AP Psych Exam 2020 QUICK GUIDE

2 Free-Response Questions from Units 1 - 7

Question 1 (25 minutes) Concept Application		**Question 2 (15 minutes) Research Methods**	
% of Exam Weight	55%	% of Exam Weight	45%
Question Description	Question 1 assesses students' ability to explain behavior and apply theories and perspectives in authentic contexts.	Question Description	Question 2 assesses students' ability to analyze psychological research studies, including analyzing and interpreting quantitative data.
Number of Tasks	8	Number of Tasks	6

- Unlike many other History and English AP exams, **you do NOT need to write a formal essay with an introduction, thesis, and a conclusion**.
  - However, you may NOT just make a bulleted list of facts or create an outline.
  - You will need to write **complete sentences** that provide the specific information requested in the various parts of the FRQ.

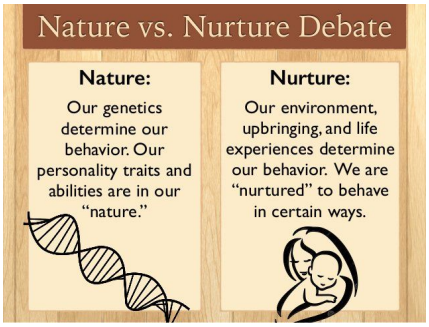
SODAS *(Follow these guidelines to write an effective response)*

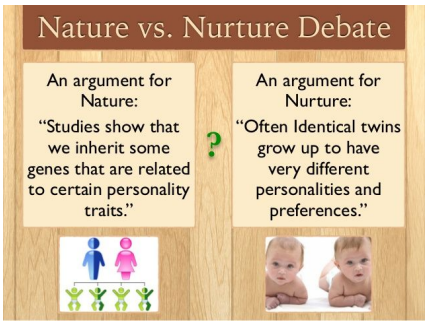
- **S**pace – leave 1-2 lines between each paragraph; easier for readers; gives you space to add more info
- **O**rder – answer the various parts in the order they are asked; keeps you more organized and makes it easier for the readers; each paragraph should begin with a topic sentence that indicates which part of the question you are answering
- **D**efine – definitions alone will not score points but they show knowledge and can help support your response; underline key words
- **A**pply – absolutely **ESSENTIAL** to apply your answer to the specific scenario; do this for each individual part of the prompt; it is repetitive but necessary
- **S**ynonyms – you cannot explain a word by using the term or any part of the word; for example "*Modeling* is when someone *models* another person's behavior." - this does not demonstrate any knowledge about the concept

Advice from past readers…

1. Use the structure of your scoring guide to answer the question addressing each point in an orderly fashion. If structured properly a reader will easily see that all parts of the question have been addressed.
2. **Each new concept (possibly each new point) should have a new paragraph. Leave a blank line after each paragraph!!!!!!!!**
3. **Underline** main ideas
4. **KEEP IT SIMPLE.** Address and dismiss. Don't add fluff. Be Concise. Readers want to see your knowledge of the best and most common techniques, methods, theories, etc. Do not waste time explaining unnecessarily complicated concepts unless directly asked to within the question.
5. **DO NOT TRY TO IMPRESS – KEEP IT SIMPLE!**
6. **USE PSYCHOLOGICAL TERMS and PROPER NAMES THEORIES, THEORISTS and PSYCHOLOGISTS…USE YOUR BIG BOY/GIRL WORDS**
7. Readers expect to see appropriate examples that are clearly relevant to the point being addressed. They should NOT be a hypothetical or personal (from your own life) example.

Unit 1: Scientific Foundations of Psychology

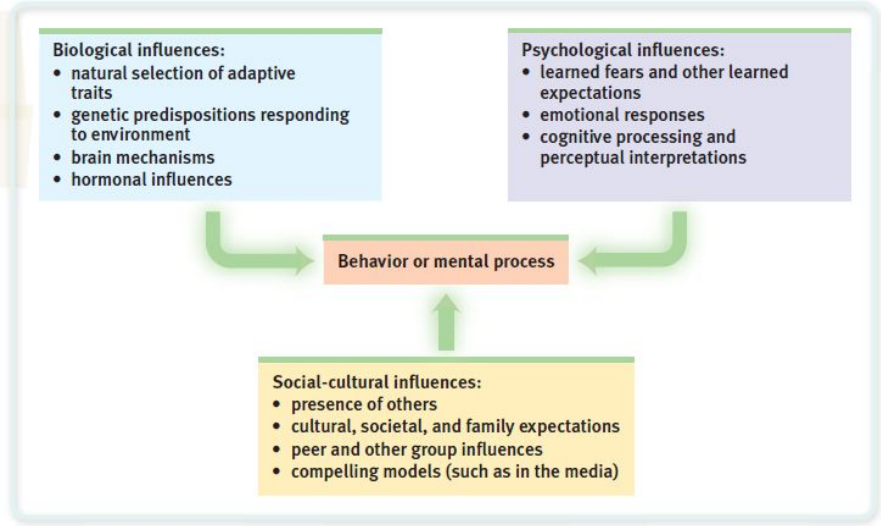




Approaches to Psychology

Nature ⟷ Nurture

Biological Approach	Psychoanalysis	Cognitive Psychology	Humanism	Behaviorism
Focus on genetic, hormonal, and neuro-chemical explanations of behavior.	Innate drives of sex and aggression (nature). Social upbringing during childhood (nurture).	Innate mental structures such as schemas, perception and memory and constantly changed by the environment.	Maslow emphasized basic physical needs. Society influences a person's self concept.	All behavior is learned from the environment through conditioning.

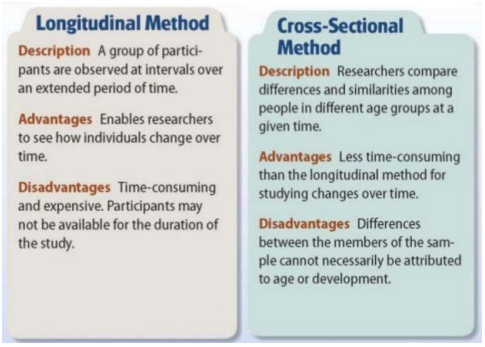


Main points of APA Ethics Code for research

- Informed Consent
- Deception
- Protection from harm
- Freedom from coercion
- Privacy
- Debriefing
- Humane treatment of animals

Table 6.1 Overview of Research Methods

Research Method	Description	Key Strength	Major Weakness
Experiment	Manipulation of an (IV) independent variable under controlled conditions and measurement of its effects on a dependent variable (DV)	Can establish cause and effect relationships between the IV and the DV	Ability to generalize to real world behavior can be limited
Quasi-experiment	Measurement of DV when random assignment to groups is not possible	Can provide strong evidence suggesting cause and effect relationships	Lack of random assignment can weaken conclusions
Naturalistic observation	Careful observations of humans or other animals in real-life situations	Provides descriptive data about behavior with wide applicability	Loss of experimental control
Surveys and Tests	Obtain large samples of abilities, beliefs, or behaviors at a specific time and place	Ease of administration, scoring, and statistical analysis	Distorted results because of sampling error, poorly phrased questions, and response biases
Case studies	Intensive investigation of the behavior and mental processes associated with a specific person or situation	Provide detailed descriptive data and analyses of new, complex, or rare phenomena	May not be representative of phenomena



:): Research Methods in Psychology

- Correlational Research
  - Research technique based on the naturally occurring relationship between two or more variables
  - Used to make **PREDICTIONS**, such as the relation between SAT scores and success at college
  - Cannot be used to determine cause and effect
  - Asks: Do the two variables vary together?

Experiments

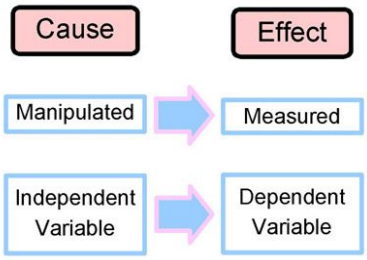
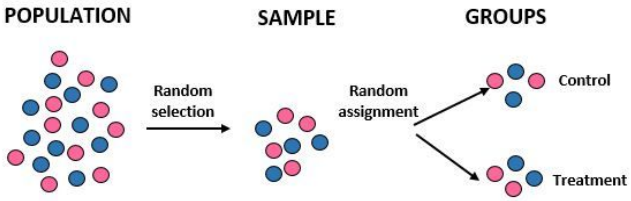


TABLE 1.1
Examples of Independent and Dependent Variables in Experimental Research

Independent Variables	Dependent Variables
Type of treatment: different types of drug treatments or psychological treatments	Behavioral variables: measures of adjustment, activity levels, eating behavior, smoking behavior
Treatment factors: brief vs. long-term treatment, inpatient vs. outpatient treatment	Physiological variables: measures of physiological responses such as heart rate, blood pressure, and brain wave activity
Experimental manipulations: types of beverage consumed (alcoholic vs. nonalcoholic)	Self-report variables: measures of anxiety, mood, or marital or life satisfaction



	Laboratory experiments	Field experiments	Natural experiments
Type of environment	Artificial environment	Natural environment but not necessarily the participants own one	Participants own natural environments
Control of independent variable	IV is set by the experimenter	IV is set by the experimenter	IV is naturally occurring and the experimenter has no control of it
Control of extraneous variables	EVs can be effectively controlled	Some control of EVs	No control of EVs
Cause and effect	Good because the IV affects the DV and there are few if any EVs	Moderate because there may be some EVs	Low because EVs are inevitable
Demand characteristics	Lots as task is artificial and it is easy for participants to work out the aim	Fewer as task is more natural, but participants know they are taking part in an experiment	None as participants are carrying out everyday tasks and are probably unaware they are taking part in an experiment
Ethical considerations	Easy to gain informed consent and give participants have the right to withdraw	Easy to gain informed consent and give participants have the right to withdraw	Participants probably do not know they are taking part in an experiment and so informed consent and right to withdraw become serious concerns

Descriptive Statistics
- Organise
- Summarise
- Simplify
- Describe and present data

Inferential Statistics
- Generalise from samples to populations
- Hypothesis testing
- Make predictions

TYPES OF GRAPHS ON THE AP PSYCHOLOGY EXAM

Correlational Coefficient (Survey)

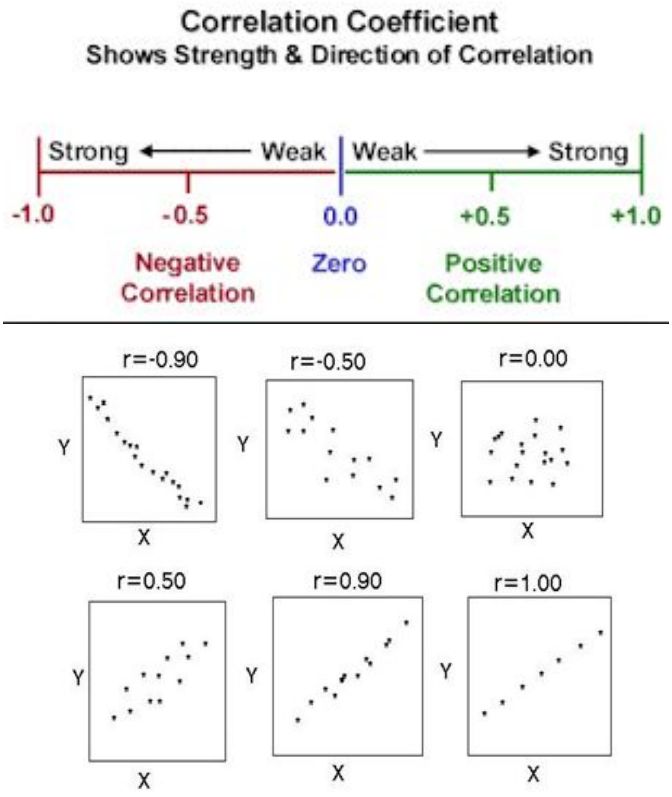
- Shows the relationship between two or more variables.
- Has a value between -1 & +1
- The positive and negative represents the type of relationship.

A positive correlation can be either two factors increasing
OR two factors decreasing. Both variables go in the same direction.

A **negative correlation** or inverse relationship has one variable that increases, as the other decreases.

- In statistics, the **correlational coefficient** is represented by a lowercase r.
- The graph is called a **scatterplot**.

