History and Approaches (2-4%)

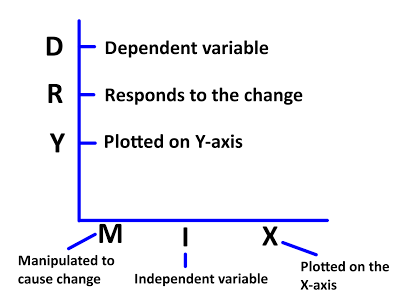
**AP Psychology Study Guide**

* **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
  + ***Behavioral*** – learned, reinforced
  + ***Humanistic*** – free will, choice, ideal, actualization
  + ***Cognitive*** – Perceptions, thoughts
  + ***Evolutionary*** – Genes
  + ***Biological*** – Brain, NTs
  + ***Sociocultural*** – society
  + ***Biopsychosocial*** – combo of above
* **People:**
  + ***Mary Calkins:*** First Fem. Pres. of APA
  + ***Charles Darwin:*** Natural selection & evolution
  + ***Dorothea Dix:*** Reformed mental institutions in U.S.
  + ***Stanley Hall:*** 1st pres. of APA1st journal
  + ***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%)

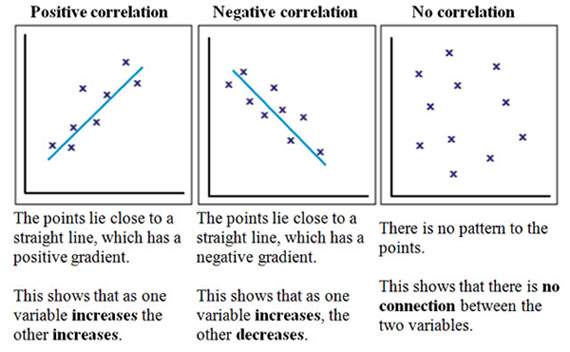
* **Experiment** : Adv: researcher controls variables to establish **cause and effect** Disadv: difficult to generalize

