AP Psychology Study Guide – MHE BEA

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

- Psychoanalytic/dynamic unconscious, childhood
- o Behavioral learned, reinforced
- *Humanistic* free will, choice, ideal. actualization
- Cognitive Perceptions, thoughts
- Evolutionary Genes
- o Biological Brain, NTs
- Sociocultural society
- *Biopsychosocial* combo of above
- **PEOPLE:**
 - o Mary Calkins: First Fem. Pres. of APA
 - Charles Darwin: Natural selection & evolution
 - o Dorothea Dix: Reformed mental institutions in U.S.
 - o Stanley Hall: 1st pres. of APA1st journal
 - o William James: Father of American Psychology – functionalist
 - Wilhem Wundt: Father of Modern Psychology - structuralist
 - Margaret Floy Washburn-1st fem. PhD
 - Christine Ladd Franklin 1st fem.

RANDOM TERMS

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

Research Methods (8-10%)

EXPERIMENT : Adv: researcher controls variables to establish cause and effect Disady: 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 (drug studies)
 - Single-Blind: only participant blind - used if experimenter can't be blind (gender, age, etc)
- 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
- Often conflised 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
 - Assignment and sampling can be done via names in a hat, computer generation_
- 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 Disady: No cause and effect

(CORRELATION DOES NOT EQUAL **CAUSATION**)

Positive Correlation – variables 0 increase & decrease together





The stronger the # the stronger the 0 relationship REGARDLESS of the pos/neg sign

> • 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)
- CASE STUDY: Adv. Studies ONE person (usually) in great detail – lots of info Disady: No cause and effect
- **DESCRIPTIVE STATS:** shape of data • Measures of Central Tendency:
 - Mean: Average (use in normal distribution)
 - Median: Middle # (use in skewed distribution)
 - Mode: occurs most often o Normal Distribution:





Negative Skew:

INFERENTIAL STATISTICS:

- establishes significance (meaningfulness)
- STATISTICAL SIGNIFANCE = results not due to chance
- **ETHICAL GUIDELINES (APA)**
 - Confidentiality: names kept secret 0
 - 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 0 No harm- mental/physical

Biological Basis (8-10%)



- NEURON: Basic cell of the NS
 - **Dendrites:** Receive incoming signal
 - Soma: Cell body (includes nucleus) 0
 - Axon: AP travels down this

- Myelin Sheath: speeds up signal down axon, protects axon
- *Terminals:* release NTs send signal \circ onto next neuron
- Vesicles: sacs inside terminal contain 0 NTs
- 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 0 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
- Interneurons cells in spinal cord responsible for reflex loop
- CENTRAL NS: Brain and spinal cord
- PERIPHERAL NS: Rest of the NS
 - Somatic NS: Voluntary movement 0
 - Autonomic NS: Involuntary (heart, 0 lungs, etc)
 - increase) Sympathetic NS: Arouses the body for fight/flight (generally activates for FRQ credit
 - sympathetic to you getting eaten
 - by a 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 Excitatory NT 0 (get excited when seeing your mates!
 - Dopamine: Reward & movement 0
 - Serotonin: Moods and emotion 0
 - Acetylcholine (ACh): Memory 0
 - Epinephrine & Norepinephrine: 0 sympathetic NS arousal
 - Endorphins: pain control 0
 - 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:**
- <u>Hindbrain:</u> oldest part of the brain
- o Cerebellum movement/balance (picture walking a tightrope balance a bell)
- Medulla vital organs (HR, BP)
- Pons sleep/arousal (Ponzzzzz)

- Midbrain
- 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
- o Thalamus: relay center for all but smell (you MUST (thalaMUST) use your thalamus, unless its MUSTY - smell)
- o Cerebral Cortex: outer portion of the brain - higher order thought processes
 - Occipital Lobe: located in the back of the head - vision - mom's eyes!
 - 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 Left hemisphere only - damage results

in aphasia (damaged speech)

Must include bio response

- Broca's Area: Inability to produce speech (Broca – Broken speech)
- Wernicke's Area: Inability to
- comprehend speech (Wernicke's what?)