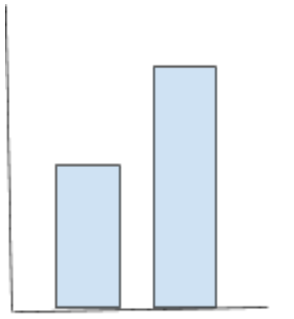
CORRELATION NEVER MEAN CAUSATION

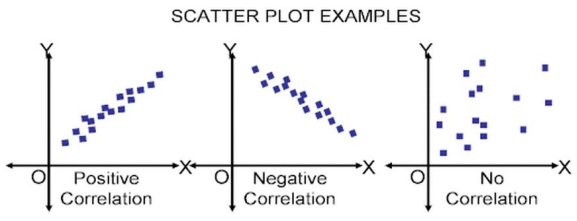


PRACTICE GUESSING THE CORRELATIONAL COEFFICIENT
https://istics.net/Correlations/

What is statistical significance?

- It means your findings are not due to chance!
- It means, "The sample averages are reliable and the difference between the experimental and control group is relatively large."
- In an experiment, you are looking for a P less than .05 (P <.05)
- In a correlational study, you are looking for a correlational coefficient (r) closer to +1 or -1. It should be above r > +.5 OR r < -.5
  - The closer the plots(dots) are to forming a straight line the stronger the correlational coefficient and the closer the number is to +1 or -1.

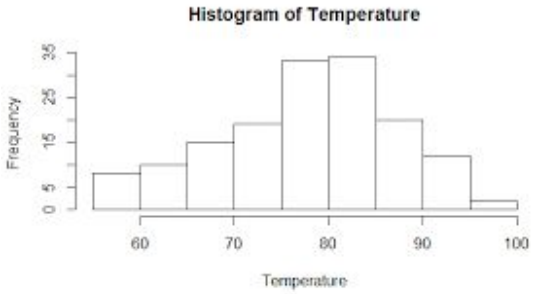


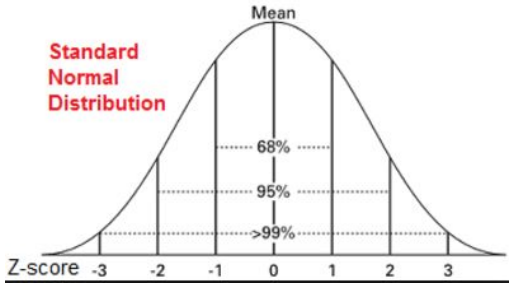


A NOTE FROM AN AP GRADER:
If you are asked to draw a graph. Keep it simple. More bars on your histogram does not make it better! **Draw it as you see here!**

Frequency Distribution

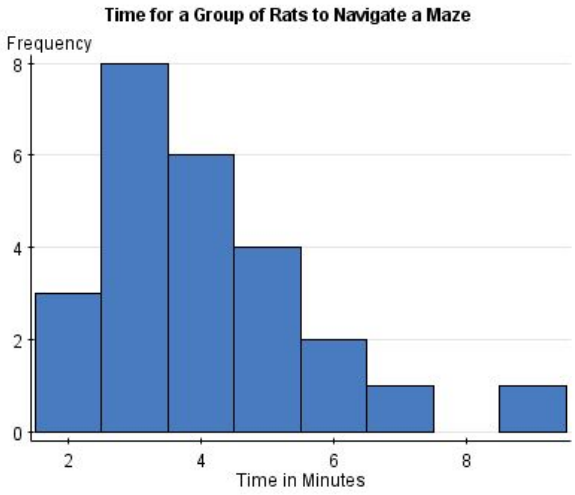
- This graph is called a **histogram** or bar graph.
- On the Y-Axis is the number of participants. On the X-axis is what is being measured or the **dependent variable.**
- Notice that the shapes of both graphs are a **normal distribution**.
- The **Measures of Central Tendency** (Mean, Median, Mode) fall in the center of the normal curve. The Mean, Median and Mode are all very similar in a normal distribution.

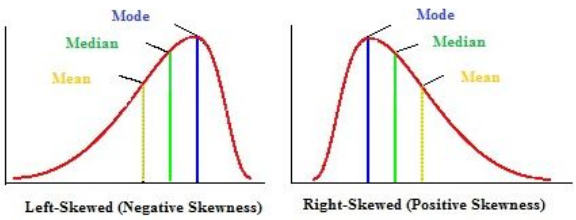


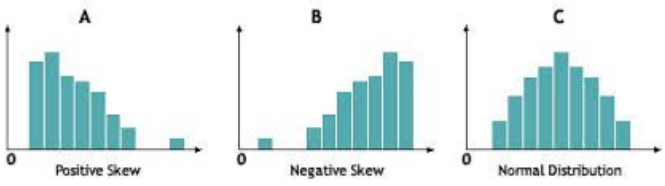


Positively and Negatively Skewed Distribution

- A **positively skewed distribution** is caused by an extremely high score in a frequency distribution. The high score or outlier causes a graph with a tail to the right.
- A **negatively skewed distribution** is caused by an extremely low score in a frequency distribution. The low score or outlier causes a graph with a tail towards the left.
- The **Measures of Central Tendency** are then changed. The **Mean** will be pulled towards the tail making it less representative of all scores. The **Mode** will still be in the middle and be the most representative of all the scores. The **Median** will still be in the middle.







Unit 2: Biological Bases of Behavior

Heritability: the degree of variance among individuals that can be attributed to genetic variations. Many physical and psychological characteristics are inherited. However, genes do not determine everything about us. Environmentality is the degree to which a trait's expression is caused by the environment in which an organism lives.

Today, the debate is no longer nature versus nurture, but rather nature and nurture working together; our psychological makeup is largely the result of the interaction of the two forces.

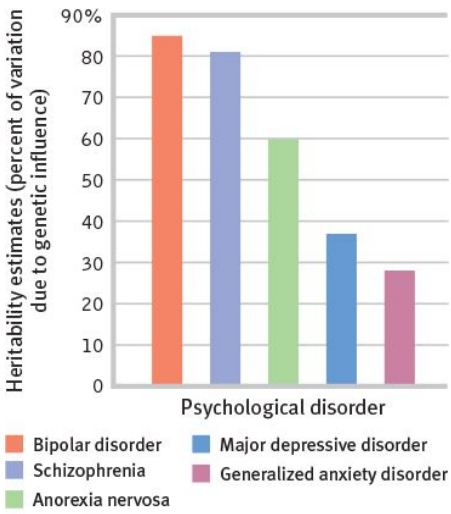


Figure 13.9
Myers/DeWall, *Psychology in Everyday Life*, 4e,
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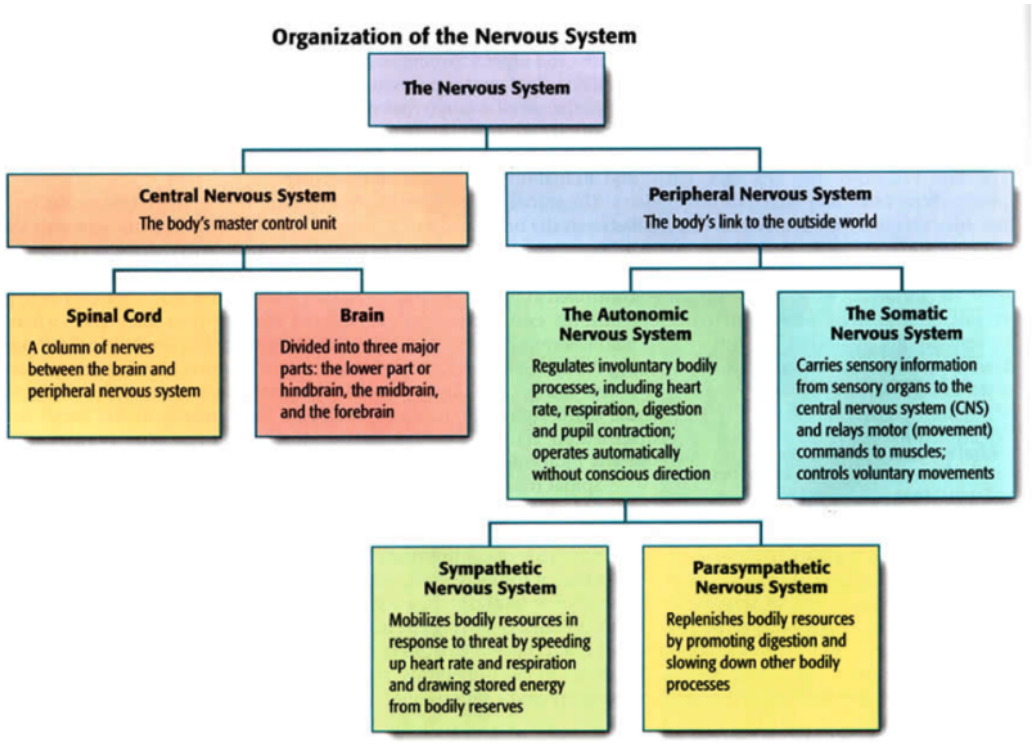
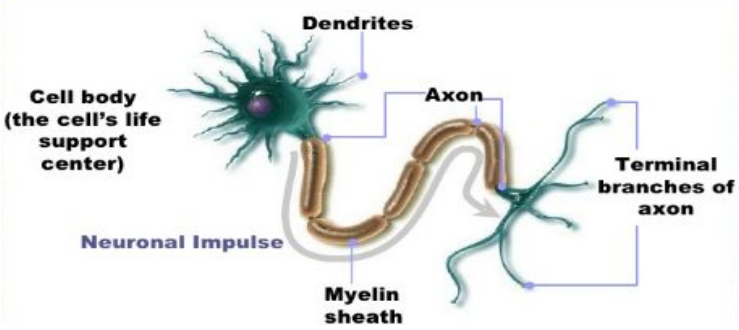
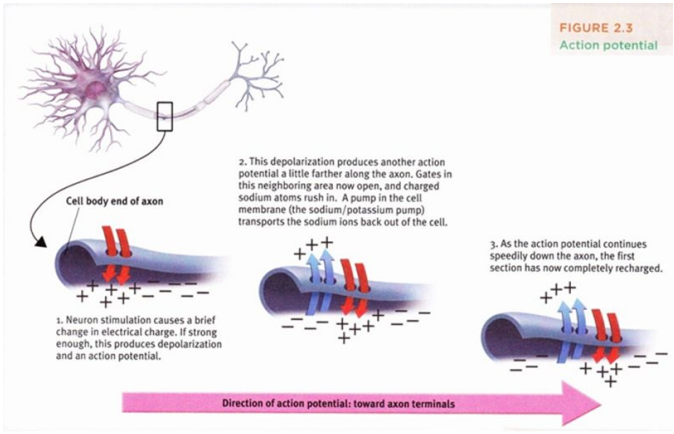
The Endocrine System

Gland/Location	Hormone	Function	Dysregulation
Pituitary Gland "Master Gland" Forebrain structure below the hypothalamus	Growth Prolactin Oxytocin storage Various hormones that stimulate other glands	The pituitary gland regulates growth, breast milk production, childbirth, bonding, and communicates to other glands to release hormones	Extremes in height
Pineal Gland Forebrain structure	Melatonin	The pineal gland regulates seasonal and sleep cycles. Melatonin concentrations fluctuate daily with higher levels at night causing drowsiness.	Seasonal Affective Disorder (SAD)
Thyroid and Parathyroid Glands Throat	Thyroxine Calcitonin Parathyrin	The thyroid controls metabolism or the rate at which glucose is converted to energy. Together the parathyroid glands regulate calcium levels in the blood.	Hypothyroidism (underactive gland) Hyperthyroidism (overactive gland)
Adrenal Glands Above kidneys	Cortisol Epinephrine (Adrenaline) Norepinephrine (Noradrenaline)	The adrenal glands are controlled by the sympathetic nervous system's flight-or-fight reaction, which increases heart rate, blood pressure, and glucose levels to respond to a threat.	Excessive sympathetic nervous system activity can compromise the immune system.
Pancreas Close to the stomach	Insulin Glucagon	The pancreas regulates sugar metabolism	Diabetes Low blood sugar
Gonads Testes Ovaries	Androgens, including testosterone Estrogen Progesterone	The gonads allow for sexual reproduction	Reproductive difficulties Higher levels of testosterone are correlated with increased aggression.

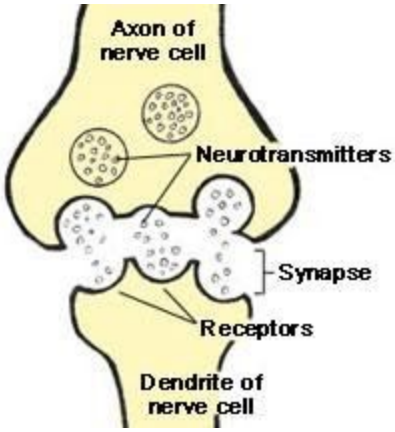






Neurotransmitters			
	Function	**Lack**	**Excess**
Dopamine	Pleasure, reward, voluntary movement, learning, and attention • Certain dopamine pathways are involved in drug addiction.	Parkinson's disease	Schizophrenia
Acetylcholine (AcH)	Memory and movement	Alzheimer's disease Paralysis	Muscle convulsions
Serotonin	Mood, appetite, and sleep	Depression Feeding and eating disorders Sleep-wake disorders Aggression	
Norepinephrine	Mood and sleep	Depression	Anxiety
Glutamate	Memory and learning Major excitatory neurotransmitter		Migraines and seizures
GABA	Relaxation and sleep Major inhibitory neurotransmitter	Anxiety disorders Seizures Insomnia	
Endorphins	Inhibits pain signals	Lower pain thresholds Use of heroin and other opiates leads to decreased production of endorphins	Higher pain threshold Runner's high

Reuptake: neurotransmitters are reabsorbed by the presynaptic neuron



Agonists: drugs that work by either blocking reuptake or mimicking the natural neurotransmitters by fitting into receptor sites on the postsynaptic neuron.

