensory stimulation (seeing and/or hearing things)
 - Delusions: fixed, false beliefs (people are out to get them, grandiose thoughts (I am God)
 - Disorganized thinking, Disorganized speech
- Negative Symptoms (something taken away)
 - Flat affect: lack ability to show emotions
 - Impaired decision making, inability to pay attention
- Catatonia: become frozen over periods of time (exhibit waxy flexibility: can move them into new positions)

• CAUSES OF SCHIZOPHRENIA

- Brain abnormalities: enlarged ventricles (atrophy), smaller frontal cortex
- Genetics: runs in families, MZ twins at higher risk
- Dopamine hypothesis: too much dopamine in the brain
- <u>Diathesis Stress:</u> individual has a genetic predisposition, disease must be "turned-on" by environmental stimuli (like stress) –most commonly developed during college years

DEPRESSIVE DISORDERS

- Major depressive disorder: extreme sadness and despair, apathy towards life, w/ no known cause
- <u>Disruptive mood regulation disorder:</u>
 Frequent temper tantrums inconsistent with developmental level
- <u>Seasonal Affective Disorder (SAD):</u> form of depression that occurs typically winter found mostly in Northern areas (Alaska, Ireland) **UNIQUE TREATMENT** = **LIGHT THERAPY**

BIPOLAR DISORDERS

- <u>Bipolar disorder:</u> bouts of severe depression & manic episodes
 - Mania: heightened mood, characterized by risky behaviors, fast talking, flights of ideas

CAUSES OF DEPRESSIVE AND BIPOLAR DISORDERS

- <u>Biology:</u> lower levels of serotonin & norepinephrine linked to depression, higher levels of norepinephrine linked to mania. Runs in families suggesting **GENES. Twin studies** also support this.
- <u>Cognitive:</u> negative thought patterns leads to depression

PERSONALITY DISORDERS

Marked by disruptive, inflexible, enduring behavior patterns — makes this very difficult to treat!

Antisocial: NOT "avoidant of socialization" – more like "anti-society" – disregard for others, manipulative, breaks laws

Borderline: instable interpersonal relationships & self-image, "I hate you, don't leave me"

- <u>Histrionic:</u> excessive emotionality & attention seeking
- Narcissistic: need for admiration & lack of empathy (who cares about everyone else look at me!)

OTHER DISORDERS

- Obsessive-compulsive Disorders
 (OCD): person is overwhelmed with both:
 - Obsessions: persistent unwanted thoughts (did I leave the stove on?)
 - Compulsions: senseless rituals (hand washing)
- Post-traumatic stress disorders (PTSD): characterized by flashbacks, problems w/ concentration, and anxiety following a traumatic event (war, natural disasters)
- Autism Spectrum Disorder: usually diagnosed in childhood, characterized by an impairment in social relationships, communication, and activities

TREATMENT OF PSYCHOLOGICAL <u>DISORDERS</u>

- <u>PSYCHODYNAMIC APPROACH:</u> SEE PERSONALITY SECTION
- **HUMANISTIC APPROACH:**
- <u>Client-centered therapy:</u> (developed by CARL ROGERS) techniques include active listening, accepting environment, focuses on patient growth (you figure out what needs to change and do it)

• COGNITIVE APPROACH:

 <u>Rational-emotive therapy:</u> (developed by ELLIS) techniques include analyzing self-defeating behaviors to change thought patterns – and then change behaviors associated w/ said patterns

- Best for anxiety disorders
- Very confrontational
- Cognitive therapy: (developed by BECK) illogical thoughts → psychological problems, challenges those thoughts
 - Best for depression
 - Self-directed you figure out your errors

• BEHAVIORAL APPROACH (typically used for anxiety disorders / phobias)

- **O Classical Conditioning:**
 - Counterconditioning Little Albert & Watson
 - Aversive conditioning: associate an unpleasant experience (e.g. nausea) w/ an unwanted behavior (e.g. drinking alcohol)
 - Exposure therapy: slowly expose people to whatever it is that makes them anxious
 - Systematic desensitization:
 associate a pleasant relaxed state w/
 gradually increasing anxiety
 triggering stimuli (create a
 desensitization hierarchy ex. List of
 things about flying that makes you
 nervous step through each one till
 you can do it)
 - Intensive exposure therapy (Flooding): force someone to experience the fear (afraid of drowning, throw you in a pool)
- Operant Conditioning: use behavior modification (reward good behaviors w/ token reinforcers). Used in schools, w/ autistic children, etc.