(HR 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
- <u>Split-brain experiments:</u> 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



- PLASTICITY: Brain can "heal" itself
- NATURE VS. NURTURE: ANSWER IS BOTH
- 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:

- EEG: brain activity not specific
- o XRAY: not useful, doesn't show tissues
- 0 CT / MRI: shows structures
- <u>PET: glucose shows brain activity</u> (when in doubt pick this one)
- o fMRI: glucose shows activity: real time \circ <u>lesion</u> – brain damage

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

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

VISUAL SYSTEM:

- \circ Pathway of vision: light \rightarrow cornea \rightarrow pupil/iris \rightarrow lens \rightarrow retina \rightarrow rods/cones \rightarrow bipolar cells \rightarrow ganglion cells \rightarrow optic nerve \rightarrow optic chiasm \rightarrow 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)
- o Rods black/white, dim light
- Cones color, bright light (red, green, blue)
- 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. 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
- Key • **Opponent Process** – complementary colors are processed in ganglion cells INORD 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 <u>3D image from a 2D image)</u> 0
- o Interposition: overlapping images appear closer
- Relative Size: 2 objects that are usually similar in size, the smaller one is further away
- o Relative Clarity: hazy objects appear further away
- Texture Gradient: coarser objects are closer
- o Relative Height: things higher in our field of vision look further away
- o 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 retina, 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 \rightarrow Whole

AUDITORY SYSTEM:

- \circ Pathway of sound: sound \rightarrow pinna \rightarrow auditory canal \rightarrow ear drum (tympanic membrane) \rightarrow hammer, anvil, stirrup (HAS) \rightarrow oval window \rightarrow cochlea \rightarrow auditory nerve \rightarrow temporal lobes
- o Outer Ear: pinna (ear), auditory canal
- o Middle Ear: ear drum , HAS (bones vibrate to send signal)
- 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) 0

OTHER SENSES: ٠

- \circ Touch: Mechanoreceptors \rightarrow spinal cord \rightarrow thalamus \rightarrow somatosensory cortex $_{\circ}$
- \circ Pain: Gate-control theory: we have a \circ "gate" to control how much pain is 0 experienced
- o Kinesthetic: Sense of body position
- o Vestibular: Sense of balance (semicircular canals in the inner ear effect this)
- \circ 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

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

Gestalt Principles:

• Figure/ground: organize information into figures objects (figures) that stand apart from surrounds (back ground) 17



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



States of Consciousness (2 - 4%)•

- STATES of CONSCIOUSNESS:
- Higher-Level: controlled processes totally aware
- Lower-Level: automatic processing (daydreaming, phone numbers)
- Altered States: produced through drugs, fatigue, hypnosis
- Subconscious: Sleeping and dreaming
- No awareness: Knocked out
- **METACOGNITION:** Thinking about thinking
- SLEEP:

0

- Beta Waves: awake (you better 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 Eye 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 0
- Controlled by the Suprachiasmatic nucleus (SCN) in the brain
- Explains jet lag • SLEEP DISORDERS
- Insomnia: Inability to fall asleep 0 (due to stress/anxiety)
- Sleep walking/talking: (due to fatigue, 0 drugs, alcohol) - NOT during REM
- Night terrors: extreme nightmares -0 NOT in REM sleep - typical in children
- Narcolepsy: fall asleep out of nowhere 0 (due to deficiency in orexin)
- o <u>Sleep Apnea</u>: stop breathing suddenly while asleep (due to obesity usually)

• DREAM THEORIES:

- Freud's Unconscious Wish 0 *Fulfillment:* Dreaming is gratification of unconscious desires and needs
 - Latent Content: hidden meaning of dreams
 - Manifest Content: obvious storyline of dream
- Activation Synthesis: Brain produces random bursts of energy - stimulating

lodged memories. Dreams start random then develop meaning

• HYPNOSIS

- It Can: Reduce pain, help you relax
- It CANNOT: give you superhuman strength, make you regress, make you do things against your will
- **PSYCHOACTIVE DRUGS**:
 - *Triggers dopamine release in the brain Depressants:* Alcohol, barbiturates,
 - tranquilizers, opiates (narcotics)Decrease sympathetic NS activation,
 - highly addictive o <u>Stimulants:</u> Amphetamines, Cocaine,
 - MDMA (ecstasy), Caffeine, Nicotine • Increase sympathetic NS activation,
 - Increase sympathetic NS activation, highly addictive
 Hallucinegens, LSD, Mariinene
 - <u>Hallucinogens:</u> LSD, Marijuana
 Causes hallucinations, not very addictive
 - *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.

Learning

(7-9 %)

- <u>CLASSICAL CONDITIONING:</u> <u>PAVLOV!</u>
- **Unconditioned Stimulus (UCS):** brings about response w/o needing to be learned (food)
- Unconditioned Response (UCR): response that naturally occurs w/o training (salivate)
- Neutral Response (NS): stimulus that normally doesn't evoke a response (bell)
- **Conditioned Stimulus (CS):** once neutral stimulus that now brings about a response (bell)
- **Conditioned Response (CR):** response that, after conditioning, follows a CS (salivate)
- **Contiguity:** Timing of the pairing, NS/CS must be presented immediately 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)
- Discrimination: CR to ONLY the CS

- <u>CONTINGENCY MODEL: Rescorla &</u> <u>Wagner –</u> classical conditioning involves cognitive processes
- <u>CONDITIONED TASTE AVERSION</u> <u>(ONE-TRIAL LEARNING): John</u> <u>Garcia – Innate predispositions can allow</u> classical conditioning to occur in one trial (food poisoning)
- <u>COUNTERCONDITIONING: Little</u> <u>Albert and John Watson (father of</u> <u>behaviorism) –</u> conditioned a fear in a baby (only to countercondition – remove it- later on)

• <u>OPERANT CONDITIONING:</u> <u>SKINNER!</u>

- **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
- **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)
- 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?)
 - <u>SOCIAL (OBSERVATIONAL)</u> <u>LEARNING: BANDURA!</u>
- **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)
- C 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 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
 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
- <u>Memory organization</u>
 - **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**)



• **<u>Proactive interference</u>**

New information is interfered with

- <u>**Retroactive interference</u>** Old information is interfered with</u>
- **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 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:** infants babble 1st 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
- **Confirmation bias:** look for evidence to support what we already believe
- **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)
 - **<u>Primary drive:</u>** unlearned drive based on survival (hunger, thirst)

- Secondary drive: learned drive (wealth or success)
- **<u>OPTIMUM AROUSAL:</u>** 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
 - o Glucose (sugar) level is maintained by the pancreas (endocrine system).
 - o 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:

- o 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
 - o Pituitary gland: monitors, initiates, and restricts hormones
 - 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)
 - Alfred Kinsey: 1st 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)

THORIES OF EMOTIONS • JAMES-LANGE: stimulus

- \rightarrow physiological arousal \rightarrow emotion
- <u>CANNON-BARD:</u> stimulus → physiological arousal & emotion simultaneously
- is the key • SCHACTER TWO FACTOR: adds cognitive labeling (bridge experiment) stimulus \rightarrow arousal \rightarrow interpret external cues \rightarrow 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, feat) 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)

- o Alarm: body/you freak out in response to stress
- o 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, low stress

INDUSTRIAL/ORGANIZATIONAL PSYCH

- Industrial / Organizational Psych: psychology 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 (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
- Employee Commitment:
 - o Affective: emotional attachment (best type)
 - Continuance: stay due to costs of leaving
- Normative: stay due to obligation (they Label paid for your school)

Meaning of Work:

Cog

- Job no training, just do it for \$\$. No happiness
- o Career work for advancement. Some happiness
- Calling work because you love it. Lotsa happiness

