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Important People

Person	Chapters	Information
Mary Whiton Calkins	1	<ul style="list-style-type: none">● first female president of the American Psychological Association
Charles Darwin	1, 3	<ul style="list-style-type: none">● Evolutionist, influenced functionalism as well● Created natural selection
Dorothea Dix	1	<ul style="list-style-type: none">● successfully pressured lawmakers to construct & fund asylums for the mentally ill
Sigmund Freud	1, 5, 9, 10, 13	<ul style="list-style-type: none">● psychoanalytic founder● free association● Dream Analysis● Repressed Memories● Defense Mechanisms● Structures of Personalities<ul style="list-style-type: none">○ Stages of development; (Only Awesome People Learn Guitar)
G. Stanley Hall	1	<ul style="list-style-type: none">● studied kids● Studied gender and racial geneders● founder of APA
William James	1, 5, 8	<ul style="list-style-type: none">● created Functionalist school of thought; early American psychology teacher/philosopher● did research into consciousness - believed that it was a stream of thought● Carle-Lange theory
Ivan Pavlov	1, 6	<ul style="list-style-type: none">● Focused on classical conditioning● famous experiments with dogs
Jean Piaget	1, 9	<ul style="list-style-type: none">● follower of cognitive school, known for his theory of cognitive development in children● believed that children moved from stage to stage as they matured and were exposed to relevant types of experiences● Developed clinical method of research● Studied schemas, and how they changed via assimilation and accommodation
Carl Rogers	1, 10, 13	<ul style="list-style-type: none">● Humanist● developed "client-centered" therapy● Therapist should use unconditional positive regard

B.F. Skinner	1, 6, 13	<ul style="list-style-type: none"> • Founder of behaviorism • Created operant conditioning
Margaret Floy Washburn	1	<ul style="list-style-type: none"> • first woman to earn a Ph.D in psych • 2nd women president of APA
John B. Watson	1, 6	<ul style="list-style-type: none"> • classical condition pioneer • Early behaviorist; famous for the "Little Albert" experiments on fear conditioning • The B in John B Watson stands for "Behaviorism"
Wilhelm Wundt	1	<ul style="list-style-type: none"> • started german lab and was first to use empiricism • Structuralist founder • Created introspection theory
Gustav Fechner	4	<ul style="list-style-type: none"> • Founder of modern experimental psychology, influenced psychophysics • Studied thresholds
David Hubel	4	<ul style="list-style-type: none"> • Worked on visual system neurons and processing certain neurons
Ernst Weber	4, 5	<ul style="list-style-type: none"> • Studied JND and created Weber's law: States that the greater the magnitude of the stimulus, the greater the difference must be to be noticed <ul style="list-style-type: none"> ◦ It is easier to notice change in stimuli if starting point is lower (i.e. 5% volume to 10% compared to 50% volume to 55%)
Albert Bandura	6, 9, 10	<ul style="list-style-type: none"> • Did research on Observational learning/social learning • bobo doll experiment • Connected behaviorism and cognitive schools • Created the <u>Social-cognitive theory</u> • Created <u>Bandura's Triadic Reciprocity</u>
John Garcia	6	<ul style="list-style-type: none"> • studied taste aversion
Robert Rescorla	6	<ul style="list-style-type: none"> • Created <u>Rescorla's Contingency Model</u> • Classical conditioning
Edward Thorndike	6	<ul style="list-style-type: none"> • operant conditioning pioneer • Created <u>law of effect</u>
Edward Tolman	6	<ul style="list-style-type: none"> • did rat experiment • studied cognitive maps and latent learning • behaviorist
Noam Chomsky	7,	<ul style="list-style-type: none"> • Father of modern linguistics • Universal grammar - allows all to learn native language in so little time
Hermann Ebbinghaus	7,	<ul style="list-style-type: none"> • Studied memory, found serial positioning effect • Created forgetting/learning curve • Studied/found spacing effect
Wolfgang Köhler	7,	<ul style="list-style-type: none"> • Gestalt psychologist
Elizabeth Loftus	7,	<ul style="list-style-type: none"> • Cognitive psychologist • Studied memory and faults of it (eyewitness testimonies)
George A. Miller	7,	<ul style="list-style-type: none"> • studied short term memory • Cognitive psychologist • Founded working memory and chunking
Alfred Kinsey	8,	<ul style="list-style-type: none"> • Studied sexual behavior of men and women
Abraham Maslow	8, 10	<ul style="list-style-type: none"> • Humanist • Focused on human positive qualities • Created hierarchy of needs / self-actualization

Stanley Schachter	8,	<ul style="list-style-type: none"> Created two-factor theory of emotions (physiological arousal and labeling based on significance)
Hans Selye	8,	<ul style="list-style-type: none"> Stress researcher and studied endocrine system Created general adaptation syndrome (alarm, resistance, exhaustion)
Mary Ainsworth	9,	<ul style="list-style-type: none"> Strange situation experiment - we want to have a healthy attachment
Diana Baumrind	9,	<ul style="list-style-type: none"> Looked at parenting styles
Erik Erikson	9,	<ul style="list-style-type: none"> <u>Social development</u> stages - it's important to complete each stage neo-freudian
Carol Gilligan	9,	<ul style="list-style-type: none"> Focused on ethical reasoning Claimed Kohlberg's work applies most to western men
Harry Harlow	9,	<ul style="list-style-type: none"> Studied monkey's attachment
Lawrence Kohlberg	9,	<ul style="list-style-type: none"> Moral development Extended on Piaget's work
Konrad Lorenz	9,	<ul style="list-style-type: none"> Ethologist Discovered critical period and imprinting
Lev Vygotsky	9,	<ul style="list-style-type: none"> Talks about zone of proximal development and scaffolding - you need to work bit-by-bit to achieve a goal by yourself Studied children and how culture affected them
Alfred Adler	10	<ul style="list-style-type: none"> Created the <u>inferiority complex</u> Co-founder of psychoanalytic movement
Paul Costa	10	<ul style="list-style-type: none"> Created big 5 Trait theorists
Robert McCrae	10	<ul style="list-style-type: none"> Created big 5 Trait theorists
Carl Jung	10	<ul style="list-style-type: none"> psychodynamic view Created the <u>collective unconscious</u> theory
Aaron Beck	13	<ul style="list-style-type: none"> created cognitive therapy Worked on treating clinical depression - maladaptive thoughts
Albert Ellis	13	<ul style="list-style-type: none"> created <u>REBT</u> Clients should consciously work to self-defeat maladaptive beliefs and behaviors by acknowledging their irrationality
Joseph Wolpe	13	<ul style="list-style-type: none"> Early Freud follower, but didn't see it working Discovered "<u>systematic desensitization</u>" •
Solomon Asch	14	<ul style="list-style-type: none"> studied conformity via line tests (<u>video</u>) with lines and confederates
Leon Festinger	14	<ul style="list-style-type: none"> studied <u>cognitive dissonance</u> and proximity
Stanley Milgram	14	<ul style="list-style-type: none"> studied obedience via shocking tests (<u>video</u>) Studied ethics
Philip Zimbardo	14	<ul style="list-style-type: none"> Stanford prison study guy Studied impact of roles and situations on individuals behavior
Rosenthal	14	<ul style="list-style-type: none"> Did test proving self-fulfilling prophecy on school children, saying random kids would do better than they ended up doing better (<u>video</u>)

Paul Broca	3	• Found Broca's Area
Michael Gazzaniga	3	• Conducted the "HE-ART" experiments with split brain patients
Roger Sperry	3	• studied split brain patients; showed that left/right hemispheres have different functions ○ Sensory information in left side is conscious, right side is unconscious
Carl Wernicke	3	• Found Wernicke's Area
Alfred Binet	11	• Developed the first standardized intelligence test after being hired by the French govt to help identify children who have problems in class
Sir Francis Galton	11	• Created correlation and regression towards the mean • Founded psychometrics - intelligence studies • Coined term “nature vs nurture”
Howard Gardner	11	• IQ is too limited, we have multiple intelligences
Charles Spearman	11	• Created factor analysis and general intelligence
Robert Sternberg	11	• Triarchic theory of intelligence
Louis Terman	11	• Studied gifted children in longitudinal studies
David Wechsler	11	• Developed the Wechsler Adult Intelligence Scale (WAIS) and later the Wechsler Intelligence Scale for Children (WISC) - most commonly used IQ tests today • Opposed general intelligence

FRQ Tips

- [Good Document](#)
- First 1-2 minutes to read and understand the question carefully
 - Underline/circle key words and terms and cross out excess words
 - Make sure you know what the question is asking
 - Identify where “points” in the question
- Next 3-5 minutes
 - Outline your response based on the points identified previously
- 15 minutes - write response
 - No introduction or conclusions is needed - not an essay
 - **Full sentences** - make sure you reflect back to question and apply the terms
 - Be **specific** on both your references and discussion of psychological principles or problems
 - **DEAD**
 - Define
 - Explain
 - Apply
 - Don’t use personal experiences, use psych experiment
 - Describe
 - Test graders assume that you know nothing and can’t infer anything, use the three C’s
 - Clear - You want to make sure that if you are putting pen to paper, the reader of the essay will understand what you’re saying. Be direct. Don’t leave room for confusion. Their general assumption will be that you don’t know jack
 - Concise - You have a lot of tasks (defining terms, providing and explaining support, describing their relation to the question, etc), this means that you want to waste as little time as possible while doing these tasks
 - Correct - always be specific as possible to the degree which you can be sure that you’re correct
 - Don’t use eg, ie, etc
 - Skip questions that you don’t know - write for points

1. History and Approaches (2–4%)

Psychology has evolved markedly since its inception as a discipline in 1879. There have been significant changes in the theories that psychologists use to explain behavior and mental processes. In addition, the methodology of psychological research has expanded to include a diversity of approaches to data gathering.

[Chapter Quizlet](#)

AP students in psychology should be able to do the following:

- 1.1. Recognize how **philosophical** and **physiological** perspectives shaped the development of psychological thought.

1.1.1.1. *philosophical - hypothetical, ideas*

- 1.1.1.1.1. Earlier greeks such as Socrates and Plato believed in

1.1.1.1.1.1. dualism: mind and brain are independent

1.1.1.1.1.2. monism: mind and brain are combined

1.1.1.2. *physiological - physical and chemical activities*

- 1.1.1.2.1. German guy Wilhelm Wundt created a lab and started actual empirical psych.

- 1.2. Describe and compare different **theoretical approaches** in explaining behavior AND

- 1.3. Recognize the **strengths and limitations** of applying theories to explain behavior.

[Overview of schools of psych](#)

- 1.3.1. **structuralism, functionalism, and behaviorism** in the early years;

1.3.1.1. Structuralism / Introspection

- 1.3.1.1.1. Behavior is a combination of emotions and sensations

1.3.1.1.2. Just like how chemists at the time were finding out about structure of chemicals, people believed that the same could be done for psychology

1.3.1.1.3. Focused on different brain elements and what they did

1.3.1.1.4. *[S]* Focused on why the mind works

1.3.1.1.5. *[W]* Used introspection; asking people to talk about their conscious experience (sorta like free association)

1.3.1.1.5.1. Introspection wasn't always accurate

1.3.1.1.5.2. People weren't linguistic

1.3.1.2. Functionalism

- 1.3.1.2.1. Behavior is our mind reacting to the situation

1.3.1.2.2. Focused on the adaptation of human mind to different environments

1.3.1.2.3. Put emphasis on how the mind works and how it relates to consciousness

1.3.1.2.4. Attempted to apply knowledge to improve one's self

1.3.1.3. Behaviorism

- 1.3.1.3.1. Behavior is the result of prior experiences (Classical Conditioning)

1.3.1.3.2. Only observable events can be studied

1.3.1.3.3. Believed you were born as a blank slate, tabula rasa, and the environment makes you unique

1.3.1.3.4. *[S]* Uses both classical and operant conditioning

1.3.1.3.5. *[S]* Uses scientific methods

1.3.1.3.5.1. Conditioning

1.3.1.3.5.2. Reinforcement/punishment

1.3.1.3.6. *[W]* Focuses too much on nurture - suggesting that all behavior is learned

1.3.1.3.7. *[W]* Ethically, animals cannot consent for experiments

- 1.3.2. **Gestalt, psychoanalytic/psychodynamic, and humanism** emerging later;

1.3.2.1. Gestalt

- 1.3.2.1.1. Behavior is the manifestation of everything working together

1.3.2.1.2. Focused on the entire conscious experience

1.3.2.2. Psychoanalytic/Psychodynamic

- 1.3.2.2.1. Behavior is our unconscious driving us

1.3.2.2.2. *[S]* Repressed memories and childhood experiences play large role

1.3.2.2.3. *[S]* Takes into account nature and nurture

1.3.2.2.3.1. Childhood is nurture

1.3.2.2.3.2. ID, Ego, and Superego are all nature

1.3.2.2.4. *[W]* Not empirical

1.3.2.3. Humanism

- 1.3.2.3.1. Behavior is us attempting to climb Maslow's Hierarchy of Needs

- 1.3.2.3.2. Humans are can reach self-actualization if they're nurtured and have the opportunities for personal growth
- 1.3.2.3.3. Carl Roger is a founder and humanism approach is similar to Mr. Rogers (from TV)
 - 1.3.2.3.3.1. Unconditional Positive Regard
 - 1.3.2.3.3.2. You're a unique person
 - 1.3.2.3.3.3. You're the best person to solve your own problems
- 1.3.3. evolutionary, biological, cognitive, and biopsychosocial as more contemporary approaches.
 - 1.3.3.1. Evolutionary
 - 1.3.3.1.1. Behavior is learned from our ancestors
 - 1.3.3.1.2. Focused on how behaviors change from one generation to the next
 - 1.3.3.2. Biological
 - 1.3.3.2.1. Behavior is the result of chemicals, hormones, neurotransmitters, and genetics
 - 1.3.3.2.2. *[S]* Empirical, measurable, and repeatable
 - 1.3.3.2.3. *[W]* Focus on nature side too much
 - 1.3.3.2.4. *[W]* Over-generalizes and doesn't focus on individuals
 - 1.3.3.3. Cognitive
 - 1.3.3.3.1. Behavior is the result of our brain acquiring, storing, and processing the information
 - 1.3.3.3.2. *[S]* Looks at though process / memory unlike other methods
 - 1.3.3.3.3. *[W]* Oversimplifies behavior down to individual process and treats people more like robots than humans
 - 1.3.3.4. Biopsychosocial
 - 1.3.3.4.1. an integrated approach that incorporates biological, psychological, and social-cultural levels of analysis

- 1.4. Distinguish the **different domains** of psychology (e.g., biological, clinical, cognitive, counseling, developmental, educational, experimental, human factors, industrial–organizational, personality, psychometric, social).

Relativant worksheet

- 1.4.1. Biological - emphasis on what is going on inside the brain physically (neurons, hormones, etc.)
- 1.4.2. clinical - focused on evaluating, diagnosing, and treating psychological disorders
- 1.4.3. cognitive - focuses on higher mental processes (memory, language, problem solving, decision making, creativity)
- 1.4.4. counseling - similar to clinical, but with people suffering from everyday problems
- 1.4.5. developmental - looks at human development across lifespan
- 1.4.6. educational - goal is to improve students performance for those who have trouble in class
- 1.4.7. experimental - focuses on science: sensation, perception, learning, conditioning, etc.
- 1.4.8. human factors - find out how humans respond to stuff - makes sure that programs/machines are intuitive
- 1.4.9. industrial/organizational - goal is to improve workplace efficiency, often by boosting morale/productivity/attitude at workplace or by examining procedures and organizational structures
- 1.4.10. personality - interested in understanding how personality is formed and the factors that go into it
- 1.4.11. psychometric - interested on testing and recording psychological data and seeing how/why it changes
- 1.4.12. Social - focuses on interpersonal behavior and the and how people affect one another

2. Research Methods (8–10%)

Psychology is an empirical discipline. Psychologists develop knowledge by doing research. Research provides guidance for psychologists who develop theories to explain behavior and who apply theories to solve problems in behavior

Chapter Quizlet

AP students in psychology should be able to do the following:

- 2.1. Differentiate **types of research** (e.g., experiments, correlational studies, survey research, naturalistic observations, case studies) with regard to **purpose, strengths, and weaknesses**.

Relevant Quizlet

- 2.1.1. Research:
 - 2.1.1.1. Applied: Has clear, practical use
 - 2.1.1.2. Basic: Pure science that aims to increase the scientific knowledge base
- 2.1.2. Experiments:
 - 2.1.2.1. Should be both:
 - 2.1.2.1.1. Valid: Measure what they are designed to measure
 - 2.1.2.1.2. Reliable: Produce consistent results

- 2.1.2.2. Purpose: To see if there is a correlation between 2 variables
- 2.1.2.3. Strengths:
- 2.1.2.3.1. Easy to see the level of correlation of variables and draw cause-and-effect
 - 2.1.2.3.2. Only method that can draw cause-effect relationship
- 2.1.2.4. Weaknesses:
- 2.1.2.4.1. Bias can occur if not doing double-blind experiment
 - 2.1.2.4.2. Behaviors aren't authentic
 - 2.1.2.4.3. Research sample may not represent population, meaning the data is not externally valid
 - 2.1.2.4.4. Besides the independent variable, everything else must be kept the same - if not the test will not be reliable
- 2.1.3. correlational studies:
- 2.1.3.1. Purpose: Researchers do not directly manipulate variables and observe naturally, study relationship to validate prediction
- 2.1.3.2. Strengths: Allows researchers to explore questions that couldn't be done via experiment
- 2.1.3.3. Weaknesses: Cannot draw cause-and-effect
- 2.1.4. survey research:
- 2.1.4.1. Purpose: Get general idea of population
- 2.1.4.2. Strengths:
- 2.1.4.2.1. Easy to do
 - 2.1.4.2.2. Lotta info
- 2.1.4.3. Weaknesses:
- 2.1.4.3.1. Wording effect: the effect that question phrasing and order have on how people answer surveys
 - 2.1.4.3.2. Framing/wording can change the way people respond
 - 2.1.4.3.3. Participants can lie, wording effect/leading can occur
 - 2.1.4.3.4. Bias of selection: occurs when people are selected from a physical space, e.g. asking how people feel about sports outside of a football stadium
 - 2.1.4.3.5. Self-selection: occurs when participants have control whether or not they get to interview, e.g. extroverts are more likely to interview
 - 2.1.4.3.6. Pre-screening / advertisement: occurs often in medical research, bias occurs when people see the advert. E.g. people motivated to quit smoking are more likely to have stopped smoking prior to experiment
 - 2.1.4.3.7. Healthy user: occurs when the study population is healthier than general population
- 2.1.5. naturalistic observations:
- 2.1.5.1. Purpose: Observing/recording naturally occurring situation without manipulating anything
- 2.1.5.2. Strengths:
- 2.1.5.2.1. Allows for least artificial environment
 - 2.1.5.2.2. Real and authentic behavior
- 2.1.5.3. Weaknesses:
- 2.1.5.3.1. Researchers cannot manipulate anything
 - 2.1.5.3.2. Only observational, cannot see why or what's going on inside their head
- 2.1.6. case studies:
- 2.1.6.1. Purpose: Intensive studies on a single, or small group of people
- 2.1.6.2. Strengths:
- 2.1.6.2.1. Good, detailed, starting point with lots of information
 - 2.1.6.2.2. Can find out why a person became the way they did
- 2.1.6.3. Weaknesses:
- 2.1.6.3.1. Hard to draw any externally valid conclusions due to lack of empirical research
 - 2.1.6.3.2. Biased by who conducted research/wrote it
- 2.2. Describe **how research design drives the reasonable conclusions** that can be drawn (e.g., experiments are useful for determining cause and effect; the use of experimental controls reduces alternative explanations).
- 2.2.1. Experiments need to be representative, meaning that they represent the entire population the best that they can so that the information can be externally valid
- 2.2.2. Experiments should have an experiment group and a control group
- 2.2.2.1. experiment group: group that has independent variable changed

- 2.2.2.2. control group group that doesn't have anything changed, sometimes receives placebo effect
- 2.2.3. Bias should be minimal
- 2.2.3.1. Single-blind: the participants don't know what group they're in
 - 2.2.3.2. Double-blind: neither the group nor experimenters know what group they're in
- 2.3. Identify **independent**, **dependent**, **confounding**, and **control** variables in experimental designs.
- 2.3.1. Independent variable - The variable changed
 - 2.3.2. Dependent variable - The variable measured / **depends** on independent variable
 - 2.3.3. Confounding variable - Unknown factor(s) that might produce an effect in an experiment
 - 2.3.3.1. Bad to have and lowers validity - 2.3.4. Control variable - Factor that tester controls
 - 2.3.5. Degree of independent variable: difference between groups
 - 2.3.5.1. E.g. for experiment testing effects of caffeine on test, control has no caffeine, experiment group has coffee

- 2.4. Distinguish between **random assignment** of participants to conditions in experiments and **random selection** of participants, primarily in correlational **studies** and **surveys**.

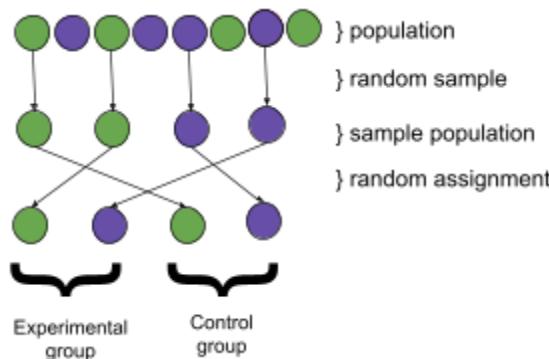
- 2.4.1. random sample: random group of people pulled from population (ie every other)

 - 2.4.1.1. Allows generalizability to population

- 2.4.2. Stratified sample: extra work the researchers do - this example would have the researchers form 2 groups - 1 for green and 1 for purple, then picking every other to get it most representative
- 2.4.3. random assignment: people from random selection are split into experiment and control groups

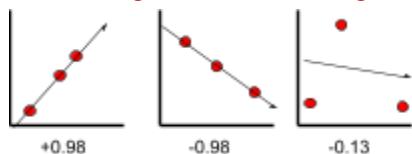
 - 2.4.3.1. What controls for pre-existing differences between groups (minimizes confounding variables)

- 2.4.4. The hope is to minimize preexisting differences between those assigned to the different groups.
- 2.4.5. Researchers want to optimize the statistical significance,



- 2.5.

- 2.5.1. **Predict the validity** of behavioral explanations based on the quality of research design (e.g., confounding variables limit confidence in research conclusions).
- 2.5.2. Valid experiments should have a strong correlation between the independent variable and the dependent variable
- 2.5.3. Positive/direct: As X goes up, Y goes up, OR As X goes down, Y goes down
- 2.5.4. Negative/inverse: As X goes up, Y goes down, OR As X goes down, Y goes up



- 1 - 0.7: strong correlation
- 0.7 - 0.5 : mediocre correlation
- 0.5 - 0.3 : might be something
- 0.3 - 0: weak correlation

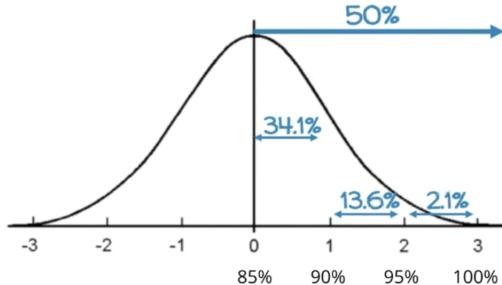
- 2.6. Distinguish the purposes of **descriptive statistics** and **inferential statistics**.

- 2.6.1. descriptive statistics: summarize data from experiments
 - 2.6.1.1. Central tendency: Mean, median, mode
- 2.6.2. inferential statistics: allow researchers to see how applicable this is to the population (form **inferences**)
 - 2.6.2.1. P value
 - 2.6.2.2. Degree of change between control and experimental groups

- 2.7. Apply basic **descriptive statistical concepts**, including interpreting and constructing graphs and calculating simple descriptive statistics (e.g., measures of central tendency, standard deviation).
- 2.7.1. [URL to worksheet](#) with standard/pos/neg
- 2.7.2. measures of central tendency
- 2.7.2.1. Mean - average
- 2.7.2.2. Mode - most common number
- 2.7.2.3. Median - middle number
- 2.7.3. Standard Deviation - mean, median, and mode all are directly in the middle

Typical Test Question:

Mrs. Rice's awesome AP Psych students took their exam and averaged 85%, and had a standard deviation of 5 points. How many students scored between a 90% and 100%?



2.7.4.

2.7.5. Memorize for AP Exam

2.7.5.1. 34.1% - first deviation

2.7.5.2. 13.6% - second deviation

2.7.5.3. 2.1% - third deviation

2.7.5.4. And the sum of all those, 50%

2.7.6. Positive skew - "Tail" is furthest from 0 - mode, median, mean from left to right

2.7.7. Negative skew - "Tail" is closest from 0 - mean, median, mode from left to right

2.7.8. [Bimodal Distribution](#): Exist when external force has affected the dataset that creates a systematic bias

2.8. Discuss the value of **reliance on operational definitions** and measurement in behavioral research.

2.8.1. operational definitions: how the behavior/result is categorized by the researchers. These should be as universal as possible to ensure maximum external validity

2.8.2. P-value: represents chance that results are purely chance

2.8.2.1. 0.05 p = 5% difference between groups due to chance

2.8.3. If p value < 0.05 it has statistical significance,

2.9. Identify how **ethical issues inform and constrain** research practices.

2.9.1. Animals cannot give consent, meaning that they cannot be ethically be involved in many experiments

2.10. Describe how **ethical** and **legal** guidelines (e.g., those provided by the American Psychological Association, federal regulations, local institutional review boards) protect research participants and promote sound ethical practice.

[Relevant worksheet #1](#)

[Relevant worksheet #2](#)

2.10.1. American Psychological Association (APA)

2.10.2. Experimenters should take not only take the ethical responsibility upon themselves, but responsibility for those who work for himself/herself

2.10.3. Any doubt should in the ethicality should result in consulting with others about the situation

2.10.4. The participants must give informed consent and shouldn't be coerced into participating

2.10.5. Researchers shouldn't offer excessive incentives

2.10.5.1. E.g. offering a free medicines as a reward for completing an experiment to sick and economically disadvantaged people Given that sick people need medication and that medication can be very expensive, the use of free medication as a carrot to tempt people into a drug trial may be unethical. People who need the medication may not feel free to refuse enrolling in the drug trial, and being in that drug trial could put them at risk of harm. Typically, small incentives (like candy) are not considered to pose a threat to informed consent

2.10.6. Participants should have the right to stop the experiment at any time

2.10.7. Investigators should honor any agreements made between themselves and the participant(s)

2.10.8. Researchers should minimize discomfort/harm. If any risk is involved, the participants must know beforehand. Any serious and lasting harm is a biiiiig no-no

2.10.9. The researchers should be as open/honest as possible.

- 2.10.10. If any deception is necessary, the participant should be completely debriefed on the nature/purpose of the study and why deception was needed after the experiment finishes
- 2.10.11. If any unwanted outcome occurs, the experimenter should acknowledge them and make an effort to remove/correct them
- 2.10.12. Any information must be kept confidential, if it cannot be the participants should know beforehand

3. Biological Bases of Behavior (8–10%)

An effective introduction to the relationship between physiological processes and behavior — including the influence of neural function, the nervous system and the brain, and genetic contributions to behavior — is an important element in the AP course.

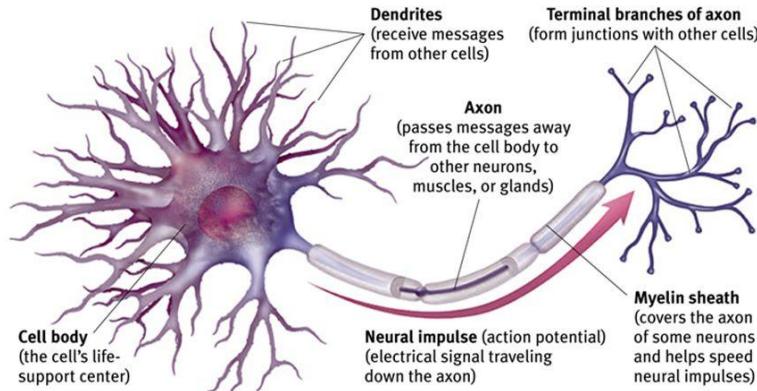
Chapter Quizlet

AP students in psychology should be able to do the following:

- 3.1.1. Identify basic **processes and systems** in the biological bases of behavior, including **parts of the neuron** and the **process of transmission** of a signal between neurons.