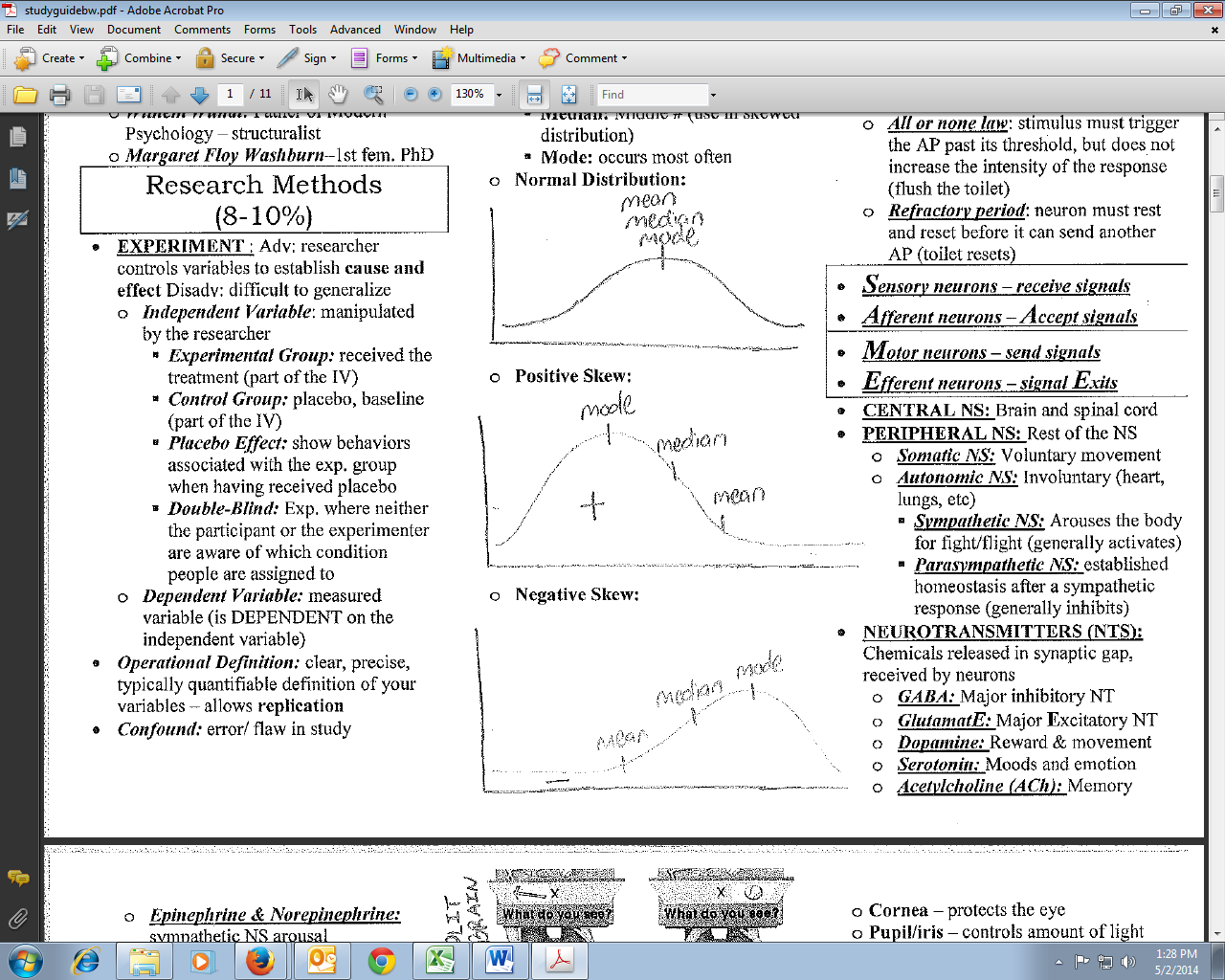


* + ***Independent Variable***: manipulated by the researcher
    - ***Experimental Group:*** received the treatment (part of the IV)
    - ***Control Group:*** placebo, baseline (part of the IV)
    - ***Placebo Effect:*** show behaviors associated with the exp. group when having received placebo
    - ***Double-Blind:*** Exp. where neither the participant or the experimenter are aware of which condition people are assigned to (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
* ***Random Assignment:*** assigns participants to either control or experimental group at random – minimizes bias, increase chance of equal representation

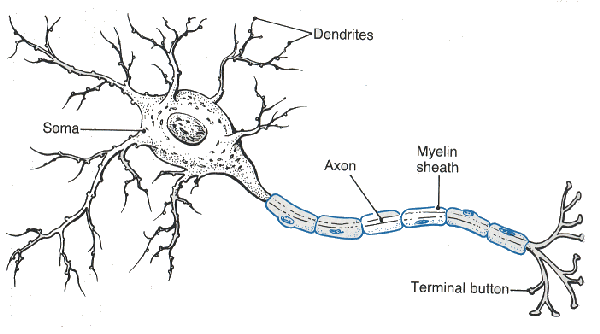
Often confused

* ***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 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



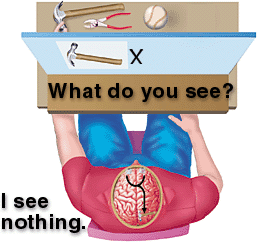
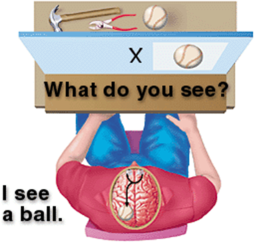
* + ***The stronger the # the stronger the relationship REGARDLESS of the pos/neg sign*** 
    - **3rd variable problem (lurking variable)–** diff. variable is responsible for relationship (breast implants & suicide)
    - **Illusory correlation –** belief of correlation that doesn’t exist (old man predicts rain from arthritis)
* **Case Study**: Adv. Studies ONE person (usually) in great detail – lots of info 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
* **Inferential statistics:**establishes significance (meaningfulness)
* **statistical signifance** = results not due to chance
* **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%)

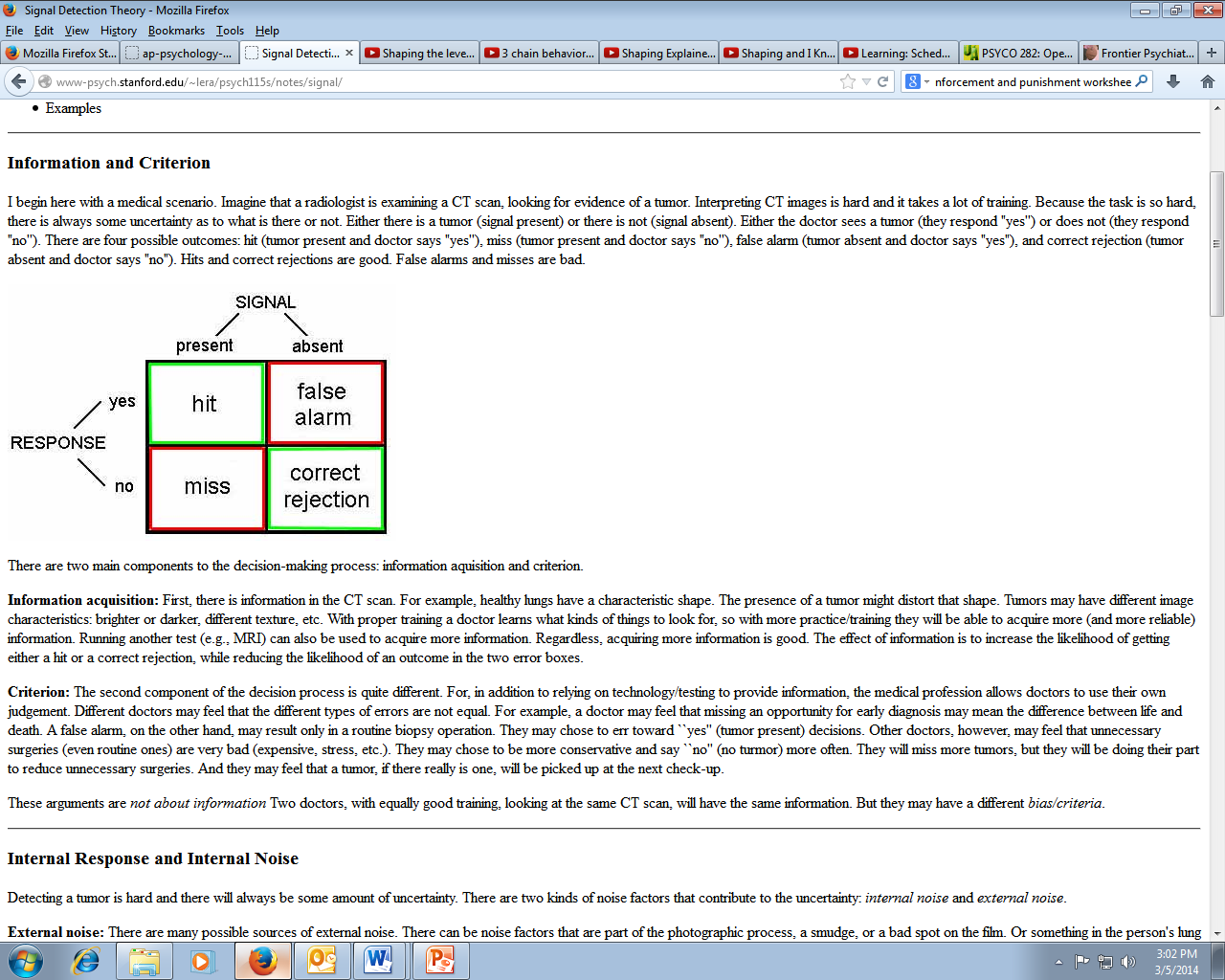
* **Neuron:**Basic cell of the NS
  + ***Dendrites:*** Receive incoming signal
  + ***Soma:*** Cell body (includes nucleus)
  + ***Axon:*** AP travels down this
  + ***Myelin Sheath:*** speeds up signal down axon, protects axon
  + ***Terminals:*** release NTs – send signal onto next neuron
  + ***Vesicles:*** sacs inside terminal contain 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 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
  + ***Autonomic NS:*** Involuntary (heart, lungs, etc)
    - ***Sympathetic NS:*** Arouses the body for fight/flight (generally activates – sympathetic to you getting eaten by a tiger helps you run away)