- Example: ***Xanax*** is an anti-anxiety medication – the drug molecules fit into receptor sites for the inhibitory neurotransmitter GABA and excite the cell
- **SSRIs** (Selective Serotonin Reuptake Inhibitors): function as agonists by delaying the reuptake of serotonin, allowing the neurotransmitters more opportunity to stimulate the postsynaptic neuron (Example: ***Prozac*** is a drug used to treat depression)

Antagonists: drugs that work by occupying receptor sites on the postsynaptic neuron and block the impact of neurotransmitters.

- Individuals with schizophrenia have too much dopamine, and antipsychotic medications act as dopamine antagonists to block the receptor sites and prevent cell excitement

Hindbrain

"Primitive" part of the brain; coordinates basic bodily functions

Brainstem *Base of the brain at the top of the spinal cord*	• Automatic survival functions • Sends and receives information
Cerebellum *Behind the brainstem underneath the brain*	• Balance and coordination • Fine motor movements • Procedural memory
Pons *Above the medulla on the brainstem and below the thalamus*	• Sleep and arousal • Dreams • Facial expressions
Medulla **(Medulla Oblongata)** *Below the pons on the brain stem*	• Survival functions (heartbeat, breathing, and digestion) • Reflexes (sneezing, coughing, vomiting, and swallowing)

Midbrain

Very small in humans; coordinates simple movements with sensory information

Reticular Formation **(Reticular Activating System)** *Network of nerves running vertically through the brainstem and extending to the thalamus*	• Arousal to stimuli • Sleep • Attentiveness • Filters incoming stimuli and relays important information to the thalamus
Basal Ganglia *Midbrain and forebrain*	• Smooth voluntary body movements

Forebrain

Sophisticated part of the human brain; allows for complex thought and behaviors unique to humans

Thalamus *Two connected egg-shaped structures located at the top of the brainstem*	• Filters and relays sensory information ***except for smell*** to the appropriate parts of the cerebral cortex	**Hypothalamus** *Limbic system structure below the thalamus*	• Maintenance functions (eating, drinking, body temperature, and sex) • Controls the autonomic nervous system • Controls the endocrine system by influencing the pituitary gland
Limbic System *Bagel-shaped group of structures between the brainstem and the cerebral cortex*	• Learning • Memory • Emotion • Basic drives	**Nucleus Accumbens** *Region of the forebrain near the limbic system*	• Pleasure or reward circuit • Associated with drug dependency
Hippocampus *Limbic system structure surrounding the thalamus*	• Explicit memory formation • Learning	**Suprachiasmatic Nucleus (SCN)** *Small region within the hypothalamus*	• Regulation of circadian rhythm • Regulation of sleep cycle
Amygdala *Limbic system structure at the end of each arm of the hippocampus*	• Emotions (especially fear and aggression)	**Corpus Callosum** *Bundle of neurons connecting the two cerebral hemispheres*	• Relays information between the two hemispheres

Frontal Lobe

Higher-level thinking; Reasoning; Planning; Judgment; Impulse Control

	Location	*Function*
Prefrontal Cortex	*Association area located in front of the motor strip in the frontal lobes*	• Controls conscious thoughts and actions • Working memory • Short-term and long-term planning
Broca's Area	*Front of the LEFT frontal lobe*	• Controls the facial muscle movements required for speech production
Primary Motor Cortex	*Rear of the frontal lobes, parallel to the sensory cortex (extending from ear to ear like a headband)*	• Controls voluntary movement • Left motor cortex controls movement on the right side of the body • Right motor cortex controls movement on the left side of the body

Parietal Lobes

Receives sensory information about the somatic senses of touch, pain, and temperature; Spatial abilities

	Location	*Functions*
Primary Somatosensory Cortex	*Front of the parietal lobes, parallel to the motor cortex (extending from ear to ear like a headband)*	• Sensory input is received for touch and body position • Left sensory cortex controls sensation for the right side of the body • Right sensory cortex controls sensation for the left side of the body

Occipital Lobes

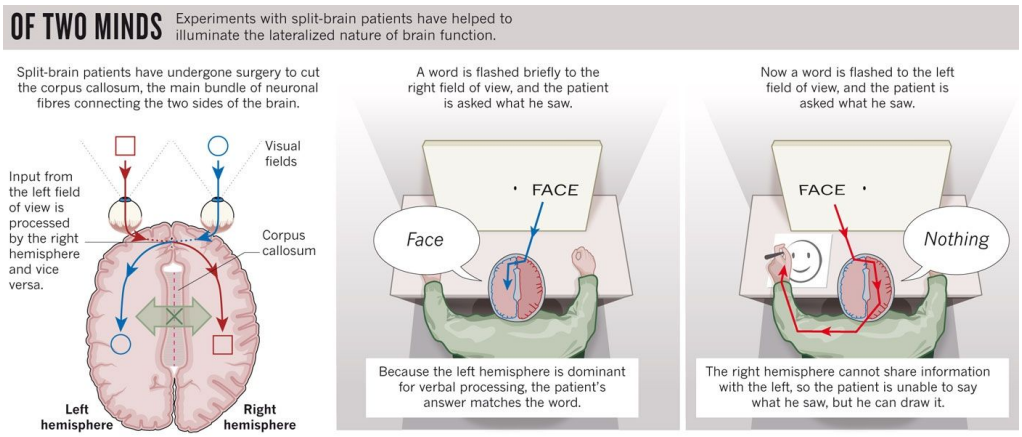
Visual processing

	Location	*Functions*
Primary Visual Cortex	*Bottom area of the occipital lobes*	• Information from the left visual field goes to the right side of each eye and is interpreted by the right visual cortex • Information from the right visual field goes to the left side of each eye and is interpreted by the left visual cortex

Temporal Lobes

Auditory processing (hearing); Olfactory (smell); Recognition of faces

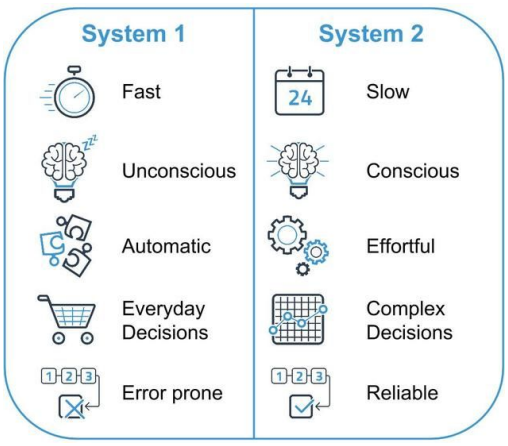
	Location	*Functions*
Primary Auditory Cortex	*Upper area of the temporal lobes*	• Processes most auditory information from the opposite ear
Wernicke's Area	*Top of the LEFT temporal lobe*	• Responsible for language comprehension • Creates meaningful statements



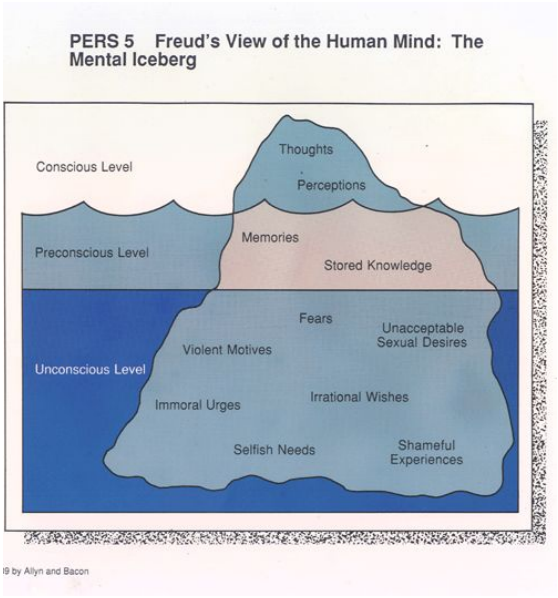
Brain Imaging Techniques

Scan	Definition	Purpose	Advantages/Disadvantages
EEG	Electroencephalogram measures electrical activity of the neurons below the electrodes placed on the scalp. The EEG is often used to show brain wave patterns of electrical activity during sleep stages and seizures.	Function	**Advantages** ● Noninvasive ● Abnormal patterns indicate neurological disorders **Disadvantages** ● Difficult to determine which specific brain areas are producing the electrical activity
PET	Positron emission tomography involves the injection of a small harmless amount of radioactive material, such as glucose (sugar), into the bloodstream. The PET scan indicates areas of the brain active during cognitive tasks by tracking specific structures using the radioactive material as fuel, resulting in a color coded image	Function	**Advantages** ● Allows investigation of mental illness and neurological problems, including Alzheimer's disease and epilepsy ● Allows investigation of specific types of neurotransmitters and drugs **Disadvantages** ● Exposure to low levels of radioactive material ● Difficult to pinpoint the exact location of brain activity
CT Scan (CAT)	Computerized axial tomography creates advanced and specific X-rays of the brain. When the individual is in the machine the X-ray tube rotates around the body taking a series of X-rays. The CT scan is often used to locate tumors and brain damage resulting from blood clots and strokes.	Structure	**Advantages** ● Can view large brain abnormalities ● Significantly more sensitive than traditional X-ray imaging **Disadvantages** ● Involves radiation ● Incapable of locating small brain abnormalities
MRI	The magnetic resonance imaging technique uses strong magnetic fields that cause different molecules to vibrate at different frequencies, which produces detailed images of slices of brain tissue.	Structure	**Advantages** ● Generates images of brain structures with greater clarity than the CT scan ● No exposure to radiation or radioactive materials **Disadvantages** ● Cannot be used on an individual with a metallic implant including a pacemaker or surgical pin ● Individual is required to remain still for an extended period of time in a confined space
fMRI	The functional magnetic resonance imaging technique uses magnetic fields to produce images of the brain and tracks real-time brain activity by measuring blood flow carrying oxygen to active brain tissue.	Structure and Function	**Advantages** ● No exposure to radioactive materials like during a PET scan, allowing researchers to conduct multiple scans on the same individual ● Ability to pinpoint and track mental processes that occur over seconds as opposed to minutes, such as thinking about an object **Disadvantages** ● Cannot be used on an individual with a metallic implant including a pacemaker or surgical pin ● Although no harmful consequences have been identified, the long-term impact of exposure to powerful magnets is unknown

Dual Processing



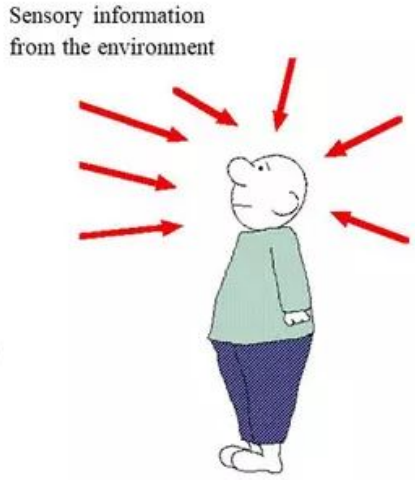
Consciousness



Mechanism	Symptoms	Drug	Dangers and side effects	Psychological dependence	Physical dependence	Addiction potential
Stimulants						
Stimulants block the reuptake of dopamine, norepinephrine, and serotonin in the synapses of the CNS.	Enhanced mood and increased energy	Caffeine	May create dependence	Low	Low	Low
		Nicotine	Has major negative health effects if smoked or chewed	High	High	High
		Cocaine	Decreased appetite, headache	Low	Low	Moderate
		Amphetamines	Possible dependence, accompanied by severe "crash" with depression as drug effects wear off, particularly if smoked or injected	Moderate	Low	Moderate to high
Depressants						
Depressants change consciousness by increasing the production of the neurotransmitter GABA and decreasing the production of the neurotransmitter acetylcholine, usually at the level of the thalamus and the reticular formation.	Calming effects, sleep, pain relief, slowed heart rate and respiration	Alcohol	Impaired judgment, loss of coordination, dizziness, nausea, and eventually a loss of consciousness	Moderate	Moderate	Moderate
Barbiturates and benzodiazepines	Sluggishness, slowed speech, drowsiness, in severe cases, coma or death	Moderate	Moderate	Moderate		
Toxic inhalants	Brain damage and death	High	High	High		
Opioids						
The chemical makeup of opioids is similar to the endorphins, the neurotransmitters that serve as the body's "natural pain reducers."	Slowing of many body functions, constipation, respiratory and cardiac depression, and the rapid development of tolerance	Opium	Side effects include nausea, vomiting, tolerance, and addiction.	Moderate	Moderate	Moderate
Morphine	Restlessness, irritability, headache and body aches, tremors, nausea, vomiting, and severe abdominal pain	High	Moderate	Moderate		
Heroin	All side effects of morphine but about twice as addictive as morphine	High	Moderate	High		
Hallucinogens						
The chemical compositions of the hallucinogens are similar to the neurotransmitters serotonin and epinephrine, and they act primarily by mimicking them.	Altered consciousness; hallucinations	Marijuana	Mild intoxication; enhanced perception	Low	Low	Low
LSD, mescaline, PCP, and peyote	Hallucinations; enhanced perception	Low	Low	Low		