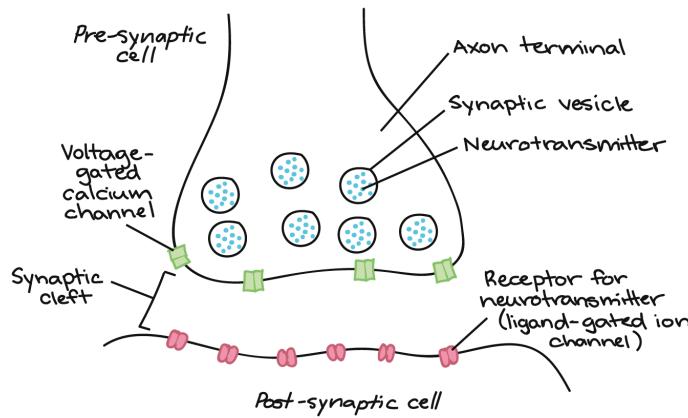
3.1.1.1. Part of a Neuron

- | | |
|----------------------------|---|
| 3.1.1.1.1. Dendrites: | Receive/detect incoming signals from other cells |
| 3.1.1.1.2. Axon: | Carries signals away from cell body to other neurons/muscles/glands |
| 3.1.1.1.3. Cell body: | The cell's life-support center |
| 3.1.1.1.4. Neural impulse: | Electric signal traveling down the axon |
| 3.1.1.1.5. Myelin Sheath: | Covers axon and speeds up neural impulses |
| 3.1.1.1.6. Terminal: | End of neural impulses travel, sends off to other nerves/muscles/glands |



3.1.2. Process of transmission

- 3.1.2.1. Good notes on this subject
- 3.1.2.2. Neural transmission occurs when a neuron is fired, or activated by a stimulus (pressure, heat, light, or another cell)
- 3.1.2.3. To actually fire, it must reach the neural threshold, or the level of stimulation required for it to fire
 - 3.1.2.3.1. Communications between Neurons
 - 3.1.2.3.1.1. Synapses - gaps between neurons
 - 3.1.2.3.1.2. Message travels through axon to synaptic knob on axon's tip
 - 3.1.2.3.1.3. Synaptic vesicles open and release neurotransmitter into synaptic gap
 - 3.1.2.3.1.4. Neurotransmitter fits into receptor sites on receiving dendrite, causing it to be more or less likely to fire
 - 3.1.2.3.2. Resting Potential: The default state of an unstimulated neuron, 70 millivolts
 - 3.1.2.3.3. Action Potential: The potential created when the stimulus is high enough to reach the neural threshold, causing the neuron to fire.
 - 3.1.2.3.3.1. The all or none principle is the fact that once a neuron cell is triggered, the neural impulse will travel the entire neuron



3.1.2.4. Types of Neurotransmitters

- 3.1.2.4.1. Inhibitory: stops signal
- 3.1.2.4.2. Excitatory: sends signal

Name	Function	Effect of Deficit	Effect of Surplus
Acetylcholine (Ach)	Excitatory: Released by motor neurons. Controls <u>muscle contraction</u> , involved in attention, <u>memory</u> , learning, and general intelligence stuff	alzheimer's	Severe muscle spasms
Serotonin (LSD)	Inhibitory: Moods and emotional states, hunger, sleep, and arousal	Depression & other mood disorders	
Dopamine	Inhibitory: Pleasurable sensation involved in voluntary movement, attention, and learning	Parkinsons	Schizophrenia, drug addiction
GABA (Tranquilizers)	Inhibitory: helps offset excitatory messages and regulates daily sleep-wake cycles	anxiety, seizures, tremors, and insomnia	Sleep and eating disorders
Glutamate	Excitatory: used in memory, learning, movement. Helps messages across the synapse more efficiently	N/A	Epileptic seizures
Norepinephrine	Excitatory: used for arousal in the flight/fight response, modulation of mood, plays role in learning and memory retrieval	Mental disorders, especially depression	Anxiety
Endorphins (Runners High)	Inhibitory: involved in pain perception and positive emotions. (Opiates)	Body experiences pain	Body may not warn about pain
Insuline	Regulates blood sugar levels		
Melatonin	Maintains sleep-wake cycles		

3.1.3. Discuss the **influence of drugs on neurotransmitters** (e.g., reuptake mechanisms, agonists, antagonists).

- 3.1.3.1. reuptake mechanisms: a neurotransmitter's reabsorption by the sending neuron.
- 3.1.3.2. Agonists: a chemical that mimics the action of a neurotransmitter
- 3.1.3.3. Antagonists: a chemical which blocks the activity of neurotransmitters

3.1.4. Discuss the effect of the **endocrine system** on behavior.

- 3.1.4.1. The endocrine system is how our body relays information from one section to another
- 3.1.4.2. System works via sending hormones from glands that affect body functions

Endocrine Gland	Location	Function

Pituitary (Main)	Brain	Growth, regulates thyroid, pancreas, adrenal cortex, and gonads
Posterior	Brain	Regulates water and salt metabolism
Thyroid Gland	Throat	Regulates metabolic rates
Pancreas	Abdomen	Regulates sugar metabolism by creating insulin and glucose
Pineal gland		Releases melatonin - hormone that helps synchronize sleep-wake cycle
Pituitary gland		Secrets melatonin

3.1.5. Differences between hormones and neurotransmitters

Hormones	Neurotransmitters
Trigger range of responses	Trigger specific response
In blood stream	Travels via neurotransmitters
Long lasting effect	Short lasting effect

3.1.6. Describe the **nervous system** and its **subdivisions and functions**:

3.1.6.1. central and peripheral nervous systems (CNS/PNS);

3.1.6.1.1. CNS - Central Nervous System

3.1.6.1.1.1. Made up of brain and spinal cord

3.1.6.1.1.1.1. Controls reflexes

3.1.6.1.2. PNS - Peripheral Nervous System - sensory and motor nerves which transmit information

3.1.6.1.2.1. Made up of all other nerves in the body

3.1.6.1.2.2. Somatic Nervous System (voluntary)

3.1.6.1.2.2.1. Connect to voluntary skeletal muscles and to sensory receptors

3.1.6.1.2.2.2. Controls skeletal muscles

3.1.6.1.2.2.3. Interneurons: Neurons that interact with other neurons - 95% of neurons

3.1.6.1.2.2.4. Afferent: Nerves that send information to the brain

3.1.6.1.2.2.5. Efferent: Nerves that convey information from brain

3.1.6.1.2.2.5.1. Think afferent = arriving, efferent = exiting OR

3.1.6.1.2.2.5.2. SAME (*sensory afferent, motor efferent*)

3.1.6.1.2.3. Autonomic Nervous System (involuntary)

3.1.6.1.2.3.1. Controls cardiac muscles, smooth muscles, and glands (i.e. heart and lungs) but NOT REFLEXES (that's the spinal cord in the CNS)

3.1.6.1.2.3.2. Sympathetic

3.1.6.1.2.3.2.1. Mobilizes the body to respond to emergencies

3.1.6.1.2.3.2.2. Fight or flight reaction

3.1.6.1.2.3.3. Parasympathetic

3.1.6.1.2.3.3.1. Calms you down

3.1.6.1.2.3.3.2. Helps to conserve the body's energy (digestion, blood pressure, heart rate)

3.1.6.1.2.3.3.3. Returns body back to normal after fight or flight reaction

3.1.6.1.2.3.4. Think sympathetic is sympathetic when you're scared, parasympathetic acts as a parachute to help you calm down

3.1.6.2. major brain regions, lobes, and cortical areas;

3.1.6.2.1. major brain regions:

3.1.6.2.1.1. Hindbrain - Responsible for reflective automatic behavior, oldest part to develop evolutionarily, composed of:

3.1.6.2.1.1.1. **Cerebellum:** Controls muscle tone, coordination, balance (good in athletes)

- 3.1.6.2.1.1.2. **Medulla Oblongata:** Controls involuntary actions such as breathing, digestion, heart rate, swallowing (basic life functions)
- 3.1.6.2.1.1.3. **Reticular Activating System (RAS):** controls arousal (wakefulness and alertness)
- 3.1.6.2.1.1.4. **Pons:** Passes neural information from one half of the brain to the other and also controls some involuntary bodily functions i.e. intensity and frequency of breathing and also controls our sleep and consciousness cycle (REM Sleep)

- 3.1.6.2.1.1.4.1. pons = ponds = peaceful = wakefulness + restfulness + REM
- 3.1.6.2.1.1.4.2. pons = ponzzzzz (sleep)

3.1.6.2.1.2. Midbrain - composed of:

- 3.1.6.2.1.2.1. **Tectum:** Brain's roof
- 3.1.6.2.1.2.2. **Tegmentum:** Brain's floor
- 3.1.6.2.1.2.3. Both control visual and auditory reflexes, such as orienting to a light/sound

3.1.6.2.1.3. Forebrain - composed of:

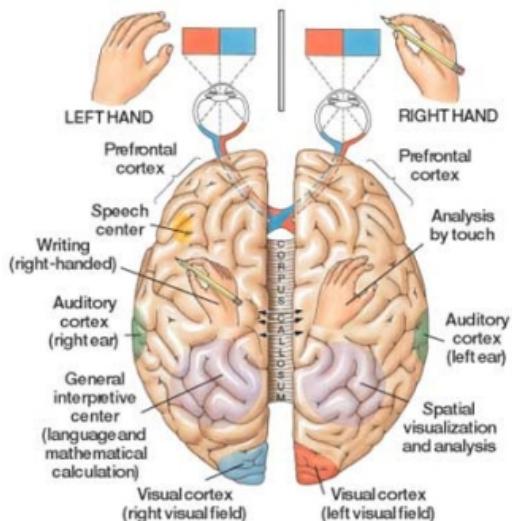
- 3.1.6.2.1.3.1. **Limbic System:** Emotional center of brain
- 3.1.6.2.1.3.2. **Thalamus:** receives and relays (afferent) sensory information from visual and auditory systems
- 3.1.6.2.1.3.3. **Hippocampus:** processing and integrating (creating) memories - damage to hippocampus is anterograde amnesia and stops creation of new memories and of memory that caused damage to hippocampus
- 3.1.6.2.1.3.4. **Amygdala:** emotion center, influence fear and aggression, decides if and where memories are stored
- 3.1.6.2.1.3.5. **Hypothalamus:** 4 F's, regulate hunger, thirst, body temp, sexual behavior
- 3.1.6.2.1.3.6. **Cerebral Cortex:** Here
- 3.1.6.2.1.3.7. **Left Hemisphere**
- 3.1.6.2.1.3.7.1. Controls the right side of your body
 - 3.1.6.2.1.3.7.2. Logical and calculative
 - 3.1.6.2.1.3.7.3. Language
- 3.1.6.2.1.3.7.3.1. Broca's Area: effects ability for individual to speak and use expressive language - Broca like Boca in spanish (moth)
 - 3.1.6.2.1.3.7.3.2. Wernicke's Area: effects ability to understand others speaking
 - 3.1.6.2.1.3.7.3.3. I'm talking to my BRO(ca) and listening to (wer)NICK(e)
 - 3.1.6.2.1.3.7.3.4. Damage to the left hemisphere that results in impairment of language is called aphasia
- 3.1.6.2.1.3.8. **Right Hemisphere**
- 3.1.6.2.1.3.8.1. Controls the left side of your body
 - 3.1.6.2.1.3.8.2. Imaginative, spatial, and creative
 - 3.1.6.2.1.3.8.3. Muscle movement

3.1.6.2.1.4.

- 3.1.6.2.1.5. **Corpus callosum:** the large band of fibers connecting the left and right brain together that allows two sides to communicate to one another
- 3.1.6.2.1.6. **Pituitary gland:** main gland, controls many other endocrine glands

3.1.6.2.2. Lobs

- 3.1.6.2.2.1. **Frontal:** focuses on deeper thinking - reasoning, planning, speech, movement, emotion, and problem solving
- 3.1.6.2.2.2. **Parietal:** focuses on sensory processing
- 3.1.6.2.2.3. **Occipital:** focuses on vision processing function
- 3.1.6.2.2.4. **Temporal:** focuses on auditory processing, left side receives right ear information
- 3.1.6.2.2.5. Think "FPOT" for Frontal Parietal Occipital Temporal
- 3.1.6.2.3. cortical areas
- 3.1.6.2.3.1. **Motor cortex:** area in the frontal lobe that controls voluntary movement



- 3.1.6.2.3.2. Sensory cortex: area in parietal lobe that registers and processes body touch and movement sensations
- 3.1.6.2.3.3. Cerebral cortex: the body's control and information processing center, focuses on thinking, planning, language, fine motor control
- 3.1.6.3. brain lateralization and hemispheric specialization.
- 3.1.6.3.1. brain lateralization
- 3.1.6.3.2. hemispheric specialization
- 3.1.7. Discuss the role of **neuroplasticity** in traumatic brain injury.
- 3.1.7.1. Plasticity is the brain's ability to adapt and change after it is damaged, especially during childhood.
This is oftentimes done by reorganizing or building new pathways
- 3.1.8. Recount **historic** and **contemporary research strategies** and **technologies** that support research (e.g., case studies, split-brain research, imaging techniques).
- 3.1.8.1. Brain imaging techniques:
- | Name | Function |
|--|---|
| EEG (electroencephalogram) - Functional | Measures changes in brain electrical activity via electrodes placed on ones head. Allows scientists to view brain during different states |
| CAT (computerized axial tomography) - Imaging | X-ray of brain from different angles |
| MRI (magnetic resonance imaging) - Imaging | Uses magnetic fields to see 3d image of brain, can only take single image |
| fMRI (functional magnetic resonance imaging) - Function | Rapid MRIs taken sequentially, allow scientists to view blood-flow and oxygen in the brain while it's working |
| PET scan (positron emission tomography) - Function | See glucose in brain, allows scientists to view what areas are active in brain during activity/task/state |

- 3.1.9. Discuss psychology's abiding interest in how **heredity**, **environment**, and **evolution** work together to shape behavior.
- 3.1.9.1. Heredity/Evolution: Nature side of debate, focuses on how we inherited traits and characteristics (i.e. eye color) are passed from parent to offspring
- 3.1.9.2. Environment: Nurture side of debate, believes that we act the way we do because of prior experiences
- 3.1.10. Predict how **traits** and **behavior** can be selected for their **adaptive value**.
- 3.1.10.1. Trait: Distinctive characteristics or behavior patterns that are determined by genetics
- 3.1.10.2. Phenotype: Physical / observable trait
- 3.1.10.3. Traits / behaviors change over time. This is called adaptive value. It represents the usefulness of a trait in a environment
- 3.1.11. Nature vs Nurture:
- 3.1.11.1. Twin Studies:
- 3.1.11.1.1. Identical twins - monozygotic

4. Sensation and Perception (6–8%)

Everything that organisms know about the world is first encountered when stimuli in the environment activate sensory organs, initiating awareness of the external world. Perception involves the interpretation of the sensory inputs as a cognitive process.

Chapter Quizlet

AP students in psychology should be able to do the following:

- 4.1. Discuss **basic principles of sensory transduction**, including absolute threshold, difference threshold, signal detection, and sensory adaptation.
- 4.1.1. Sensation: receiving raw information from environment
- 4.1.2. Perception: understanding and categorizing the information we sense

- 4.1.3. sensory transduction: The transforming of stimulus energies into neural impulses
- 4.1.4. absolute threshold: The minimum stimulation needed to detect a particular stimulus 50% of the time
- 4.1.5. Preconscious processing:
- 4.1.5.1. Processing occurs when we are presented with stimuli so rapidly that we aren't consciously aware of them.
 - 4.1.5.2. Subliminal processing: Below one's absolute threshold for conscious awareness, but still affects behavior (priming)
 - 4.1.5.2.1. E.g. showing a person a picture of a rabbit then asking them how to spell "Hair/Hare", most of the time they'll spell it "Hare" because the image activated a part of their memory subconsciously
 - 4.1.5.3. Tip-of-the-tongue phenomenon: when we try to recall something that we already know but that isn't consciously available for retrieval
- 4.1.6. Discrimination threshold: the ability to distinguish the difference between 2 stimuli
- 4.1.7. difference threshold (JDN): the minimum distance between 2 stimuli that they can be detected
 - 4.1.7.1.1. Your eyes are at their JND at eye doctors if you're having to squint to tell difference between different lenses
- 4.1.8. signal detection theory: predicts how and when we detect the presence of a faint stimulus ("signal") amid background stimulation ("noise"). Assumes that there is no single absolute threshold and that detection depends partly on a person's experience, expectations, motivation, and level of fatigue
- 4.1.9. Types of errors:

	Reported Stimuli	No report of stimuli
Signal Present	Hit	Miss (Type 1 error)
Signal Absent	False Alarm (Type 2 error)	Correct Rejection

- 4.1.10. sensory adaptation: diminished sensitivity as a consequence of constant stimulation causing the brain to focus on more important things - below our consciousness
- 4.1.11. Habituation: process of becoming accustomed to stimulus, noticing it less over time. Occurs with repeated exposure to stimulus - more of a conscious choice
- 4.1.12. Dishabituation: noticing stimulus again, either because it changed or because it was taken away and represented
- 4.1.13. **Describe sensory processes** (e.g., hearing, vision, touch, taste, smell, vestibular, kinesthesia, pain), including the **specific nature** of energy transduction, **relevant anatomical structures**, and **specialized pathways** in the brain for each of the senses.
- 4.1.14. Good review sheet
- 4.1.15. Sensory organs have receptor cells, which are specialized cells designed to detect a specific type of energy in a specific region, known as the receptive field
 - 4.1.15.1. e.g. your vision system has specific cells for detecting light waves
- 4.1.16. Hearing
 - 4.1.16.1. "energy" senses, involve our senses "absorbing" energy (soundwaves) and converting them to neural impulses.
 - 4.1.16.2. Sounds waves have 2 physical characteristics:
 - 4.1.16.2.1. Wave length: frequency/pitch of sound
 - 4.1.16.2.2. Amplitude: loudness of sound
 - 4.1.16.3. Outer Ear → Eardrum → Hammer, Anvil, Stirrup (middle ear) → Cochlea (inner ear) → Basilar Membrane → Hair cells → Auditory Nerve
 - 4.1.16.4. Odd → Erica → HAS → Cooked → Bad → Hamburgers → Again
- 4.1.17. Vision
 - 4.1.17.1. "energy" senses, involve our senses "absorbing" energy (light) and converting them to neural impulses.
 - 4.1.17.2. Light comes from a small portion of the electromagnetic spectrum.
 - 4.1.17.3. Light has 2 physical characteristics:
 - 4.1.17.3.1. Wavelength: Determines the hue/color and amplitude/brightness,
 - 4.1.17.3.2. Amplitude: Height of the light wave, determines the intensity/brightness of the light
 - 4.1.17.4. Cornea → Pupil → Lens (accommodation, focuses light on retina) → Retina (Rods and Cones) → Bipolar Cells → Ganglion Cells → Optic Nerve → optic chiasm (sending left eye information to the right side and visa-versa) → Visual cortex (for processing)

- 4.1.17.5. Chris → Plays → Legos → Roughly → Outside
- 4.1.18. Touch - pressure, pain, and temperature
- 4.1.18.1. Skins has cutaneous and tactile receptors that provide information about pressure, pain, and temperature.
- 4.1.18.1.1. Pressure and movement neurons
- 4.1.18.1.1.1. Fast-conducting myelinated neurons
- 4.1.18.1.1.2. Send information to spinal cord, then to the medulla oblongata, then thalamus, and finally somewhere in the somatosensory cortex
- 4.1.18.1.2. Pain neurons
- 4.1.18.1.2.1. C fibers
- 4.1.18.1.2.1.1. Unmyelinated and cause throbbing sense of chronic pain
- 4.1.18.1.2.2. A-delta fibers
- 4.1.18.1.2.2.1. Myelinated
- 4.1.18.1.2.2.2. Send info about acute pain
- 4.1.18.1.2.3. Both send signals that first reach the spinal cord and trigger release of “Substance P”
- 4.1.18.1.2.3.1. Substance P is a chemical signal similar to a neurotransmitter that alerts the spinal cord to the presence of a painful stimulus
- 4.1.18.1.2.3.2. Sent to thalamus and then to the cingulate cortex, which is responsible for attention
- 4.1.18.1.2.3.3. Brain reacts by “pain-gating” to reduce pain
- 4.1.18.1.2.3.3.1. Gate-control: spinal cord contain two types of fibers:
- 4.1.18.1.2.3.3.1.1. Small fibers: open the gate to the brain, making individual feel pain
- 4.1.18.1.2.3.3.1.2. Large fibers: close the gate to the brain, making individual not feel pain
- 4.1.18.1.2.3.4. Rubbing the areas surrounding the area that is causing pain can stop some of the pain signals from reaching the brain
- 4.1.18.1.3. Temperature Neurons
- 4.1.18.1.3.1. Cold fibers: fire in response to cold stimulus
- 4.1.18.1.3.2. Warm fibers: fire in response to warm stimulus
- 4.1.19. Taste - gustation
- 4.1.19.1. “chemical” sense, involve the senses absorbing chemicals and converting them to neural signals.
- 4.1.19.2. Tongue is covered with small papillae, which contain taste buds (receptors for gustatory information) which travel to the medulla oblongata and then to the pons and the thalamus. It is then relayed to the gustatory area of the cerebral cortex, as well as the hypothalamus and limbic system
- 4.1.19.3. Five basic tastes:
- 4.1.19.3.1. Sweet: we like sweet because it often comes with calories
- 4.1.19.3.2. Salty
- 4.1.19.3.3. Bitter: we dislike bitter because poisonous plants taste bitter
- 4.1.19.3.4. Sour
- 4.1.19.3.5. Umami (savory)
- 4.1.19.4. 2 conditions:
- 4.1.19.4.1. Supertasters: a bunch of taste buds
- 4.1.19.4.2. Nontasters: fewer taste buds than normal
- 4.1.20. Smell or olfaction
- 4.1.20.1. “chemical” sense, involve the senses absorbing chemicals and converting them to neural signals.
- 4.1.20.2. Scent reaches nasal cavity where there are olfactory cells. These send info to the olfactory cortex and the limbic system.
- 4.1.20.3. Skips the thalamus and instead routed through the olfactory bulb
- 4.1.20.4. Because the amygdala and hippocampus connect to olfactory nerves, certain smells trigger different memories
- 4.1.21. Vestibular- balance
- 4.1.21.1. Vestibular sacs in the inner ear have receptors sensitive to tilting
- 4.1.22. Kinesthesia - location of body parts
- 4.1.22.1. Joints and ligaments transmit information about location/orientation/position of body parts
- 4.2. Explain common sensory disorders (e.g., visual and hearing impairments).

4.2.1. Color Blindness

- 4.2.1.1. Dichromats: people who cannot distinguish between red/green or blue/yellow
- 4.2.1.2. Monochromats: people who only see in shades of black and white
- 4.2.1.3. Color blindness is genetic and occurs much more often in males
- 4.2.1.4. Trichromatic Theory
 - 4.2.1.4.1. Developed by Young-Helmholtz
 - 4.2.1.4.2. Believes that we have **three (tri)** different color receptor (**RGB!**), which when stimulated in combination can produce any color
- 4.2.1.5. Opponent Process Theory
 - 4.2.1.5.1. Our understanding of colors is based off of “switches” (red/green, yellow/blue, white/black)
 - 4.2.1.5.2. E.g. if you stare at a red dot on a page and turn away to a blank piece of white paper, you will see a green dot. This is because the red cell receptors have become fatigued, this is known as afterimage

4.2.2. Deafness

- 4.2.2.1. Conductive deafness: damage to outer or middle ear, e.g. eardrum
- 4.2.2.2. Sensorineural/nerve deafness: damage to cochlea's receptor cells) or to the auditory nerves

4.3. Discuss how **experience and culture** can influence perceptual processes (e.g., perceptual set, context effects)

- 4.3.1. Perceptual adaptation: notion that you can adapt to changes to vision/perception
- 4.3.2. Perceptual Sets: top-down processing - what our brain jumps to when it sees an image based off of what we believe
 - 4.3.2.1. Context Effects: filling in the gaps with information given. E.g. “_eel is on the wagon” you think “Wheel” or “_eel is on the orange” you think “Peel”
 - 4.3.2.2. Cultural Effects: how our culture affects how we fill in the blanks
 - 4.3.2.3. Emotion and motivation: how our emotional state/drives change how we think

4.4. Describe general principles of organizing and integrating sensation to promote stable awareness of the external world (e.g., Gestalt principles, depth perception) **AND**

4.5. Explain the role of **top-down** processing in producing vulnerability to **illusion**.

4.5.1. Perceptual Processes:

- 4.5.1.1. Top-down processing: our minds interpretation based off of prior knowledge/information such as expectations
 - 4.5.1.1.1. You start by using the *top* of your head (your brain)
- 4.5.1.2. Bottom-up processing: analysis that begins with the sensation, and works up to the brain's integration of sensory information
- 4.5.2. E.g. someone bites into a lemon. The neurons firing alerting the brain of the taste is bottom-up. Labeling the lemon “sour” is top-down
- 4.5.3. Because visual perception is very complex, our mind often takes shortcuts and educated guesses relies on top-down processing which can cause us to jump to conclusions and get duped by illusions
 - 4.5.3.1. Monocular depth cues: we only need one eye to see
 - 4.5.3.1.1. Relative size: Images that are farther from us project smaller images onto the retina than closer images. Therefore, we believe that images that appear to be larger to be closer to us
 - 4.5.3.1.2. Texture gradient: textures/patterns on objects, appear more dense the further we are from them. E.g. if we see pebbles up close we can see they're imperfect and jagged, while far away they appear smooth
 - 4.5.3.1.3. Interposition/occlusion: occurs when a near object partially blocks the view of an object behind it
 - 4.5.3.1.4. Linear perspective: parallel lines seem to draw closer together as they recede into the distance and meet at vanishing point (Train tracks)
 - 4.5.3.1.4.1. Objects closer to the vanishing point are further away
 - 4.5.3.1.5. Aerial perspective: stuff like dust/fog/moisture tend to obscure objects in the distance more than nearby objects
 - 4.5.3.1.6. Relative Clarity: explains why fuzzy/less distinct images appear to be further away
 - 4.5.3.1.7. Motion parallax: when riding a train, a person sees closer objects move quicker than further objects
 - 4.5.3.1.7.1. NOTE: Needs motion, cannot be perceived in 2D image
 - 4.5.3.2. Binocular depth cues: we need both eyes to see
 - 4.5.3.2.1. Stereopsis: 3D image of world resulting from binocular vision

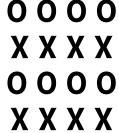
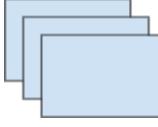


- 4.5.3.2.2. Retinal Convergence: depth cue that results from the fact your eyes must be inward slightly to focus on near objects - the closer the object, the more inward your eyes must look
- 4.5.3.2.3. Retinal/ Binocular disparity: the closer an object is, the less similar the information arriving at each eye will be
- 4.5.3.2.3.1. If you alternate between covering your left/right eye, closer objects you look at will have very different images coming to your eyes, while further objects will result in more similar images

4.5.3.3. Binocular cues allow our vision to have depth perception, which is at least partially innate

4.5.4. Gestalt approach - form perception based on looking at image as a whole top-down theory

- 4.5.4.1. Figure ground: The organization of the visual field into objects (the figures) that stand out from their surroundings (the ground). E.g. listening to someone talking in crowded room - their voice becomes the figure - the other voices become the ground
- 4.5.4.2. Gestalt principles represent the law of Pagnanz - we tend to see objects in their simplest forms
- 4.5.4.3. Groupings:

	Reversible - we can either see a vase or two faces
	Proximity - we tend to objects near each other forming groups. E.g. see 3 pairs of lines rather than 6 individual lines
	Similarity - the tendency to prefer to group like objects together. E.g. we tend to see these as rows of o's and x's rather than columns of ox's
	Symmetry - tendency to perceive preferentially forms that make up mirror images. E.g. we see the top figure forming a circle and the bottom forming a triangle
	Continuity - tendency to perceive preferentially fluid or continuous forms, rather than jagged or irregular ones. E.g. we see a curved line (AB) and a straight line (CD) rather than AC and DB
	Closure - the tendency to see closed objects rather than those that aren't complete. E.g. seeing 3 rectangles, despite there being only 1 complete one
	Connectedness - perceiving the two circles and a unit as a single unit because they're connected

4.5.4.4. Feature detectors: the brain's ability to identify specific components of visual stimuli such as corners or edges. This can help us be more aware of the environment

4.5.4.5. Constancy:

4.5.4.5.1. We tend to believe that a stimulus remains the same size, shape, brightness, weight, and/or volume even though it doesn't always appear to.