Must include bio response (HR increase) for FRQ credit

* + - ***Parasympathetic NS:*** established homeostasis after a sympathetic response (generally inhibits)
* **Neurotransmitters (NT):**Chemicals released in synaptic gap, received by neurons
  + ***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
  + ***Epinephrine & Norepinephrine:*** sympathetic NS arousal
  + ***Endorphins:*** pain control
  + ***Oxytocin:*** love and bonding
* [](http://www.youtube.com/watch?v=ZMLzP1VCANo)***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
  + Cere**bell**um – movement/balance (picture walking a tightrope balance a bell)
  + Medulla – vital organs (HR, BP)
  + Pon**s** – sleep/arousal (Pon**zzzzzz**)
* Midbrain
  + **R**eticular **f**ormation: alertness
* Forebrain: higher thought processes
  + Limbic System
    - Amygdala: emotions, fear (Amy, da! You’re so emotional!)
    - Hippocampus: memory (if you saw a hippo on campus you’d remember it!)
    - 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: 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)*
    - Broca’s Area: Inability to produce speech (Broca – Broken speech)
    - Wernicke’s Area: Inability to comprehend speech (Wernicke’s what?)
  + Corpus Callosum: bundle of nerves that connects the 2 hemispheres – sometimes severed in patients with severe seizures – leads to “split-brain patients”
    - Lateralization: the brain has some specialized features – language is processed in the L Hemisphere
    - Split-brain experiments: done by *Sperry & Gazzanaga.*
    - Images shown to the right hemisphere will be processed in the left (& vice versa), patient can verbally identify what they saw
* ***Brain***
* ***Plasticity:*** Brain can “heal” itself
* **Nature vs. Nurture: Answer is both**
  + Twin Studies:
    - Identical twins – Monozygotic (MZ)
    - Fraternal twins – Dizygotics (DZ)
  + Genetics: MZ twins will have a higher percentage of also developing a disease
  + Environment:MZ twins raised in different environments show differences
* **Endocrine System:**sends hormones throughout the body
  + *Pituitary Gland:* Controlled by hypothalamus. release growth hormones
  + *Adrenal Glands:*related to sympathetic NS: releases adrenaline
* **BRAIN IMAGING:**
  + EEG: brain activity – not specific
  + XRAY:not useful, doesn’t show tissues
  + CT / MRI:shows structures
  + PET:glucose shows brain activity (when in doubt pick this one)
  + fMRI:glucose shows activity: real time
  + lesion –brain damage

Sensation & Perception

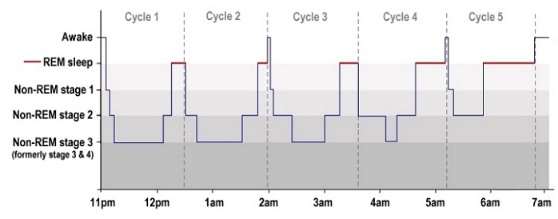
(6 – 8%)