Stage	Wave Name	Wave Characteristics	Characteristics or Common Behaviors of This Stage
Awake But Relaxed	Alpha	High frequency	Alert and aware but crossing slowly into the first stage of sleep
NREM-1	Theta	Slower frequency than alpha	Fantastic images resembling **hallucinations** **Hypnagogic sensations** such as the jerk of a limb or feeling of falling Sensations from the environment filter in to the images
NREM-2	N/A	**Sleep spindles** – rapid bursts of rhythmic brain-wave activity	Could be awakened without much difficulty but now clearly asleep
NREM-3	Delta	Slower frequency waves that last about 30 minutes	Harder to wake – **deepest level of NREM sleep** Lasts about 30 minutes
REM	N/A	Waves become rapid and saw-toothed like those of NREM-1	Heart rate rises, breathing becomes rapid and irregular, eyes dart, **dreaming** occurs

Unit 3: Sensation and Perception

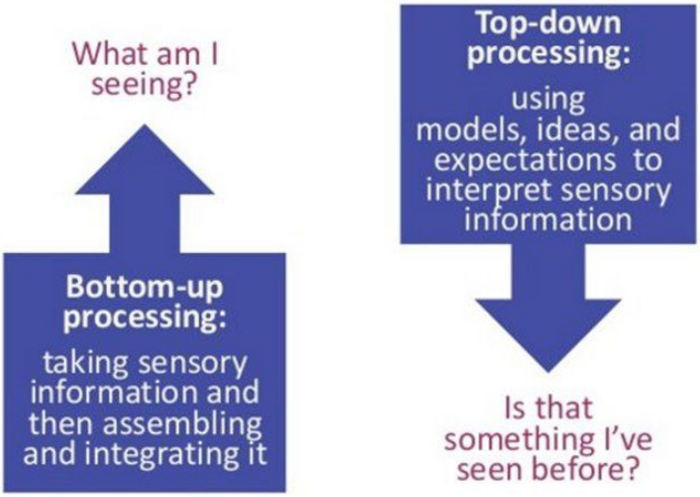


5 senses

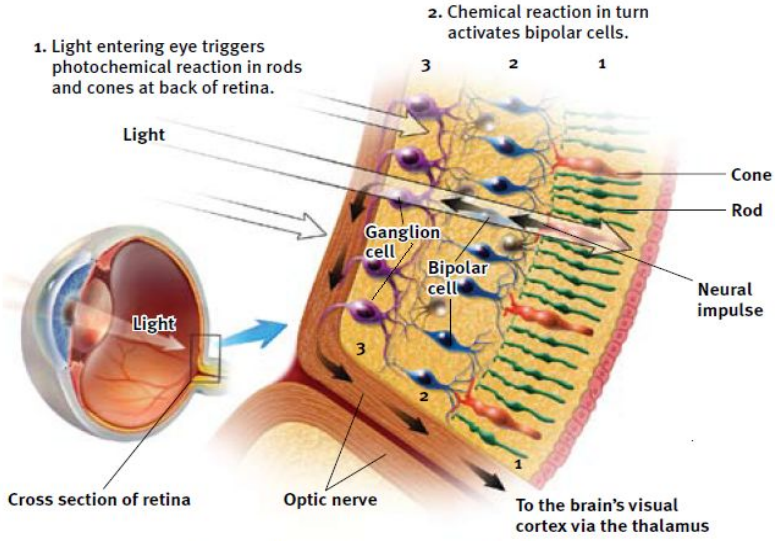
1. Visual (sight)
2. Auditory (sound)
3. Olfaction (Smell)
4. Taste
5. Touch

Sensation refers to the physical stimulation of the sensory receptors.

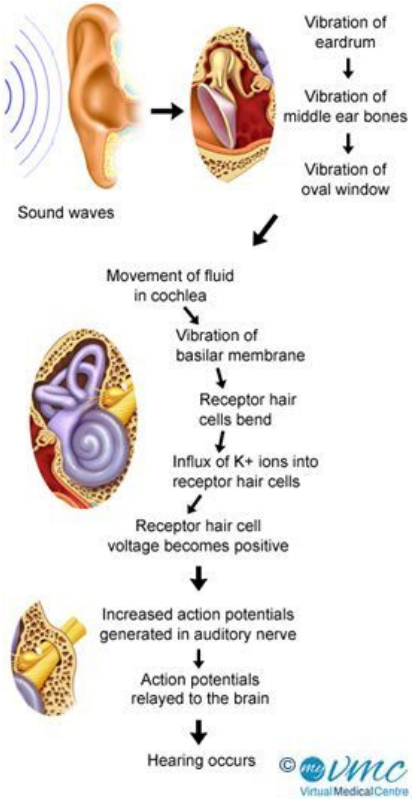
Perception involves interpreting this sensory information.



Bottom-up	Top-down
Senses-driven	Schema-driven
Rely on information from senses	Rely on knowledge & experiences
Lower-level cognition	High-level cognition
Organizing info.	Interpreting info.



3. Bipolar cells then activate the ganglion cells, the axons of which converge to form the optic nerve. This nerve transmits information to the visual cortex (via the thalamus) in the brain.



Summarizing the Senses

Sensory System	Source	Receptors
Vision	Light waves striking the eye	Rods and cones in the retina
Hearing	Sound waves striking the outer ear	Cochlear hair cells in the inner ear
Touch	Pressure, warmth, cold on the skin	Skin receptors detect pressure, warmth, cold, and pain
Taste	Chemical molecules in the mouth	Basic tongue receptors for sweet, sour, salty, bitter, and umami
Smell	Chemical molecules breathed in through the nose	Millions of receptors at top of nasal cavity
Position/movement of body parts—kinesthesis	Any change in position of a body part, interacting with vision	Kinesthetic sensors in joints, tendons, and muscles
Position/movement of head—vestibular sense	Movement of fluids in the inner ear caused by head/body movement	Hairlike receptors in the semi-circular canals and vestibular sacs

Binocular Cues: Retinal Disparity

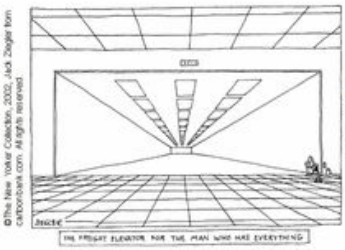
The image your right eye sees is different than your left eye because they are a small distance apart. The image you see using both eyes is the two images merged.

Monocular Cues

Relative height We perceive objects higher in our field of vision as farther away. Because we perceive the lower part of a figure-ground illustration as closer, we perceive it as figure (Vecera et al., 2002). Invert the illustration above and the black becomes ground, like a night sky.

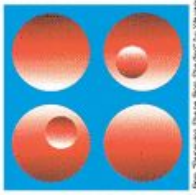
Relative size If we assume two objects are similar in size, *most* people perceive the one that casts the smaller retinal image as farther away.

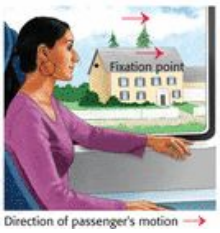
Interposition If one object partially blocks our view of another, we perceive it as closer. The depth cues provided by interposition make this an impossible scene.



Linear perspective Parallel lines, such as railroad tracks, appear to converge with distance. The more they converge, the greater their perceived distance.

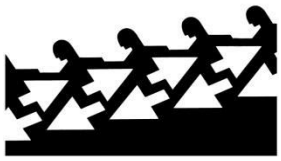
Light and shadow Nearby objects reflect more light to our eyes. Thus, given two identical objects, the dimmer one seems farther away. Shading, too, produces a sense of depth consistent with our assumption that light comes from above. Invert the illustration below and the hollow in the bottom row will become a hill.



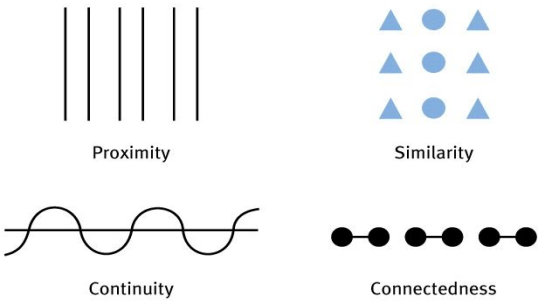


Relative motion As we move, objects that are actually stable may appear to move. If while riding on a bus you fix your gaze on some object—say, a house—the objects beyond the fixation point appear to move with you; objects in front of the fixation point appear to move backward. The farther those objects are from the fixation point, the faster they seem to move.

Gestalt: an organized whole. Gestalt psychologists emphasized our tendency to integrate pieces of information into meaningful wholes.



- **Figure-ground:** the organization of the visual field into objects (the *figures*) that stand out from their surroundings (the *ground*).
- **Grouping:** the perceptual tendency to organize stimuli into coherent groups.
- **Proximity:** We group nearby figures together.
- **Similarity:** We group similar figures together.
- **Continuity:** We perceive smooth, continuous patterns rather than discontinuous ones.
- **Connectedness:** Because they are uniform and linked, we perceive each set of two dots and the line between them as a single unit.
- **Closure:** We fill in gaps to create a complete, whole object.



Depth perception: the ability to see objects in three dimensions although the images that strike the retina are two-dimensional; allows us to judge distance.

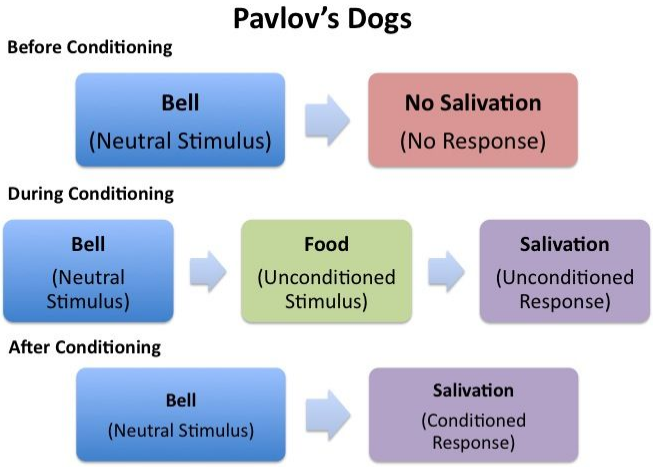
- **Visual cliff:** a laboratory device for testing depth perception in infants and young animals. Used by Eleanor Gibson and Richard Walk to determine whether crawling infants could perceive depth

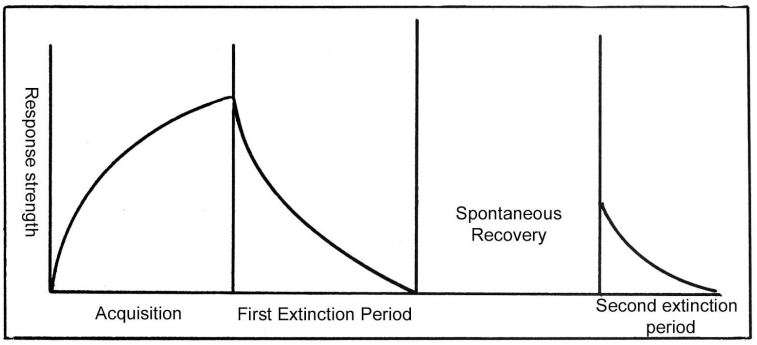
Unit 4: Learning

Classical and Operant Conditioning Compared		
Characteristics	*Classical Conditioning*	*Operant Conditioning*
Types of association	Between two stimuli	Between a response and its consequences
State of subject	Passive	Active
Focus of attention	On what precedes the response	On what follow the response
Types of response typically involved	Involuntary or reflexive response	Voluntary response
Bodily response typically involved	Internal responses; emotional and glandular reactions	External responses; muscular and skeletal movement and verbal responses
Range of responses	Relative simple	Simple to highly complex
Responses learned	Emotional reactions: fear, likes, dislikes	Goal-oriented responses

COMPARISON OF CLASSICAL AND OPERANT CONDITIONING

	Classical Conditioning	Operant Conditioning
Response	Involuntary, automatic.	Voluntary, operates on environment.
Acquisition	Associating events; CS announces US.	Associating response with a consequence (reinforcer or punisher).
Extinction	CR decreases when CS is repeatedly presented alone.	Responding decreases when reinforcement stops.
Cognitive processes	Organisms develop expectation that CS signals the arrival of US.	Organisms develop expectation that a response will be reinforced or punished; they also exhibit latent learning, without reinforcement.
Biological predispositions	Natural predispositions constrain what stimuli and responses can easily be associated.	Organisms best learn behaviors similar to their natural behaviors; unnatural behaviors instinctively drift back toward natural ones.