4.5.4.5.2. This is why someone who has never seen airplanes on the ground will have a difficult time perceiving the actual size of the plane because their experience with the size of the object when airborne

4.5.4.5.3. Both the ability to achieve consistency, which is innate, and the experience, which is learned, both contribute to our development of the various types of constancy

4.5.4.6. Motion Detection:

4.5.4.6.1. We perceive motion through two processes

4.5.4.6.1.1. Records the changing position of the objects as it moves across the retina

4.5.4.6.1.2. Tracks how we move our head to follow the stimuli

4.5.4.6.2. For both cases, the brain interprets the information with special motion detectors

4.5.4.6.3. Apparent movement

4.5.4.6.3.1. Phi phenomenon: blinking lights, giving the appearance of movement

4.5.4.6.3.2. Stroboscopic effect: pictures appearing at a fast enough frame rate that they appear to move

4.5.4.6.3.3. Autokinetic effect: light appears to twinkle in darkness

4.6. Discuss the role of **attention** in behavior.

4.6.1. Attention manages what we focus on, allowing us to focus on a particular aspect while our body receives massive amounts of input from our sensory system. Acts as a bottleneck, allowing only most important stuff in

4.6.2. Selective attention: We focus on one thing and ignore all other stimuli

4.6.2.1. Filter Theories: propose that stimulus must pass through some form of filter to enter attention

4.6.2.1.1. Something higher up allows certain information through, such as our name

4.6.2.2. Attentional Resource: propose that we have a certain amount of attention that we can distribute

4.6.2.2.1. E.g. if you're deeply engrossed in a book, you are giving it nearly all of your attention, meaning that only strong stimulation could capture your attention

4.6.2.2.2. This theories sucks because it doesn't account for more important stimulus - e.g. if a conversation is occurring near it is more likely to interfere with your reading than some other nonverbal noise that is happening at the same distance

4.6.2.3. Inattentional Blindness: Ignoring an obvious stimuli even after acknowledging it because our attention is elsewhere. E.g. not hearing your parents when you're jamming out to Duke Ellington

4.6.2.4. Change blindness: the tendency to fail to detect changes in environment because we aren't focusing our attention on it. Occurs very often and we don't notice it. [Good video on change blindness](#)

4.6.2.5. Cocktail party phenomenon: our ability to focus on a single conversation, but still process other noises so that if someone calls our name we can acknowledge it and respond

4.6.3. Divided attention: trying to focus on more than one task at a time

4.6.3.1. Most difficult when attending to two or more stimuli that activate the same sense, such as watching tv and reading or rocking out to zeppelin and comprehending someone talk

4.6.3.2. Ability to divide attention declines with age (strong inverse relation)

4.6.4. Challenge common beliefs in **parapsychological phenomena**:

4.6.5. Extrasensory Perception (ESP): perception can occur apart from sensory input

4.6.5.1. Telepathy: share thoughts

4.6.5.2. Clairvoyance: see events that you aren't around

4.6.5.3. Precognition: predict future events

4.6.6. Parapsychology:

4.6.6.1. Psychokinesis: move stuff with your mind

4.6.7. BULL - it's not reproducible

5. States of Consciousness (2-4%)

Understanding consciousness and what it encompasses is critical to an appreciation of what is meant by a given state of consciousness. The study of variations in consciousness includes an examination of the sleep cycle, dreams, hypnosis, circadian rhythms, and the effects of psychoactive drugs.

Chapter Quizlet

AP students in psychology should be able to do the following:

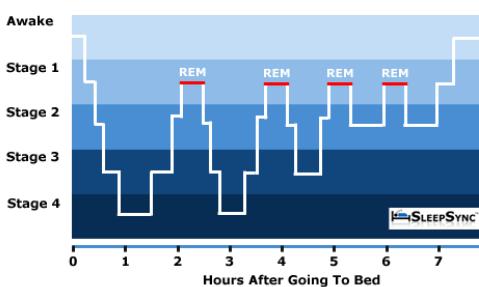
5.1. Describe various **states of consciousness** and their **impact on behavior**.

5.1.1.

States that occur spontaneously	Daydreaming	Drowsiness	Dreaming
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Physiologically induced	Hallucinations	Orgasm	Food/Oxygen Starvation
Psychologically induced	Sensory deprivation	Hypnosis	Meditation

- 5.1.2. Consciousness: awareness that we have ourselves, our internal states, and the environment
- 5.1.3. States of consciousness: allow us to evaluate the environment and filter information from the environment through the mind, while being aware of the occurrence of this complex process
- 5.1.4. Altered state of consciousness: A temporary state that differs significantly from a normal waking state; includes sleep, meditation, a coma, hypnosis, or the influence of drugs.
- 5.1.4.1. near-death experience: an altered state of consciousness reported after a close brush with death (such as through cardiac arrest); often similar to drug-induced hallucinations
 - 5.1.4.2. Hypnosis: Information [here](#)
 - 5.1.4.3. Drugs: substances that alter oneself - [more info here](#)
- 5.1.5. Conscious level - self aware level
- 5.1.5.1. information about yourself and your environment that you are aware of
- 5.1.6. Nonconscious level
- 5.1.6.1. body processes controlled by the mind that we're not aware of
- 5.1.7. Preconscious level
- 5.1.7.1. information about yourself or your environment such as unrepressed stored memories, thoughts, and information that you aren't thinking about, but can be easily retrieved
- 5.1.8. Subconscious level
- 5.1.8.1. information of which we aren't consciously aware
 - 5.1.8.2. must exist due to behavior
 - 5.1.8.3. proof: priming and mere exposure effect
- 5.1.9. Unconscious level
- 5.1.9.1. Contains the thoughts, desires, and urges that are actively repressed from consciousness and that affect mental activity outside of active awareness.
- 5.2. Discuss aspects of sleep and dreaming:
- 5.2.1. stages and characteristics of the sleep cycle;
- 5.2.1.1. Sleep Cycle
- 5.2.1.1.1. Changed as we mature/age - we spend less time in REM sleep and more time in the other stages of sleep
 - 5.2.1.1.2.
 - 5.2.1.1.3. Circadian rhythm
 - 5.2.1.1.3.1. Controlled by suprachiasmatic nucleus - activated by light
 - 5.2.1.1.3.2. metabolic and thought processes follow a pattern
 - 5.2.1.1.3.3. regular bodily rhythms (for example, of temperature and wakefulness)
 - 5.2.1.1.3.4. Naturally 25 hours, but is effect by lots of factors i.e. light and the environment
 - 5.2.1.1.4. Sleep onset
 - 5.2.1.1.4.1. the period when we are falling asleep
 - 5.2.1.1.4.2. possible mild hallucinations
 - 5.2.1.1.4.3. alpha waves
 - 5.2.1.1.4.3.1. produced when we are drowsy but awake
 - 5.2.1.1.4.3.2. Your teacher shouts "Ahh!" when you have alpha waves because you're about to fall asleep in class
 - 5.2.1.1.5. Theta waves
 - 5.2.1.1.5.1. high frequency, low amplitude
 - 5.2.1.1.5.2. as we go from awake to stage 1 to stage 2, they get slower and higher in amplitude
 - 5.2.1.1.5.3. stage 1, stage 2, awake
 - 5.2.1.1.6. Sleep spindles
 - 5.2.1.1.6.1. stage 2
 - 5.2.1.1.6.2. short bursts of rapid brain waves
 - 5.2.1.1.6.3. Occasionally break off into k complexes, large slow waves
 - 5.2.1.1.7. Delta sleep



- 5.2.1.1.7.1. stages 3 and 4
- 5.2.1.1.7.2. slow-wave sleep
- 5.2.1.1.7.3. delta = deep sleep
- 5.2.1.1.7.4. the slower the waves, the deeper the sleep
- 5.2.1.1.8. REM sleep - Rapid Eye Movement
 - 5.2.1.1.8.1. dreams occur
 - 5.2.1.1.8.2. improves memory
 - 5.2.1.1.8.3. intense brain activity
 - 5.2.1.1.8.4. Also known as paradoxical sleep because the muscles are relaxed (except for minor twitches) but other body systems are active and our brain waves are more intense
 - 5.2.1.1.8.5. REM rebound
 - 5.2.1.1.8.5.1. if deprived of REM sleep the previous night, we will spend more time in REM

5.2.2. theories of sleep and dreaming:

- 5.2.2.1. We don't know the reason we dream
- 5.2.2.2. Freud hypothesized that dreams are the expression of unconscious wishes or desires
 - 5.2.2.2.1. Believed that manifest content, or storyline/imagery of dream offered insight into important symbols relating to unconscious processes
 - 5.2.2.2.2. Latent content: emotional significance and underlying meaning of the dream
 - 5.2.2.2.3. Activation-synthesis hypothesis: dreams are the product of our awareness of neural activity due to sensory input while we sleep
 - 5.2.2.2.3.1. Explains why if it starts raining while you sleep, you may dream of a waterfall
- 5.2.2.3. Problem-solving theory of dreaming: holds that dreams provide a chance for the mind to work out issues that occupy its attention during waking hours.
 - 5.2.2.3.1. Neural repair, consolidations of memories, and protein synthesis seem to occur during dreams
- 5.2.2.4. Nightmares : are elaborate dream sequences that produce high levels of anxiety of fear in the dreamer.
 - 5.2.2.4.1. Dreamer may experience sense of physical danger to himself or loved ones and a strong sense of embarrassment about doing something unacceptable.
 - 5.2.2.4.2. Occur during REM sleep
 - 5.2.2.4.3. Little memories afterwards
- 5.2.2.5. Night terrors: occur in much deeper sleep states
 - 5.2.2.5.1. involve actual behaviors such as screaming, crying, or jerking movements while sleeping.
 - 5.2.2.5.2. Occur during non-REM sleep
 - 5.2.2.5.3. No memory of night terrors after

5.2.3. symptoms and treatments of sleep disorders.

- 5.2.3.1. Dyssomnias: abnormalities in the amount, quality, or timing of sleep
 - 5.2.3.1.1. Insomnia:
 - 5.2.3.1.1.1. Inability to fall asleep or to maintain sleep
 - 5.2.3.1.1.2. More common in women than man
 - 5.2.3.1.1.3. Most common sleep disorder
 - 5.2.3.1.1.4. Caused by chronic stress, alcohol, or stimulants such as caffeine
 - 5.2.3.1.2. Narcolepsy:
 - 5.2.3.1.2.1. Inability to stay awake
 - 5.2.3.1.2.2. When narcoleptic individuals fall asleep it is short and almost all REM sleep
 - 5.2.3.1.2.3. Unknown cause, but research suggests it may be something with the REM sleep and hypothalamus that produces the neurotransmitter hypocretin
 - 5.2.3.1.3. Sleep Apnea:
 - 5.2.3.1.3.1. Person stops breathing during any stage of sleep, resulting in awakening after a minute or so without air
 - 5.2.3.1.3.2. Can occur hundreds of times in a night, causing exhaustion during the day
 - 5.2.3.1.3.3. Linked to obesity and alcohol
 - 5.2.3.1.4. Sleepwalking or somnambulism
 - 5.2.3.1.4.1. Occurs when an individual walks around and sometimes talks while sleeping
 - 5.2.3.1.4.2. Occurs in stage 3 and 4, so they aren't simply acting out a dream

5.3. Describe **historic and contemporary uses of hypnosis** (e.g., pain control, psychotherapy). AND

- 5.4. Explain hypnotic phenomena (e.g., suggestibility, dissociation).
- 5.4.1. Hypnosis: altered state of consciousness where individual is relaxed, open to suggestions, and has a heightened concentration and focus
- 5.4.2. Can cause individuals to remember experiences they cannot recall having while in a normal state of consciousness
- 5.4.3. Typical person has no recollection of hypnosis upon returning to normal consciousness
- 5.4.4. Hypnosis CANNOT make you act against your will or reliably recall repressed memories
- 5.4.5. 2 main ways to think about hypnosis
- 5.4.5.1. Hypnosis is a form of social influence
- 5.4.5.1.1. Hypnotised subjects will be “good hypnotic subjects” if they trust their hypnotist
- 5.4.5.2. Dissociation: a special dual processing state of split consciousness
- 5.4.5.2.1. Ranges from spacing out to losing sense of one’s self
- 5.4.5.2.2. Hypnosis can cause patients to not attend to certain stimuli, such as pain
- 5.4.6. Can be used in clinical cases:
- 5.4.6.1. Psychotherapy: used to extract memories that are so terrible they were repressed from the conscious into the unconscious mind
- 5.4.6.2. Posthypnotic suggestions involves an instructor telling patient how to behave after they wake - has had limited success in treating chronic pain, reducing blood pressure, and even helping people quit smoking
- 5.4.7. Easier to hypnotise those who have a rich imagination, positive attitude, highly focused, and process information quickly - around 20% of our population
- 5.5. Identify the **major psychoactive drug categories** (e.g., depressants, stimulants) and **classify specific drugs**, including their **psychological and physiological effects**.
- 5.5.1. Psychoactive Drugs
- 5.5.1.1. Chemicals that change mood and perception
- 5.5.1.2. Induce an altered state of consciousness
- 5.5.1.3. The effects are due both to expectations and physiological processes
- 5.5.1.4. Blood-brain barrier
- 5.5.1.4.1. thick walls surrounding the brain’s blood vessels
- 5.5.1.4.2. molecules of psychoactive drugs are small enough to pass through it
- 5.5.1.5. Agonists
- 5.5.1.5.1. mimic neurotransmitters
- 5.5.1.6. Antagonists
- 5.5.1.6.1. prevent neurotransmitters from entering receptor sites, but don’t mimic their functions
- 5.5.1.7. Tolerance
- 5.5.1.7.1. caused by a physiological change
- 5.5.1.7.2. more of the same drug is needed for the same effect
- 5.5.1.7.3. cause withdrawal symptoms
- 5.5.2. Stimulants
- 5.5.2.1. Speed up body processes
- 5.5.2.1.1. autonomic nervous system
- 5.5.2.1.2. Increase self-confidence
- 5.5.2.1.3. Excite neural activity
- 5.5.2.1.4. Quicker mood changes
- 5.5.2.2. Produce a sense of euphoria
- 5.5.2.3. Legal - caffeine, nicotine, amphetamines
- 5.5.2.4. Illegal - cocaine, meth, ecstasy
- 5.5.2.5. Disturb sleep, reduce appetite, increase anxiety, cause heart problems
- 5.5.2.6. Cause depressive “crash” due to lack of body producing its own neural transmitters
- 5.5.3. Depressants
- 5.5.3.1. Slow down body systems
- 5.5.3.2. Impairs your brain’s judgement areas, while reducing self-awareness and self-control
- 5.5.3.3. Alcohol, barbiturates, anxiolytics (tranquilizers, antianxiety drugs)

- 5.5.3.4. Cause euphoria
- 5.5.3.5. Alcohol
 - 5.5.3.5.1. slows reactions/judgment
 - 5.5.3.5.2. affects motor coordination
- 5.5.4. Hallucinations (Psychedelics)
 - 5.5.4.1. Cause changes in perception of reality
 - 5.5.4.1.1. sensory hallucinations
 - 5.5.4.1.2. loss of identity
 - 5.5.4.1.3. vivid fantasies
 - 5.5.4.2. Unpredictable effects
 - 5.5.4.3. LSD, peyote, psilocybin mushrooms, marijuana
 - 5.5.4.4. Reverse tolerance
 - 5.5.4.4.1. second dose may be less than first but cause greater effects
 - 5.5.4.4.2. the drug lingers in the body for weeks
- 5.5.5. Opiates
 - 5.5.5.1. Depress neural activity and envelope brain in a fog of no-pain bliss
 - 5.5.5.2. Morphine, heroin, methadone, codeine
 - 5.5.5.3. Similar in chemical structure to opium
 - 5.5.5.3.1. a drug derived from the poppy plant
 - 5.5.5.4. Act as agonists for endorphins
 - 5.5.5.4.1. pain killers
 - 5.5.5.4.2. mood elevators
 - 5.5.5.5. Cause drowsiness and euphoria
 - 5.5.5.6. Very physically addictive because they introduce a bunch of outside opiates, which results in brain stopping itself from producing natural painkillers such as endorphins
 - 5.5.5.6.1. rapidly change brain chemistry and create tolerance/withdrawal
- 5.6. Discuss drug **dependence, addiction, tolerance, and withdrawal**.
 - 5.6.1. Dependence: occurs when an individual continues to use a drug despite its negative consequences to avoid unpleasant feelings associated with not taking it - partially due to the fact that dopamine is released when taking drug
 - 5.6.2. Addiction: compulsive drug craving and use, despite adverse consequences - takes drug as compulsion
 - 5.6.3. Tolerance: need for larger doses to reach previous felt effects/"high"
 - 5.6.4. Withdrawal: wearing off a drug that one has become dependent upon - involves physical and psychological symptoms of a highly unpleasant nature. Part of the reason people are dependant on drugs is so that they don't feel the effects of withdrawal

6. Learning (7–9%)

This section of the course introduces students to differences between learned and unlearned behavior. The primary focus is exploration of different kinds of learning, including classical conditioning, operant conditioning, and observational learning. The biological bases of behavior illustrate predispositions for learning.

Chapter Quizlet

AP students in psychology should be able to do the following:

- 6.1. Distinguish general differences between principles of **classical conditioning, operant conditioning, and observational learning** (e.g., **contingencies**).
- 6.1.1. Associative learning
 - 6.1.1.1.

	Classical	Operant
<i>Pioneers</i>	Ivan Pavlov John B. Watson	Edward Thorndike B.F. Skinner
<i>Basic Idea</i>	Organisms learn from events they don't control	Organisms learn to associate between their behavior and the outcome/event
<i>Example</i>	Sound of bell (CS) beginning to	Baby cries and parent pick up baby

	produce CR in conditioned patient	
<i>Response</i>	Involuntary - cannot control salivation (subject is passive)	Voluntary (subject is active)
<i>Order</i>	CS must come before NS	Reinforcement comes after behavior
<i>Acquisition</i>	CS announces US	Associate responses with consequences
<i>Extinction / Desensitization</i>	CS goes down when CR is shown over again without effect	Behavior goes down when outcome goes down
<i>Spontaneous Recovery</i>	CR reappears randomly	Random want to do behavior
<i>Generalization</i>	Similar CS e.g. school/cow bell	Generalize what caused outcome
<i>Discrimination</i>	Distinguish between CS and other stimuli	Distinguishing between what causes outcome and why it happened
<i>Cognitive Process / higher-order learning</i>	Expectations - CS is arrival of US	Expectation that response will be reinforced
<i>Biological Predisposition</i>	If you naturally can do UR it's easier to teach	Organisms learn best doing actions that are closest to what we do naturally

- 6.1.1.2. classical conditioning - focuses on whether one stimulus predicts response
- 6.1.1.2.1. Unconditioned response (UR): already known/reflex - e.g. **salivating** when exposed to US
 - 6.1.1.2.2. Unconditioned stimulus (US): causes UR - e.g. UR occurring when seeing **food**
 - 6.1.1.2.3. Neutral Stimulus (NS): has no effect on US or UR - e.g. **bell**
 - 6.1.1.2.4. Conditioned Response (CR): learned behavior / UR when exposed to CS - e.g. **salivating**
 - 6.1.1.2.5. Conditioned Stimulus (CS): activating CR when hearing NS - e.g. **bell**
 - 6.1.1.2.6. Higher-order: term describes conditioning in which the CS for one experiment becomes the UCS in another experiment so that another neutral stimulus can be made to elicit the original UCR
 - 6.1.1.2.7. Premack Principle: the idea that the reinforcing properties of something depends on the situation and the individual
 - 6.1.1.2.7.1. one person's reinforcer may be another person's punishment
 - 6.1.1.2.8. Rescorla's Contingency Model
 - 6.1.1.2.8.1. Idea that acquisition would occur more quickly in the absence of additional presentations of the CS and/or US which would weaken the cognitive connection the learner would establish between the two.
- 6.1.1.3. operant conditioning - when organisms associate actions with consequence (reinforcement or punishment)
- 6.1.1.3.1. type of learning that occurs when there's reinforcement or punishment
 - 6.1.1.3.2. Law of effect: says if you get rewarded, you do it more, you get punished, you get it less
 - 6.1.1.3.3. Shaping: rewarding behavior every time as they get close to desired behavior bit-by-bit - e.g. teaching a dog to sit, then roll over, then play dead
 - 6.1.1.3.4. Chaining: the entire process of building towards behavior
- 6.1.1.4. Predict the effects of **operant conditioning** (e.g., **positive reinforcement**, **negative reinforcement**, **punishment**).

	Reinforcement - strengthens response	Punishment - weakens response
<i>Positive</i>	Getting something good as a reward e.g. getting \$5 for getting an A	Getting something unwanted as a punishment e.g. getting slapped
<i>Negative</i>	Something bad is taken away e.g.	Taking away something good e.g.

	taking pills to remove your headache	getting grounded
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- 6.1.1.4.1. Primary reinforcers: basic/biological needs - e.g. food/water
 6.1.1.4.2. Secondary reinforcers: something we want - e.g. toy/praise
 6.1.1.4.3. Types of training:
 6.1.1.4.3.1. Aversive Training: using punishment to train a subject
 6.1.1.4.3.2. Escape training: the subject learns how to escape or get out of the punishing situation
 6.1.1.4.3.3. Avoidance training: the subject learns to completely avoid the punishing stimulus
 6.1.1.5. observational/social learning: learn by watching others
 6.1.1.5.1. Learning based on observing the behavior of others as well as the consequences of the behavior
 6.1.1.5.2. Social-cognitive theory: people do not learn new behaviors solely by trying them and either succeeding or failing, but by replicating what they saw successfully done and avoiding what they've observed doesn't work
 6.1.1.5.3. Mirror neurons: mimic actions/emotions of others - e.g. we see someone sad and we're sad, or we see someone smiling we feel happy
 6.1.1.5.4. Bobo doll experiment: kids watching video of lady beating up bobo doll were more likely to be aggressive towards the bobo doll when put in a room with it and other toys
 6.1.1.5.4.1. Used same actions/words
 6.1.1.5.4.2. Proved kids learn by watching
 6.1.1.5.5. We tend to learn from people who are demographically similar to us
 6.1.1.6. contingencies

6.2. Describe basic classical conditioning phenomena, such as **acquisition, extinction, spontaneous recovery, generalization, discrimination, and higher-order learning.** AND

6.3. Predict how **practice, schedules of reinforcement, and motivation** will **influence quality of learning.**

6.3.1. Reinforcement Schedule:

- 6.3.1.1. Continuous Reinforcement: every time you do an action getting rewarded (naturally rare)
 6.3.1.2. Partial (intermittent) reinforcement:

Fixed ratio - certain number - e.g. every 5 times you raise your hand you get a sticker - weakest reinforcement	Variable ratio - random number - e.g. every 5/3/8 times you raise your hand getting a sticker - slightly stronger
<i>Fixed interval</i> - certain time - e.g. if you stay quiet for 10 minutes, you get a sticker- slightly stronger	<i>Variable interval</i> - random time - e.g. randomly checking if person is quite to get a sticker - strongest (?)

- 6.3.2. Latent learning: showing learning later when it is needed
 6.3.3. Cognitive Maps: maps generated subconsciously of area, form of latent learning
 6.3.4. Insight: a sudden and often novel realization of the solution to a problem
 6.3.5. Motivation:
 6.3.5.1. Intrinsic motivation: doing something because you inherently enjoy doing it
 6.3.5.1.1. E.g. doing robotics because it's enjoyable
 6.3.5.2. Extrinsic motivation: doing something because something else outside is rewarding/punishing
 6.3.5.2.1. E.g. psych study to get a 5
 6.3.5.2.2. E.g. getting grades so car isn't taken away
 6.3.6. Instinctive drift: we naturally go back to what we are biologically know/what our core is
 6.3.7. Approach-approach
 6.3.7.1. conflict that occurs when you must choose between two desirable outcomes
 6.3.8. Approach-avoidance
 6.3.8.1. conflict that occurs when one event or goal has both attractive and unattractive features
 6.3.8.2. E.g. You are feeling stressed because you can't decide whether to go to the restaurant in your neighborhood that has great food but is very loud, or drive across town and go to the diner where the food is not as good but which has a nicer atmosphere.
 6.3.9. Avoidance-avoidance
 6.3.9.1. conflict that occurs when you must choose between two unattractive outcomes

- 6.3.10. Habituation: info [here](#)
- 6.3.11. Dishabituation: info [here](#)
- 6.4. Interpret graphs that exhibit the results of learning experiments.
- 6.4.1.
- 6.5. Provide examples of how **biological constraints** create **learning predispositions**.
 - 6.5.1. Neurons themselves can be affected by environmental stimulation
 - 6.5.2. Rats with more room to move around and other rats to talk to (socialize with) tended to have thicker cortices, higher brain weight, and greater neural connectivity
 - 6.5.3. Neuromodulators strengthen the synapses between sensory neurons and motor neurons and more synapse are created - neurons that fire together, wire together
 - 6.5.4. Long term memories involve more permanent change to brain, including structural and functional connections between neurons.
- 6.6. Apply learning principles to explain **emotional learning**, **taste aversion**, **superstitious behavior**, and **learned helplessness**.
 - 6.6.1. taste aversion: [example](#)
 - 6.6.1.1. Form of classical conditioning
 - 6.6.1.2. Garcia's study:
 - 6.6.1.2.1. Garcia effect: Gave rats sweetened water, then exposed a third to no radiation, mild radiation, and severe radiation. Later on, when offered the choice between tap and sweetened water, those who had radiation exposed to them chose to drink the tap water
 - 6.6.1.2.2. Behaviorist perspective best explains it
 - 6.6.1.2.3. Proved that it could take place even if the US doesn't immediately follow the CS
 - 6.6.1.3. E.g. a human who eats sushi for the first time and who happens to come down with an unrelated stomach virus may still develop a taste aversion to sushi
 - 6.6.2. superstitious behavior
 - 6.6.2.1. "If you believe in things that you don't understand, than you suffer from Superstition" -Stevie Wonder
 - 6.6.3. learned helplessness
 - 6.6.3.1. Subject learns after consistent efforts fail to bring rewards/end punishment
 - 6.6.3.2. Dogs were placed in a room with an electrified floor. At first, the dogs would try to escape the room or avoid the floor, but they ultimately learned that there was nothing they could do to prevent being shocked. Even after the leashes were removed, they still stayed on the electrified floor, even thought they could have escaped, showing that the dogs learned to be helpless
 - 6.6.3.3. People do this in work, school, and relationships - they give up after finding their efforts are in vein no matter how hard they try, often resulting in depression
- 6.7. Suggest how behavior **modification**, **biofeedback**, **coping** strategies, and **self-control** can be used to address behavioral problems.
 - 6.7.1.

7. Cognition (8–10%)

In this unit students learn how humans convert sensory input into kinds of information. They examine how humans learn, remember, and retrieve information. This part of the course also addresses problem solving, language, and creativity.