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, intellectual 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
- 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 (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.</u> <u>Sense of Self:</u> by 2 yrs can recognize themselves in the mirror
- <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)
 - *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**)
- <u>HARRY HARLOW:</u> discovered that contact comfort is more important than feeding (monkeys fed on wire or cloth mothers). Monkeys raised in isolation couldn't socialize
- <u>MARY AINSWORTH:</u> 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
 - <u>Avoidant attachment (20% infants):</u> actively avoids mom, doesn't care when she leaves
 - <u>Ambivalent attachment(10% infants):</u> actively avoids mom, freaks out when she leaves
 - Disorganized attachment (5%): confused, fearful, dazed – result of abuse
- **BAUMRIND:** parenting styles
 - <u>Authoritarian</u>: rules & obedience, "my way or the highway" – kids lack initiative in college
 - <u>**Permissive:**</u> kids do whatever no rules – kids lack initiative in college
 - <u>Authoritative:</u> give and take w/ kids kids become socially competent and reliable

• KOHLBERG'S MORAL DEV

- <u>Preconventional morality:</u> Children: they follow rules to avoid punishment
- <u>Conventional morality:</u> adolescents: follow rules b/c rules exist to keep order
- **<u>Postconventional morality:</u>** 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)
- ERIKSON'S SOCIOEMOTINAL DEV. : 8 stages, each stage represents a crisis that must be resolved, results in competence or weakness
 - <u>Trust vs Mistrust (birth − 18 months)</u>: if needs are dependably met infants dev basic trust
 - <u>Autonomy vs shame&doubt</u> (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
 - **Identity vs role confusion**: (*adolescence thru 20s*): refine a sense of self by testing roles and forming an identity

- <u>Intimacy vs isolation</u>: (20s—40s): form close relationships and gain capacity for love.
- <u>Generativity vs stagnation</u>: (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 & identity from those around us

• <u>AGING:</u>

- **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
 - 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
- **<u>Problem-focused coping:</u>** solving or doing something to alter the course of stress (planning, acceptance)
- <u>Emotion-focused coping:</u> reducing the emotional distress (denial, disengagement)

Personality (5-7%)

<u>PSYCHODYNAMIC EXPLANATION</u> SIGMUND FREUD said personality was largely unconscious.

- <u>Conscious</u>: immediate awareness of current environment
- <u>Preconscious:</u> available to awareness (phone #s)
- <u>Unconscious:</u> unavailable to awareness

- <u>id:</u> our hidden true animalistic wants and desires operates on the pleasure principle, all about rewards and avoiding pain (*devil* on your shoulder entirely unconscious)
- <u>superego:</u> 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
- <u>**Repression:**</u> push memories back into the unconscious mind (sexual abuse is too traumatic to deal w/ so you repress it)
- **<u>Projection</u>**: 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)
- <u>Reaction formation:</u> transform unacceptable motive into his opposite (woman who fears sexual urges becomes a religious zealot)
- **<u>Regression</u>**: transform into an earlier development period in the face of stress (during exam week you start to suck your thumb)
- <u>Rationalization:</u> replace a less acceptable reasoning with a more acceptable one (don't get into your college justify it was a sucky college anyway)
- <u>Sublimation:</u> 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)
 - **Electra complex:** young girls learn to identify w/ their mother b/c they cannot with their father (<u>penis envy</u>)
- 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 <u>What's good about it?</u> – 1st theory about personality, sparked psychoanalysis <u>How do we test this approach?</u>

- **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)
 - <u>Thematic apperception test (TAT)</u> : tell a story about a picture (when someone has a tattoo (tatt) you ask what it means
- Rorschach inkblot: show an inkblot <u>NEO-FREUDIANS</u>
- CARL JUNG: believed in the *collective unconsciouss* (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:</u>** (by Costa & McCrae) (acronym OCEAN) You vary on each of these
 - <u>Openness</u> : imaginative, independent, like variety
 - \circ <u>C</u>onscientiousness: organized, careful, disciplined
 - <u>Extraversion: sociable, fun-loving,</u> affectionate (opoosite it **introversion:** shy, timid, reserved)
 - <u>A</u>greeableness: soft hearted, trusting, helpful
 - <u>N</u>euroticism (emotional stability): calm, secure

<u>What's wrong with trait theory? – ignores</u> the role of the situation in behavior

<u>What's good about it?</u> - identifying traits gives us perspectives about careers, relationships, health

How do we test this approach?