* ***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



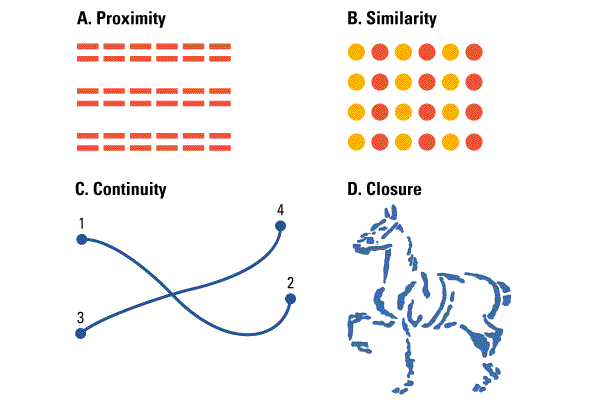
* ***Inattentional Blindness:*** failure to notice something added b/c you’re so focused on another task (gorilla video)
* ***Change Blindness:*** failure to notice a change in the scene (door study)
* ***Cocktail party effect:*** notice your name across the room when its spoken, when you weren’t previously paying attention
* **Visual System:**
  + **Pathway of vision: light 🡪 cornea 🡪pupil/iris 🡪 lens 🡪 retina 🡪 rods/cones 🡪 bipolar cells 🡪 ganglion cells 🡪 optic nerve 🡪 optic chiasm 🡪 occipital lobe**
  + **Cornea –** protects the eye
  + **Pupil/iris –** controls amount of light entering eye
  + **Lens –** focuses light on retina
  + **Fovea–**area of best vision(cones here)
  + **Rods –** black/white, dim light
  + **Cones –** color, bright light (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
  + **Opponent Process –** complementary colors are processed in ganglion cells – explains why we see an **after image**

Key word

* ***Visual Capture:*** Visual system overwhelms all others (nauseous in an IMAX theater – vision trumps vestibular)
* ***Constancies:***recognize that objects do not physically change despite changes in sensory input (size, shape, brightness)
* ***Phi Phenomenon:*** adjacent lights blink on/off in succession – looks like movement (traffic signs with arrows)
* ***Stroboscopic movement:***motion produced by a rapid succession of slightly varying images (animations)
* **Monocular Cues *(****how we form a 3D image from a 2D image)*
  + Interposition: overlapping images appear closer
  + Relative Size:2 objects that are usually similar in size, the smaller one is further away
  + Relative Clarity:hazy objects appear further away
  + Texture Gradient:coarser objects are closer
  + Relative Height:things higher in our field of vision look further away
  + Linear Perspective: parallel lines converge with distance (think railroad tracks)
* **BINOCULAR CUES**: (how both eyes make up a 3D image)
  + Retinal Disparity: Image is cast slightly different on each 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 🡪 Whole
* **Auditory System:**
  + **Pathway of sound: sound 🡪 pinna 🡪 auditory canal 🡪ear drum (tympanic membrane) 🡪 hammer, anvil, stirrup (HAS) 🡪 oval window 🡪 cochlea 🡪 auditory nerve 🡪 temporal lobes**
  + **Outer Ear:** pinna (ear), auditory canal
  + **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)
* **Other Senses:**
  + Touch: Mechanoreceptors 🡪 spinal cord 🡪 thalamus 🡪 somatosensory cortex
  + Pain: Gate-control theory: we have a “gate” to control how much pain is experienced
  + Kinesthetic: Sense of body position
  + 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
* **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)



* + - Closure: mentally fill in gaps
    - Proximity: 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:**
  + **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:** **D**eep 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
  + Controlled by the Suprachiasmatic nucleus (SCN) in the brain
  + Explains jet lag
* **SLEEP DISORDERS**
  + ***Insomnia:*** Inability to fall asleep (due to stress/anxiety)
  + ***Sleep walking/talking:*** (due to fatigue, drugs, alcohol) – NOT during REM
  + ***Night terrors:*** extreme nightmares – NOT in REM sleep – typical in children
  + ***Narcolepsy:*** 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 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
  + ***Stimulants:*** Amphetamines, Cocaine, MDMA (ecstasy), Caffeine, Nicotine
    - Increase sympathetic NS activation, highly addictive
  + ***Hallucinogens:*** 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 %)

* **CLASSICAL CONDITIONING: *PAVLOV!***
  + **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
* **Contingency Model: Rescorla & Wagner –** classical conditioning involves cognitive processes
* **CONDITIONED TASTE AVERSION (ONE-TRIAL LEARNING): John Garcia –** Innate predispositions can allow classical conditioning to occur in one trial (food poisoning)
* **COUNTERCONDITIONING: Little Albert and John Watson (father of behaviorism) –** conditioned a fear in a baby (only to countercondition – remove it- later on)
* **OPERANT CONDITIONING: *SKINNER!***
  + **lAW OF EFFECT (thorndike):** Behaviors followed by pos. outcomes are strengthened, neg. outcomes weaken a behavior (cat in the puzzle box)
* **PRINCIPLES OF OPERANT cOND:**
  + **Pos. Reinforcement:** *Add* something *nice* to *increase* a behavior (gold star for turning in HW)
  + **Neg. Reinforcement:** *Take away* something *bad/annoying* to *increase* a behavior (put on seatbelt to take away annoying car signal)
  + **Pos. Punishment:** *Add* something *bad* to *decrease* a behavior (spanking)
  + **Neg. Punishment:** *Take away* something *good* to *decrease* a behavior (take away car keys)
  + **Primary Reinforcers:** innately satisfying (food and water)
  + **Secondary Reinforcers:** everything else (stickers, high-fives)
    - **Token Reinforcer:** type of secondary- can be exchanged for other stuff (game tokens or money)
  + **Generalization:** respond to similar stimulus for reward
  + **Discrimination:** stimulus signals when behavior will or will not be reinforced (light on means response are accepted)
  + **Extinction / Spontaneous Recovery:** same as classical conditioning
  + **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?)
* **SOcial (observational) learning: *Bandura!***
* **Modeling Behaviors:** Children model (imitate) behaviors. Study used BoBo dolls to demonstrate the following
  + **Prosocial –** helping behaviors
  + **Antisocial –** mean behaviors
* **MISC LEARNING TYPES**
  + **Latent learning (*Tolman!)* –** learning is hidden until useful (rats in maze get reinforced half way through, performance improved
    - **Cognitive maps –** mental representation of an area, allows navigation if blocked
  + **Insight learning (Kohler!) –** some learning is through simple intuition (chimps with crates to get bananas)
  + **Learned Helplessness (Seligman!)** – no matter what you do you never get a positive outcome so you just give up (word scrambles)