The Effects of Reinforcement and Punishment (OPERANT CONDITIONING)	
Reinforcement *(increase or strengthens a behavior)*	***Punishment*** *(decrease or suppresses a behavior)* • May result in side effects such as negative emotional responses and increased aggressive behavior • When used for disciplinary reasons, punishment should be applied swiftly, just severe enough to be effective, explained, and not physical
Adding a Positive (positive reinforcement) Presenting food, money, praise, attention, or other rewards.	**Adding a Negative (positive punishment)** Delivering a pain-producing or otherwise aversive stimulus, such as a spanking or electric shock.
Subtracting a Negative (negative reinforcement) Removing or terminating some pain-producing or otherwise aversive stimulus, such as an electric shock or taking medicine for a headache. Plays a key role in escape and avoidance learning.	**Subtracting a Positive (negative punishment)** Removing some pleasant stimulus or taking away privileges such as TV watching or use of automobile.

Reinforcement Schedules Compared			
Schedule of Reinforcement	*Response Rate*	*Pattern of Responses*	*Resistance to Extinction*
Fixed-ratio schedule	Very high	Steady response with low ratio. Brief pause after each reinforcement with a very high ratio.	The higher the ratio, the more resistance to extinction.
Variable-ratio schedule	Highest response rate	Constant response pattern, no pauses	Most resistance to extinction.
Fixed-interval schedule	Lowest response rate	Long pause after reinforcement, followed by gradual acceleration.	The longer the interval, the more resistance to extinction.
Variable-interval schedule	Moderate	Stable, uniform response.	More resistance to extinction than fixed-interval schedule with the same average interval.

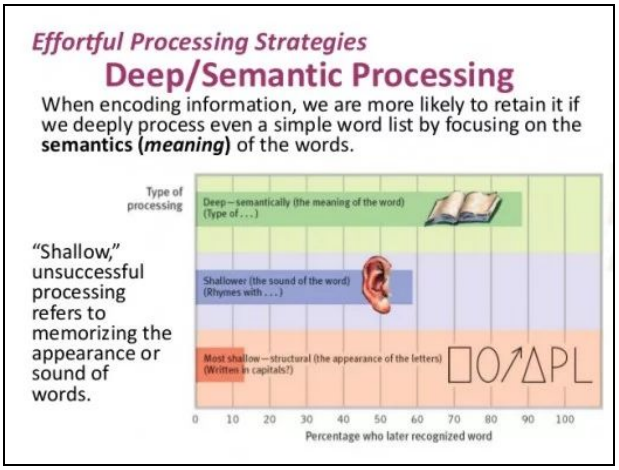
Unit 5: Cognition (Memory)

Automatic Processing

- **Space**: location of items
- **Time**: sequence of the day's events
- **Frequency**: how many times things have happened

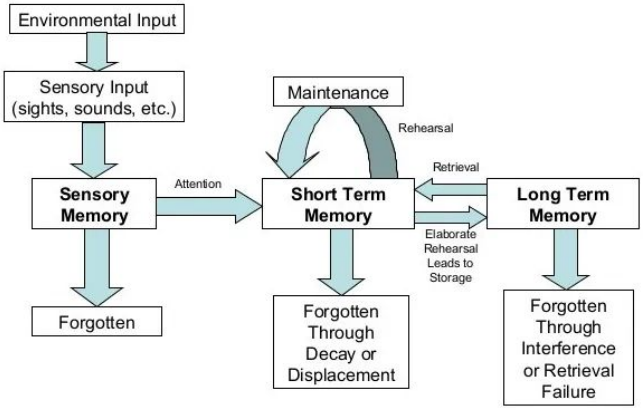
Effortful Processing

- **Maintenance Rehearsal**:
  - Simple Repeating keeps it STM
- **Elaborate Rehearsal**:
  - Thinking & Making connections to other learned ideas



Memory: the persistence of learning over time through the storage and retrieval of information.

Multi Store Model - Atkinson & Shiffrin

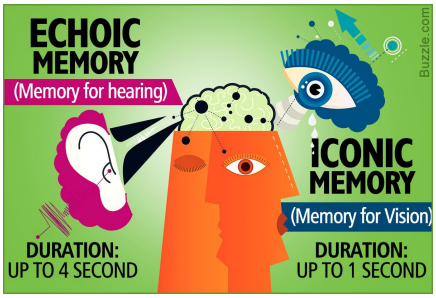


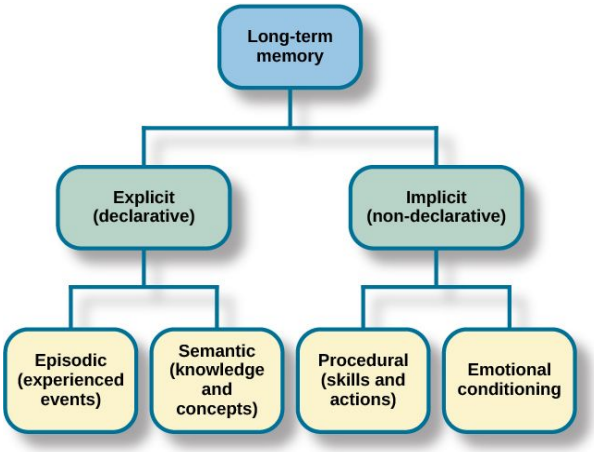
Short term memory has three key aspects:

1. **limited capacity** (only about 7 items can be stored at a time)
2. **limited duration** (storage is very fragile and information can be lost with distraction or passage of time)
3. **encoding** (primarily acoustic, even translating visual information into sounds).

Sensory Memory

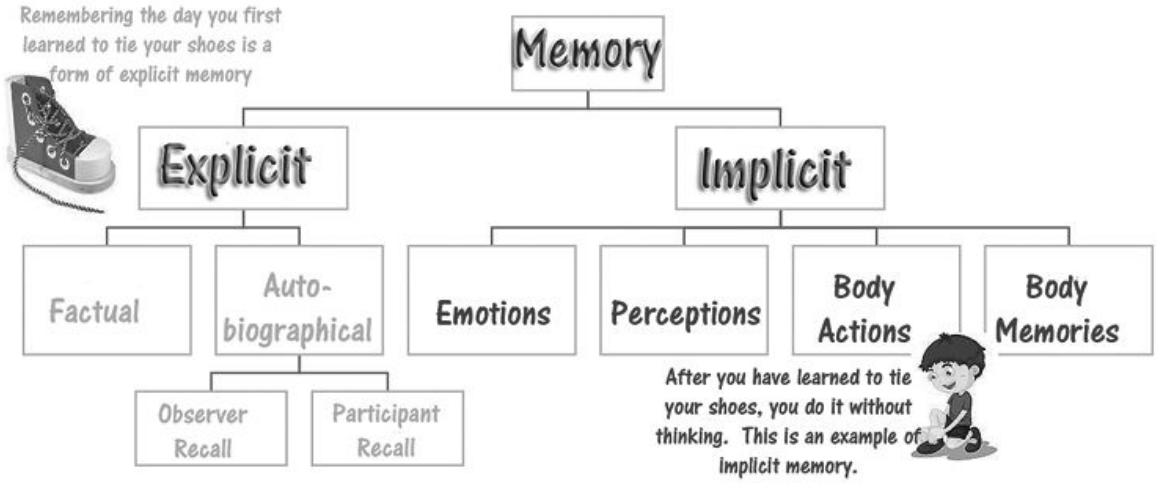
A quick, fleeting memory that is activated by the five senses. This information will leave the brain if we don't attend (pay attention) to it.





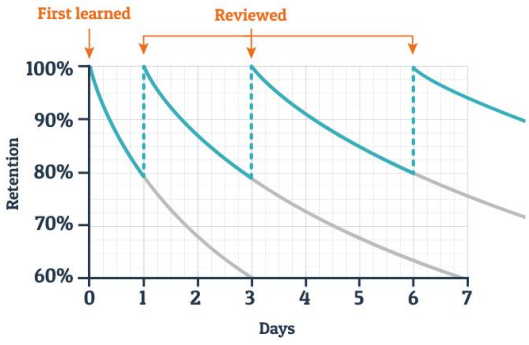
Explicit Memory

- Are encoded to memory and later retrieved
- Are often formed deliberately through rehearsal
- Can be encoded unconsciously and tied to emotions
- May be drawn into awareness through associations



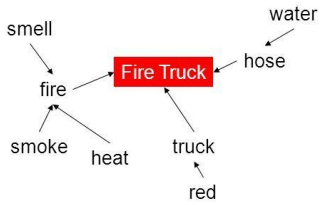
Brain Structure	Connection to Memory
Hippocampus	Long-term potentiation / memory processing Associated with emotion and the transfer of information from STM to LTM
Amygdala	Emotional reactions
Cerebellum	Procedural memories Conditioned responses
Prefrontal Cortex	Storage of short-term/working memories
Basal Ganglia	Memory retrieval and procedural memory - key to creating and maintaining habits

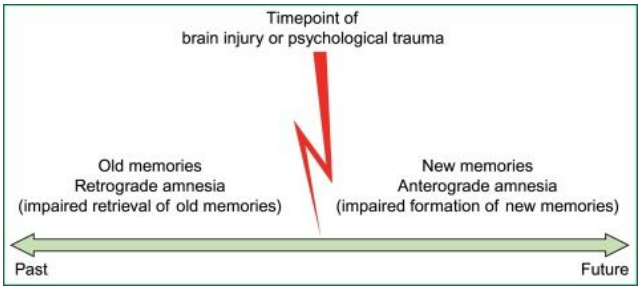
Typical Forgetting Curve for Newly Learned Information

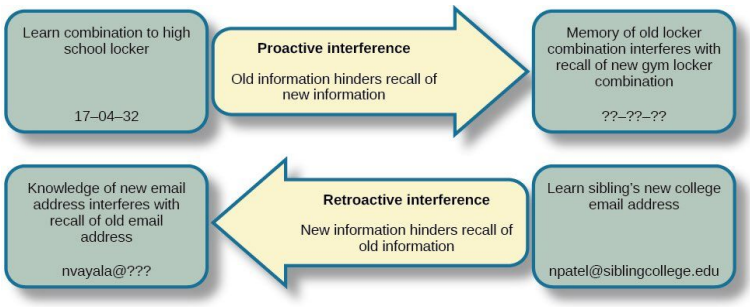


Retrieval Cues

Memories are held in storage by a web of associations. These associations are like anchors that help retrieve memory.