• OTHER THERPAIES:

- <u>Family therapy:</u> treats the family as a system, individual behaviors are influenced by family dynamics
- Group therapy: therapy through a group
 lets patients see "they're not alone"

• BIOLOGICAL APPROACH: CALLED BIOMEDICAL THERAPIES

- o Drug therapies (psychopharmacology):
 - Anti-psychotics: decrease dopamine: treats schizophrenia
 - **Side effects:** *TARDIVE DYSKINESIA:* hand tremors (similar to Parkinson'sdue to lack of dopamine), worsening of negative symptoms, extreme sedation
 - Drug names: thorazine, clozapine
 - <u>Mood stabilizers:</u> used in the treatment of BIPOLAR disorder: *LITHIUM*
 - Anti-anxiety drugs: depress the central nervous system (dangerous in combo w/ alcohol) Xanax, Ativan
 - Anti-depressants: increase serotonin through REUPTAKE inhibition

- **Side effects:** drowsiness, anxiety, can increase suicide risk in teens
- **Drug names:** SSRIs (selective serotonin reuptake inhibitors) like *Prozac*, *Zoloft*, *Paxil*. SNRIs (selective norepinephrine reuptake inhibitors) *Cymbalta*, *Effexor*
- Electroconvulsive therapy (ECT): send electricity to induce minor seizures. Used (rarely) to treat depression (when nothing else works). Thought to "reboot" the brain
- Psychosurgery (frontal lobotomy): frontal lobe is surgically destroyed. Used to treat depression or violent individuals – almost never used anymore

Social (8-10%)

- Attribution theory: we explain others behaviors by crediting the situation or the person's disposition (they only passed b/c they cheated)
- <u>Fundamental attribution error</u> tendency for observers to underestimate the importance of the situation and overestimate the impact of personal disposition (that guy cut me off b/c he's a jerk not that his wife could be in labor)
- Central route to persuasion: change people's attitudes through logical arguments and explanations. Leads to long term behavior change
- Peripheral route to persuasion: change people's attitudes through incidental cues (like a speaker's attractiveness). Leads to temporary behavior changes
- Foot in the door phenomenon: complying w/ a small request then leads to going along w/ a larger request (can I have \$5? Yes. Now can I have \$25?)
- Door in the face phenomenon: a large request is turned down, when then leads you to be more likely to comply w/ a small request (can I have \$100? Heck no! How about \$20? Okay)
- STANFORD PRISON EXPERIMENT (ZIMBARDO): classic "experiment" where individuals were assigned to be guards / prisoners. w/in days they took on their roles and went too far. Highly unethical
- Cognitive dissonance (FESTINGER): two opposing thoughts conflict w/ each other, causing discomfort (dissonance), which makes us find ways to justify the situation (cult that was going to be abducted by aliens, smokers)

SOCIAL INFLUENCE

• <u>Conformity:</u> classic experiment done by **ASCH** – showed lines of different lengths, confederates gave wrong answers to see if others would go along w/ it

- Normative social influence: we conform to gain approval or to not stand out from the group (be part of the *norm*
- <u>Informational social influence:</u> we conform to others b/c we think their opinions must be right
- Obedience: classic experiment done by MILGRAM: participants were to "teach" another individual using shocks. 60% of participants would administer lethal shocks to another person simply b/c they were told to