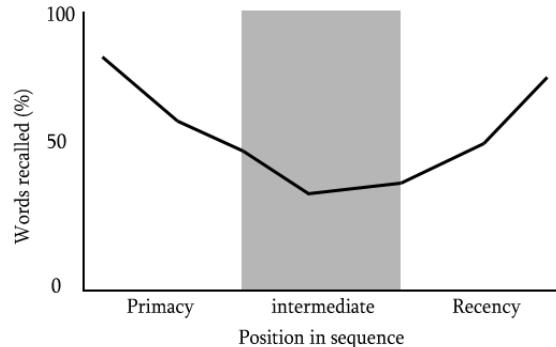
[Chapter Quizlet](#)

AP students in psychology should be able to do the following:

- 7.1. Compare and contrast various **cognitive processes** AND
- 7.2. Describe and differentiate psychological and physiological **systems of memory** (e.g., short-term memory, procedural memory). AND
- 7.3. Outline the principles that underlie **effective encoding, storage**, and **construction of memories**.
- 7.4. Good breakdown of information processing [here](#)
 - 7.4.1. Sensory Memory
 - 7.4.1.1. Purpose: Holds sensory information
 - 7.4.1.2. Capacity: Large
 - 7.4.1.3. Information keeps getting replaced/updated, only important information is forwarded to short-term
 - 7.4.1.4. Types:
 - 7.4.1.4.1. Iconic: visual memories - last tenths of a second
 - 7.4.1.4.1.1. Duration: incredibly short
 - 7.4.1.4.1.2. Information is not easily manipulable

- 7.4.1.4.2. Echoic: auditory memories - last 3 or 4 seconds
 7.4.1.5. Information is lost if not transferred to short term memory
7.4.2. Working memory - debate whether working memory is its own thing or if its a part of short-term memory
 7.4.2.1. Memories last 30 seconds before decaying or transferred into either short term or long term memory
 7.4.2.2. Information stored in working memory can be manipulated in a way that icon or echoic memory would not be able to do, which helps distinguish working memory from other more evanescent forms of memory
 7.4.2.2.1. E.g. Iconic allows person see row of 5 letters
 7.4.2.2.2. E.g Working allows person to rearrange those 5 letters into alphabetical order
- 7.4.3.** Short-term Memory (STM)
- 7.4.3.1. Purpose: Holds perceptions for analysis
 7.4.3.2. Duration: Lasts up to 30 seconds without rehearsal
 7.4.3.3. Capacity: Can hold 7 items, plus or minus 2
 7.4.3.4. George Miller discovered that all memory in short term is at least partially auditily encoded
 7.4.3.5. Items here can be maintained by rehearsals
- 7.4.3.5.1. Maintenance rehearsal
 7.4.3.5.1.1. Keeping an item in short term until it can be used
 7.4.3.5.1.2. E.g. telephone number - you remember it until you dial it, after which you discard it
- 7.4.3.5.2. Elaborative rehearsal:
 7.4.3.5.2.1. Involves organizing and understanding the information that has been encoded
 7.4.3.5.2.2. Much more effective than maintenance to transfer memories into Long-term
- 7.4.3.6.** Encoding
- 7.4.3.6.1. Types:
 7.4.3.6.1.1. Structural Encoding: Shallow processing: emphasis on the physical structure of stimulus
 7.4.3.6.1.2. Phonemic Encoding: Intermediate processing: emphasis on what the stimulus/word sounds like
 7.4.3.6.1.3. Semantic Encoding: Deep processing: emphasis on the meaning of verbal input
 7.4.3.6.1.4. Level-of-Processing Theory: Proposes that deeper levels of processing result in longer-lasting memory (deeper processing leads to enhanced memory)
- 7.4.3.6.2. Encoding occurs between sensory and short term, and again between short and long term
 7.4.3.6.3. Elaboration: Linking a stimulus to other information at the time of encoding
 7.4.3.6.4. It's easier to remember the general plot of a book than the exact words, meaning that semantic information (meaning) is more easily remembered than grammatical information (form) when the goal is to learn a concept
 7.4.3.6.5. Attention: focusing your attention in 2 or more places at once causes large reduction in memory performance and motor performance
 7.4.3.6.6. Mnemonic devices: use of short words or phrases that represent longer strings of information:
 7.4.3.6.6.1. E.g. ROYGBIV - red, orange, yellow, green, blue, indigo, violet
 7.4.3.6.6.2. E.g. PORN - proactive old, reactive new
- 7.4.3.6.7. Dual-coding hypothesis: it's easier to remember words with associated images than words or images alone. This works because there are more connections made to the memory and more of an opportunity to process the information at a deeper level.
- 7.4.3.6.8. Imagery: Creation of visual images to represent the words to be remembered
 7.4.3.6.8.1. Easier to form images from concrete objects that are familiar
- 7.4.3.6.9. Method of Loci: Remembering familiar places, such as your home, and leaving a visual representation of a topic to be remembered. Then when that information was to be recalled, you would just have to think about the place/see an image of it.
- 7.4.3.6.10. Self-reference effect: It's easier to remember stuff that you connect with or find interesting/relevant, so try to connect what you're studying to your life
- 7.4.3.6.11. Chunking: It's easier to remember smaller bits of information that add up to a lot
 7.4.3.6.11.1. E.g. cell phone numbers - you remember it as 3 and 4 digits, not all 7
- 7.4.3.7.** Memories end up being:
- 7.4.3.7.1. Encoded: stored and able to be recalled later into long-term memory

- 7.4.3.7.1.1. Conceptual Hierarchy: a multilevel grouping system that sorts information by commonality
- 7.4.3.7.1.2. Schema: an organization cluster of knowledge about a particular object or event created from previous experiences with object or event
- 7.4.3.7.1.2.1. People are more likely to remember things that are consistent with their schemas than ideas that aren't
- 7.4.3.7.2. Forgotten:
- 7.4.3.7.2.1. Decay: items are forgotten over time
- 7.4.3.7.2.2. Interference:
- 7.4.3.7.2.2.1. Retroactive interference: new information pushes old information out
- 7.4.3.7.2.2.1.1. E.g. not remembering your new locker combo because you keep using your old one
- 7.4.3.7.2.2.2. Proactive interference: old information makes it more difficult to learn new info
- 7.4.3.7.2.2.2.1. E.g. not remembering your new phone number because you've had so many previously
- 7.4.3.7.2.2.3. Misinformation effect
- 7.4.3.7.2.2.4. Mnemonic device
- 7.4.3.7.2.3. Repression: Freud Theory - we keep distressing thoughts and feelings buried in unconsciousness
- 7.4.3.8. Serial Positioning effect: We tend to remember stuff sequentially, leading us to recall the first and last items we learned and forget the ones in the middle
- 7.4.3.8.1. Primacy: remembering the first items
- 7.4.3.8.2. Recency: remembering the last items
- 7.4.4. Long term memories (LTM)
- 7.4.4.1. Purpose: Long term acts as a giant repository of our lasting memories and knowledge
- 7.4.4.2. Duration: Relatively permanent
- 7.4.4.3. Capacity: Infinite capacity and duration
- 7.4.4.4. We encode most stuff semantically - by their words or definitions. However, we can also store information that has been visually encoded or acoustically encoded but it's less common
- 7.4.4.4.1. Remember song lyrics is an example of memories that are acoustically encoded in the LTM
- 7.4.4.5. Declarative (Explicit Memory) - **can** be consciously consider / retrieve
- 7.4.4.5.1. Needs effort put forth to retrieve it
- 7.4.4.5.1.1. Studying for AP exam
- 7.4.4.5.2. Semantic memory
- 7.4.4.5.2.1. Facts, figures, words
- 7.4.4.5.3. Episodic memory
- 7.4.4.5.3.1. Specific days or events
- 7.4.4.6. Nondeclarative (Implicit Memory) - **can't** be consciously consider / retrieve
- 7.4.4.6.1. Classic conditioning
- 7.4.4.6.2. Procedural memory
- 7.4.4.6.2.1. Skills, automatic stuff, habits
- 7.4.4.6.2.2. NOT PROCEDURES**
- 7.4.4.6.2.3. Stored in striatum
- 7.4.4.6.3. Priming
- 7.4.4.7. Retrieval: getting information out of memory so we can use it
- 7.4.4.7.1. Involves the activation of semantic networks - if our long term memories contained isolated pockets of information without any organization, they might be more difficult to access
- 7.4.4.7.2. State-dependent memory: information is more likely to be recalled if the attempt to retrieve it occurs in a situation similar to the situation in which it was encoded
- 7.4.4.7.2.1. E.g. if you memorize psych while in a classroom, you should be able to recall it better in that same classroom than you would if you memorized the information at home



- 7.4.4.7.2.2. Also applies to drug states - information memorized under the influence of a drug is easier to access when in a similar state than not on that drug
- 7.4.4.7.3. Context-dependent memory: tendency to recover information more easily when the retrieval occurs in the same setting as the original learning of the information
- 7.4.4.7.4. Recall: retrieving a memory with an **external cue**
- 7.4.4.7.4.1. E.g. FRQ or short answer response
- 7.4.4.7.5. Recognition: process of **matching a current event** or fact with **one already in memory**
- 7.4.4.7.5.1.1. E.g. multiple choice test
- 7.4.5. **effortful** versus **automatic** processing;
- 7.4.5.1. Effortful: encoding that requires attention and conscious effort
- 7.4.5.1.1. E.g. studying
- 7.4.5.1.2. Declarative memory
- 7.4.5.2. Automatic: unconscious encoding of incidental information, such as space, time, and frequency, and of well-learned information, such as word meaning
- 7.4.5.2.1. E.g. tasting food
- 7.4.5.2.2. nonddeclarative
- 7.4.6. **deep** versus **shallow** processing;

Depth of processing	Level of processing	Type of encoding	Example of questions used to elicit appropriate encoding
	Shallow processing	<i>Structural encoding:</i> emphasizes the physical structure of the stimulus	Is the word written in capital letters?
	Intermediate processing	<i>Phonemic encoding:</i> emphasizes what a word sounds like	Does the word rhyme with weight?
	Deep processing	<i>Semantic encoding:</i> emphasizes the meaning of verbal input	Would the word fit in the sentence: "He met a _____ on the street"?

7.4.6.1.

- 7.4.7. **focused** versus **divided** attention.

7.4.7.1. [here](#)

- 7.5. Describe **strategies for memory improvement**.

7.5.1. [here](#)

- 7.6. Synthesize how **biological**, **cognitive**, and **cultural factors** converge to facilitate acquisition, development, and use of language. AND

- 7.7. Identify **problem-solving strategies** as well as factors that **influence their effectiveness**.

7.7.1. Concept: Group of similar objects/ideas (robins, penguins, ostriches, bluejays, cardinals)

7.7.2. Prototype: Best example of a concept (robin)

7.7.3. Strategies:

7.7.3.1. Algorithm: step by step approach to problem that will end with answer if continued long enough

7.7.3.1.1. E.g. seeing "M_X" and going letter-by-letter to find the correct word

7.7.3.2. Heuristic: mental shortcut

7.7.3.2.1. Representative Heuristic: judging the likelihood of things in terms of how well they seem to represent, or match, particular prototypes

7.7.3.2.1.1. Prototypes

7.7.3.2.2. Available Heuristic: we base our judgments of the frequency of events on what events come to mind

7.7.3.2.2.1. E.g. being scared of shark attacks because you see it in the news, despite shark attack being very rare

7.7.3.2.2.2. E.g. seeing "M_X" and noticing there is no vowel and other possible words that can be spelled that are 3 letters, 2 of which are M and X

- 7.7.3.2.2.3. E.g seeing a plane crash in the news and then being scared on planes
- 7.7.3.2.3. Insight: a sudden and often novel realization of the solution to a problem
- 7.7.3.2.3.1. E.g. seeing “M_X” and suddenly figuring out it says “MAX”
- 7.7.4. Language/Culture:
- 7.7.4.1. Linguistic Determinism: the way language affects how you think
 - 7.7.4.1.1. People in Alaska have a bunch of words for snow, while in Florida it's just “snow” - this leads Alaskans to think about snow much differently than Floridians
 - 7.7.4.2. Denotation: dictionary definition of words
 - 7.7.4.2.1. E.g. using “kicks” by its dictionary term
 - 7.7.4.3. Connotation: secondary/slang term
 - 7.7.4.3.1. E.g. using “kicks” as a term for shoes
 - 7.7.4.4. Language can lead us/have wording affection (survey)
 - 7.7.4.5. Thinking leads to language, and language leads to how we think (it's a recursion!)
- 7.8. Anatomy of Memory
- 7.8.1. Retrograde Amnesia: Can't recall old memories
 - 7.8.2. Anterograde Amnesia: Can't make new memories
 - 7.8.3. Memory takes place all over the brain
 - 7.8.4. Hippocampus accounts for much long-term memory through consolidation
 - 7.8.4.1. Consolidation: A hypothetical process involving the gradual conversion of information into durable memory codes stored in long-term memory
 - 7.8.5. Amygdala is responsible for forming learned fears
- 7.9. Language:
- 7.9.1. Structure
 - 7.9.1.1. Phonemes: the smallest distinctive sound unit
 - 7.9.1.2. Morpheme: the smallest unit that carries meaning; may be a word or a part of a word (such as a prefix)
 - 7.9.1.2.1. Morpheme = meaning
 - 7.9.1.3. Grammar/Syntax: “the rules” - a system of rules that enables us to communicate with and understand others i.e. the order words appear (adjectives before nouns)
 - 7.9.1.3.1. E.g. the order in which words go - different for Spanish from English
 - 7.9.1.4. Semantic: the set of rules by which we derive meaning from morphemes, words, and sentences in a given language; also the study of meaning (semantics = meaning)
 - 7.9.1.4.1. Using correct word (definitions, context)
 - 7.9.1.4.2. E.g. “the rock thought to itself” is a violation of semantics because rocks can't think
 - 7.9.2. Milestones
 - 7.9.2.1. Babbling: 4 months - random noises
 - 7.9.2.2. One-word or holophrases: 12 months - saying single words that mean multiple things
 - 7.9.2.2.1. E.g. saying “dog” to mean, “look at that dog” or “hello, dog!”
 - 7.9.2.3. Two-word: 24 months - saying two words to mean specific things - mostly nouns and verbs
 - 7.9.2.3.1. E.g. “car fast” to say “that car is going fast”
 - 7.9.2.3.2. Use Telegraphic speech: early speech stage in which a child speaks like a telegram
 - 7.9.2.4. After 2 years children learn language very quickly due to it being there critical period
 - 7.10. Obstacles to Problem solving
 - 7.10.1.1. Confirmation bias: tendency to stick to initial opinion even when confronted with convincing evidence to the contrary - e.g. politics
 - 7.10.1.2. Hindsight bias: the tendency to believe, after learning an outcome, that one would have foreseen it
 - 7.10.1.3. Fixation: when we're not able to look at the whole image
 - 7.10.1.4. Perceptual set: mental predisposition to perceive one thing and not another
 - 7.10.1.5. Mental set: a tendency to approach a problem in one particular way, often a way that has been successful in the past
 - 7.10.1.5.1. E.g. believing that women can't be miners, so when you think of a miner you don't think of women
 - 7.10.1.6. Functional Fixedness: the tendency to think of things only in terms of their usual functions; an impediment to problem solving
 - 7.10.1.7. Overconfidence: overestimating ourselves when forming judgements
 - 7.10.1.8. Framing: the way an issue/situation is posed can affect decisions and judgement

7.10.1.9. Illusory Correlation: the idea of a relationship where none exists

7.10.1.9.1. E.g. wearing your lucky t-shirt

7.10.1.10. Memory construction:

7.10.1.10.1. False memories: memories changing over time bit by bit

7.10.1.10.2. Memories changed due to moods

7.10.1.11. Heuristics

7.10.1.12. Belief perseverance: continuing to believe something after it is proved to be false

7.11. List the **characteristics of creative thought** and **creative thinkers**.

7.11.1. critical thinking: not blindly accepting arguments and conclusions

8. Motivation and Emotion (6–8%)

In this part of the course, students explore biological and social factors that motivate behavior and biological and cultural factors that influence emotion.

Chapter Quizlet

AP students in psychology should be able to do the following:

8.1. Discuss the **biological underpinnings of motivation**, including needs, drives, and homeostasis. **AND**

8.2. Identify and apply **basic motivational concepts** to understand the behavior of humans and other animals (e.g., instincts, incentives, intrinsic versus extrinsic motivation). **AND**

8.3. Describe **classic research findings** in specific motivation systems (e.g., eating, sex, social) **AND**

8.4. Describe how **cultural influences shape emotional expression**, including variations in body language.

8.4.1. Sources of motivation:

8.4.1.1. Biological: Food, water, temperature regulation, sleep and sex (4F's controlled by the hypothalamus)

8.4.1.1.1. Hunger:

8.4.1.1.1.1. Biological/Physical:

8.4.1.1.1.1.1. Stomach contractions

8.4.1.1.1.1.1.1. Sends signals to the brain

8.4.1.1.1.1.2. Body chemical release (hormones)

8.4.1.1.1.1.2.1. Insulin decreases glucose in blood, lowering blood glucose levels which makes us feel hungry

8.4.1.1.1.1.2.2. E.g. people with diabetes have a faulty pancreas that doesn't release proper amounts of insulin to regulate glucose in the blood

8.4.1.1.1.1.3. Hypothalamus

8.4.1.1.1.1.3.1. Lateral: "lets eat" - stimulates hunger - damage to it causes starvation

8.4.1.1.1.1.3.2. Ventromedial: "vomit" if you eat too much - stops hunger - damage causes animal to overeat

8.4.1.1.1.1.4. Set-point theory:

8.4.1.1.1.1.4.1. Manipulates lateral and ventromedial hypothalamus altering the body's "weight thermostat" with the goal of keeping us at a steady weight

8.4.1.1.1.1.4.2. If weight is lost (we go below the set point) food intake increases and energy expenditure decreases

8.4.1.1.1.1.4.3. If weight is gained (go above set point) food intake decreases and energy expenditure decreases

8.4.1.1.1.1.4.4. Also monitors the body's metabolic rate

8.4.1.1.1.1.4.4.1. The body's resting rate of energy expenditure drops when less activity is occurring

8.4.1.1.1.2. Psychologically:

8.4.1.1.1.2.1. We eat based off of mood, memory of time elapsed since last meal, and sight and smell of tasty foods

8.4.1.1.1.2.2. External incentives: eating because triggered by the presence of food, especially tasty/high fat food

8.4.1.1.1.3. Socio-cultural

8.4.1.1.1.3.1. Eating by the clock: eating because it is time to eat lunch/dinner

8.4.1.1.1.3.2. Social eating: eating at an event because it is expected/the norm

8.4.1.1.1.3.3. Stress and depression: eating more/less and different types of food

8.4.1.1.1.4. Hunger from Biological vs Cultural

8.4.1.1.1.4.1. Body chemistry and environmental factors together influence not only when we feel hungry but what we feel hungry for

8.4.1.1.1.5. Disorders (needed for FRQs)

8.4.1.1.1.5.1. Anorexia nervosa:

8.4.1.1.1.5.1.1. characterized by a normal weight person losing dramatic amounts of weight

8.4.1.1.1.5.1.2. Still feeling overweight due to negative/depressed mindset

8.4.1.1.1.5.1.3. Caused by genetic predispositions, biochemical imbalances, social influences, and psychological characteristics (perfectionist)

8.4.1.1.1.5.2. Bulimia nervosa:

8.4.1.1.1.5.2.1. eating excessive amounts of food

8.4.1.1.1.5.2.2. Typically by those who are average weight or slightly overweight

8.4.1.1.1.5.2.3. Caused by stress, cultural idea of attractiveness, low self esteem

8.4.1.1.1.5.2.4. Followed by purging (vomiting, laxatives, fasting, or excessive exercise)

8.4.1.1.1.5.3. Binge eating:

8.4.1.1.1.5.3.1. Eating excessive amounts of food without any type of purging

8.4.1.1.1.5.4. Body image

8.4.1.1.1.5.4.1. Western culture tends to over-emphasize thin body image more than other cultures

8.4.1.1.1.5.4.2. Cultures who put more emphasis on appearance have higher rates of eating disorders

8.4.1.1.1.5.4.3. Women who have low self esteem are particularly likely to have negative body image and tend to have eating disorders because it provides a sense of control over their lives

8.4.1.1.2. Sex

8.4.1.1.2.1. Drive caused by multiple factors

8.4.1.1.2.1.1. Biological

8.4.1.1.2.1.1.1. Sexual maturity

8.4.1.1.2.1.1.2. Sex hormones, especially testosterone

8.4.1.1.2.1.1.3. Sexual orientation

8.4.1.1.2.1.2. Psychological

8.4.1.1.2.1.2.1. Exposure to stimulating conditions

8.4.1.1.2.1.2.2. Sexual fantasies

8.4.1.1.2.1.3. Sociological

8.4.1.1.2.1.3.1. Family and societal values

8.4.1.1.2.1.3.2. Religious and personal values

8.4.1.1.2.1.3.3. Cultural expectations

8.4.1.1.2.1.3.4. Process of what is attractive is learned

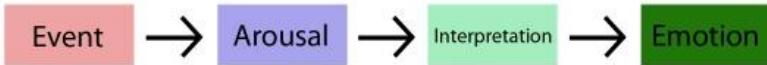
8.4.1.1.2.1.3.5. Media can affect one's expectations

8.4.1.2. Compare and contrast major theories of emotion (e.g., James–Lange, Cannon–Bard, Schachter two-factor theory).

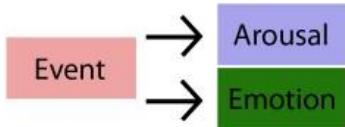
8.4.1.3. Emotional: Panic, fear, anger, love, hatred

8.4.1.3.1. Emotions are combination of physiological activation, expressive behaviors, and conscious experience

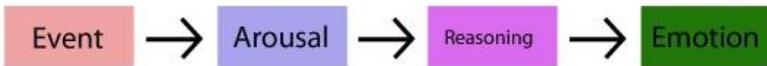
James-Lange Theory



Cannon-Bard Theory



Schachter-Singer Theory



Schachter Singer's Two-Factor theory



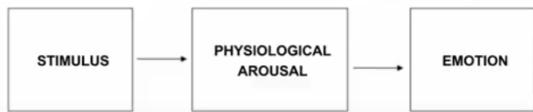
8.4.1.3.2.

8.4.1.3.3. James-Lange Theory

8.4.1.3.3.1. First main theory developed by William James and Carl Lange

8.4.1.3.3.2. Stimulus leads to Physiological arousal, which causes emotion

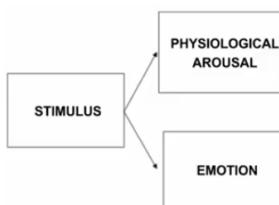
8.4.1.3.3.3. E.g. seeing snake, sympathetic system activates, causing fear



8.4.1.3.3.4.

8.4.1.3.4. Cannon-Bard Theory:

8.4.1.3.4.1. Walter Cannon challenged the James-Lange theory and proposed emotion triggered stimulus and body's arousal simultaneously



8.4.1.3.4.2.

8.4.1.3.4.3. E.g. someone shouts, causing you to tense up and being startled

8.4.1.3.5. Two-factor theory

8.4.1.3.5.1. Stanley Schachter and Jerome Singer proposed another theory which suggests that our physiology and our cognition create emotions. Emotions have two factors - physical arousal and cognitive label

8.4.1.3.5.1.1. E.g. you see a man in an alleyway - your heart to start beating fast, but your brain labels him as friendly because he's waving and smiling at you causing you to not feel scared

8.4.1.3.6. Zojonc: something happens and we immediately respond to it (disgusting) with no processing

8.4.1.3.7. Lazarus: we have a stimulus go through the thalamus and we process it in the prefrontal cortex and then we have the response (then thinking it's disgusting)

8.4.1.4. Cognitive: perceptions about the world, beliefs about what can and cannot be done, expectation

8.4.1.5. Social: Reactions from friends and families (socio-cultural factors)

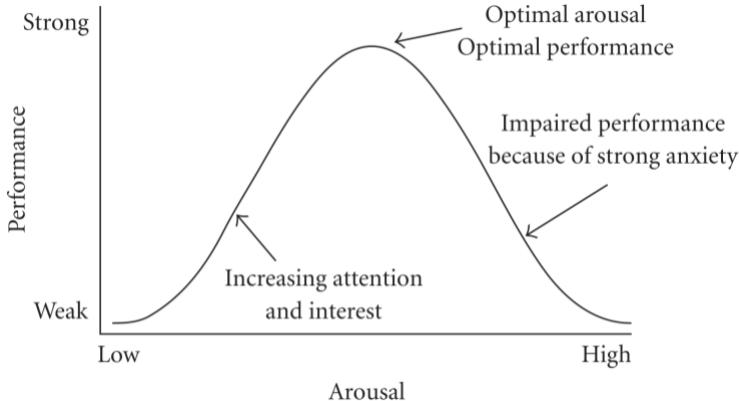
8.4.2. Instincts and evolution:

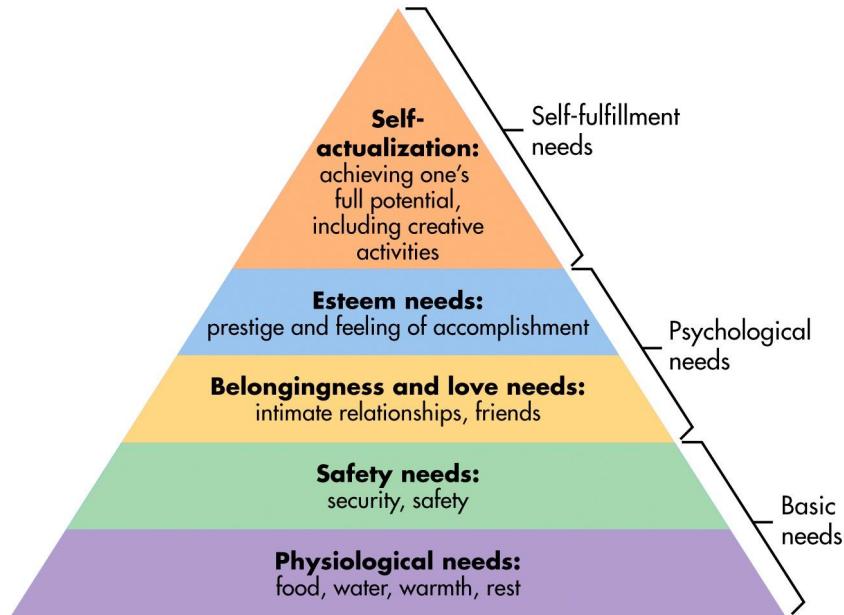
8.4.2.1. innate, automatic disposition toward responding in a particular way when confronted with a specific stimulus (genetics)

8.4.2.2. Behavior will continue to be passed down the species if it helps them survive.

8.4.2.3. Not as common with humans as other species other than baby reflexes

8.4.3. Incentive theory:

- 8.4.3.1. Incentive: positive or negative stimuli that pulls us in one way or another to satisfy our wants/needs
- 8.4.3.2. states that behavior is directed towards attaining desirable stimuli and avoiding unwanted stimuli
- 8.4.3.3. Where our needs and drives push us towards actions, incentives pull us
- 8.4.3.4. Value of incentive is determined by biological and cognitive factors
- 8.4.3.5. E.g. getting \$\$ for doing chores, pulling you do complete your chores to get reward (\$\$)
- 8.4.3.6. [intrinsic vs extrinsic](#)
- 8.4.4. Types of Reinforcers
- 8.4.4.1. Primary: an innately reinforcing stimulus, such as one that satisfies a biological need
- 8.4.4.2. Secondary or conditioned: anything that comes to represent a primary reinforcer i.e. money
- 8.5. **Compare and contrast motivational theories** (e.g., drive reduction theory, arousal theory, general adaptation theory), including the **strengths and weaknesses** of each.
- 8.5.1. Instinct:
- 8.5.1.1. We do it because we're programmed to do it / we naturally get satisfaction for doing it
- 8.5.2. Drive reduction theory:
- 8.5.2.1. belief that motivation arises from imbalances in homeostasis
- 8.5.2.2. An imbalance creates a need and the brain responds by creating a drive that then prompts the organism to take action to satisfy or reduce the drive
- 8.5.2.2.1. E.g. **need** for food leads to a **drive** for hunger, causing the person to exhibit a **behavior**, in this case eating
- 8.5.3. Optimum arousal theory:
- 8.5.3.1. Human motivation aims not to eliminate arousal but to seek optimum levels of arousal
- 8.5.3.2. Yerkes-Dodson law: We perform best when arousal is moderate (not too bored, not too stressed)
- 8.5.3.2.1. Both very low and very high levels of arousal usually negatively impact performance
- 
- The graph illustrates the relationship between performance and arousal. The vertical axis is labeled 'Performance' with 'Strong' at the top and 'Weak' at the bottom. The horizontal axis is labeled 'Arousal' with 'Low' on the left and 'High' on the right. A bell-shaped curve starts at a low level of arousal and performance, rises to a peak labeled 'Optimal performance' at 'Optimal arousal', then falls sharply to a point labeled 'Impaired performance because of strong anxiety' at 'High' arousal, before rising again towards the end of the high arousal range. Arrows point from the text labels to their corresponding points on the graph.
- 8.5.3.2.2.
- 8.5.3.3. We try to increase arousal when it's low (bored) and decrease it when it's too high (stressed)
- 8.5.3.4. Peoples optimum arousal is unique to them. Some people are okay with binging netflix while others want a job or purpose
- 8.5.3.5. When our basic needs are met, we thrive off of having arousal (putting a man on the moon)
- 8.5.3.5.1. E.g. going to a party to increase our arousal but take a nap afterwards to reach our optimum arousal
- 8.5.4. Maslow's Hierarchy of needs



- 8.5.4.1.
- 8.5.4.2. Lower needs must be met first (basic needs)
- 8.5.4.3. We're all motivated to move up on the pyramid, but only a few make it to self-actualization
- 8.5.5. human work motivation and management
 - 8.5.5.1. Theory X
 - 8.5.5.1.1. Default assumption

- 8.5.5.1.2. Assumes worst of worker - they're lazy, self-centered, dumb, etc.
 - 8.5.5.1.3. Workforce operates more efficiently under a hands-on approach to management - individuals are held responsible for their actions and are motivated by punishment/reinforcements
 - 8.5.5.1.4. Managers role is to micro manage workforce
- 8.5.5.2. Theory Y
- 8.5.5.2.1. Believes that workers are internally motivated, enjoy their job, and work to better themselves without a direct reward in return
 - 8.5.5.2.2. Employees additionally tend to take full responsibility for their work and do not need close supervision to create a quality product
 - 8.5.5.2.3. Helps employees get closer to self-actualization
 - 8.5.5.2.4. Managers role is to enable and inspire employees to work

8.6. Discuss **theories of stress** and the **effects of stress** on psychological and physical well-being.

8.6.1. What is stress?

- 8.6.1.1. Stress is any circumstance that may be real or perceived and threatens one's well-being
- 8.6.1.2. When severe stress is felt it impairs our ability to cope with it
- 8.6.1.3. Stress is not merely a stimulus or response, it is the process by which we appraise and cope with environmental threats and challenges

8.6.2. Stressor: a stressful stimulus, a condition demanding adaption (THING) e.g. ap psych exam

8.6.3. Stress: the physical and mental changes that occur in response to a challenging or threatening situation (REACTION)

8.6.4. Components to stress response:

- 8.6.4.1. Cognitive Appraisal: identify threat and determine how to cope - different for everyone
- 8.6.4.2. Perceived Control: The more perceived control an individual believes they have, the less negative effects they feel
- 8.6.4.3. Physiological response: body's reaction (e.g. throwing up)
- 8.6.4.4. Subjective feelings: emotions (e.g. crying)
- 8.6.4.5. Behaviors: action taken because of stress

8.6.5. Types:

- 8.6.5.1. Catastrophic event: sudden, unexpected, potentially life-threatening experiences or traumas
 - 8.6.5.1.1. E.g. war, hurricane, car crash
- 8.6.5.2. Life changing/strains: life circumstances that demands which people have to adjust
 - 8.6.5.2.1. E.g. moving, marriage, birth
- 8.6.5.3. Chronic stress: stress that continues over long period of time
 - 8.6.5.3.1. E.g. crime in neighborhood, fear of planes, unhappy marriage, poverty
- 8.6.5.4. Daily hassles: irritations, pressures, and annoyances that might be significant alone, but add up
 - 8.6.5.4.1. E.g. homework, long lines, etc.