Unit 5: Cognition (Problem Solving)

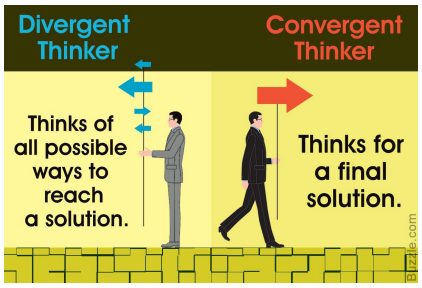
Problem Solving Methods

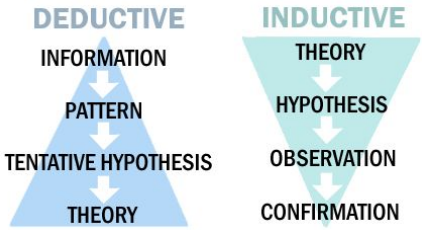
- **Trial and Error:** The process of experimenting with various methods of doing something until one finds the most successful. Example: Typing in random numbers to figure out a pin number for an ATM card.
- **Means-End Analysis:** Breaking a problem into subgoals in order to reach the ultimate goal. Example: Wanting to run a marathon, but you don't go out the first day and run 20 miles. You have to start small, set a goal for a 5K, then a 10K, etc.
- **Algorithm:** A logical, step-by-step procedure that, if followed correctly, will eventually solve a specific problem. Example: Typing in 0000, 0001, 0002, 0003, etc. to figure out a pin number for an ATM card.
- **Heuristic:** A general rule-of-thumb or shortcut that is used to reduce the number of possible solutions to a problem. Usually speedier but more prone to errors than algorithms. Example: Using birthdays for a pin number.
- **Insight:** A sudden realization of a problem's solution; the "aha" moment

Obstacles to Problem Solving:

- **Fixation:** Having a preoccupation with something, not being able to stop thinking about it.
- **Mental set:** The tendency to continue using belief systems and problem-solving strategies that have worked in the past, even though it may not be working now.
- **Functional fixedness:** The tendency to think of an object as functioning only in its usual way or customary way. As a result, individuals often do not see unusual or innovative uses of familiar objects.
- **Availability heuristic:** Judging the likelihood of an event based on readily available personal experiences or new reports. Example: not wanting to fly after 9/11.
- **Representative heuristic:** Judging the likelihood of an event based on how well it matches a typical example. Example: Not thinking a tall, skinny man who likes to read would be a truck driver.
- **Anchoring effect:** The tendency to be influenced by a reference point. Example: only buying a car because it's the color you want even though it has a lot of miles.
- **Framing:** Posing a question or wording a phrase in such a way to persuade someone's thoughts. Example: buying something because it's 95% fat free sounds better than 5% fat.
- **Bias:** Having pre-existing positions or beliefs about events, people, etc.
    - **Confirmation Bias:** A preference for information that confirms preexisting positions or beliefs, while ignoring or discounting contradictory evidence. Example: only looking at good reviews of something you want.
    - **Belief Perseverance:** Holding onto a belief even after it has been discredited. Example: believing that fad diets work.
    - **Hindsight Bias:** Also known as the knew-it-all-along effect, the inclination to see events that have already occurred as being more predictable than they were before they took place
    - **Overconfidence Bias:** The tendency to be more confident than correct. Example: Hitler thinking he could invade Russia when no one else has ever successfully done it.
    - **Exaggerated Fear:** Being overly fearful of something to the point of a phobia. Availability heuristic plays a part in this.

Unit 5: Cognition (Creativity)





Unit 5: Cognition (Intelligence)

Intelligence: Mental quality consisting of the ability to learn from experience, solve problems, and use knowledge to adapt to new situations.

Intelligence Test: A measure for assessing an individual's mental aptitudes and comparing them with those of others, using numerical scores.

Aptitude v. Achievement Tests

Aptitude	Achievement
• Purpose: predict future performance.	• Purpose: assess current performance
• Predictive Validity.	• Content Validity.
• Evaluate more general competencies that may be innate or acquired in the distant past.	• Evaluate more specific competencies that have been recently learned.

TABLE 10.2

Comparing Theories of Intelligence

Theory	Summary	Strengths	Other Considerations
Spearman's general intelligence (*g*)	A basic intelligence predicts our abilities in varied academic areas.	Different abilities, such as verbal and spatial, do have some tendency to correlate.	Human abilities are too diverse to be encapsulated by a single general intelligence factor.
Thurstone's primary mental abilities	Our intelligence may be broken down into seven factors: word fluency, verbal comprehension, spatial ability, perceptual speed, numerical ability, inductive reasoning, and memory.	A single *g* score is not as informative as scores for seven primary mental abilities.	Even Thurstone's seven mental abilities show a tendency to cluster, suggesting an underlying *g* factor.
Gardner's multiple intelligences	Our abilities are best classified into eight independent intelligences, which include a broad range of skills beyond traditional school smarts.	Intelligence is more than just verbal and mathematical skills. Other abilities are equally important to our human adaptability.	Should all of our abilities be considered *intelligences?* Shouldn't some be called less vital *talents?*
Sternberg's triarchic	Our intelligence is best classified into three areas that predict real-world success: analytical, creative, and practical.	These three facets can be reliably measured.	1. These three facets may be less independent than Sternberg thought and may actually share an underlying *g* factor. 2. Additional testing is needed to determine whether these facets can reliably predict success.

Fluid vs. Crystallized Intelligence
(Cattell and Horn)

Fluid Intelligence	Crystallized Intelligence
• Inherited ability to reason and think	• Accumulated knowledge and information acquired over a lifetime
• Neurophysiological base: dependent on the state of the brain and nervous system	• Application of skills and knowledge to problem solving
• Minimal dependence on school learning or acculturation	• Education dependent
• Inductive reasoning; problem solving	• Verbal and general knowledge
• Nature	• Nurture

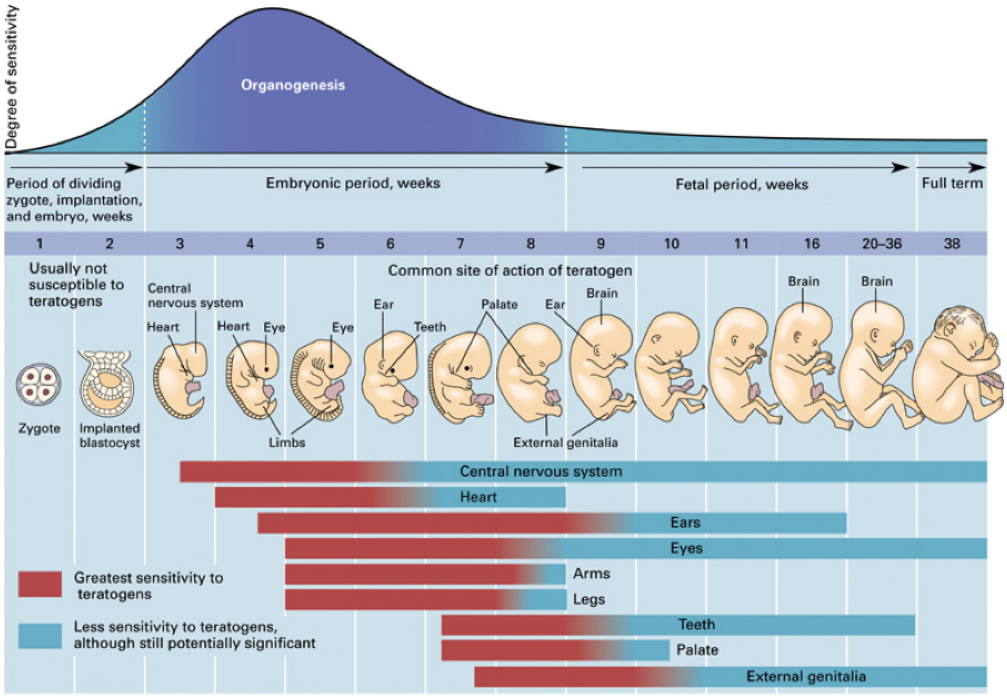
Types of Validity

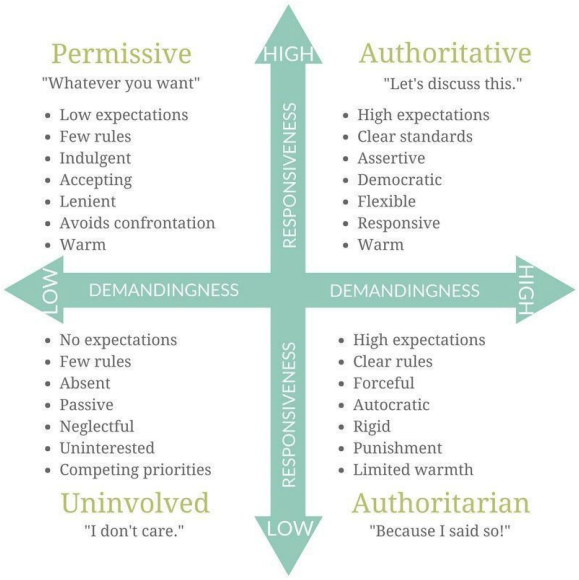
CONTENT-RELATED (appropriate content)	CRITERION-RELATED (relationship to other measures)
face validity: does the test appear to test what it aims to test?	**concurrent validity**: does the relate to a existing similar measure?
construct validity: does the test relate to underlying theoretical concepts?	**predictive validity**: does the test predict later performance on a related criterion?

Types of Reliability

INTERNAL (extent to which a measure is consistent within itself.)	EXTERNAL (the extent to which a measure varies from one use to another.)
split-half method: measures the extent to which all parts of the test contribute equally to what is being measured.	**test re-test**: measures the stability of a test over time.
	Inter-rater: to the degree to which different raters give consistent estimates of the same behavior

Unit 6: Development



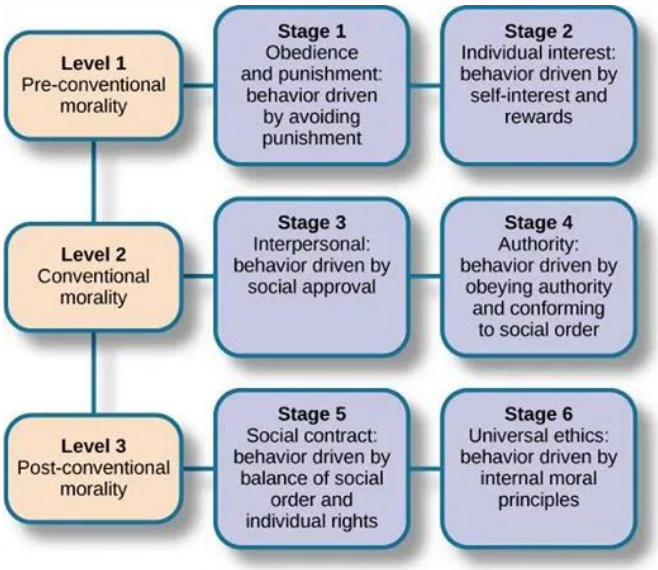


Stage	Ages	Focus of Libido	Major Development	Adult Fixation Example
Oral	0 to 1	Mouth, Tongue, Lips	Weaning off of breast feeding or formula	Smoking, Overeating
Anal	1 to 3	Anus	Toilet Training	Orderliness, Messiness
Phallic	3 to 6	Genitals	Resolving Oedipus/ Electra Complex	Deviancy, Sexual Dysfunction
Latency	6 to 12	None	Developing Defense Mechanisms	None
Genital	12+	Genitals	Reaching Full Sexual Maturity	If all stages were successfully completed then the person should be sexually matured and mentally healthy.

PIAGET'S STAGES OF COGNITIVE DEVELOPMENT

Typical Age Range	Description of Stage	Developmental Phenomena
Birth to nearly 2 years	*Sensorimotor* Experiencing the world through senses and actions (looking, touching, mouthing, and grasping)	• Object permanence • Stranger anxiety
2 to about 6 or 7 years	*Preoperational* Representing things with words and images; use intuitive rather than logical reasoning	• Pretend play • Egocentrism • Language development
About 7 to 11 years	*Concrete operational* Thinking logically about concrete events; grasping concrete analogies and performing arithmetical operations	• Conservation • Mathematical transformations
About 12 through adulthood	*Formal operational* Abstract reasoning	• Abstract logic • Potential for mature moral reasoning

Stage	Basic Conflict	Important Events	Outcome
Infancy (birth to 18 months)	**Trust vs. Mistrust**	**Feeding**	Children develop a sense of trust when caregivers provide reliability, care and affection. A lack of this will lead to mistrust.
Early Childhood (2-3 years)	**Autonomy vs. Shame and Doubt**	**Toilet Training**	Children need to develop a sense of personal control over physical skills and a sense of independence. Success leads to feelings of autonomy. Failure results in feelings of shame and doubt.
Preschool (3-5 years)	**Initiative vs. Guilt**	**Exploration**	Children need to begin asserting control and power over the environment. Success in this stage leads to a sense of purpose. Children who try to exert too much power experience disapproval, resulting in a sense of guilt.
School Age (6-11 years)	**Industry vs. Inferiority**	**School**	Children need to cope with new social and academic demands. Success leads to a sense of competence, while failure results in feelings of inferiority.
Adolescence (12-18 years)	**Identity vs. Role Confusion**	**Social Relationships**	Teens need to develop a sense of self and personal identity. Success leads to an ability to an ability to stay true to yourself, while failure leads to role confusion and a weak sense of self.
Young Adulthood (19-40 years)	**Intimacy vs. Isolation**	**Relationships**	Young adults need to form intimate, loving relationships with other people. Success leads to strong relationships, while failure results in loneliness and isolation.
Middle Adulthood (40-65 years)	**Generativity vs. Stagnation**	**Work and Parenthood**	Adults need to create or nurture things that will outlast them, often by having children or creating a positive change that benefits other people. Success leads to feelings of usefulness and accomplishment, while failure results in shallow involvement in the world.
Maturity (65-Death)	**Ego Integrity vs. Despair**	**Reflection on Life**	Older adults need to look back on life and feel a sense of fulfillment. Success at this stage leads to feelings of wisdom, while failure results in regret, bitterness and despair.