GROUP INFLUENCE

- <u>Social facilitation:</u> perform better on simple or well learned tasks in the presence of others
- <u>Social loafing:</u> tendency for ppl in a group to exert less effort when pooling their effort together (tug of war)
- <u>Deindividuation:</u> loss of self-awareness and self-restraint occurring in group situations that foster arousal and anonymity (mob mentality)
- Group polarization: the more time spent w/ a group the stronger their thoughts / opinions will become
- **Groupthink:** desire for harmony w/in a group leads to everyone going along w/ the same thinking, ignoring other possibilities or bad ideas
- Risky shift: groups make riskier decisions together rather than alone

PREJUDICE

- <u>Ingroup:</u> "US" ppl w/ whom we share a common identity
- <u>Outgroup:</u> "them" ppl perceived as different or not part of the group
- <u>Ingroup bias:</u> tendency to favor our own group
- <u>Scapegoat theory:</u> prejudice offers an outlet for anger by providing someone else to blame
- **Ethnocentrism:** tendency to see your own group as more important than others
- <u>Just-world phenomenon:</u> tendency for ppl to believe that the world is just and therefore ppl get what they deserve (homeless ppl)

AGGRESION

- Genetic influence: runs in families, can breed for in animals
- Lower serotonin, higher testosterone
- Environmental influence: social learning theory (BANDURA) observing violence in others makes us more violent for a time
- o Also: pollution, crowding, heat, humidity
- <u>Frustration-aggression hypothesis:</u> frustration creates anger, which leads to aggression

ATTRACTION

- Mere exposure effect: repeated exposure to novel stimuli increases liking of them (the more time you spend around something the more you like it)
- <u>Physical attractiveness:</u> pretty ppl are thought to be more credible, less likely to do bad things
- Similarity: we prefer ppl similar to us
- <u>Passionate Love:</u> Early stage of romance

 intense pos. obsession w/ another (due to arousal)
- Companionate Love: Later stage deep attachment to someone who your life is intertwined w/ - best with equality and self-disclosure (revealing intimate details about self)

ALTRUISM

- <u>Altruism:</u> unselfish regard for the welfare of others
- **Bystander effect:** the more ppl around the less likely we are to help someone in need (Kitty Genovese)
- Social exchange theory: social behavior (helping) is an exchange process – aim is to maximize benefits and minimize cost
- Reciprocity norm: we give so we can get CONFLICT
- Social trap: conflicting parties pursue their own best interests, which can result in destructive results (prisoner's dilemma game theory) (choose 5 or 15 demo)
- <u>Superordinate goals</u>: two or more groups work together to achieve a common goal, creates cohesiveness

SOCIAL SELF

- <u>False-consensus effect:</u> we overestimate the degree to which everyone else thinks / acts the way we do
- <u>Self-fulfilling prophecy:</u> a belief that leads to its own fulfillment (I expect you all to pass, you know this, you study fulfilling my prophecy)

Must have all 3 for FRQ – belief → behavior change → belief

- <u>Self-serving bias:</u> readiness to perceive ourselves as favorably
- Spotlight effect (self-objectification): tendency of an individual to overestimate the extent to which others are paying attention to them

AP Exam Formatting:

100 Multiple Choice Questions – 70 minutes

10 minute break

TWO FRQs - 50 Minutes

- One FRQ specific to research methods
- One FRQ conceptually based

FRQ TIPS:

Remember to CHUG SODAS:

- Concise answer the prompt as concisely as possible
- Handwriting write legibly and in black and/or blue pen. If you have *trash* handwriting then write on every other line
- Underline underline the vocab term you're talking about (or write it in a different color)
- Get rid of intro and concluding paragraphs (just answer the bloody question!)
- **Spacing** leave a space between each term that you are writing about
- Order and organize write in order and organize each term into its own paragraph
- **Define** DEFINE EVERY TERM. PERIOD.
- Apply apply the concept to the scenario given make sure to refer to the prompt, don't give random examples with no context
- Synonyms don't parrot the prompt try to use synonyms when possible

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