8.6.6. Responses

- 8.6.6.1. Cannon proposed that stress response (fast) was fight-or-flight response marked by outpour of epinephrine and norepinephrine from inner adrenal glands increasing heart and respiration rates, mobilizing sugar and preparing us for fight or flight
- 8.6.6.2. The hypothalamus and pituitary gland also respond to stress (slow) by triggering outer adrenal glands to secrete glucocorticoids (cortisol)
- 8.6.6.3. Three main stages:
 - 8.6.6.3.1. Alarm reaction
 - 8.6.6.3.1.1. Hypothalamus sets "fight or flight" response into action, releasing neurotransmitters and hormones to deal with stressful situation
 - 8.6.6.3.1.2. If stressor persists over long period of time, this initially adaptive reaction can become distress as it deplete the body's energy and defense resources
 - 8.6.6.3.1.3. Can cause high blood pressure, deterioration of immune system, etc.
 - 8.6.6.3.2. Resistance:
 - 8.6.6.3.2.1. If stressor persists, but not so strong that it overwhelms the organism during stage 1, the individual begins to rebond during stage 2
 - 8.6.6.3.2.1.1. outwardly : body appears to be resisting the stressor
 - 8.6.6.3.2.1.2. Inwardly: trying to restore homeostasis, yet body still working to cope with stress

- 8.6.6.3.2.2. Resistance only applies to original stressor - if another stressor is introduced, defense could be so depleted that may be unable to respond to second stressor
- 8.6.6.3.3. Exhaustion:
- 8.6.6.3.3.1. If resistance fails or we cannot keep up with it the symptoms of alarm reappear
 - 8.6.6.3.3.2. This time with even more powerful CNS response - the CNS will overcompensate and if the stressor is not removed, exhaustion and eventually death will occur
 - 8.6.6.3.3.2.1. Usually there are warning signs of exhaustion, e.g. heart attacks, clogged arteries, colds/flu, frequent headaches, etc.
 - 8.6.6.3.3.3. Sympathetic system never taking a break and parasympathetic never activated
- 8.6.6.4. Stress and illness
- 8.6.6.4.1. Any stressor, including mental processes like worry, can affect one's health and resources, like the immune system.
 - 8.6.6.4.2. Human immune system may react to chronic stressors by breaking down and turning on itself because it allocates so many of its resource to dealing with stress causing it to be more prone to diseases/illnesses
- 8.6.6.5. Response to stress:
- 8.6.6.5.1. Problem focused coping: Reducing stress by changing events that causes stress or by changing how we react to stress
 - 8.6.6.5.1.1. I.e. your car keeps breaking down, causing you stress, so you buy a new car
 - 8.6.6.5.2. Emotion focused coping: We respond by attending to our own emotional needs because we cannot change a stressful situation
 - 8.6.6.5.2.1. Someone close dies causing you to seek support from family and friends
 - 8.6.6.5.3. Cognitive: change thought patterns
 - 8.6.6.5.4. Emotional: knowing you have a support system or places for advice
 - 8.6.6.5.5. Behavioral: changing behavior to minimize impact of stress (e.g. time management)
 - 8.6.6.5.6. Physical: changing physical response including medication and relaxation

8.7. Thinking

- 8.7.1. Convergent: deciding upon ONE solution
- 8.7.2. Divergent: creative thinking with many solutions

9. Developmental Psychology (7–9%)

Developmental psychology deals with the behavior of organisms from conception to death and examines the processes that contribute to behavioral change throughout the life span. The major areas of emphasis in the course are prenatal development, motor development, socialization, cognitive development, adolescence, and adulthood.

Chapter Quizlet

AP students in psychology should be able to do the following:

- 9.1. Discuss the **interaction of nature and nurture** (including cultural variations) in the **determination of behavior AND**
 - 9.2. Explain the **process of conception and gestation**, including factors that influence successful fetal development (e.g., nutrition, illness, substance abuse).
- 9.2.1. Conception:
- 9.2.1.1. When male's sperm fertilizes female egg
 - 9.2.1.1.1. At this point, egg blocks all other sperm (1 egg, 1 sperm)
 - 9.2.1.1.2. Women are born with all the eggs they will ever have (1/5000 actually mature)
 - 9.2.1.1.3. Men begin producing sperm at puberty and produce it 24/7 for the rest of their life
- 9.2.1.2. Genetics:
- 9.2.1.2.1. This new one-cell entity contains 23 pairs of chromosomes, one member of the pair from the mother and the other from the father for a total of 46
 - 9.2.1.2.1.1. Each chromosome contains thousands of genes, either individually or in combination, genes produce the particular characteristic of each person
 - 9.2.1.2.2. Genes are composed of sequences of DNA molecules
 - 9.2.1.2.3. Some genes are responsible for the development of systems common to all humans (heart, circulatory system, brain, lungs, etc.) while other control characteristics that make each human unique (eye color, height, facial features, etc.)
 - 9.2.1.2.4. Sex is determined by combination of the genes at the 23rd chromosome
 - 9.2.1.2.4.1. XX = female, XY = male
- 9.2.2. Prenatal development:

9.2.2.1. Zygote: fertilized egg

9.2.2.1.1. Fewer than $\frac{1}{2}$ survive the first 2 weeks

9.2.2.2. Embryonic stage (weeks 2-8)

9.2.2.2.1. At 2 weeks, zygote becomes an embryo

9.2.2.2.2. By 4 weeks, embryo has developed a rudimentary beating heart, brain, and intestinal tracts

9.2.2.2.3. By 8 weeks, embryo is about an inch long, has arms, legs, and face that are distinct

9.2.2.3. Fetal stage (8 weeks to birth)

9.2.2.3.1. Officially a fetus

9.2.2.3.2. Fetal movement strong enough to be detected by a mother

9.2.2.3.3. Around 6 months, eyelids open and fetus have well-developed grasp and taste buds

9.2.2.3.4. Age of viability: point at which fetus could survive if born, typically ~24 weeks

9.2.2.3.5. Fetus continues to grow and gain weight during the last two months, at the end of a normal 38 week pregnancy, a fetus typically weighs around 7 lbs and is 20 inches in length

9.2.2.4. Prenatal influences:

9.2.2.4.1. Genetic factors (major cause of genetic defects is faulty genes or chromosomes)

9.2.2.4.1.1. Phenylketonuria (PKU): genetically caused, inability to properly digest or break down proteins, but they can still survive if caught early and fed correct diet

9.2.2.4.1.2. Tay-Sachs disease: body is unable to break down fat, which causes these substances to build up in and destroy brain and nerves cells, until nervous system shuts down

9.2.2.4.1.2.1. Babies show signs around 4-6 weeks after birth

9.2.2.4.1.2.2. Normally die by age of 5

9.2.2.4.1.2.3. If both parents carry the genetic defect, the child has a $\frac{1}{4}$ chance of being born with the disease (recessive trait)

9.2.2.4.1.3. Down syndrome:

9.2.2.4.1.3.1. Occurs when a zygote receives an extra chromosome at the moment of conception, causing intellectual disability (mom or dad give 24)

9.2.2.4.1.3.2. More common in babies with mothers older than 35

9.2.2.4.1.3.3. Facial features such as upward slanted eyes, smaller noses, etc.

9.2.2.4.1.3.4. Often accompanied by other health problems such as heart, vision, and hearing issues

9.2.2.4.2. Environmental factors

9.2.2.4.2.1. Teratogens: Environmental agents such as drugs, chemicals, viruses, or other factors that can produce birth defects

9.2.2.4.2.1.1. Rubella (measles): can cause blindness, deafness, heart issues

9.2.2.4.2.1.2. Syphilis can cause intellectual disabilities, physical deformities, and miscarriages

9.2.2.4.2.1.3. AIDS can be passed on to child prior to birth

9.2.2.4.2.1.4. Drugs: can result in baby born being addicted to said drug

9.2.2.4.2.1.4.1. Mostly illegal, but sometimes legal drugs

9.2.2.4.2.1.4.2. Can result in baby going through withdrawal after birth

9.2.2.4.2.1.5. Fetal alcohol syndrome: condition resulting in mental growth retardation

9.2.2.4.2.1.5.1. physical features: small eyes and brain, upturned nose

9.2.2.4.2.1.5.2. Most have some degree of intellectual disability and may exhibit problems with attention span, learning, coordination, and behavior

9.2.2.4.2.1.6. Smoking can lead to fewer nutrients received by the fetus which results in lower birth weight, heavier smoking can affect the brain

9.2.3. Newborns:

9.2.3.1. All babies are born with a number of reflexes that are unlearned and involuntary responses

9.2.3.2. Infant Reflexes:

9.2.3.2.1.

Reflex	Stimulation	Infant's Response	Developmental Pattern
Blinking	Flash of light, puff of air	Closes both eyes	permanent

Babinski	Sole of foot tickled	Fans out toes, twists foot	Disappears after 9mo to 1 year
Grasping	Palms touched	Grasps tightly	Weakens after 3mo, disappears after 1 year
Moro (startle)	Sudden stimulation (loud noises/being dropped)	Startles, arches back, throws back head, flings out arms and legs and rapidly close them to center of body	Disappears after 3 to 4 mo
Rooting	Cheek stroked or side of mouth touched	Turns head, opens mouth, begins sucking	Disappears after 3 to 4 mo
Stepping	Infant held above surface and feet lowered to ground	Moves feet as if to walk	Disappears after 3 to 4 mo
Sucking	Objects touches mouth	Sucks automatically	Disappears after 3 to 4 mo
Swimming	Infant put face down in water	Makes coordinated swimming movements	Disappears after 6 to 7 mo
Tonic neck	Infant placed on back	Forms fist with both hands and usually turns head to right	Disappears after 2 mo

- 9.2.4. Discuss maturational challenges in adolescence, including related family conflicts. **AND**
- 9.2.5. Describe how sex and gender influence socialization and other aspects of development.
- 9.2.6. Adolescence
- 9.2.6.1. Begins with puberty
 - 9.2.6.2. Has important implications for the way adolescents feel about themselves
 - 9.2.6.2.1. Self-image can be greatly affected by when one physically matures
 - 9.2.6.3. Early maturation
 - 9.2.6.3.1. Boys
 - 9.2.6.3.1.1. Early maturing boys tend to do better in athletics and tend to be more popular, yet often are involved in substance abuse because they look older meaning they hang out with older guys
 - 9.2.6.3.1.2. In the long term, early maturing boys are typically more responsible and cooperative in life
 - 9.2.6.3.2. Girls
 - 9.2.6.3.2.1. Early maturing girls are more popular and have better self-esteem than later maturing girls
 - 9.2.6.3.2.2. Early development can also be embarrassing due to the negative connotation around it
 - 9.2.6.4. Late maturation:
 - 9.2.6.4.1. Late maturation can produce psychological difficulty for both genders
 - 9.2.6.4.2. Boys:
 - 9.2.6.4.2.1. Smaller and less coordinated, causing ridicule and seen as less attractive
 - 9.2.6.4.3. Girls
 - 9.2.6.4.3.1. Have lower social status in high school
 - 9.2.6.4.3.2. Have greater satisfaction with bodies in later high school and college
 - 9.2.6.5. Cognitive changes
 - 9.2.6.5.1. Usually in formal operational stage (from Piaget's stages)
 - 9.2.6.5.2. Begin to reason hypothetically and deduce consequences, leading to greater understanding and comprehension of moral principles
- 9.2.7. Adulthood: 20-60 years
- 9.2.7.1. Social Development

- 9.2.7.1.1. Early adulthood is centered around careers
 - 9.2.7.1.2. Midlife transition - occurs in person's 40s when one may question their life and accomplishments due mainly because of physical changes and realization that they're gonna die
 - 9.2.7.1.2.1. Most people's shift is relatively calm
 - 9.2.7.1.2.2. Many focus on the past or future and come to terms with their life/what they're doing now
 - 9.2.7.1.3. Marriage, children, and family
 - 9.2.7.1.3.1. People are still getting married, but rates of living together as well as divorce are higher
 - 9.2.7.1.3.1.1. ~90% of heterosexual adults will marry and ~75% of divorcees will remarry
 - 9.2.7.1.3.1.2. About 50% of first marriages end in divorce
 - 9.2.7.1.4. Women's Roles
 - 9.2.7.1.4.1. Close to 75% of all married women with school-age children are working outside the home
 - 9.2.7.1.4.2. Most working women are coming home to do the majority of housework
 - 9.2.7.1.4.3. According to sociologist Arlie Hochschild, employed mothers put in extra month of 25-hour days during the course of a year
 - 9.2.7.1.4.4. Most women work for personal satisfaction and sense of contributing to society
- 9.2.8. Late Adulthood: 65+
- 9.2.8.1. Many physical changes
 - 9.2.8.1.1. Thinning and graying of hair, skin wrinkling, and a slight loss of height, senses are less sensitive, reaction times slow, decrease in stamina
 - 9.2.8.1.2. Causes:
 - 9.2.8.1.2.1. Genetic programming theories of aging: built-in timeline to the reproduction of human cells (kind of like an automatic self-destruct button has been pushed)
 - 9.2.8.1.2.2. Wear-and-tear theories of aging: mechanical function the body simply stops working efficiently as people age
 - 9.2.8.2. Cognitive changes:
 - 9.2.8.2.1. Fluid intelligence decline - responsiveness in new situations
 - 9.2.8.2.2. Crystallized intelligence increase - facts
 - 9.2.8.2.3. Memory:
 - 9.2.8.2.3.1. Neural processing slows down which in turn causes it to take longer to process the memories
 - 9.2.8.2.3.1.1. Most memory loss tends to be limited to episodic memory, other types are largely unaffected by age
 - 9.2.8.2.3.1.2. If a person stays active, physically and mentally, the memory loss seems almost non-existent
 - 9.2.8.2.3.1.3. Some memory loss is due to disease, such as alzheimer's
 - 9.2.8.3. Social Changes:
 - 9.2.8.3.1. Disengage theory from aging - gradual withdrawal from the world on physical, psychological, and social levels
 - 9.2.8.3.2. Provides opportunity for increased reflectiveness and decreased emotional investment in others at a time of life when social relationships will end in death
 - 9.2.8.3.3. Active theory of aging - people who age most successfully are those who maintain the interests, activities, and level of social interaction they experienced during middle adulthood
 - 9.2.8.3.4. Late adulthood should reflect a continuation, as much as possible, of the activities in which people participated during earlier parts of their lives
- 9.2.9. Stages of Grief
- 9.2.9.1. Denial
 - 9.2.9.2. Anger
 - 9.2.9.3. Bargaining
 - 9.2.9.4. Depression
 - 9.2.9.5. Acceptance
- 9.3. Social development
- 9.3.1. Erik Erikson's the dude

- 9.3.2. Psychosocial development: involves our changes in our interactions and understanding of one another as well as our knowledge and understanding ourselves as members of society
- 9.3.3. Believed that passage through stage required resolution of a conflict
- 9.3.4. Stages: [Video on subject](#)
- 9.3.4.1. Trust vs Mistrust (0-18 months)
 - 9.3.4.1.1. “Can I trust this world?”
 - 9.3.4.1.2. Depends on others to meet physical need and need for love
 - 9.3.4.1.3. If parents care and become attached you’ll develop a sense of trust and predictability
 - 9.3.4.1.4. Inconsistent or lacking care will cause infant to develop a sense of mistrusts and paranoia causing them to not be able to trust others
 - 9.3.4.2. Autonomy vs Shame and Doubt (18 months-3 years)
 - 9.3.4.2.1. “Do I have control over my life?” - can I make choices
 - 9.3.4.2.2. If the parents set boundaries, but still let the child make some decisions, they will develop a “will” or sense of independence
 - 9.3.4.2.3. If parents are overly restrictive, children will be unable to assert themselves yet if parents are too lenient, children become overly demanding and controlling - children will also have a sense of shame, self-consciousness
 - 9.3.4.3. Initiative vs Guilt (3-6 years)
 - 9.3.4.3.1. “Am I capable of doing things for myself?”
 - 9.3.4.3.2. Imagination and curiosity develops, bringing independence
 - 9.3.4.3.3. If parents react positively to these items, child will feel confident to take risks and have self-confidence
 - 9.3.4.3.4. If parents react negatively, child will lack self-sufficiency, have low self-esteem, and fear punishment
 - 9.3.4.4. Industry vs Inferiority (6-11 years)
 - 9.3.4.4.1. “Am I capable of doing things socially?”
 - 9.3.4.4.2. Compares self with others in social and academic aspects
 - 9.3.4.4.3. If they believe that they can do tasks, they develop a sense of pride and feel like they can fit in - confidence in a specific area
 - 9.3.4.4.4. Feeling inferior or not as good as others if they don’t find there “industry” or niche
 - 9.3.4.5. Identity vs Role Confusion (12-20 years)**
 - 9.3.4.5.1. “Who am I and where is my place in this world?
 - 9.3.4.5.2. Transitioning from childhood to adulthood and trying to figure out who you are, what strengths you have, and what kinds of roles you are best suited to do
 - 9.3.4.5.3. Finding a sense of who you are can lead to commitment to future roles
 - 9.3.4.5.4. Confusion over what role to play can lead to an unstable identity and adoption of a socially unacceptable rules
 - 9.3.4.5.5. Pressure to identify with what one wants to do with one's life are acutely felt
 - 9.3.4.5.5.1. Separate selves from parents
 - 9.3.4.5.5.2. Tend to rely more on peer group
 - 9.3.4.5.5.3. Pivotal time period in person’s life, paving the way for continued growth and future development of personal relations
 - 9.3.4.5.5.4. It’s only gonna get harder to break habits as you age
 - 9.3.4.5.6. Erikson believed that one had to “find self” and figure out role before they could truly feel and express love
 - 9.3.4.6. Intimacy vs Isolation (20-30 years)
 - 9.3.4.6.1. “Can I love and be loved?”
 - 9.3.4.6.2. Pondering entering into a close, loving relationship
 - 9.3.4.6.3. Developing intimacy can lead to a sense of connectedness
 - 9.3.4.6.4. Developing isolation can draw into self and avoid close emotional contact
 - 9.3.4.7. Generativity vs Stagnation (30-65)
 - 9.3.4.7.1. “Am I productive and giving something back to the world?”
 - 9.3.4.7.2. Sense that making a difference to the world through child, job, and community involvement, etc.
 - 9.3.4.7.3. Happy with life and feel made a difference, sense of accomplishment
 - 9.3.4.7.4. Feeling worthless and preoccupation with own needs (mid-life crisis)

9.3.4.8. Integrity vs Despair (65+)

9.3.4.8.1. "Has it all been worth it?"

9.3.4.8.2. Reviewing one's life

9.3.4.8.3. Look back at life happily, having a strong sense of self-acceptance

9.3.4.8.4. Develop a sense of despair, looking back at life with frustration, regret, and disappointment

9.4. Discuss maturation of motor skills.

9.4.1. Maturation: biological growth process, uninfluenced by experience

9.4.2. Motor maturation is universal (roll over, crawl, walk), but the timing is individualistic

Sitting unsupported	Crawling	Beginning to walk	Walking independently
6 months	8-9 months	12 months	15 months

9.5. Describe the influence of temperament and other social factors on attachment and appropriate socialization.

9.5.1. Stranger anxiety: fear of stranger - develops around 8 months - occurs because infants form schemas for familiar face and cannot assimilate a new face

9.5.2. Attachment: positive emotional bond that develops between child and particular individual (often mom)

9.5.2.1. Harry Harlow's monkey experiment [video](#)

9.5.2.2. Affected by environmental influences

9.5.3. Secure attachment: relaxed and attentive caregiving becomes the backbone of secure attachment

9.5.4. Insecure attachment: Harlow's experiment showed that monkey experienced great anxiety if their cloth mothers were removed

9.5.5. Ainsworth's strange situation experiment:

9.5.5.1. Mom and child entered room, and after a bit mom would leave and stranger would enter - all children felt anxiety. After a while, stranger would leave and mom would come back - two types of reactions:

9.5.5.1.1. Secure attachment: when mom came back they went to her and calmed down quickly and went back to exploring room

9.5.5.1.2. Insecure attachment:

9.5.5.1.2.1. Avoidant: do not cry when mom leaves but avoid her when she returns

9.5.5.1.2.2. Ambivalent: display anxiety when mom is in room and is upset when she leaves, but when she returns they may kick or hit or due to them being upset

9.6. Explain the maturation of cognitive abilities (e.g., Piaget's stages, information processing).

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

9.6.1.

9.6.2. Our cognitive development is shaped by errors we make

9.6.3. Object permanence: knowing that a thing exists even when it's hidden - peek-a-boo

- 9.6.4. Egocentric: NOT selfishness, child is unable to see stuff from others perspectives
- 9.6.5. Conversation: knowing that quantity can remain the same when shape or other properties change
- 9.6.6. Video of Conversation experiment
- 9.7. Compare and contrast models of moral development (e.g., Kohlberg, Gilligan).
- 9.7.1. Lawrence Kohlberg's Moral Ladder
- 9.7.1.1. Believed moral reasoning helps guide our judgement and behavior, proposed dilemmas to help people reason at different levels
 - 9.7.1.2. Theory assumes that people move through levels in a fixed order
 - 9.7.1.2.1. No real ages match up with levels, but it's believed that one could not reach the highest level until 13 because cognitive they couldn't understand it
 - 9.7.1.2.2. Helped people progress through levels by posing moral dilemmas to solve
 - 9.7.1.3. Stages: - when looking at test questions related to moral stuff, ask "Why did they chose to do the thing they did?"
 - 9.7.1.3.1. Level 1 - Preconventional:
 - 9.7.1.3.1.1. Performs actions based on reward or punishment
 - 9.7.1.3.1.2. very selfish and self-centered morality, typical in young children
 - 9.7.1.3.1.3. E.g. Stealing medicine so you can save a life because you can't live without a person
 - 9.7.1.3.2. Level 2 - Conventional:
 - 9.7.1.3.2.1. Interested in pleasing others and doing what is right by social laws
 - 9.7.1.3.2.2. Considered more than self think of family, loved ones, and societally as a whole
 - 9.7.1.3.2.3. E.g. Stealing medicine because society will think it's for the better and you'll get the street cred
 - 9.7.1.3.3. Level 3 - Postconventional:
 - 9.7.1.3.3.1. Using higher reasoning to guide behavior
 - 9.7.1.3.3.2. Thinking about terms of justice, equality, and human rights when making decisions
 - 9.7.1.3.3.3. Most people don't make it to this level, similar to the hierarchy of needs
 - 9.7.1.3.3.4. E.g. Stealing medicine because you believe one's life is more important than another property
- 9.8. Explain how parenting styles influence development.
 - 9.8.1. Authoritarian: rigid, punitive, and demand unquestionable obedience from children
 - 9.8.1.1. Strict standards and discourage expressions of disagreement
 - 9.8.1.2. Children tend to be unsociable, unfriendly, and withdrawn
 - 9.8.2. Permissive: give children relaxed or inconsistent direction and although nice, have low expectations
 - 9.8.2.1. Children tend to be immature, moody, dependent and have low self-control
 - 9.8.3. Authoritative (democratic): are firm, setting limits and goals for their children, yet explain and use reasonable logic to set limits - often let children have some role in making decisions/setting goals
 - 9.8.3.1. Encourage children's independence
 - 9.8.3.2. Children tend to be likeable, self-reliant, independent, and cooperative
 - 9.8.4. Uninvolved: show little interest in child and they are emotionally detached
 - 9.8.4.1. They view parenting as nothing more than providing food, clothing, and shelter for children
 - 9.8.4.2. Most extreme forms could be a form of child abuse
- 9.9. Characterize the development of decisions related to intimacy as people mature.
 - 9.9.1.
- 9.10. Predict the physical and cognitive changes that emerge as people age, including steps that can be taken to maximize function.
 - 9.10.1. Schemas: mental molds into which we pour our experiences
 - 9.10.2. As we are exposed to new stuff, we change our schemas in one of two ways
 - 9.10.2.1. Assimilation: interpret new information in terms of existing schema
 - 9.10.2.1.1. When you assimilate information, you are making an ass out of yourself
 - 9.10.2.1.1.1. E.g calling a cow a horse
 - 9.10.2.1.2. Accommodation: adapt their existing schema to incorporate new information
 - 9.10.3. Cognitive development in adolescence

10. Personality (5-7%)

In this section of the course, students explore major theories of how humans develop enduring patterns of behavior and personal characteristics that influence how others relate to them. The unit also addresses research methods used to assess personality.

Chapter Quizlet

AP students in psychology should be able to do the following:

- 10.1. Compare and contrast the major theories and approaches to **explaining personality** (e.g., psychoanalytic, humanist, cognitive, trait, social cognition, behavioral).