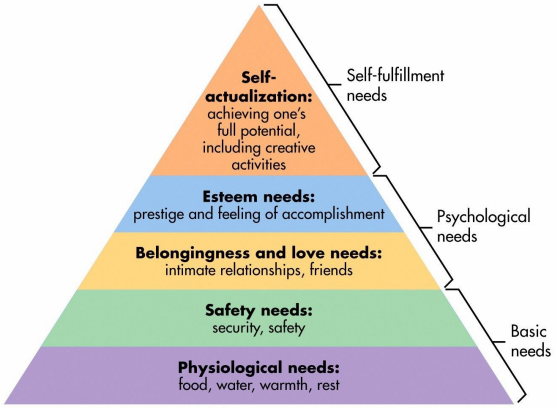


Unit 7: Motivation

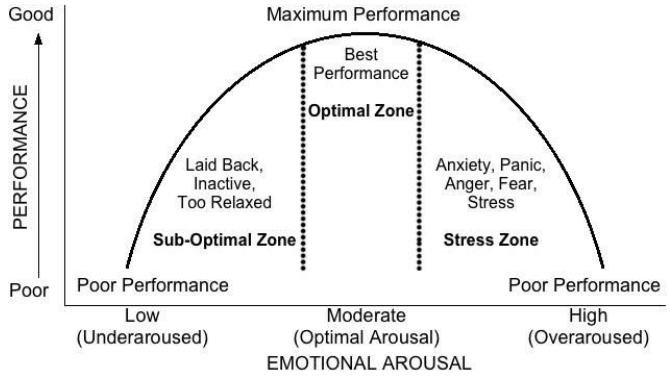
Theories and Concepts of Motivation

Theory	View
Biological Theories	
1. Instinct	Motivation results from behaviors that are unlearned, uniform in expression, and universal in a species.
2. Drive-Reduction	Motivation begins with a physiological need (a lack or deficiency) that elicits a drive toward behavior that will satisfy the original need.
3. Arousal	Organisms are motivated to achieve and maintain an optimal level of arousal.
Psychosocial Theories	
4. Incentive	Motivation results from environmental stimuli that "pull" the organism in certain directions.
5. Cognitive	Motivation is affected by attributions, or how we interpret or think about our own or others' actions.
Biopsychosocial Theory	
6. Maslow's Hierarchy of Needs	Lower motives (such as physiological and safety needs) must be satisfied before advancing to higher needs (such as belonging and self-esteem).

Maslow's Hierarchy of Needs



Yerkes-Dodson Law



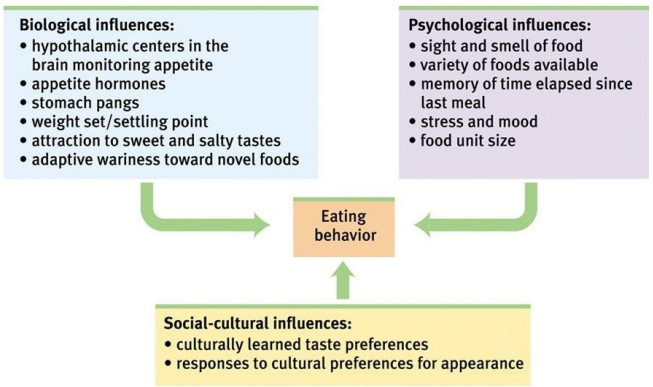
Primary incentives: motivates behavior to satisfy a physiological need.

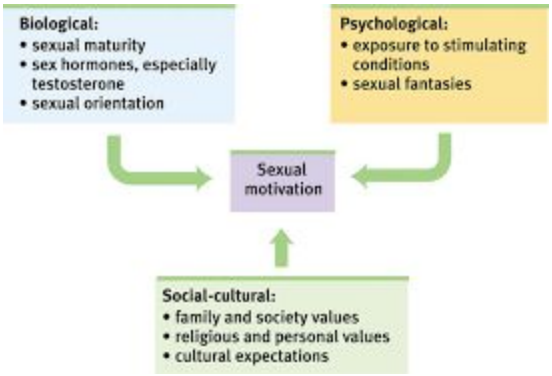
Secondary incentive: motivates behavior to satisfy a desire.

Intrinsic motivation: doing something because you generally like to do it.

Extrinsic motivation: doing something because of a promise or a reward or a threat of punishment.

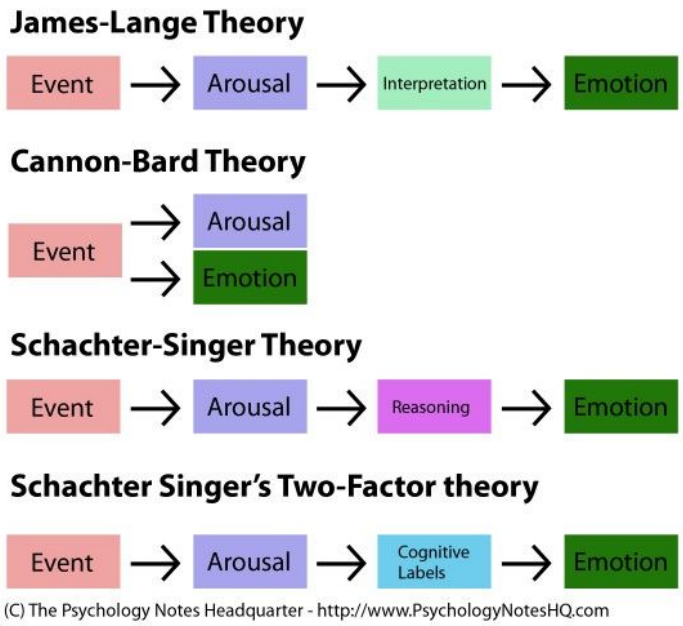
Summary of Hunger Motivation

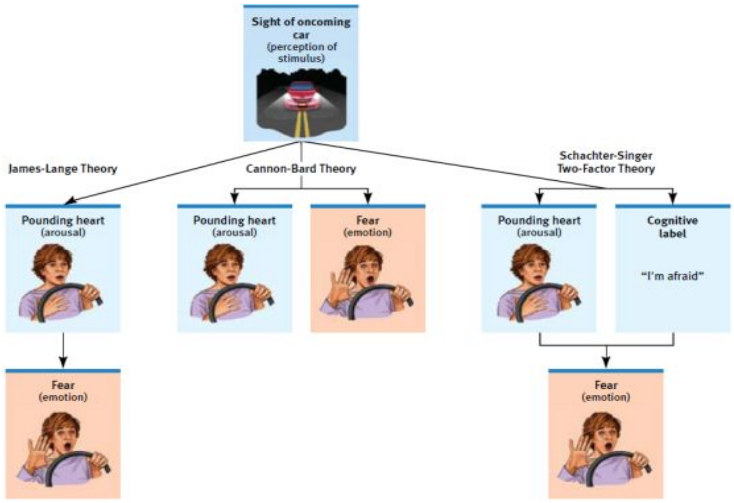




Unit 7: Emotion and Stress

Theories of Emotion

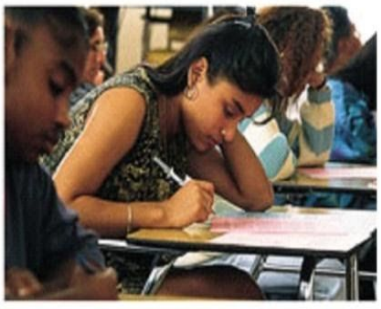




General Adaptation Syndrome (GAS): Selye's concept of the body's adaptive response to stress in three phases – alarm, resistance, exhaustion. ***Remember: Selye's three stages ARE (alarm, resistance, exhaustion) a GAS.**

1. **Alarm stage:** encounter threatening stimulus, fight or flight activated. If threat avoided, stage ends
2. **Resistance stage:** if the threat is not avoided there's prolonged state of stress. Activation of stress cannot be kept up indefinitely.
3. **Exhaustion stage:** energy and strength are used up by maintaining resistance, can become vulnerable to illness, fatigue & injury.

Cognitive appraisal of stress: stress is not merely a stimulus or a response. It is a process by which we appraise and cope with environmental threats and challenges. When short-lived or taken as a challenge, stressors may have positive effects. However, if stress is threatening or prolonged, it can be harmful



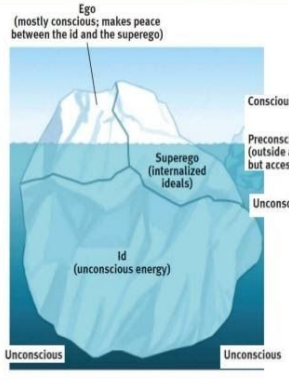
Four Types of Motivational Conflict

Conflict	Description	Example
Approach-Approach	An individual is forced to make a choice between two equally desirable goals. Both options are appealing, which makes the choice difficult.	*You are accepted to both Harvard and Dartmouth. Which do you choose?*
Avoidance-Approach	An individual is forced to make a choice between two equally undesirable or threatening options. Neither choice is good, so the individual is essentially choosing the lesser of two evils.	*Mow the lawn or wash the dishes?*
Approach-Avoidance	An individual is both attracted to and repelled by the ***same*** goal. Within one particular situation there are both positive and negative parts.	*You like to eat spicy food but it gives you heartburn.*
Multiple Approach-Avoidance	An individual must choose between ***two*** different options, both of which have positive and negative parts.	*You receive acceptance letters from two colleges and must choose to go to college in California or New York. Attending college in California allows you to be close to your family but New York has a better program for your area of interest.*

Unit 7: Personality

Psychoanalytic Theory (Freud)

Freud's Personality/Mind Iceberg



The mind is mostly below the surface of conscious awareness

Personality develops from the efforts of our **ego**, *our rational self*, to resolve tension between our **id**, based in *biological drives*, and the **superego**, *society's rules and constraints*.

The **Unconscious**, in Freud's view: *A reservoir of thoughts, wishes, feelings, and memories, that are hidden from awareness because they feel unacceptable.*

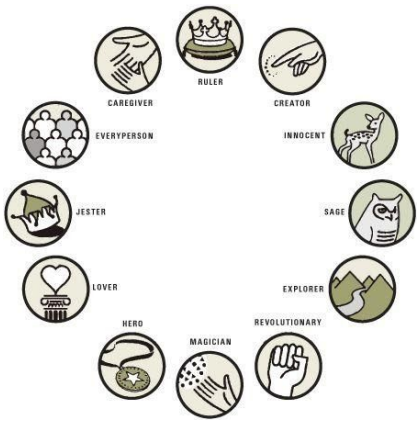
Stage	*Age Range*	*Development Task*	*Associated Personalty Traits*
Oral	0–18 months	Moving from infantile dependency toward autonomy	Dependency
Anal	18–36 months	Learning to exercise control over one's body, one's impulses, and other people	Obsessiveness
Oedipal	5–6 years	Mastering competitive urges and acquiring gender role related behaviors	Competitiveness
Latency	6 years–puberty	Investing energy in productive, rewarding tasks and activities	---
Genital	Puberty onward	Mature sexuality (sexuality blended with intimacy)	---

Note: Dashes indicate that no associated character traits exist for that stage (fixation in the latency and genital periods does not play a role in classical psychoanalytic theory).

Mechanism	Description	Example
Repression	Repression is an unconscious mechanism employed by the ego to keep disturbing or threatening thoughts from becoming conscious.	During the Oedipus complex aggressive thoughts about the same sex parents are repressed
Denial	Denial involves blocking external events from awareness. If some situation is just too much to handle, the person just refuses to experience it.	For example, smokers may refuse to admit to themselves that smoking is bad for their health.
Projection	This involves individuals attributing their own unacceptable thoughts, feeling and motives to another person.	You might hate someone, but your superego tells you that such hatred is unacceptable. You can 'solve' the problem by believing that they hate you.
Displacement	Satisfying an impulse (e.g. aggression) with a substitute object.	Someone who is frustrated by his or her boss at work may go home and kick the dog,
Regression	This is a movement back in psychological time when one is faced with stress.	A child may begin to suck their thumb again or wet the bed when they need to spend some time in the hospital.
Sublimation	Satisfying an impulse (e.g. aggression) with a substitute object. In a socially acceptable way.	Sport is an example of putting our emotions (e.g. aggression) into something constructive.