cognition

(8 – 10%)

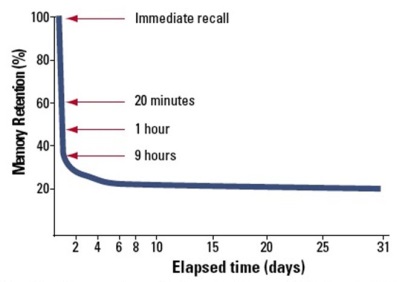
**ENCODING: Getting info into memory**

* **Automatic encoding** – requires no effort (what did you have for breakfast?)
* **Effortful encoding** – requires attention (school work)
* Shallow, intermediate, deep processing: the more emphasis on MEANING the deeper the processing, and the better remembered
* **Imagery** – attaching images to information makes it easier to remember (shoe w/ spaghetti laces)
* **Self-referent encoding –** we better remember what we’re interested in (you’d remember someone’s phone number who you found extremely attractive)
* **Dual encoding –** combining different types of encoding aids in memory
* **Chunking –** break info into smaller units to aid in memory (like a phone #)
* **Mnemonics –** shortcuts to help us remember info easier
  + Acronyms – using letter to remember something (PEMDAS)
  + Method of loci – using locations to remember a list of items in order
* **Context dependent memory –** where you learn the info you best remember the info (scuba divers testing)
* **State dependent memory –** the physical state you were in when learning is the way you should be when testing (study high, test high)

**STORAGE**: **Retaining info over time**

* ***Information Processing Model –*** Sensory memory, short term memory, long term memory model
* **Sensory Memory –** stores all incoming stimuli that you receive (first you have to 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
* **Memory organization**
  + **Hierarchies:** memory is stored according to a hierarchy
  + **Semantic networks:** linked memories are stored together
  + **Schemas:** preexisting mental concept of how something should look (like a restaurant)
* **Memory storage**
  + **Acetylcholine neurons in the hippocampus for most memories**
  + **Cerebellum for procedural memories**
  + **Long-term potentiation:** neural basis of memory – connections are strengthened over time with repeated stimulation (more firing of neurons)

**RETRIEVAL: Taking info out of storage**

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

**O**LD blocks *new*

* **Retroactive interference**

**N**EW blocks *old*

* **Misinformation effect:** distortion of memory by suggestion or misinformation (**Loftus –** lost in the mall, Disney land)
* **Anterograde amnesia:** amnesia moves forward (forget new info – 50 first dates)
* **Retrograde amnesia:** amnesia moves backwards (forget old info)
* **Alzheimer’s Disease:** caused by destruction of acetylcholine in hippocampus

**LANGUAGE**

* **Phonemes:** smallest unit of sound (ch sound in chat)
* **Morpheme:** smallest unit that 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**