10.1.1. Psychoanalytic

- 10.1.1.1. Personality is made up of us thinking, feeling, and acting
10.1.1.2. Behavior is determined by conflicts in aggression, and sexual impulses in the ID, ego, and superego
10.1.1.3. Structure of personality

ID	Ego	Superego
I Do whatever I want	There he goes and makes a decision	Superman (superego) had good morals and ethics
The "wants" of personality	The "coulds" of personality	The "shoulds" of the personality
Seeks to satisfy urges/drives/needs (4Fs)	Seek realistic ways to meet wants of ID while staying within superego rules	Seeks to do the proper thing, perfectionist
Contains instinctive drives, impulse, etc	Contains coping techniques	Contains all our internal standards of right and wrong
Pleasure Principle	Reality Principle	Morality Principle
All unconsciousness	Consciousness and Unconsciousness	Consciousness and Unconsciousness
Develops first. Infant	Develops second. Child	Develops last. Adult
Uses fantasy for relief	Uses defense mechanisms	Uses shame and guilt or threat of them
	Mediates between ID and superego	Divided into conscience and ego-ideal > Conscience: what shouldn't be done (guilt) > Ego-ideal: what should be done (shame)

10.1.1.3.1. Pleasure principle: demands instant gratification

10.1.1.3.2. Ego: reality - compromise - goal is to focus on reality and what's realistic

10.1.1.3.2.1. Deals with anxiety produced by id-superego conflict

10.1.1.3.2.2. Reality principle: delayed gratification of IDs urges until appropriate outlet and situations can be found

10.1.1.3.3. Superego: consciousness - decision making based on what society says is ok

10.1.1.4. psychosexual stages - the childhood stages of development where the id's pleasure-seeking energies focus on distinct erogenous zones

10.1.1.4.1. Only Awesome People Learn Guitar

10.1.1.4.2. Oral: 0-1.5yrs - focus on sticking stuff in mouth

10.1.1.4.3. Anal 1.5-3yrs - focus on controlling bodily functions

10.1.1.4.4. Phallic 3-6yrs

10.1.1.4.4.1. oedipus and electra complex: a child's sexual attachment to the parent of the opposite sex and jealousy toward the parent of the same sex

10.1.1.4.5. Latency 6-puberty - start of sexual feelings

10.1.1.4.6. Genital puberty-onwards - mature sexual desires

10.1.1.5. Identification: the process by which a child adopts the values and principles of the same-sex parent

10.1.1.6. Conscious: whatever one is aware of at a particular time

10.1.1.7. Preconsciousness: contains material just beneath the surface of awareness that can easily be retrieved

- 10.1.1.8. Unconscious: thoughts, memories, and desires that are well below the surface of conscious awareness but that exert great influence on behavior
- 10.1.1.9. Free association: a method of exploring the unconscious in which the person relaxes and says whatever comes to mind, no matter how trivial or embarrassing
- 10.1.1.10. Defense mechanisms: ego's way of protecting itself
 - 10.1.1.10.1. Anxiety is Caused by Unconscious Conflicts between Ego, ID, and Superego
 - 10.1.1.10.2. Repression: putting idea from conscious to unconscious
 - 10.1.1.10.3. Regression: reverting back to old stage in when life was easier
 - 10.1.1.10.4. Reaction form: react by doing opposite
 - 10.1.1.10.4.1. E.g. "I hate person X" to "I love person X"
 - 10.1.1.10.5. Rationalization: distort reality and justify maladaptive behavior
 - 10.1.1.10.6. Displacement: replacing your feelings
 - 10.1.1.10.6.1. Angry at parents, and taking anger out on punching bag
 - 10.1.1.10.7. Denial: refusing to acknowledge unwanted beliefs or actions
 - 10.1.1.10.8. Sublimation: unacceptable thoughts are converted into socially acceptable ones
 - 10.1.1.10.8.1. E.g. thinking about edgy stuff, then writing a horror book
- 10.1.1.11. Carl Jung Analytical
 - 10.1.1.11.1. Archetypes: emotionally charged images and thought forms that have universal meaning
 - 10.1.1.11.1.1. E.g. snakes are evil (we all know this - even across cultures)
 - 10.1.1.11.2. Collective unconsciousness: Cross-cultural idea that we all share
 - 10.1.1.11.2.1. E.g. we all know what a "hero" is
 - 10.1.1.11.3. Introverts: tend to be preoccupied with the internal world of their own thoughts, feelings, and experiences
 - 10.1.1.11.4. Extraverts: tend to be interested in the external world - people and things
- 10.1.1.12. Inferiority complex: we strive to turn feelings of inferiority into feelings of superiority

10.1.2. Humanist

- 10.1.2.1. Focuses on individuals, and what experiences make an individual
- 10.1.2.2. We're all trying to reach self-actualization and be the best version of ourselves
- 10.1.2.3. Unconditional positive regard: you strive in life if you have Unconditional positive regard
 - 10.1.2.3.1. Genuineness
 - 10.1.2.3.2. Acceptance
 - 10.1.2.3.3. Empathy
- 10.1.2.4. Self-concept: "Who am I?" - mental representation of the way we truly feel
- 10.1.2.5. Congruence is when self-concept is very similar to actual experience, leading to less anxiety
- 10.1.2.6. Incongruence is when self-concept is very different from actual experience, causing more anxiety

10.1.3. Socio-Cognitive

- 10.1.3.1. Observing how a person acts between their environment and their cognition (way of thinking)
- 10.1.3.2. Reciprocal Determinism - how we everything reacts
 - 10.1.3.2.1. Behavior
 - 10.1.3.2.2. Internal Cognition
 - 10.1.3.2.3. Consequences
- 10.1.3.3. Internal locus control: You are in control - when people are happy they believe it's internal
 - 10.1.3.3.1. E.g. I got an A because of me
- 10.1.3.4. External locus control: Outside factor - when people are unsatisfied they believe it's external
 - 10.1.3.4.1. E.g. I got an D because the classroom was noisy
- 10.1.3.5. Explanatory styles:
 - 10.1.3.5.1. Permanence: looking at the long-term effects?
 - 10.1.3.5.2. Pervasiveness: how will this affect other things?
 - 10.1.3.5.3. Personal: are these events personal?
- 10.1.3.6. Self-esteem:
 - 10.1.3.6.1. Spotlight: belief that everyone is watching you at all times, but in reality no one cares
 - 10.1.3.6.2. Self-esteem: how you feel about yourself
 - 10.1.3.6.3. Self-serving bias: we tend to believe that we are better than we actually are - ~70% think they're above average
 - 10.1.3.6.4. Self-efficacy: belief that one's ability to perform behaviors should lead to expected outcomes

10.1.3.6.4.1. High self-efficacy or high self-confidence leads to better performance

10.1.4. Behavioral:

- 10.1.4.1. B.F. skinner ideas adapted to personality
- 10.1.4.2. Claimed there was no free will
- 10.1.4.3. Personality is a product of conditioning
- 10.1.4.4. Personality is shaped over a lifetime

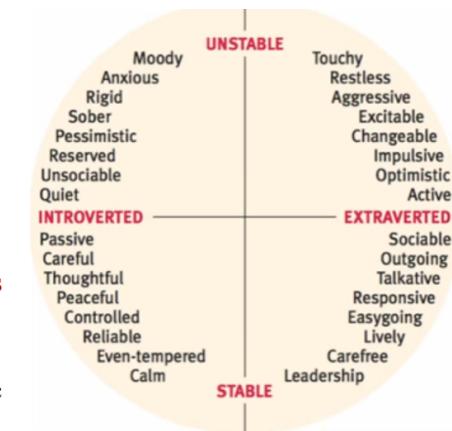
10.1.5. Trait

- 10.1.5.1. Trait is a pattern of behavior
- 10.1.5.2. Describe personality with a set of characteristics that presumably should hold fairly constant across a wide variety of circumstances
 - 10.1.5.2.1. If you say someone is conscientious, you typically don't mean that the person works hard in some situations and not in others - you mean they're hard working 100% of the time
- 10.1.5.3. Factor analysis: looking at what traits an individual excels at/doesn't have
 - 10.1.5.3.1. a statistical technique used to allow researchers to use correlations between the traits a person has and does not have with the goal to see which traits cluster together as factors
- 10.1.5.4. Albert Bandura
- 10.1.5.4.1. Triadic Reciprocity: Personality is the result of behavior, traits, and the environment
- 10.1.5.5. Hans Eysenck:
 - 10.1.5.5.1. You're either introverted or extrovert and either stable or unstable
 - 10.1.5.5.2. Developed 16PF (personality factors) questionnaire
 - 10.1.5.5.3.
- 10.1.5.6. Big Five traits - very stable, 50% is heritable - use OCEAN as mnemonic device
 - 1. openness to new experience
 - 2. conscientiousness
 - 3. extraversion
 - 4. agreeableness
 - 5. neuroticism - compulsiveness, anxiety, obsessive thoughts

10.2. Describe and compare **research methods** (e.g., case studies and surveys) that psychologists use to investigate personality. AND

10.3. **Identify frequently used assessment strategies** (e.g., the Minnesota Multiphasic Personality Inventory [MMPI], the Thematic Apperception Test [TAT]), and evaluate relative test quality based on reliability and validity of the instruments.

- 10.3.1. Personality inventory: true/false questions to assess one's personality
- 10.3.2. MMPI: the most widely researched and clinically used of all personality tests. Originally developed to identify emotional disorders (still considered its most appropriate use), this test is now used for many other screening purposes
- 10.3.3. TAT: a projective test in which people express their inner feelings and interests through the stories they make up about ambiguous scenes from pictures/images displayed to them.
- 10.3.4. [16 PF](#)
- 10.3.5. [Free association](#)



Comparing Research Methods Used To Investigate Personality				
Research Method	Description	Perspectives incorporating this method	Benefits	Weaknesses
Case study	In-depth study of one.	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 Myers-Briggs, the MMPI, and (thanks to factor analysis) the Big Five	Objectively scored groups of questions designed to identify personality dispositions.	Trait	Generally reliable and empirically validated.	Explore 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 variables, with random assignment to conditions.	Social-cognitive	Discerns cause and effect.	Some variables cannot feasibly or ethically be manipulated.

10.3.6.

- 10.4. Speculate how **cultural context** can facilitate or constrain personality development, especially as it relates to self-concept (e.g., collectivistic versus individualistic cultures).

10.4.1. Western culture is individualist, Japan is collectivist

10.4.2. Big 5 are similar across cultures

TABLE 10.4

Value Contrasts Between Individualism and Collectivism

Concept	Individualism	Collectivism
Self	Independent (identity from individual traits)	Interdependent (identity from belonging)
Life task	Discover and express one's uniqueness	Maintain connections, fit in, perform role
What matters	Me—personal achievement and fulfillment; rights and liberties; self-esteem	Us—group goals and solidarity; social responsibilities and relationships; family duty
Coping method	Change reality	Accommodate to reality
Morality	Defined by individuals (self-based)	Defined by social networks (duty-based)
Relationships	Many, often temporary or casual; confrontation acceptable	Few, close and enduring; harmony valued
Attributing behavior	Behavior reflects one's personality and attitudes	Behavior reflects social norms and roles

Sources: Adapted from Thomas Schoeneman (1994) and Harry Triandis (1994).

10.4.3.

11. Testing and Individual Differences (5–7%)

An understanding of intelligence and assessment of individual differences is highlighted in this portion of the course. Students must understand issues related to test construction and fair use.

Chapter Quizlet

AP students in psychology should be able to do the following:

- 11.1. Explain how psychologists design tests, including standardization strategies and other techniques to establish reliability and validity. AND
- 11.2. Interpret the meaning of scores in terms of the normal curve. AND
- 11.3. Define intelligence and list characteristics of how psychologists measure intelligence:

- 11.3.1. Intelligence (in all cultures) is the capacity to understand the world, think rationally, and use resources effectively when faced with challenges - typically school-smarts
- 11.3.1.1. Psychologists believe that intelligence is a concept and not a “thing”
- 11.3.1.2. Reification: view an abstract immaterial concept (intelligence) as if it was something definitive/concrete
- 11.3.2. Assessing intelligence: psychologists define intelligence testing as a method for assessing an individual's mental aptitudes and comparing them with others using numerical scores
- 11.3.3. Alfred Binet set out to find out the child's mental age, or the average age of individuals who achieve a particular level of performance
- 11.3.3.1. E.g. if a child is 4, but can think as well as an average 6 year old, then their mental age is 6
- 11.3.4. Goal wasn't to label children, and warned that if information was misused it would label the children, instead he wanted to find a way to help improve the education experience of French kids
- 11.3.5. Lewis Terman adapted/revised Binet's test for American school kids and named it the “Stanford-Binet IQ Test”, which is still in use today
- 11.3.5.1. Today it is given orally and varies in nature according to the person taking the test
- 11.3.5.1.1. Children: given figures to copy or everyday problems to solve
- 11.3.5.1.2. Adults: asked to solve analogies, explain proverb and describe similarities that underlie set of words
- 11.3.5.2. Test giver finds the mental age of the individual, then asks more difficult questions until the person can't answer any more, meaning they've reached their mental age
- 11.3.6. IQ *used* to be equal to the mental age, divided by the actual age, then multiplied by 100
- 11.3.7. WAIS
- 11.3.7.1. For adults
- 11.3.7.2. 2 parts
- 11.3.7.2.1. Verbal: vocab definitions and comprehension
- 11.3.7.2.2. Performance: timed assembly of small objects and arranged pictures in logical order
- 11.3.7.2.2.1. E.g. putting a puzzle together
- 11.3.7.3. Normally, verbal and performance are within very close range, yet separate scores can give a more precise picture of a person's specific abilities
- 11.3.8. Achievement tests: intended to reflect on what you have already learned:
- 11.3.8.1. E.g. AP Psych Exam
- 11.3.9. Aptitude tests: intended to predict your ability to learn new skills
- 11.3.9.1. E.g. SAT/ACT
- 11.3.9.2. Aptitude like altitude, predicts where you're gonna peak/reach in the future
- 11.3.10. For a test to be acceptable, it must be
- 11.3.10.1. Standardized:
- 11.3.10.1.1. when test items are piloted on a similar population of people and “norms” have been established
- 11.3.10.1.2. E.g. AP Psych exam may be given to college freshman or take into account previous years exam results to establish (new) norms
- 11.3.10.1.3. Tests need to be restandardized because humans grow smarter over time due to the Flynn effect - in the past 60 years iq has raised by an average of 27 points because of better environmental factors (healthier, better schools, etc.)
- 11.3.10.2. Reliable:
- 11.3.10.2.1. Test scores measure what it is trying to measure
- 11.3.10.2.2. Split-half reliability: dividing the test into two equal halves and assessing how consistent the scores are (giving half the class odd number questions and giving the other half even number questions)
- 11.3.10.2.3. Reliability using different tests: using different forms of the test to measure consistency between them
- 11.3.10.2.4. Test-retest reliability: using the same test on two occasions to measure consistency, off setting - needs to be enough time between them that test-takers don't remember questions
- 11.3.10.3. Valid:
- 11.3.10.3.1. Validity refers to the tests ability to measure what it's supposed to measure
- 11.3.10.3.2. Construct Validity: test measures a particular hypothetical concept, i.e. creativity, iq, extraversion, etc.

- 11.3.10.3.3. Content Validity: refers to the extent a test measures what it is supposed to measure
- Math chapter test should quiz you on what you learned in the chapter
- 11.3.10.3.4. Predictive Validity: refers to the function of a test in predicting a particular behavior or trait
- 11.3.11. Types of intelligence:
- 11.3.11.1. Fluid intelligence: reflects information-processing capabilities, reasoning, and memory
11.3.11.1.1. Tends to decline as we age
- 11.3.11.2. Crystallized intelligence: accumulated knowledge, skills, and strategies that have been learned through experience
11.3.11.2.1. Tend to increase throughout life
- 11.3.12. Genetical Influence:
- 11.3.12.1. Studies of identical twins have shown a strong correlation in IQ scores when compared with fraternal twins
- 11.3.12.2. Adopted children tend to have a more similar IQ to their biological parents than adoptive parents
- 11.3.13. Environmental Influence:
- 11.3.13.1. The more/better schooling, the higher the intelligence
- 11.3.13.2. Greater similarity in IQ scores of those individuals raised together than those raised apart
- 11.3.13.3. Races are remarkably alike genetically
- 11.3.13.4. Asian students outperform North American students, largely due to environmental factors
- 11.3.14. Heritability
- 11.3.14.1. Heritability and heredity aren't the same thing!
- 11.3.14.1.1. Heritability looks at difference in groups
11.3.14.1.1.1. Heritability is higher in groups that share the same environment
- 11.3.14.1.2. Heredity looks at an individual's traits
11.3.14.2.
- 11.3.15. abstract versus verbal measures;
11.3.15.1.
- 11.3.16. speed of processing.
11.3.16.1.
- 11.4. Discuss how culture influences the definition of intelligence.
- 11.5.
- 11.6. Compare and contrast historical and contemporary theories of intelligence (e.g., Charles Spearman, Howard Gardner, Robert Sternberg).
- 11.6.1. Charles Spearman:
- 11.6.1.1. Believed there was a single, general factor for all mental ability, didn't deny that some people have outstanding talents, but felt these differences shouldn't blind us to a single general intelligence
- 11.6.1.2. General intelligence (g) is linked to many clusters/abilities and can be connected back to a single underlying aspect of intelligence
11.6.1.2.1. E.g. people who do well on vocab tests also do better on math or spatial ability tests
- 11.6.2. LL Thurstone
- 11.6.2.1. Analyzed his subjects on 7 different clusters of intelligence:
- 11.6.2.1.1. Word fluency
11.6.2.1.2. Verbal Comprehension
11.6.2.1.3. Spatial Ability
11.6.2.1.4. Perceptual Speed
11.6.2.1.5. Numerical Ability
11.6.2.1.6. Inductive Reasoning
11.6.2.1.7. Memory
- 11.6.2.2. Thurstone found out that if someone did well in one subject, they tended to do well in many of them (trait theory)
- 11.6.3. Howard Gardner:
- 11.6.3.1. Supports with multiple subjects idea, but not general intelligence
- 11.6.3.2. Justified his theory by explaining why someone can be handicapped in one area but exceed in another
- 11.6.3.3. Intelligence includes:
- 11.6.3.3.1. **Interpersonal:** ability to understand **others**
- 11.6.3.3.2. **Intrapersonal:** ability to understand yourself, **about yourself**

- 11.6.3.3.3. Existential: think about life, death, and reality, "Why am I here"
- 11.6.3.3.4. Naturalist: ability to discriminate among living things and sense features of the world
- 11.6.3.3.5. Bodily Kinesthetic: coordination
- 11.6.3.3.6. Musical: hear/recognize/manipulate patterns
- 11.6.3.3.7. Visual/Spatial: see 3d image in your mind (rubik's cube)
- 11.6.3.3.8. Logical: understand underlying principles (math)
- 11.6.3.3.9. Linguistic: use language to express yourself

11.6.4. Robert Sternberg

- 11.6.4.1. Agreed there is more than success than traditional intelligence
 - 11.6.4.1.1. Analytical: what we test in schools
 - 11.6.4.1.2. Creative: lets us adapt to new situations
 - 11.6.4.1.2.1. Expertise: well developed knowledge base
 - 11.6.4.1.2.2. Imaginative: the ability to see things in novel/new ways
 - 11.6.4.1.2.3. Adventuresome: seek new experiences
 - 11.6.4.1.2.4. Intrinsic motive: unconscious drive to be creative
 - 11.6.4.1.2.5. Creative env.: creativity blooms in supported environment
 - 11.6.4.1.3. Practical: "street smarts"

11.7. Describe relevant labels related to intelligence testing (e.g., gifted, cognitively disabled).

11.7.1. Intellectually disabled:

- 11.7.1.1. Significantly below-average intellectual functioning (~<70 IQ) and limitation in at least two areas of adaptive functioning:
 - 11.7.1.1.1. Communication skills
 - 11.7.1.1.2. Self-care (shower, brush your teeth, etc)
 - 11.7.1.1.3. Ability to live independently
 - 11.7.1.1.4. Social skills
 - 11.7.1.1.5. Community involvement (get along with groups)
 - 11.7.1.1.6. Self direction (make good decisions)
 - 11.7.1.1.7. Health and safety
 - 11.7.1.1.8. Academic
 - 11.7.1.1.9. Leisures and work
- 11.7.1.2. Factors:
 - 11.7.1.2.1. Genetics (down syndrome)
 - 11.7.1.2.2. Environmental (fetal alcohol syndrome)
 - 11.7.1.2.3. Deprivation or neglect
 - 11.7.1.2.4. No apparent/known cause
- 11.7.1.3. Cure:
 - 11.7.1.3.1. None, but there are some measures that can be taken
 - 11.7.1.3.2. Tests for PKU
 - 11.7.1.3.3. Going to doctor appointments
- 11.7.1.4. Levels:

Severeness / IQ	Results in
Mild (50-70)	85% of those with mental disabilities are here, they can live on their own and hold a job, 6 th grade intelligence
Moderate (35-49)	2 nd grade intelligence, can be trained in self-care and acquire some reading/writing skills, but still need supervision
Severe (20-34)	Mental age of 5 year old, can talk and perform simple tasks, but need close supervision
Profond (<20)	Mental age of 3 - very limited communication and require constant supervision

11.7.2. Intellectually gifted: >135 IQ

- 11.7.2.1. Terman did a bunch of research on the gifted

- 11.7.2.2. Found that children excelled in school, had overall good health, and were generally happy
- 11.7.2.3. Most continued to be successful, but not the next Steve Jobs

11.8. Debate the appropriate testing practices, particularly in relation to culture-fair test uses.

12. Abnormal Behavior (7-9%)

In this portion of the course, students examine the nature of common challenges to adaptive functioning. This section emphasizes formal conventions that guide psychologists' judgments about diagnosis and problem severity.

Chapter Quizlet

AP students in psychology should be able to do the following:

- 12.1. Describe contemporary and **historical conceptions** of what constitutes psychological disorders.
 - 12.1.1. Defining abnormal behavior: Must be deviant, distressful, and dysfunctional
 - 12.1.2. Historically, maltreatment of insane was based on irrational view (possessed by demons). Many patients were subject to strange, debilitating and dangerous treatments i.e. torture
- 12.2. Recognize the use of the most recent version of the Diagnostic and Statistical Manual of Mental Disorders (**DSM**) published by the American Psychiatric Association as the primary reference for making **diagnostic judgments**. AND
- 12.3. Identify the positive and negative consequences of diagnostic labels (e.g., the Rosenhan study).
 - 12.3.1. DSM contains a lot of stuff, including over 400 psychological disorders (compared to the 60 in the 1950's book)
 - 12.3.1.1. Introduction and how the book should be used
 - 12.3.1.2. Diagnostic criteria and codes: lists all disorders and what makes someone classify under that disorder
 - 12.3.1.3. Emerging measures and models: how we should go about diagnosing the disorder and certain measures that we should take when treating it
 - 12.3.2. The purpose of the book is to
 - 12.3.2.1. Describe the 400 disorders
 - 12.3.2.2. Indicate how prevalent the disorder is
 - 12.3.2.3. Make sure there is a universal standard across doctors/psychologists
 - 12.3.3. DSM created by the APA include the following criteria to label behavior as a disorder
 - 12.3.3.1. It's a recurring pattern
 - 12.3.3.2. It reflects an underlying psychobiological dysfunction
 - 12.3.3.3. The consequences of which are clinically significant distress or disability
 - 12.3.3.3.1. E.g. a painful symptom or impairment in one or more important areas of functioning
 - 12.3.3.4. Must not be merely an expected response to common stressors or loss
 - 12.3.3.4.1. E.g. the loss of a loved one isn't a disorder
 - 12.3.3.5. Primarily a result of social deviance or conflicts with societal norms
 - 12.3.4. Can be shortened to the four D's (and a U)
 - 12.3.4.1. **Deviant:** goes against the norms of behavior (may be abnormal in one culture, but normal in another)
 - 12.3.4.2. **Distressful:** cause the person (or others) distress or disturbs them
 - 12.3.4.3. **Dysfunctional:** may cause dysfunction in the person's life (alter daily routine)
 - 12.3.4.4. **Dangerous:** cause harm to self or others
 - 12.3.4.5. **Unjustifiable** not reasonable
 - 12.3.5. Label psychological disorders debate:
 - 12.3.5.1.

Labeling is Good	Labeling is Bad
Make communication between doctors easier due to standardization	Stigmatized individuals by assigning arbitrary conditions and value judgements
Easier to know how to treat individual	People can be turned away from seeking help due to stigma of being labeled
Insurance companies won't cover things that aren't on the DSM 5	

- 12.3.6. Rosenhan's experiment on being sane in insane places

- 12.3.6.1. [Good video](#) on subject
 - 12.3.6.2. Sick patients were thought to be healthy (Type 1 error)
 - 12.3.6.3. Healthy patient was labeled as sick (Type 2 error) and occurs more often
 - 12.3.6.4. [URL](#) to error types
- 12.4. Discuss the **major diagnostic categories**, including anxiety disorders, bipolar and related disorders, depressive disorders, dissociative disorders, feeding and eating disorders, neurodevelopmental disorders, neurocognitive disorders, obsessive-compulsive and related disorders, personality disorders, schizophrenia spectrum and other psychotic disorders, somatic symptom and related disorders, and trauma- and stressor-related disorders and their corresponding symptoms.
- 12.4.1. Personality Disorders - affects who that person is
 - 12.4.1.1. Individuals often seek treatment only after being pressured by family member or close friend because the individual believes it's "who they are" despite it affecting their life
 - 12.4.1.2. Cluster A - odd/eccentric cluster
 - 12.4.1.2.1. Paranoid Personality Disorder
 - 12.4.1.2.1.1. Pervasive distrust and suspiciousness of others
 - 12.4.1.2.1.2. Suspects others are exploiting, harming, or deceiving them
 - 12.4.1.2.1.3. Doubts loyalty or trustworthiness of others
 - 12.4.1.2.1.4. Will not confide in others
 - 12.4.1.2.1.5. Looks for hidden meaning that isn't there
 - 12.4.1.2.2. Schizoid Personality Disorder
 - 12.4.1.2.2.1. Neither desired nor enjoys close relationships
 - 12.4.1.2.2.2. Prefers to be alone
 - 12.4.1.2.2.3. Lacks close friends
 - 12.4.1.2.2.4. Cold and detached
 - 12.4.1.2.3. Schizotypal Personality Disorder
 - 12.4.1.2.3.1. Once known as "Simple Schizophrenia"
 - 12.4.1.2.3.2. Uncomfortable in close relationship
 - 12.4.1.2.3.3. Odd thinking and speech
 - 12.4.1.2.3.4. Lacks close friends
 - 12.4.1.2.3.5. Inappropriate affect
 - 12.4.1.2.3.6. Odd or eccentric behavior or appearance
 - 12.4.1.3. Cluster B - the "dramatic, emotional, erratic" cluster
 - 12.4.1.3.1. Antisocial personality disorder
 - 12.4.1.3.1.1. "Sociopaths" and "Psychopaths"
 - 12.4.1.3.1.2. Have no consciousness - disregard rights of others
 - 12.4.1.3.1.3. Lack of remorse
 - 12.4.1.3.1.4. Can lie without guilt
 - 12.4.1.3.1.5. Strictly uses people for self gain
 - 12.4.1.3.1.6. Can be very charming
 - 12.4.1.3.1.7. Imposters, con men, crooked politicians, serial killers, etc
 - 12.4.1.3.2. Borderline Personality Disorder
 - 12.4.1.3.2.1. Intense and unstable emotions and moods
 - 12.4.1.3.2.2. Impulsive behaviors
 - 12.4.1.3.2.3. Feelings of emptiness
 - 12.4.1.3.2.4. Unstable self image or sense of self
 - 12.4.1.3.2.5. Tends to be impulsive
 - 12.4.1.3.3. Histrionic personality disorder
 - 12.4.1.3.3.1. Frequent dramatic public displays
 - 12.4.1.3.3.2. Overreacts emotionally to routine events
 - 12.4.1.3.3.3. Demands to be center of attention
 - 12.4.1.3.3.4. Continually makes scenes, throwing tantrums
 - 12.4.1.3.4. Narcissistic Personality Disorder
 - 12.4.1.3.4.1. Grandiose over inflated sense of self
 - 12.4.1.3.4.2. Truly conceited, often arrogant, selfish
 - 12.4.1.3.4.3. Needs constant attention
 - 12.4.1.3.4.4. Can't take criticism
 - 12.4.1.3.4.5. No empathy or compassion for others

12.4.1.4. Cluster C - the “anxious, fearful” cluster

12.4.1.4.1. Avoidant Personality Disorder

- 12.4.1.4.1.1. Hypersensitive to rejection
- 12.4.1.4.1.2. Needs constant acceptance and affection
- 12.4.1.4.1.3. Won’t enter relationship unless they get tot acceptance
- 12.4.1.4.1.4. Can’t take the slightest hint of disapproval
- 12.4.1.4.1.5. Ends up being alone and isolated

12.4.1.4.2. Dependent Personality Disorder

- 12.4.1.4.2.1. Allows others to take responsibility for major areas of their life
- 12.4.1.4.2.2. Has trouble making decisions
- 12.4.1.4.2.3. Lacks confidence
- 12.4.1.4.2.4. Give up their needs for the needs of others

12.4.1.4.3. Obsessive-compulsive personality disorder

- 12.4.1.4.3.1. Picky perfectionist
- 12.4.1.4.3.2. Preoccupied with details
- 12.4.1.4.3.3. Insists other do things their way
- 12.4.1.4.3.4. Trouble expressing emotions
- 12.4.1.4.3.5. Indecisive

12.4.2. Neurodevelopmental Disorders

12.4.2.1. Group of disorders that involve distortion in the development of basic psychological functions that are involved in social skills, language, perception, or motor/physical behavior

12.4.2.2. Due to some sort of biologically altering (genetics/environment factors)

12.4.2.3. Usually occur/diagnosed during infancy or childhood

12.4.2.4. Types:

12.4.2.4.1. Autism Spectrum Disorder (ASD)

- 12.4.2.4.1.1. Typically shows an unusual pattern of social and cognitive development beginning in childhood
- 12.4.2.4.1.2. Difficulties in communication and social interaction/communication
- 12.4.2.4.1.3. Spectrum now includes from the highest to the lowest functioning individuals with characteristics of the disorder
- 12.4.2.4.1.4. You can see characteristics of autism typically before 3, but usually much earlier
- 12.4.2.4.1.5. More frequent in males (by 4 to 5 times)
- 12.4.2.4.1.6. About 70% of those with autism have a intellectual disability (hence why there is a spectrum)

12.4.2.4.1.7. Characteristics

12.4.2.4.1.7.1. Impairment in social relationships

- 12.4.2.4.1.7.1.1. Show noticeable lack of awareness of existence or feeling of others
- 12.4.2.4.1.7.1.2. May not like to be touched/held and avoid eye contact

12.4.2.4.1.7.2. Impaired speech

- 12.4.2.4.1.7.2.1. About ½ of autistic children do not develop speech
- 12.4.2.4.1.7.2.2. Speech is often like an “echo” of what is heard
- 12.4.2.4.1.7.2.2.1. Can be from others, movies/TV shows, etc.