Psychodynamic Theories

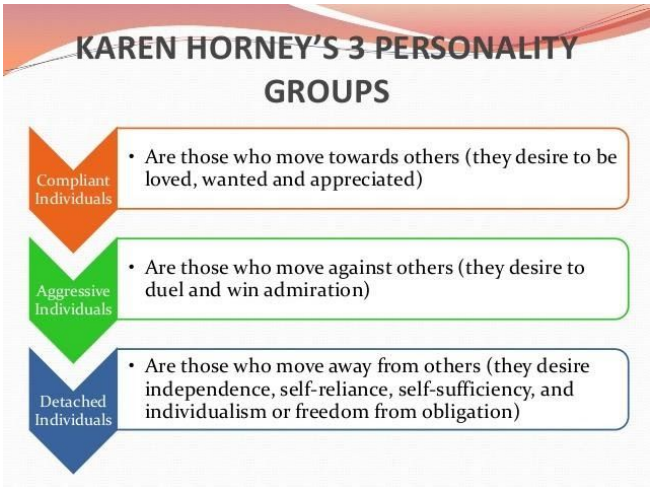
Carl Jung
- Personal and collective unconscious
- Archetypes
- Extroverts and introverts



Alfred Adler
- Striving for superiority
- Inferiority complex
- Studied birth order

First	Middle	Last	Only
Natural Leader	Flexible	Risk-taker	Close to parents
High Achiever	Easy-going	Outgoing	Self-control
Organized	Social	Creative	Leader
On-time	Peacemakers	Self-centered	Mature
Know-it-all	Independent	Financially irresponsible	Dependable
Bossy	Secretive	Competitive	Demanding
Responsible	May feel life is unfair	Bored easily	Unforgiving
Adult-pleaser	Strong negotiator	Likes to be pampered	Private
Obeys the rules	Generous	Sense of humor	Sensitive

Karen Horney
- Critical of Freud's view on female development
- Focused on the need to overcome basic anxiety and the sense of being isolated and alone in the world



Erik Erikson
- Emphasized the social elements of personality development
- Identity crisis at each stage of the lifespan

Erikson's Stage Theory in its Final Version			
Age	*Conflict*	*Resolution or "Virtue"*	*Culmination in old age*
Infancy (0-1 year)	Basic trust vs. mistrust	Hope	Appreciation of interdependence and relatedness
Early childhood (1-3 years)	Autonomy vs. shame	Will	Acceptance of the cycle of life, from integration to disintegration
Play age (3-6 years)	Initiative vs. guilt	Purpose	Humor; empathy; resilience
School age (6-12 years)	Industry vs. Inferiority	Competence	Humility; acceptance of the course of one's life and unfulfilled hopes
Adolescence (12-19 years)	Identity vs. Confusion	Fidelity	Sense of complexity of life; merging of sensory, logical and aesthetic perception
Early adulthood (20-25 years)	Intimacy vs. Isolation	Love	Sense of the complexity of relationships; value of tenderness and loving freely
Adulthood (26-64 years)	Generativity vs. stagnation	Care	Caritas, caring for others, and agape, empathy and concern
Old age (65-death)	Integrity vs. Despair	Wisdom	Existential identity; a sense of integrity strong enough to withstand physical disintegration

Humanist Theories

Carl Rogers

- Believed in the inherent goodness of people
- Self-concept is the cornerstone of personality
- Unconditional positive regard

Abraham Maslow

- Humans have a natural drive to find self-fulfillment

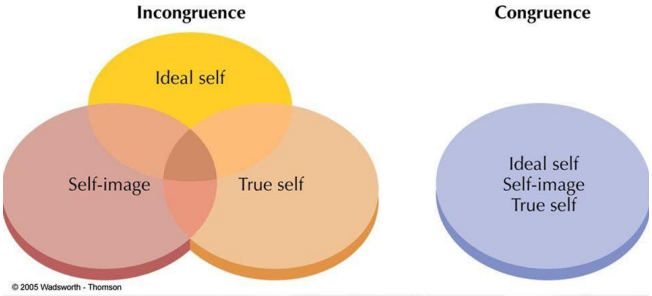
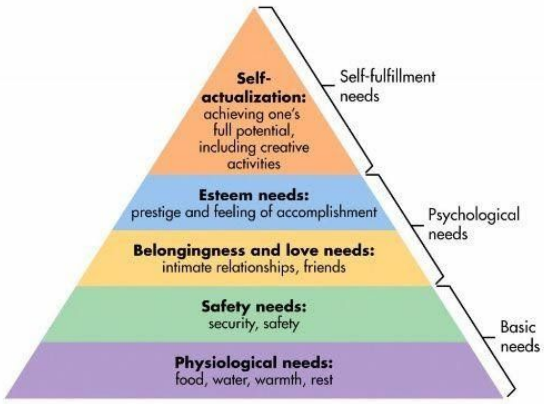


FIGURE 10.8 Incongruence occurs when there is a mismatch between any of these three entities: the ideal self (the person you would like to be), your self-image (the person you think you are), and the true self (the person you actually are). Selfesteem suffers when there is a large difference between one's ideal self and self-image. Anxiety and defensiveness are common when the self-image does not match the true self.



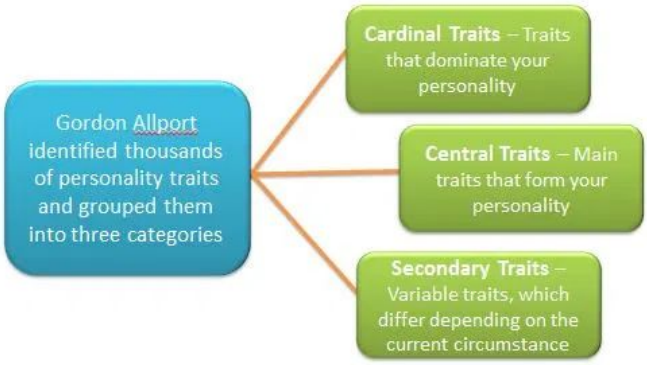
Trait Theories

Gordon Allport

- Developed a dictionary of 4,504 adjectives to describe personality traits
- Personality determined by a person's conscious motivations

Raymond Cattell

- Used statistical analysis to narrow Allport's list to 16 personality traits
- Used by psychologists today to evaluate individuals and to compare their scores with larger groups and different age ranges

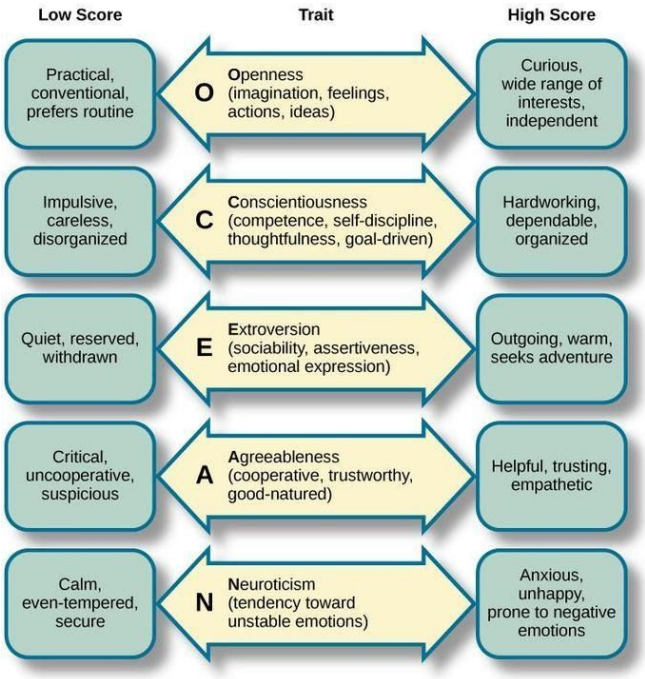


Cattell's 16 Factor Key

Factor	low score	high score
Warmth	cold, selfish	supportive, comforting
Intellect	instinctive, unstable	cerebral, analytical
Emotional Stability	irritable, moody	level headed, calm
Aggressiveness	modest, docile	controlling, tough
Liveliness	somber, restrained	wild, fun loving
Dutifulness	untraditional, rebellious	conforming, traditional
Social Assertiveness	shy, withdrawn	uninhibited, bold
Sensitivity	coarse, tough	touchy, soft
Paranoia	trusting, easy going	wary, suspicious
Abstractness	practical, regular	strange, imaginative
Introversion	open, friendly	private, quiet
Anxiety	confident, self assured	fearful, self-doubting
Openmindedness	closeminded, set-in-ways	curious, exploratory
Independence	outgoing, social	loner, craves solitude
Perfectionism	disorganized, messy	orderly, thorough
Tension	relaxed, cool	stressed, unsatisfied

Robert McCraw and Paul Costa

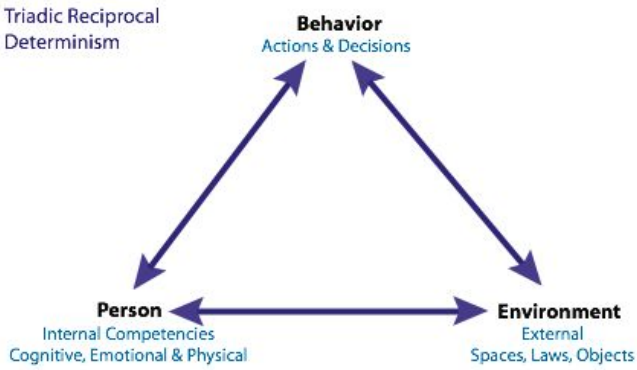
- Further narrowing of list of traits
- The Big Five Personality Traits
- Measured using an objective personality test



Social Cognitive and Behaviorist Theories

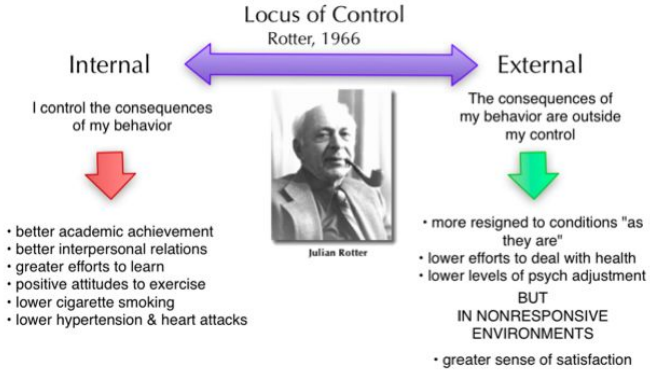
Albert Bandura

- Emphasized social learning and observation
- Reciprocal determinism
- Self efficacy = the level of confidence an individual has in regard to their abilities



Julian Rotter

- Focused on perceived control over the environment



Research Methods to Investigate Personality

Research Method	Description	Perspectives Incorporating This Method	Benefits	Weaknesses
Case Study	In-depth study of one individual	Psychoanalytic Humanistic	Less expensive than other methods.	May not generalize to the larger population.
Survey	Systematic questioning of a random sample of the population	Trait Social-Cognitive Positive Psychology	Results tend to be reliable and can be generalized to the larger population	May be expensive; correlational findings.
Projective Tests *(e.g. TAT and Rorschach)*	Ambiguous stimuli designed to trigger projection of inner dynamics	Psychodynamic	Designed to get beneath the conscious surface of a person's self-understanding; may be a good ice-breaker.	Results have weak validity and reliability.
Personality Inventories such as the MMPI (to determine scores on Big Five personality factors)	Objectively scored groups of questions designed to identify personality dispositions	Trait	Generally reliable and empirically validated.	Explore a limited number of traits.
Observation	Studying how individuals react in different situations	Social-Cognitive	Allows researchers to study the effects of environmental factors on the way an individual's personality is expressed.	Results may not apply to the larger population.
Experimentation	Manipulate variable, with random assignment to conditions.	Social-Cognitive	Discerns cause and effect.	Some variables cannot feasibly or ethically be manipulated.

Objective Personality Tests

Strengths	Weaknesses
• Relatively easy to administer • Generate a great deal of information • Large sample sizes which is more representative of the population = greater standardization and comparison • Can be translated for use across cultures • High levels of reliability and validity for recognizing mental health issues in a wide range of cultures	• Individuals from other cultures may have higher overall scores because some items do not apply to them. • Participants may not report accurately about themselves • Participants may interpret questions differently than they were intended • ***BARNUM EFFECT***: the tendency individuals have to agree with descriptions of themselves that are generally positive, but also unclear and ambiguous (i.e. horoscopes)

Projective Personality Tests

Strengths	Weaknesses
• Continue to be utilized in clinical settings • Typically used for gathering additional information about clients or providing an opportunity to stimulate discussion.	• Vulnerable to experimenter bias because of preexisting expectations that test examiners may have about how participants ought to respond. • Interrater reliability is low (when two psychologists evaluate the same participant's responses and do not come to the same conclusions) • Issues of reliability and validity in measuring personality traits and motivations, assessing mental illness, and predicting behavior