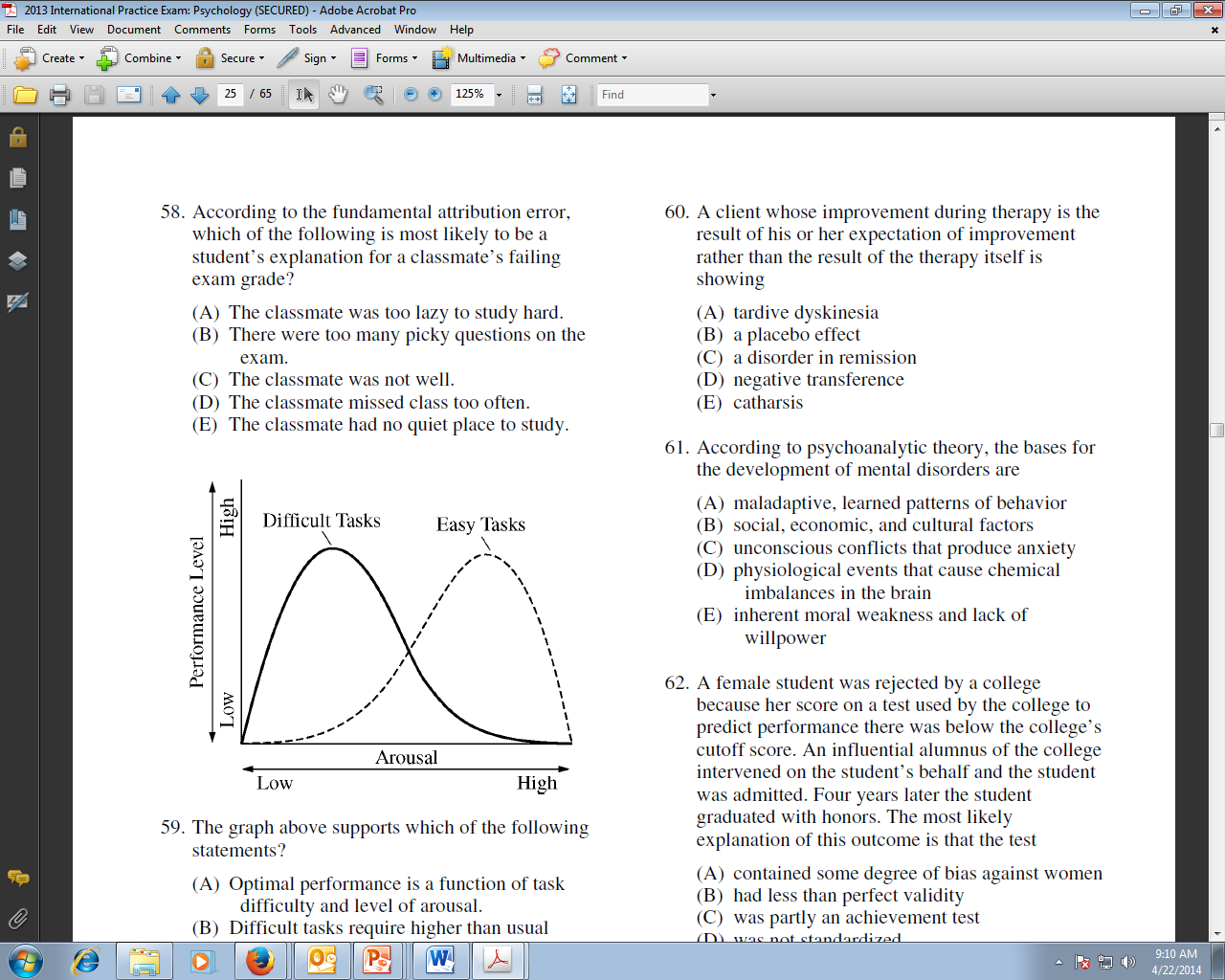
* **Concepts:** mental categories used to group objects, events, characteristics
* **Prototypes:** all instances of a concept are compared to an ideal example (what you first think of)
* **Algorithms:** step by step strategies that guarantee a solution (formula)
* **Heuristics:** short cut strategy (rule 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

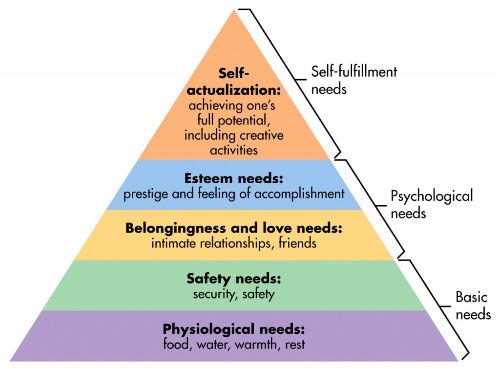
Motivation & Emotion

(6-8%)

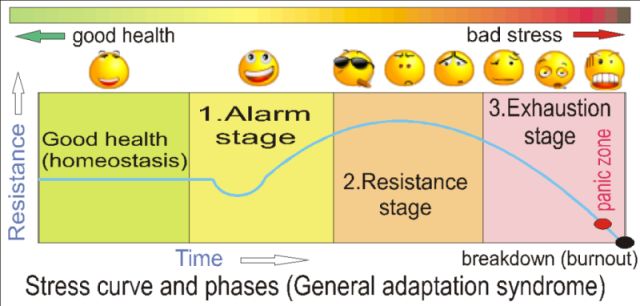
***THEORIES OF MOTIVATION***

* **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)
  + **Primary drive:** unlearned drive based on survival (hunger, thirst)
  + **Secondary drive:** learned drive (wealth or success)
* **OPTIMUM AROUSAL:** humans aim to seek optimum levels of arousal –easier tasks requires more arousal, harder tasks need less



* **HIERARCHY OF NEEDS:** theory derived by **MASLOW** – needs lower in the pyramid have priority over needs higher in the pyramid
* **Intrinsic motivation:** inner motivation – you do it b/c you like it
* **Extrinsic motivation:** motivation to obtain a reward (trophy)

***HUNGER***

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

***SEXUALITY***

* **Biology of sex:**

Not valid today

* + **Hypothalamus:** stimulation increases sexual behavior, destruction leads to sexual inhibition
  + **Pituitary gland:** monitors, initiates, and restricts hormones
    - **Males – testosterone**
    - **Females - estrogen**
  + **Sexual Response Pattern:** Excitement phase, plateau, orgasm, refractory period (resolution phase) (cannot “fire” again until you reset, guys only)
  + **Alfred Kinsey:** 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 🡪physiological arousal 🡪 emotion
* **CANNON-BARD:** stimulus 🡪 physiological arousal & emotion simultaneously