12.4.2.4.1.7.3. Very narrow range of interests and activities

- 12.4.2.4.1.7.3.1. May focus on objects almost obsessively

12.4.2.4.1.7.4. Sameness and routine very important

- 12.4.2.4.1.7.4.1. Usually become distraught/angry if change occurs

- 12.4.2.4.1.7.4.2. Most engage in self-soothing behaviors to block out extra sensory information (do not seem to have filter to block irrelevant information)

- 12.4.2.4.1.7.4.2.1. E.g. rocking (sorta like ticks)

12.4.2.4.1.8. Causes:

- 12.4.2.4.1.8.1. Both genetic and environmental factors play a role

- 12.4.2.4.1.8.2. Researchers have found genes associated with autism

- 12.4.2.4.1.8.3. Abnormal levels of serotonin and other neurotransmitters in brain

12.4.2.4.2. Attention Deficit Hyperactivity Disorder (ADHD)

12.4.2.4.2.1. Developmental disability involving short attention span, distractibility, and extreme difficulty in remaining inactive for any period

12.4.2.4.2.2. Disorder estimated to affect 3-5% of school-age kids

12.4.2.4.2.3. 3 subtypes/characteristics

12.4.2.4.2.3.1. Predominantly hyperactive-impulsive

12.4.2.4.2.3.1.1. Hyperactivity:

12.4.2.4.2.3.1.1.1. Fidgeting, squirming, talking a lot - need to be in motion constantly

12.4.2.4.2.3.1.1.2. Have difficulty doing quiet tasks or activities

12.4.2.4.2.3.1.2. Impulsiveness:

12.4.2.4.2.3.1.2.1. Impatience

12.4.2.4.2.3.1.2.2. Blurt out inappropriate comments, show emotions without restraint, act without regard for consequences

12.4.2.4.2.3.1.2.3. Have difficulty waiting for things they want, e.g. waiting for turn in a game

12.4.2.4.2.3.1.3. Often interrupt conversations or others activities

12.4.2.4.2.3.2. Predominantly inattentive

12.4.2.4.2.3.2.1. Easily distracted, miss details, forget stuff

12.4.2.4.2.3.2.2. Have difficulty focusing on one thing (can't force focus)

12.4.2.4.2.3.2.3. Become bored with a task after only a few minutes, unless they are doing something enjoyable

12.4.2.4.2.3.2.4. Have trouble completing or turning in homework, often losing things

12.4.2.4.2.3.2.5. Hard time listening when spoken to

12.4.2.4.2.3.2.6. Daydream, easily confused

12.4.2.4.2.3.2.7. Difficulty processing information compared to others

12.4.2.4.2.3.3. Combined hyperactive-impulsive and inattentive

12.4.2.4.2.4. Causes

12.4.2.4.2.4.1. Combination of genetic and environmental factors

12.4.2.4.2.5. Treatment often involves stimulant drugs like Adderall, ritalin, or concerta

12.4.2.4.2.5.1. Have "calming" effect

12.4.2.4.2.5.2. Many side effects

12.4.2.4.2.6. Individuals with ADHD oftentimes have it alongside other disorders such as learning disabilities, oppositional defiant disorder, conduct disorder, anxiety disorder, depression, or bipolar disorder

12.4.2.4.2.6.1. One disorder doesn't cause the other, but the symptoms of one may take another more noticeable or severe

12.4.2.4.3. Oppositional Defiant Disorder (ODD)

12.4.2.4.3.1. Typically starts at 8, but can start early as preschool years

12.4.2.4.3.2. Must last for at least 6 months and be more than "normal" childhood misbehavior

12.4.2.4.3.3. Symptoms:

12.4.2.4.3.3.1. Actively doesn't follow adults requests

12.4.2.4.3.3.2. Angry and resentful of others

12.4.2.4.3.3.3. Argue with adults

12.4.2.4.3.3.4. Blames other for there own mistakes

12.4.2.4.3.3.5. Has few or no friends or has lost friends

12.4.2.4.3.3.6. Loses temper

12.4.2.4.3.3.7. Spiteful or seeks revenge

12.4.2.4.3.3.8. Touchy or easily annoyed

12.4.2.4.3.4. Pattern of behavior must be different from those of other children around the same age and developmental level

12.4.2.4.3.5. Behavior is thought to be caused by a combination of biological, psychological, and social factors

12.4.2.4.4. Conduct disorder

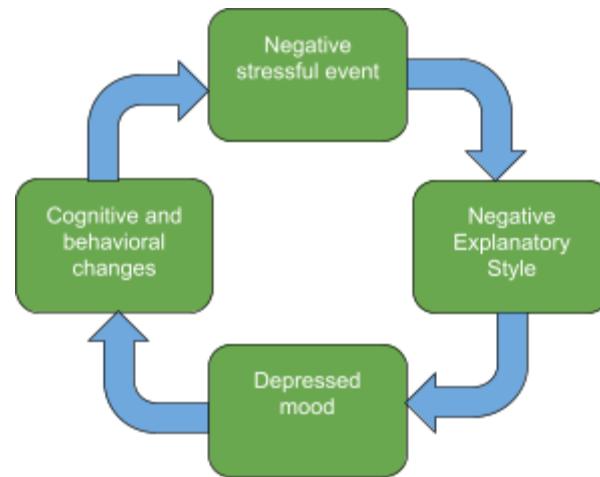
12.4.2.4.4.1. Associated with

12.4.2.4.4.1.1. Child abuse - family conflicts

- 12.4.2.4.4.1.2. Genetic defects - poverty
- 12.4.2.4.4.1.3. Parental drug addiction/alcohol abuse
- 12.4.2.4.4.2. Diagnosis is more common among boys
- 12.4.2.4.4.3. Symptoms
 - 12.4.2.4.4.3.1. Impulsive
 - 12.4.2.4.4.3.2. Difficult to control
 - 12.4.2.4.4.3.3. Unconcerned about feelings of others
 - 12.4.2.4.4.3.4. Antisocial behaviors (bullying and fighting)
 - 12.4.2.4.4.3.5. Breaking rules because they can
 - 12.4.2.4.4.3.5.1. Destruction of property (fire, breaking stuff)
 - 12.4.2.4.4.3.5.2. Vandalisms
 - 12.4.2.4.4.3.6. Cruel or aggressive behaviors towards people and animals
 - 12.4.2.4.4.3.6.1. Abuse of drugs and alcohol
 - 12.4.2.4.4.3.7. Lying to get a favor or avoid obligations
 - 12.4.2.4.4.3.8. Running away
- 12.4.2.4.4.4. Children with conduct disorder tend to develop personality disorders as adults, particularly antisocial personality disorder
- 12.4.2.4.4.5. If behaviors worsen, they may also develop significant drug and legal problems

12.4.3. Depressive disorders

- 12.4.3.1. Depression is the “common cold” of psychological disorders
- 12.4.3.2. 6-10% of the US is clinically depressed and is the #1 reason people seek mental health services
- 12.4.3.3. Women are twice as likely to experience severe depression
 - 12.4.3.3.1. ¼ of all females will experience a major episode of major depression at some point
- 12.4.3.4. Symptoms (must last 2+ weeks without cause)
 - 12.4.3.4.1. Either depressive mood or loss of interest or pleasure in almost all activities
 - 12.4.3.4.2. Must include 4 of the following:
 - 12.4.3.4.2.1. Weight gain/loss
 - 12.4.3.4.2.2. Constant sleep problems (because body is slowing down)
 - 12.4.3.4.2.3. Agitated or greatly slowed-down behavior
 - 12.4.3.4.2.4. Fatigue (because body is slowing down)
 - 12.4.3.4.2.5. Inability to think clearly
 - 12.4.3.4.2.6. Feelings of worthlessness
 - 12.4.3.4.2.7. Frequent thought of death/suicide
 - 12.4.3.4.3. Depression is not being sad
 - 12.4.3.4.4. Causes:
 - 12.4.3.4.4.1. Biological: lack of insufficient amounts of neurotransmitters
 - 12.4.3.4.4.1.1. Serotonin, norepinephrine, and dopamine
 - 12.4.3.4.4.2. Socio-cognitive: negative thoughts influence negative behaviors that influence the situation that turn influence thought patterns
 - 12.4.3.4.4.2.1. “Depression cycle”



- 12.4.3.4.2.2.
- 12.4.3.4.5. Persistent depressive disorder
- 12.4.3.4.5.1. Marked by constant low energy and poor self-esteem

12.4.3.4.5.2. Seen as low-grade, longer lasting depression

12.4.4. Bipolar and related disorders

12.4.4.1. Rapid alteration between depressive and manic state

Depressive Symptoms	Manic Symptoms
Gloomy	Elation
Withdrawn	Euphoria
Inability to make decisions	Desire for action
Tired	Hyperactive
Slowness of thought	Multiple ideas

12.4.4.2. Many musicians, writers, poets, etc. have suffered from bipolar disorder - during the manic phase, their creativity surged and dropped off during their depressive phases

12.4.4.3. Bipolar 1: experience manic episodes and usually severe depressive episodes

12.4.4.4. Bipolar 2: experience mania to a lesser degree (called hypomania)

12.4.4.4.1. Most people who have hypomania don't see it as an issue, but people around them might be concerned with their erratic behavior - can last up to 4 days

12.4.4.5. Cyclothymic Disorder:

12.4.4.5.1. Have hypomanic and depressive symptoms for at least 2 years yet symptoms do not constitute full "major depressive episode" or mania

12.4.4.6. Causes:

12.4.4.6.1. Biological: evidence for inherited predisposition is very strong

12.4.4.6.1.1. % of those with this disorder have family history of mood disorders

12.4.4.6.2. Psychological factors in triggering new episodes or preventing them - found that stressful events often trigger manic episodes

12.4.4.6.2.1. PET scans show that brain energy consumption rises and falls with manic and depressive episodes

12.4.5. Anxiety Disorders:

12.4.5.1. People with GAD often also have panic disorder

12.4.5.2. Most common mental disorder in the US affecting 40 million adults age 18 or older each year

12.4.5.3. Include worry, fear, apprehension, intrusive thoughts, physical symptoms and feelings of tension

12.4.5.4. Seems to have an automatic quality that comes from within the person, uncontrollable action

12.4.5.5. General Anxiety Disorder (GAD)

12.4.5.5.1. Prolonged, vague, unexplained, intense

12.4.5.5.2. Overwhelming sense of fear and anxiety that do not seem caused by anything in particular (General)

12.4.5.5.3. 4-6% of population experienced GAD

12.4.5.5.4. More common among women than men

12.4.5.5.5. Tends to become evident between late teens and early 20s

12.4.5.5.6. Symptoms:

12.4.5.5.6.1. Excessive anxiety and occurring for at least 6 months

12.4.5.5.6.2. Inability to control worry

12.4.5.5.6.3. Considerable distress or impairment in social occupational or other important areas of life

12.4.5.5.6.4. Presence of 3 or more of the following

12.4.5.5.6.4.1. Restlessness

12.4.5.5.6.4.2. Easily fatigued

12.4.5.5.6.4.3. Difficulty concentrating

12.4.5.5.6.4.4. Irritability

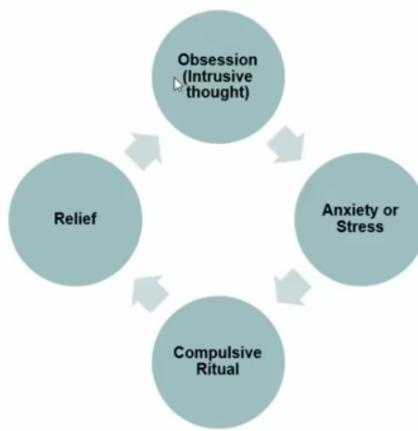
12.4.5.5.6.4.5. Muscle tension

12.4.5.5.6.4.6. Sleep disturbances

12.4.5.6. Panic disorder

12.4.5.6.1. People with GAD often also have panic disorder

- 12.4.5.6.1.1. Unlike GAD it is sudden and greatly magnified
- 12.4.5.6.2. More common among women and younger people
- 12.4.5.6.3. Recurrent, unexperienced panic attacks that last 1 month or persistent concern over having them again
- 12.4.5.6.4. Symptoms:
- 12.4.5.6.4.1. Shortness of breath / feeling smothered
 - 12.4.5.6.4.2. Dizziness, unsteadiness or faintness
 - 12.4.5.6.4.3. Trembling, shaking or sweating
 - 12.4.5.6.4.4. Racing heart
 - 12.4.5.6.4.5. Choking, nausea, or stomach pain
 - 12.4.5.6.4.6. Numbness or tingling
 - 12.4.5.6.4.7. Chest pain or discomfort
 - 12.4.5.6.4.8. Sense of “strangeness” - unfamiliar place/feeling
 - 12.4.5.6.4.9. Fear of going crazy, losing control, or of dying
- 12.4.5.7. Phobia
- 12.4.5.7.1. Marked by persistent, involuntary, and **irrational** fear of an object or situation that disrupts behavior
- 12.4.5.7.2. E.g. Heights, needles, the dark, etc
- 12.4.5.7.3. Kinds of phobias
- 12.4.5.7.3.1. Specific Fear of particular objects (spiders, oceans)
 - 12.4.5.7.3.2. Social Fear of embarrassment in interacting with others (social situations)
 - 12.4.5.7.3.3. Agoraphobia: Fear of fear itself - i.e. entering certain fear-evoking or unfamiliar situations that could cause fear/panic attacks - caused people to not to leave their homes
- 12.4.6. Obsessive-compulsive disorder (OCD) and related
- 12.4.6.1. Persistence of unwanted or intrusive thoughts (obsessions) and urge to engage in senseless rituals (compulsions) that cause distress
- 12.4.6.1.1. Obsessions: thoughts that are unwanted and intrusive
 - 12.4.6.1.2. Compulsions: actions that are to stop obsession
- 12.4.6.2. Neurological connection between obsession and compulsion
- 12.4.6.2.1. E.g. connection between mom fearing her son will die, so she feels like she needs to turn off lights by switching them on/off three times
- 12.4.6.3. Cycle:



- 12.4.6.4. People with OCD don't know anything with certainty, so they end up doing the compulsions over and over again to be safe
- 12.4.6.5. Brain imaging (PET scans) reveal that OCD causes high metabolic activity in frontal lobe in areas involved with directing attention
- 12.4.6.6. OCD Related Disorders:

Body Dysmorphic Disorder	Hoarding Disorder	Trichotillomania	Excoriation Disorder
<ul style="list-style-type: none"> • Preoccupation with an imagined or 	<ul style="list-style-type: none"> • Persistent difficulty with discarding or 	<ul style="list-style-type: none"> • Hair-pulling disorder 	<ul style="list-style-type: none"> • Skin-picking disorder

<p>exaggerated defect in personal appearance</p> <ul style="list-style-type: none"> ● Essential feature of BDD is the belief in an imagined defect in appearance ● E.g. person having big schnauzer and always thinking about it 	<p>parting with possessions because of perceived need to save them</p> <ul style="list-style-type: none"> ● Distress at the thought of getting rid of them 	<ul style="list-style-type: none"> ● Not a tick/habit, actively disrupting live 	<ul style="list-style-type: none"> ● Not a tick/habit, actively disrupting live
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12.4.7. Trauma and related

12.4.7.1. post-traumatic stress disorder (PTSD)

12.4.7.1.1. Four or more weeks of the following symptoms constitute PTSD

- 12.4.7.1.1.1. Haunting memories
- 12.4.7.1.1.2. Nightmares/flashbacks
- 12.4.7.1.1.3. Social withdrawal
- 12.4.7.1.1.4. Jumpy anxiety
- 12.4.7.1.1.5. Sleep problems

12.4.7.1.2. Resilience to PTSD - About 10% of women and 20% of men react to traumatic situations and develop PTSD

12.4.7.2. Acute stress disorder

12.4.7.2.1. Very similar to PTSD, except it happens immediately after event

12.4.7.2.2. Shorter lived but more intense than PTSD

12.4.7.3. Different perspectives takes on trauma disorders

12.4.7.3.1. Learning: believe that fear conditioning leads to anxiety. This anxiety then gets associated with other objects or events (generalized) and gets reinforced

12.4.7.3.1.1. Fear responses can be learned via observational learning. E.g. young monkeys develop fear when they see other monkeys fear snakes

12.4.7.3.1.2. Biological: GAD, panic attacks, and even OCD is linked with brain circuits like the anterior cingulate cortex

12.4.8. Dissociative Disorders:

12.4.8.1. Dissociation: Characterized by separation of critical parts of the personality (memory, consciousness, or identity) that are normally integrated and work together

12.4.8.1.1. E.g. daydreaming or getting lost in the moment while working on a project

12.4.8.1.2. Temporary dissociative states are common for most of us - i.e. when driving a common route (school or work) then realizing you don't recall going through an intersection or even stopping at a stop sign

12.4.8.2. Dissociative identity disorder

12.4.8.2.1. Condition in which a person appears to have 2 or more distinct personalities, each of which can speak, act, and write in different ways

12.4.8.2.2. Different identities also seem to have their own cognition (memories, wishes, desires, and impulses (often the impulse of one identity conflict with those of the other identities))

12.4.8.2.3. Problem occurs because there is only one body available for the different personalities, forcing the personalities to take turns

12.4.8.2.4. Because there is so much variation in personalities a personal behavior overall can appear very inconsistent/erratic

12.4.8.2.5. Cause

12.4.8.2.5.1. Psychoanalytic

12.4.8.2.5.1.1. Massive repression of unwanted impulses or memories create a "new person" who acts out otherwise unacceptable impulses or recalls otherwise unbearable memories

12.4.8.2.5.2. Behaviorist

12.4.8.2.5.2.1. Everyone capable of acting in different ways in different situations...this disorder is the extreme variation of acting so different that you "feel" like a different person

12.4.8.2.5.2.1.1. Also the symptoms are often strengthened by the feeling of relief when acting out

12.4.8.2.6. Development of DID

- 12.4.8.2.6.1. Actually evaluating the true causes of DID have been difficult due to the rarity of the disorder
- 12.4.8.2.6.2. Most clinicians believe that theorot cause of the disorder is some sort of abuse or trauma during childhood
- 12.4.8.2.6.3. The child “separated” themselves from abuse/trauma as a way to “deal” with the citation and continue to do it throughout the rest of their lives
- 12.4.8.2.6.4. Some individuals who believe the DID is not an actual disorder and that the individual is a con artist or role playing to ease anxiety in there life

12.4.9. Somatic Symptom Disorder

12.4.9.1. Physical symptoms that seem to suggest a physical disorder, yet have no physical causes or evidence.
Suggest that symptoms are linked to psychological factors

12.4.9.1.1. Factitious Disorder (fake/made up)

- 12.4.9.1.1.1. Munchausen's Syndrome: where someone purposely makes themselves physically impaired
- 12.4.9.1.1.2. Munchausen's Syndrome by proxy: when someone purposely makes someone close to them physically impaired
- 12.4.9.1.1.3. Ganser Syndrome: someone faking an physical or mental disorder

12.4.9.1.2. Conversion disorder:

- 12.4.9.1.2.1. Unexplained symptoms or deficits affecting voluntary motor or sensory functions that suggest a medical condition, yet no medical condition exists
- 12.4.9.1.2.2. Onset is usually after a stressful event
- 12.4.9.1.2.3. Common symptoms are paralysis, blindness, deafness, and difficulty walking
- 12.4.9.1.2.4. Many symptoms are anatomically impossible, i.e. glove anesthesia - inability to feel your hand, yet has sensation in the arm

12.4.9.1.2.5. Indicators:

- 12.4.9.1.2.5.1. La Belle indifference (beautiful indifference)
- 12.4.9.1.2.5.2. The person has extreme anxiety in other areas of life, but lacks concern about what appears to be an incapacitating physical ailment
- 12.4.9.1.2.5.3. Often such symptoms allow individual to escape from a frustrating situations and sometimes lead to a “secondary gain“ such as attention or affection

12.4.9.1.3. Illness anxiety disorder

12.4.9.1.3.1. Preoccupation with the idea that one has or might get a serious disease, along with interpretation of bodily systems or function

12.4.9.1.3.1.1. 3 major characteristics

- 12.4.9.1.3.1.1.1. Physiological arousal (worried, anxious, and often have sleep disturbances)
- 12.4.9.1.3.1.1.2. Bodily focus (close monitoring of bodily features and preoccupied with physical complaints)
- 12.4.9.1.3.1.1.3. Behaviors designed to avoid or check for physical illness and avoids those who have a disease and engage in repeated self inspection or medical consultation despite what they say

12.4.9.1.4. Cause

- 12.4.9.1.4.1. Conversion Disorder: conversion episode are nearly always triggered by a stressful event, emotional conflict
- 12.4.9.1.4.2. Illness anxiety disorder: although the cause is unclear, it's thought that personality, life experiences, upbringing, and inherited traits may all play a role

12.4.10. Schizophrenia

12.4.10.1. Psychosis: a symptom, not an illness, in which thought and emotions are so impaired that contact is lost with external reality

12.4.10.1.1. If disassociation is a break in personality, then psychosis is a break in reality

12.4.10.2. Schizophrenia is a now on a spectrum as of DSM 5

12.4.10.3. Schizophrenia is “the cancer” of disorders in that it isn’t too common, but very intense and severe

- 12.4.10.4. Nearly 1% of people suffer from schizophrenia
- 12.4.10.5. Targets young people as they become adults
- 12.4.10.6. Men and women get it equally, but men tend to suffer more
- 12.4.10.7. Schizophrenia translates to “split mind” - a split from reality is shown via
 - 12.4.10.7.1. Disorganized and delusional thinking (delusions)
 - 12.4.10.7.1.1. Bizarre thinking with distorted, false beliefs
 - 12.4.10.7.1.2. Occurs due to selective attention failure, resulting in fragmented, bizarre thoughts that spill out in no particular order
 - 12.4.10.7.2. Disturbed perceptions (hallucinations)
 - 12.4.10.7.3. Inappropriate emotions and actions
 - 12.4.10.7.3.1. E.g. Laugh at news of someone dying or show no emotion at all
- 12.4.10.8. Symptoms
 - 12.4.10.8.1. Positive - adding
 - 12.4.10.8.1.1. Distortion or excess of normal functions and tend to be most frequent in the first stages of early episodes of schizophrenia (adding to normal functions)
 - 12.4.10.8.1.1.1. presence of inappropriate behavior (adding to normal function of someone)
 - 12.4.10.8.1.1.1.1. Delusions
 - 12.4.10.8.1.1.1.1.1. False beliefs
 - 12.4.10.8.1.1.1.1.2. E.g. believing that someone's out to get you
 - 12.4.10.8.1.1.1.2. Hallucinations
 - 12.4.10.8.1.1.1.2.1. False perceptions
 - 12.4.10.8.1.1.1.2.2. E.g. mirages or hearing stuff that isn't there
 - 12.4.10.8.1.1.1.3. Disordered speech - “word salad”
 - 12.4.10.8.1.1.1.4. Disorganized behavior: patients with schizophrenia often have motor behaviors that are inappropriate - individual may perform senseless, compulsive acts like rocking
 - 12.4.10.8.2. Negative - removing
 - 12.4.10.8.2.1. Loss or decrease of norm functions (missing/subtracting normal functions)
 - 12.4.10.8.2.2. Absence of appropriate behavior
 - 12.4.10.8.2.3. Includes
 - 12.4.10.8.2.3.1. Flat affect (avoiding eyes, expressionless face)
 - 12.4.10.8.2.3.2. Apathy and noninterest, monotone voice
 - 12.4.10.8.2.3.3. Poverty of speech (slowed speech, long lapses/pauses)
 - 12.4.10.8.2.3.4. Lack of directedness (slowed movements, little interest in social participation)
 - 12.4.10.9. Variations
 - 12.4.10.9.1. Chronic: when schizophrenia is slow to develop and recovery is doubtful - typically negative symptoms
 - 12.4.10.9.2. Acute: when schizophrenia rapidly develops and recovery is better - typically positive symptoms
 - 12.4.10.10. Common characteristics
 - 12.4.10.10.1. Paranoia
 - 12.4.10.10.1.1. Preoccupation with delusions and hallucinations, often with themes of persecution or grandiosity (feeling better than you are)
 - 12.4.10.10.2. Catatonic:
 - 12.4.10.10.2.1. Immobility (excessive, proprieless movement), extreme negativity, and/or parrot-like repeating of another's speech/movement
 - 12.4.10.11. Childhood Schizophrenia:
 - 12.4.10.11.1. Type of chronic schizophrenia
 - 12.4.10.11.2. Basically the same thing as regular chronic schizophrenia, except it occurs earlier in life and has a profound impact on the child's behavior
 - 12.4.10.11.3. Includes:
 - 12.4.10.11.3.1. Hallucinations
 - 12.4.10.11.3.2. Delusions
 - 12.4.10.11.3.3. Irrational behavior and thinking
 - 12.4.10.11.3.4. Problem carrying out routine daily tasks, such as bathing

12.4.10.12. Understanding Schizophrenia

12.4.10.12.1. It's a disease of the brain exhibited in the symptoms of the mind

12.4.10.12.2. Brain abnormalities

12.4.10.12.2.1. Dopamine over activity: researchers have found that schizophrenic patients express high levels of dopamine D4 receptors in the brain

12.4.10.12.2.2. Brain scans show abnormal activity in the frontal cortex, thalamus, and amygdala

12.4.10.12.2.3. Hallucinations are due to too much activity in the thalamus

12.4.10.12.2.4. The greater the shrinkage of the hippocampus and amygdala, the worse the disorder

12.4.10.12.2.5. If the thalamus is small, the greater the difficulty in filtering information (and reacting to it)

12.4.10.12.3. Causes

12.4.10.12.3.1.1. Prenatal problems

12.4.10.12.3.1.1.1. Low birth weight

12.4.10.12.3.1.1.2. Birth complications

12.4.10.12.3.1.1.3. Infections that the mother has during pregnancy, especially influenza during the middle of fetal development

12.4.10.12.3.2. Genetics

12.4.10.12.3.2.1. The likelihood of individuals suffering from schizophrenia is 50% if their identical twins have the disease

12.4.10.12.3.2.2. A early warning sign of schizophrenia include:

12.4.10.12.3.2.2.1. Mothers long lasting schizophrenia

12.4.10.12.3.2.2.2. Short attention span and poor muscle coordination

12.4.10.12.3.2.2.3. Disruptive and withdrawn behavior

12.4.10.12.3.2.2.4. Emotional unpredictability

12.4.10.12.3.2.2.5. Poor peer relations and solo play

12.5. Evaluate the **strengths** and **limitations** of **various approaches** to explaining psychological disorders: medical model, psychoanalytic, humanistic, cognitive, biological, and sociocultural.