- **MMPI** helpful for mental health and job placement
- Myer's Briggs gave you 4 letter combo 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
 - Actual (social) self: what others see
 - 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 What's good about it? - 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
- Internal locus of control: you control your own fate

 External locus of control: chance / outside forces control your fate
 What's wrong with social-cognitive? – Too specific, cannot generalize
 What's good about it? – Highlights

situations, and cognitive explanations of personality

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

Testing & Individual Differences (5-7%)

Individual Theories about Intelligence

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

 can't learn in school. Also decrease over time
- <u>SPEARMAN'S G FACTOR:</u> said a general intelligence (g) underlies all mental abilities (typical IQ of today)
- <u>GARDNER:</u> multiple intelligences (8): linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, intrapersonal (self), interpersonal (social), naturalist
- **<u>STERNBERG:</u>** *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; intellectual disability = below 70
- <u>Causes of mild intellectual disability:</u>
 - PKU liver fails to produce an ezyme 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)
- Achievement: tests what you know(SAT)
- TEST CREATION:
 - <u>Standardization:</u> 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 time
 - 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



Abnormal Behavior (7 – 9%)

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)
- <u>Medical model:</u> emphasizes treatment of disorders, as they have a biological origin. Came through the reformation of institutions in U.S. (PHILIPPE PINEL / DORTHEA DIX)

- **<u>Biopsychosocial model:</u>** currently used model – stress biological, psychological, and social causes
- Diagnosing abnormal behavior:
 - DSM: 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>

- <u>Generalized Anxiety Disorder (GAD):</u> person is generally anxious, all the time, for NO REASON
- **Panic Disorder:** Being 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)
- **<u>Phobias:</u>** irrational fear that disrupts your life

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

- **Obsessive-compulsive Disorders (OCD):** person sf 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)

SOMATIC SYMPTOM DISORDERS

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

DISSOCIATIVE DISORDERS

- **Dissociative Identity Disorder:** formerly multiple personalities person fractures into several distinct personalities who normally have no awareness of each other. **NOT SCHIZOPHRENIA!**
 - Usually caused by traumatic childhood abuse
 - Legitimacy is doubted by some, more common in those w/ good health insurance
 - Treatment involves integration of the personalities

• **Dissociative Amnesia + Fugue:** following a traumatic event a person leaves, taking on a whole new life & personality w/ no memory of the previous one

DEPRESSIVE DISORDERS

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

BIPOLAR DISORDERS

- **Bipolar disorder:** bouts of severe depression & manic episodes
 - o Mania: heightened mood, characterized by risky behaviors, fast talking, flights of ideas

CAUSES OF DEPRESSIVE AND **BIPOLAR DISORDERS**

- **Biology:** 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.
- Cognitive: negative thought patterns leads to depression

SCHIZOPHRENIA NOT MULTIPLE PERSONALITIES! THEY HAVE ONE PERSONALITY!

• 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
- 0 Genetics: runs in families, MZ twins at higher risk
- Dopamine hypothesis: too much 0 dopamine in the brain
- Diathesis Stress: individual has a 0 genetic predisposition, disease must be

"turned-on" by environmental stimuli (like stress) -most commonly developed during college years

PERSONALITY DISORDERS

- Marked by disruptive, inflexible, enduring behavior patterns – makes this very difficult to treat!
- Antisocial: NOT "avoidant of
- socialization" more like "anti-society" I
- disregard for others, manipulative, breaks laws
- Borderline: instable interpersonal
- 0 relationships & self-image, "I hate you, don't leave me"
- **Histrionic:** excessive emotionality & attention seeking
- Narcissistic: need for admiration & lack 0 of empathy (who cares about everyone else – look at me!)