Cog. Label is the key

* **SCHACTER TWO FACTOR:** adds in cognitive labeling (bridge experiment) stimulus 🡪 arousal 🡪interpret external cues 🡪 label emotion
* Some stimuli are routed directly to the **amygdala** bypassing the frontal cortex (gut reaction to a cockroach)
* **Behavioral factors:** there are **SIX** universal emotions (happiness, anger, sadness, surprise, disgust, 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)
  + **Alarm:** body/you freak out in response to stress
  + **Resistance:** body/you are dealing with stress
  + **Exhaustion:** body/you cannot take any more, give up
* **Type A Personality:** rigid, stressful person, perfectionist. At risk for heart disease
* **Type B Personality:** laid back, nonstressed.

***INDUSTRIAL/ORGANIZATIONAL PSYCH***

* **Industrial / Organizational Psych:** psychological of the workplace – focuses on employee recruitment, placement, training, satisfaction, productivity
* **Ergonomics / Human Factors:** intersection of engineering and psych – focuses on safety and efficiency of human-machine interactions
* **Hawthorne effect:** productivity increases when workers are made to feel important (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:**
  + Affective: emotional attachment (best type)
  + Continuance: stay due to costs of leaving
  + Normative: stay due to obligation (they paid for your school)
* **Meaning of Work:** 
  + Job – no training, just do it for $$. No happiness
  + Career – work for advancement. Some happiness
  + Calling – work because you love it. Lotsa happiness

Development

(7-9%)

* **Prenatal Development**:
  + **Zygote:** 0 – 14 days, cells are dividing
  + **Embryo:** until about 9 weeks, vital organs being formed
  + **Fetus:** 9 wks to birth, overall development
  + **Teratogens:** external agents that can cause abnormal prenatal development (alcohol, drugs, etc)
    - Fetal alcohol syndrome (FAS): large amount of alcohol leads to FAS, causes deformities, mental retardation, death
* **Physical Development:** 
  + **Maturation:** natural course of development, occurs no matter what (walking)
  + **Reflexes:** innate responses we’re born with
    - Rooting, sucking, swallowing, grasping, stepping
  + **Habituation:** after continual exposure you pay less attention – used to test babies
  + **Eyes have the most limited development, takes till 1 year**
    - **Visual cliff:** babies have to learn depth perception, so they will cross a “cliff”
  + **Other senses are fairly developed**
  + **Brain development continues for a few years**
* ***JEAN PIAGET’S COGNITIVE DEV.***
* **Schemas –** concepts or frameworks that organize info
* **Assimilation:** incorporate new info into existing schema (aSSimlation – same stuff)
* **Accommodation:** adjust existing schemas to incorporate new information (ACcommodation - All Change)
* ***Sensorimotor Stage:*** *Birth to 2 years:* **focused on exploring the world around them**
  + *Lack* ***Object Permanence:*** Objects when removed from field of view are thought to disappear (peek-a-boo)
  + *Dev.* ***Sense of Self:*** by 2 yrs can recognize themselves in the mirror
* ***Pre-operational Stage:*** *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
* ***Concrete Operational Stage:*** *7-11 yrs:* **use operational thinking, classification, and can think logical in concrete context**
* ***Formal Operational Stage:*** *11-15 yrs:* **use abstract and idealist thoughts, hypothetical-deductive reasoning**
* *Problems with Piaget’s theory:* 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***

* **Temperament:** patterns of emotional reactions and babies (precursor to personality)
* **Imprinting:** 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
* **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
* **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
* **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)
* **Carol Gilligan:** 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
  + **Trust vs Mistrust***(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
  + **Initiative vs guilt** (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
  + **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
* **Puberty! (**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)**
* **Gender Development:** 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)
* **Cross-sectional study:** 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
* **Problem-focused coping:** solving or doing something to alter the course of stress (planning, acceptance)
* **Emotion-focused coping:** reducing the emotional distress (denial, disengagement)

Personality

(5-7%)

***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 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)
  + **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 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:**
* **Big Five: (**by Costa & McCrae) (acronym OCEAN) You vary on each of these
  + **O**penness : imaginative, independent, like variety
  + **C**onscientiousness: organized, careful, disciplined
  + **E**xtraversion: sociable, fun-loving, affectionate (opoosite it **introversion:** shy, timid, reserved)
  + **A**greeableness: soft hearted, trusting, helpful
  + **N**euroticism (emotional 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?**

* **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***

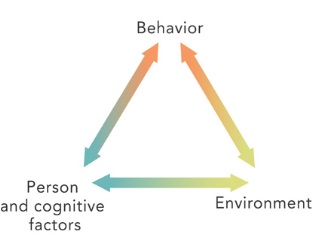
* Emphasized personal growth and free will. You don’t like yourself? So change!
* **CARL ROGERS:** talked about our *self-concept (idea of who we are).* Your self-concept is the center of your personality
  + **Actual (social) self:** what others see
  + **Ideal (true) self:** who you WANT to be
  + 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