Treatment of **Psychological Disorders** (5-7%)

• **<u>PSYCHODYNAMIC APPROACH:</u>** SEE PERSONALITY SECTION

• HUMANISTIC APPROACH:

• Client-centered therapy: (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:

- Rational-emotive therapy: (developed 0 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 \rightarrow psychological problems, challenges those thoughts
 - Best for depression
 - Self-directed you figure out your errors
- **BEHAVIORAL APPROACH** (typically used for anxiety disorders / phobias)

• 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:

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exam favorite

- Family therapy: 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**
 - Drug therapies (psychopharmacology):
 - Anti-psychotics: decrease dopamine: treats schizophrenia
 - Side effects: TARDIVE DYSKINESIA: hand tremors (similar to Parkinson's- due to lack of dopamine), worsening of negative symptoms, extreme sedation
 - Drug names: thorazine, clozapine 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
 - Mood stabilizers: used to treat BIPOLAR disorder : *LITHIUM*
 - Anti-anxiety drugs: depress the central nervous system (dangerous in combo w/ alcohol) Xanax, Ativan
 - Electroconvulsive therapy (ECT): electricity induces minor seizures. Used (rarely) to treat depression (when nothing else works). "reboots" 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)
- Fundamental attribution error 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)

- <u>Central route to persuasion</u>: 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
- <u>Foot in the door phenomenon:</u> 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*
 - Informational social influence: 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)
- <u>Group polarization</u>: the more time spent w/ a group the more similar (polarized) their thoughts / opinions will become
- <u>Groupthink:</u> desire for harmony w/in a group leads to everyone going along w/ the

same thinking, ignoring other possibilities or bad ideas

- <u>Risky shift:</u> groups make riskier decisions together rather than alone <u>PREJUDICE</u>
- <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
- Ingroup bias: tendency to favor our own group
- <u>Scapegoat theory:</u> prejudice offers an outlet for anger by providing someone else to blame
- <u>Ethnocentrism:</u> tendency to see your own group as more important than others
- Just-world phenomenon: tendency for ppl to believe that the world is just and therefore ppl get what they deserve (homeless ppl)

AGGRESION

- <u>Genetic influence:</u> 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
- \circ <u>Also:</u> pollution, crowding, heat, humidity
- Frustration-aggression hypothesis: frustration creates anger, which leads to aggression

ATTRACTION

- <u>Mere exposure effect:</u> 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
- <u>Similarity:</u> we prefer ppl similar to us
- <u>Passionate Love:</u> Early stage of romance – intense pos. obsession w/ another (due to arousal)
- <u>Compassionate Love:</u> Later stage deep attachment to someone who your life is intertwined w/ - best with *equality* and *self-disclosure* (revealing intimate details about self)

<u>ALTRUISM</u>

- <u>Altruism:</u> unselfish regard for the welfare of others
- <u>Bystander effect:</u> the more ppl around the less likely we are to help someone in need (Kitty Genovese)
- <u>Social exchange theory:</u> social behavior (helping) is an exchange process – aim is to maximize benefits and minimize cost
- **<u>Reciprocity norm:</u>** we give so we can get

CONFLICT

• <u>Social trap:</u> conflicting parties pursue their own best interests, which can result in destructive results (prisoner's dilemma – game theory)



- <u>Approach approach conflict</u>: 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)
- <u>Approach avoidance conflict:</u> win/lose situation; outcome has positive and negative aspects (marriage)
- <u>Avoidance avoidance conflict :</u> lose/ lose; both outcomes are bad but you have to choose one (clean your room or do your homework)
- <u>Multiple approach avoidance conflict:</u> 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)

SOCIAL SELF

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

FRQ TIPS: *Define* then *Apply* the term. *B.S.* what you don't know!

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