* **Individualistic Cultures:** give priorities to own goals over group goals. Define your identify in terms of you (American society)
* **Collectivistic Cultures:** 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 ***RECIPROCAL DETERMINISM:*** 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)}*

* **Self-efficacy:** 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

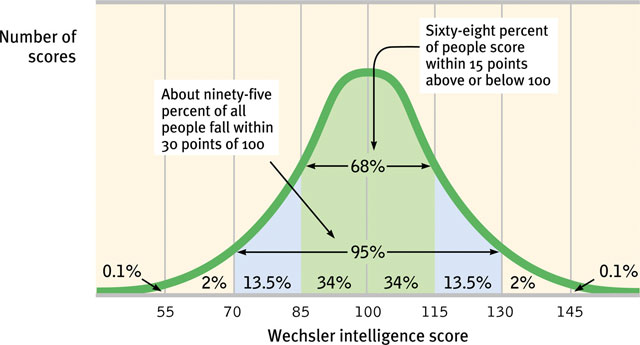
**How do we test it? –** Observations & interviews (time consuming)

Testing &

Individual Differences

(5-7%)

***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
  + ***Fluid intelligence:*** spatial abilities, rote memory, things that come natural to you – can’t learn in school. Also decrease over time
* **SPEARMAN’S G FACTOR:** 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
* **BINET:** developed 1st intelligence test, combined with **TERMAN** – developed the **STANFORD-BINET IQ TEST**

****

* + Chronological age = actual age
  + Mental age = tested age compared to other of that age
  + 100 is average
* **WECHSLER:** developed the WAIS and WISC – most commonly used today
* **FLYNN effect:** 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; mentally retarded = below 70
* **Causes of mild retardation:**
  + 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:**
  + **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 **reliable:** 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 **valid:** 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
* **Historical causes:** 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**)
* **Biopsychosocial model:** 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

***ANXIETY DISORDERS***

***Most common disorders in the U.S.***

* **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 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)

***SOMATOFORM DISORDERS***

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

***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
  + **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
  + **Genetics:** runs in families, MZ twins at higher risk
  + **Dopamine hypothesis:** too much dopamine in the brain
  + **Diathesis – Stress:** individual has a 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” – disregard for others, manipulative, breaks laws

AP exam favorite

* + **Borderline:** instable interpersonal relationships & self-image, “I hate you, don’t leave me”
  + **Histrionic:** excessive emotionality & attention seeking
  + **Narcissistic:** need for admiration & lack of empathy (who cares about everyone else – look at me!)

Treatment of Psychological Disorders (5-7%)

* **PSYCHODYNAMIC APPROACH:** 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 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)**
  + **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:** 
  + **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 in the treatment of BIPOLAR disorder : ***LITHIUM***
    - **Anti-anxiety drugs:** depress the central nervous system (dangerous in combo w/ alcohol) *Xanax, Ativan*
  + **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)
* **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)
* **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

* **Conformity:** 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

* **Social facilitation:** perform better on simple or well learned tasks in the presence of others
* **Social loafing:** tendency for ppl in a group to exert less effort when pooling their effort together (tug of war)
* **Deindividuation:** 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 more similar (polarized) 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

* **Ingroup:** “US” – ppl w/ whom we share a common identity
* **Outgroup:** “them” – ppl perceived as different or not part of the group
* **Ingroup bias:** tendency to favor our own group
* **Scapegoat theory:** prejudice offers an outlet for anger by providing someone else to blame
* **Ethnocentrism:** 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

* **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
  + **Also:** pollution, crowding, heat, humidity
* **Frustration-aggression hypothesis:** frustration creates anger, which leads to aggression

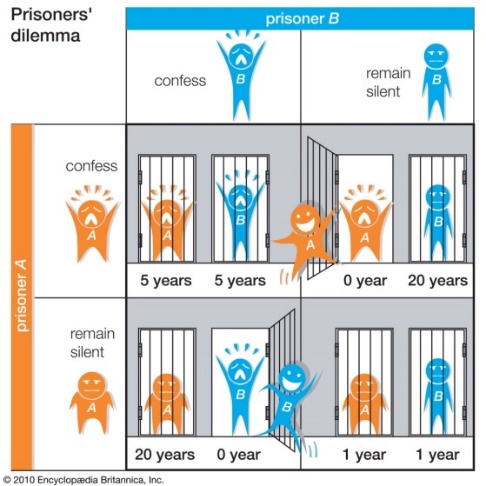
ATTRACTION

* **Mere exposure effect:** repeated exposure to novel stimuli increases liking of them (the more time you spend around something the more you like it)
* **Physical attractiveness:** pretty ppl are thought to be more credible, less likely to do bad things
* **Similarity:** we prefer ppl similar to us
* **Passionate Love:** Early stage of romance – intense pos. obsession w/ another (due to arousal)
* **Compassionate 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

* **Altruism:** 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)
* 
* **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)

SOCIAL SELF

* **Self-concept bias:** what we consider important in ourselves is what we consider important in others
* **False-consensus effect:** we overestimate the degree to which everyone else thinks / acts the way we do
* **Self-fulfilling prophecy:** a belief that leads to its own fulfillment (I expect you all to pass, you know this, you study – fulfilling my prophecy)
* **Self-serving bias:** 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

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

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