12.5.1. medical model: Philippe Pineal insisted that madness was not due to demonic possession but an ailment of the mind. Advocated for diagnosing mental illness on basis on its symptoms and cured via therapy

12.5.2. Humanistic: believes that people are responsible for their own behaviors, even abnormal behaviors - focuses on the relation between individual and society and how people view themselves in relation to others - believe disorder individuals don't have self-worth, have conditions of worth placed up them, etc.

12.5.3. Behavioral: believes that behavior are learned responses - to understand disorder, we must analyze how behavior has been learned and what "reinforces" the continuation of the behavior

12.5.4. Cognitive: believes that cognitions (thought and beliefs) are the root of psychological problems - only way to fix behavior is to change the maladaptive thoughts and beliefs

12.5.5. Psychoanalytic: believes that psychological disorders stem from unresolved childhood conflicts - to understand roots of disorder, we must look at the person's early life

12.5.6. Socio-cultural: believes that abnormal behavior is shaped by family, society, and culture - ones' relation with others can support and even cause abnormal behavior - the stresses that one encounters in life can influence the disorder they have

12.5.7. Disorders often are caused by multiple reasons

12.5.7.1. Can be explained by looking at predispositions (environmental/genetic influences) that existed prior disorder

12.5.7.2. Precipitating causes or triggering events that brought about the disorder

12.5.7.3. Maintaining causes that keep disorder continuing

Theories	Psychoanalytic	Humanistic	Cognitive	Behavior	Biological	Socio-cultural
Cause	Negative, early childhood experiences or conflicts between the superego and id	Low self-esteem or negative self-regard	Maladaptive thought process	Reinforcement of depressive behavior	Neurons or neurotransmitters	Culture and environmental influences
"Cure"	Resolve intrapsychic conflicts	Unconditional positive regard	Unlearn maladaptive behavior	Change thought process	medication	Understand culture/society

- 12.5.8. Biopsychosocial: believes that biological, socio-cultural, and psychological factors combine and interact to produce psychological disorders
- 12.5.8.1. Psychological: Stress, trauma, learned helplessness, mood related perceptions and memories
- 12.5.8.2. Biological: evolution, individual's genes, brain structure and chemistry
- 12.5.8.3. Socio-cultural: roles, expectations, definitions of normality and disorder
- 12.6. Discuss the intersection between psychology and the legal system (e.g., confidentiality, insanity defense).
- 12.6.1. Confidentiality: what goes on between psychiatrist and patient/client is confidential and cannot legally leave the room
- 12.6.2. Insanity defense: in cases, the defense can reduce sentences by claiming that the individual was insane, often resulting in them having to go to a asylum

13. Treatment of Abnormal Behavior (5–7%)

This section of the course provides students with an understanding of empirically based treatments of psychological disorders. The topic emphasizes **descriptions of treatment** modalities based on various orientations in psychology.

Chapter Quizlet

AP students in psychology should be able to do the following:

- 13.1. Describe the central characteristics of **psychotherapeutic intervention**.
- 13.1.1. treatment involving psychological techniques; consists of interactions between a trained therapist and someone seeking to overcome psychological difficulties or achieve personal growth
- 13.2. Describe **major treatment orientations** used in therapy (e.g., behavioral, cognitive, humanistic) and how those orientations **influence therapeutic planning**. AND
- 13.3. Discuss how **cultural** and **ethnic** context influence choice and success of treatment (e.g., factors that lead to premature termination of treatment).
- 13.3.1. Review sheet covering types of therapists and comparison of psychotherapies
- 13.3.2. Psychoanalysis
- 13.3.2.1. Treats the person seeking help as patient
- 13.3.2.2. Takes longer amount of time
- 13.3.2.3. Believes client's problems are symptoms of deep, unresolved, unconscious conflict (i.e. childhood trauma)
- 13.3.2.4. Focus on the patient's perception of reality from repressed memories and how they rationalize
- 13.3.2.5. Therapist uses free association/dream analysis and tries to remain detached from patient as not to countertransfer (put his/her feelings on patient) and to encourage transference (where patient explains thoughts and feelings)
- 13.3.3. Humanistic
- 13.3.3.1. Aims to boost self-fulfillment by helping people grow in self-awareness and self-acceptance
- 13.3.3.2. Longer amount of time
- 13.3.3.3. Treats the person seeking help as a client (Client-centered therapy)
- 13.3.3.4. Clients can be understood only in terms of their own reality
- 13.3.3.5. Believes that the client is not functioning at an optimal level of development due to unmet psychological needs
- 13.3.3.6. Focused on helping the client realize their full potential via self-actualization
- 13.3.3.6.1. Individual Therapy
- 13.3.3.7. Accurate empathetic understanding (Therapist's ability to see client's perspective) is needed for good communication
- 13.3.4. Behavioral
- 13.3.4.1. Take shorter amount of time compared to humanistic and psychoanalytic approaches
- 13.3.4.2. Believes that there is no underlying cause of problem - abnormal behavior is just the problem and symptom and is learned via maladaptive behavior
- 13.3.4.3. Goal is to change maladaptive behaviors and replace them with appropriate behaviors
- 13.3.4.4. Good for phobias/anxiety/OCD/etc.
- 13.3.4.5. Changing behavior is done by selecting a specific method to use
- 13.3.4.5.1. Counterconditioning:
- 13.3.4.5.1.1. Replace a good CR (reinforcement) with a bad CR (punishment)
- 13.3.4.5.1.2. Aversion conditioning/therapy: associate unpleasant state with unwanted behavior

13.3.4.5.1.2.1. E.g. replacing good feeling of drinking alcohol with antabuse, drug that causes patient to throw up after drinking alcohol (punishment)

13.3.4.5.1.3. Exposure Therapy: exposes patients to things they fear and avoid - through repeated exposures anxiety lessens because they habituate to the things feared

13.3.4.5.2. *Systematic Desensitization*

13.3.4.5.2.1. Replace bad CR with good CR, such as replacing anxiety with relaxation

13.3.4.5.2.2. Can be done by showing client bad CR stimulus, taking it away, then having them recall the least provoking memory of stimulus while having them relax (or whatever desired good CR)

13.3.4.5.2.2.1. E.g., for fear of flying

13.3.4.5.3. *Extinction Procedures*

13.3.4.5.3.1. Designed to weaken maladaptive CR

13.3.4.5.3.2. Can be done via flooding

13.3.4.5.3.2.1. Flooding involves exposing client to stimulus that provokes bad CR

13.3.4.5.3.2.2. Good for phobias

13.3.4.5.3.2.3. E.g. If a psychologist wanted to help a client get rid of fear of spiders, they could expose them to a spider. After a few minute of being around the stimulus (spiders) with no punishment, the client should realize there is no danger

13.3.4.5.4. *Impulsion*

13.3.4.5.4.1. Basically extinction, but client only thinks about stimulus rather than confronting it

13.3.4.5.5. *Operant conditioning*

13.3.4.5.5.1. Go to [6.1.2](#)

13.3.4.5.6. *Behavioral Contracting*

13.3.4.5.6.1. Client and therapist make a contract;

13.3.4.5.6.2. i.e. the client must according to the contract, not exhibit undesirable behavior and in turn the therapist will provide stated rewards in the contract if client holds up there end of the bargain

13.3.4.5.7. *Modeling*

13.3.4.5.7.1. Client watches someone act a certain way and sees them get rewarded (observational learning)

13.3.4.5.7.2. E.g. Young animals learn many behaviors from watching their mothers and imitating those behaviors

13.3.5. Biological

13.3.5.1. Biological therapy uses medicine and is typically used alongside another form of treatment

13.3.5.2. Electroconvulsive therapy (ECT)

13.3.5.2.1. Patient gets there head shocked with electricity

13.3.5.2.2. Can cause memory loss, amnesia, and seizures meaning it's not used today

13.3.5.2.3. Successfully with forms of major depression

13.3.5.3. Psychosurgery

13.3.5.3.1. Surgery done on the brain

13.3.5.3.2. Most popular form is prefrontal lobotomy

13.3.5.3.2.1. Parts of the frontal lobe cut off

13.3.5.3.2.2. Common treatment for violent patients in 1930-50s

13.3.5.3.2.3. Left patients "zombie like" and is incredibly unethical

13.3.5.4. Antipsychotics

13.3.5.4.1. Help with schizophrenia by blocking neural receptors for dopamine

13.3.5.4.2. Often causes jerky movements, tremors, and other bad stuff, so the clinician should decide what's worse: the side effects or the disorder

13.3.5.4.3. impact emotions, thinking, and behavior through changing neurotransmitter levels or neurons' abilities to absorb and use neurotransmitters

13.3.5.5. Antidepressants

13.3.5.5.1. MAO inhibitors

13.3.5.5.1.1. Increase amounts of serotonin and norepinephrine by blocking monoamine oxidase, which breaks down many neurotransmitters

13.3.5.5.1.2. Can be toxic and need special dietary changes

- 13.3.5.5.2. Tricyclics
 - 13.3.5.5.2.1. Norpramin, Amitriptyline, and Imipramine
 - 13.3.5.5.2.2. Increase amount of serotonin and norepinephrine produced
- 13.3.5.5.3. Selective reuptake inhibitors (Selective serotonin reuptake inhibitors, SSRIs)
 - 13.3.5.5.3.1. Prozac
 - 13.3.5.5.3.2. Increase the amount of neurotransmitters by blocking reuptake mechanism
 - 13.3.5.5.3.3. Very few side effects and frequently prescribed in US
- 13.3.5.6. Anxiolytics
 - 13.3.5.6.1. Depress CNS, reduce anxiety, increase feeling of well-being, and reduces insomnia
 - 13.3.5.6.2. Xanax
 - 13.3.5.6.3. Addicting
- 13.3.5.7. Benzodiazepines
 - 13.3.5.7.1. Valium and Librium
 - 13.3.5.7.2. Muscle relaxation and feeling of tranquility
- 13.3.5.8. Mood stabilizers: Lithium Carbonate
 - 13.3.5.8.1. A type of salt
 - 13.3.5.8.2. Helps with bipolar disorder by smoothing out the lows and highs
- 13.3.6. Cognitive
 - 13.3.6.1. Cause of issue is due to the client developing inappropriate/maladaptive thoughts
 - 13.3.6.2. To change behavior, the client must change their cognitions, or way they think about situations
 - 13.3.6.3. Rational-emotive behavior therapy (REBT or RET):
 - 13.3.6.3.1. Formed by Albert Ellis
 - 13.3.6.3.2. Built upon belief that when people are confronted with a situation, they recite statements to themselves that contain maladaptive thoughts, causing a maladaptive response
 - 13.3.6.3.3. Steps:
 - 13.3.6.3.3.1. Acknowledge maladaptive thoughts
 - 13.3.6.3.3.2. Confront them directly and realize that they're wrong and why
 - 13.3.6.3.3.3. Change the maladaptive thought
 - 13.3.6.4. Cognitive Therapy
 - 13.3.6.4.1. Created by Aaron Beck
 - 13.3.6.4.2. Focus on maladaptive schemas that cause client cognitive distortions, i.e. feeling worthless/incompetent
 - 13.3.6.4.3. Goal is to either eliminate / change client's maladaptive schemas
 - 13.3.6.4.4. Negative triad of depression
 - 13.3.6.4.4.1. Negative view of self
 - 13.3.6.4.4.2. Negative view of world
 - 13.3.6.4.4.3. Negative view of future
 - 13.3.6.4.5. Negative triad is learned through experiences
 - 13.3.6.4.6. Maladaptive schemas:
 - 13.3.6.4.6.1. Arbitrary Inference - person comes to conclusions without any evidence
 - 13.3.6.4.6.2. Dichotomous thinking - person concludes only extremes can be outcomes; i.e. failing the AP psych exam is going to be the end of the world and I'm gonna go homeless
- 13.4. Compare and contrast different treatment formats (e.g., individual, group).
 - 13.4.1. Group
 - 13.4.1.1. Cheaper costing than other forms
 - 13.4.1.2. Group atmosphere can be therapeutic in and of itself
 - 13.4.1.3. Less attention on the individual
 - 13.4.2. Couples / Family
 - 13.4.2.1. Allows members to express their feelings to one another and also therapist simultaneously
 - 13.4.2.2. Encourages listening to one another unlike other environments
 - 13.4.3. Person-centered/non-directive therapy
 - 13.4.3.1. Developed by Carl Rogers (humanist)
 - 13.4.3.2. Therapist engages in active listening and echoes, restates, and clarifies patient's thinking, acknowledging expressed feeling
 - 13.4.3.3. Therapist DON'T tell client what to do or impose their opinions onto the client

- 13.4.3.4. Therapist talks with client while being open, honest, and expressive of feelings (Genuineness)
- 13.4.3.5. Therapist uses unconditional positive regard to boost the client's self worth (ego)
- 13.4.3.6. Allows client to do the work and come to their own conclusions

13.5. Summarize **effectiveness of specific treatments** used to address specific problems.

Psychological Disorder	Drug	Effectiveness	Side Effects
Everyday Anxiety	Antianxiety drugs; antidepressants	Substantial improve short-term	Anti Anxiety: less powerful the longer people take them, addictive Antidepressants: see depressive disorders
Generalized Anxiety Disorder	Antianxiety Drugs	Not very effective	Less powerful the longer people taken them, addictive
Panic Disorder	Antianxiety Drugs	About ½ of people show improvement	Less powerful the longer people taken them, addictive
Agoraphobia	Tricyclic drugs and MAO inhibitors	Majority show improvement	Tricyclics: Restlessness, fainting, trembling MAO inhibitors: toxicity
Specific phobias	Antianxiety Drugs	Not very effective	Less powerful the longer people taken them, addictive
Depressive Disorders			
Bipolar Disorder	Lithium	Large majority show substantial improvements	Toxicity
Schizophrenia	Neuroleptic; atypical antipsychotic medication	Majority show partial improvement	Neuroleptics: irregular heartbeat, low blood pressure, uncontrolled fidgeting Atypical antipsychotic medication

13.6. Describe **prevention strategies** that build resilience and promote competence.

14. Social Psychology (8–10%)

This part of the course focuses on how individuals relate to one another in social situations. Social psychologists study social attitudes, social influence, and other social phenomena

Chapter Quizlet

AP students in psychology should be able to do the following:

- 14.1. Apply **attribution theory** to explain motives (e.g., fundamental attribution error, self-serving bias).
 - 14.1.1. Attribution theory: Theory that focuses with ways in which we explain the behaviors of others
 - 14.1.2. Attribution: How people assign responsibility for certain outcomes
 - 14.1.3. Fundamental Attribution Errors: Not giving benefit of doubt to people: Overestimates **dispositional** factors, such as believing they're lazy causing them to be late, instead of because of **situational** factors, such as they're stuck in poor traffic
 - 14.1.3.1. Dispositional: > assumes that person is primary factor for outcome
> looking at personality traits or a person's behavior when forming an opinion or judgment
 - 14.1.3.1.1. Student gets a 3 on the AP Psych exam and believes that it was because they're **big dumb**
 - 14.1.3.2. Situational: > assumes that environment / situational factors were cause of outcome
> looking at situational factors or excuses in terms of forming an opinion or judgment
 - 14.1.3.2.1. Student gets a 3 on the AP Psych exam and believes that it was because they kept getting distracted by the hot temperature of the testing room and the other kids tapping their feet and pencils
 - 14.1.4. Scapegoat theory: having suffered negative experience, an individual might blame an innocent person or group for the experience and subsequently mistreat the person or group

- 14.1.5. Blaming the victim: the tendency to blame an innocent victim for their misfortune through the belief that he or she deserved the outcome.
- 14.1.6. self-serving bias: occurs when an individual believes that they are the reason for good outcomes, and external factors are the reason for bad outcomes
- 14.1.7. Self-fulfilling prophecy: an expectation that causes you to act in ways that make that expectation come true
- 14.1.7.1. E.g. someone believing that women are bad drivers, then unconsciously noticing more crashes involving women/their mind is predisposed to assume it's the woman's fault in a car accident
- 14.2. Describe the **structure** and **function** of different **kinds of group behavior** (e.g., deindividuation, group polarization).
- 14.2.1. Deindividuation: occurs in presence of others, loss of person's identity and self-restraint causing them to act abnormally
- 14.2.1.1. E.g. person acting loud/annoying, or drinking/smoking when in a group while they would never do those things by themselves
- 14.2.2. normative social influence: influence resulting from a person's desire to gain approval or avoid disapproval
- 14.2.3. Group polarization: when an attitude or thought becomes more extreme when in the presence of others. Often occurs at political rallies or pep assemblies
- 14.2.4. The best way to get 2 conflicting groups to resolve their conflict is to have them both work towards a similar superordinate goal (for the greater good)
- 14.2.5. GRIT (Graduated and Reciprocated Initiatives in Tension-Reduction): Approach encourages both groups to announce intent to show small behaviors with the hope of reciprocation from the other side, reducing tensions
- 14.3. Explain **how individuals respond to expectations of others**, including groupthink, conformity, and obedience to authority.
- 14.3.1. Groupthink: occurs when group members all agree with one another, forming an echochamber. Group doesn't take into account repercussions or implications of decisions and believe that they cannot make a mistake. Members who are on-edge are criticized, forming an "ideological bubble" where no one says anything challenging/controversial
- 14.3.2. Conformity: Modification of behavior to agree with the opinion of a group. All of the following factors play a role:
- 14.3.2.1. Doing an behavior because others in a crowd do it
- 14.3.2.2. Group size: 3 or more members / confederates are sufficient enough for conformity
- 14.3.2.3. Cohesiveness of group opinion: People are more likely to conform if they see themselves as members of a cohesive group
- 14.3.2.4. Gender: Women are more likely to conform than men
- 14.3.2.5. Social status: High social status are less likely to conform than low or medium social status
- 14.3.2.6. Culture: People in collective societies tend to conform more than those in individualistic societies
- 14.3.2.7. Appearance of unanimity: People are much less likely to conform if even one other person doesn't conform
- 14.3.3. Obedience: Ability to comply/obey commands: (i.e. Hitler's General claiming he was "just following orders")
- 14.3.3.1. Obedience occurs if certain criteria are met
- 14.3.3.2. Increased obedience when:
- 14.3.3.2.1. The administrator seemed to have authority (Scientist vs Grad student)
 - 14.3.3.2.2. Physical distance to confederate/victim (In separate room vs in same room)
 - 14.3.3.2.3. If commands were given directly to individual from admin (in person vs over phone/walkie-talkie)
- 14.3.3.3. Decreased obedience when:
- 14.3.3.3.1. Individual saw other person disobey admin
 - 14.3.3.3.2. If individual was told that they were responsible for the outcome
 - 14.3.3.3.3. If experiment started immediately at high level of voltage
 - 14.3.3.3.4. If individual feels as if they have an ally in standing up to the pressure
- 14.3.4. Compliance: Likelihood of doing what others requests of you, even at the expense of yourself. Methods used:
- 14.3.4.1. Justification: Reasons why person should comply
- 14.3.4.2. Reciprocity: The tendency for people to like others who like them
- 14.3.4.3. Foot-in-the-door phenomenon: Making small requests, than moving to larger ones

- 14.3.4.4. Door-in-the-face phenomenon: Making large requests to make smaller request seem more reasonable
- 14.3.4.5. If we highly regard/respect the person making the request we are much more likely to comply
- 14.3.4.6. People resist compliance due to:
- 14.3.4.6.1. Inoculation Hypothesis: They've already been exposed to a weaker version of the argument/request, and are close minded
 - 14.3.4.6.2. Psychological Reactance: Subject feels forced against their will and will resists compliance
- 14.4. Discuss **attitude formation** and **change**, including persuasion strategies and cognitive dissonance. **AND**
- 14.5. Discuss **attitudes and how they change** (e.g., central route to persuasion).
- 14.5.1. Attitudes: Combination of affective and cognitive reactions to different stimuli
- 14.5.1.1. Afferent: Emotional response to an item/issue
 - 14.5.1.2. Cognitive: What we think about item/issue
- 14.5.2. Attitudes are formed by vicarious conditioning - i.e. if we see a dog bite a person, we form an attitude about that dog. The afferent component may be fear, and the cognitive may be understanding why this particular dog bites
- 14.5.3. Persuasion: the process by which a person or group can influence the attitudes of others - factors that affect persuasion are:
- 14.5.3.1. The positions of authority of the individual, or if they seem to be an expert in the subject
 - 14.5.3.2. The motive of the message (you form disbelief for selfish motives, and are more keen to be persuaded if they seem altruistic/genuine)
 - 14.5.3.3. Interpersonal attractiveness:
 - 14.5.3.3.1. Attractiveness
 - 14.5.3.3.2. Likeability
 - 14.5.3.3.3. Trustworthiness
 - 14.5.3.3.4. Knowledgeability
 - 14.5.3.3.5. Similarity to audience
 - 14.5.3.4. Elaboration Likelihood Model: Explains when people will be persuaded by the content of a message (such as logical elements) and when people will be persuaded by other, more superficial characteristics such as length of the message, appearance of the person delivering it, etc.
 - 14.5.3.4.1. There are three elements that go into deciding this:
 - 14.5.3.4.1.1. Message characteristics: The speech itself - including content, logic, and key points, but also superficial items such as length and grammar
 - 14.5.3.4.1.2. Source characteristics: The aspects of the individual/group delivering the speech - such as expertise, knowledge, credibility, etc.
 - 14.5.3.4.1.2.1. People are much more likely to be persuaded by a doctor versus a opinion page in People's magazine
 - 14.5.3.4.1.3. Target characteristics: Characteristics of those receiving the speech, such as mood, intelligence, culture, etc.
 - 14.5.3.4.1.3.1. Those who are smarter tend to be less persuaded by one-sided messages
 - 14.5.3.4.2. Two routes that the listener can take
 - 14.5.3.4.2.1. Central route
 - 14.5.3.4.2.1.1. Focus on key features/contents of message, e.g. draws conclusions, weighs evidence, includes facts
 - 14.5.3.4.2.1.2. Has longer-lasting outcomes
 - 14.5.3.4.2.2. Peripheral route
 - 14.5.3.4.2.2.1. Focus on superficial aspects such as attractiveness of speaker(s)
 - 14.5.3.4.2.2.2. Has shorter lasting outcomes
 - 14.5.3.4.2.3. Elaboration Likelihood Model argues that people will be motivated by central route if they're motivated to listen to the logic of the argument/personally involved in subject and aren't distracted
 - 14.5.3.4.2.4. If these conditions aren't met, the individual will go the peripheral route, and will be persuaded by superficial factors
 - 14.5.4. Cognitive dissonance: good video
 - 14.5.4.1.1. E.g. person paid \$20 has a good reason to lie, while person receiving \$1 doesn't. This means that the person who got \$1 changes what they believe and think the experiment was enjoyable
 - 14.5.4.2. Occurs when a person has thoughts that are inconsistent or contradict each other, resulting in an unpleasant state of psychological tension or arousal- similar to guilt

- 14.5.4.3. A person who lies to his or her parents about how he or she is doing in school is going to at some point experience guilt or dissonance. The reason guilt occurs is because the person has two opposing (cognitive) thoughts that are opposite of each other - one thought- he or she knows he is not doing well in school/ and a second thought that he or she has lied and told his or her parents everything is going well.
- 14.5.4.4. Some people try to reduce dissonance (guilt) through various defense mechanisms
- 14.5.4.5. For example, a person who feels guilt because he or she has started to smoke, even though they know smoking is bad, may try to rationalize their habit by stating that everyone else smokes, or that they could quit anytime
- 14.6. Predict the **impact of the presence of others** on **individual behavior** (e.g., bystander effect, social facilitation).
- 14.6.1. bystander effect: occurs to individuals while in groups - they believe that they aren't responsible - they assume that someone else will/should take initiative
- 14.6.1.1. Altruism can help reduce tendency towards bystander effect.
- 14.6.2. Social Loafing: when individual is put into a group and assumes that they can slack off with the hopes that other group members will carry them. Often occurs when group performance isn't assessed or monitored
- 14.6.3. Social Facilitation: an increase in performance on a task when in the presence of others. Oftentimes occurs when task is easy or well-practiced
- 14.6.4. Social Inhibition: a decrease in performance on a task when in the presence of others. Oftentimes when task is overly difficult, unfamiliar, or novel
- 14.7. Articulate the impact of **social and cultural categories** (e.g., gender, race, ethnicity) on **self-concept** and **relations** with others.
- 14.7.1. Culture: Behaviors, ideas, attitudes, values, and traditions norms that are passed down
- 14.7.1.1. E.g. EU culture has very large personal space culture, while many Asian cultures have very little personal space
- 14.8. Anticipate the **impact of behavior** on a **self-fulfilling prophecy**.
- 14.8.1. Check [here](#) for self-fulfilling prophecy
- 14.8.2. E.g. because person A expects person B to fail, person B is more likely to fail
- 14.8.3. Apparent in Rosenthal Effect:
- 14.8.3.1. Teachers told that random kids would do better in the coming year, and those kids ended up performing better despite no actual difference in ability/skill
- 14.9. Describe processes that contribute to **differential treatment of group members** (e.g., in-group/out-group dynamics, ethnocentrism, prejudice) AND
- 14.10. Describe the **variables that contribute to altruism, aggression, and attraction**.
- 14.10.1. Attitudes are much more susceptible to persuasion if they have low self-esteem compared to those with high self-esteem
- 14.10.2. Altruism: Selfless sacrifice for benefit of others. Occurs more often than we may think, people may put themselves in position of others in distress, and act toward them as they would like others to act towards them
- 14.10.2.1. People are more likely to be altruistic if:
- 14.10.2.1.1. They're not in a hurry
- 14.10.2.1.2. In a good mood
- 14.10.2.1.3. Believe that the victim has similar background to them
- 14.10.2.1.4. Feel guilty about something they did wrong earlier that day
- 14.10.2.1.5. See someone else helping
- 14.10.2.2. Less likely to be altruistic if:
- 14.10.2.2.1. They can justify their choice by excuses like no one else helped
- 14.10.2.2.2. Same reasons as bystander effect
- 14.10.3. Antisocial behaviors: harmful to society or others,
- 14.10.3.1. Can be divided into:
- 14.10.3.1.1. Aggression: physical or verbal behavior intended to hurt someone
- 14.10.3.1.1.1. Hostile Aggression: caused by emotional impulse, reaction to pain/stress
- 14.10.3.1.1.1.1. e.g. swatting a bee after you are stung while in Washington
- 14.10.3.1.1.2. Instrumental Aggression: caused by drive to gain something of value,
- 14.10.3.1.1.2.1. e.g. as a kid push a kid over and taking his toy truck
- 14.10.3.1.1.3. Aggression can be induced by biological factors, such as hormones, particularly androgen, testosterone. That's why steroid abusers may experience alotta aggression

- 14.10.3.1.2. Prejudice: a negative thought/feeling/attitude towards members of a particular group without evidentiary backing,
- 14.10.3.1.3. Discrimination: acting on prejudice
- 14.10.3.2. Caused by:
- 14.10.3.2.1. Authoritarian personality
- 14.10.3.2.2. Stereotyping: Prototypes of people, can cause us to believe incorrect assumptions.
- 14.10.3.2.3. In-group bias: Beliefs that one's own group is best and can do no wrong
- 14.10.3.2.3.1. E.g. Americans believing they're going to win the Olympics because they're the best
- 14.10.3.2.4. Outgroup homogeneity: Belief that every member of a group other than our own is similar
- 14.10.3.2.4.1. E.g. if one member of group smokes, entire group must smoke
- 14.10.3.2.5. Ethnocentrism: belief one's own culture or ethnic group is superior to others
- 14.10.3.2.6. Scapegoat: definition [here](#)
- 14.10.3.2.7. Social inequalities: justification of Social inequalities.
- 14.10.3.2.8. Just-world phenomenon: justifying stuff by thinking good is rewarded, and evil is punished
- 14.10.3.2.8.1. E.g. slave owners saying that they were justified because slaves were lazy
- 14.10.4. Attraction:
- 14.10.4.1. Why do we befriend / fall in love
- 14.10.4.1.1. Physical attractiveness: the first thing that we look at naturally
- 14.10.4.1.2. Similarity: we're more likely to be attracted to someone that is similar to us in demographic variables (age, education, race, religion, ethnicity, etc.)
- 14.10.4.2. Passionate love:
- 14.10.4.2.1. Highly tied to physiological response - e.g. walking over a bridge causing fear increases attraction
- 14.10.4.2.2. Compassion love: develops after physical attraction. Key is equity
- 14.10.4.2.2.1. Equity: both partners need to feel like the other person is trying to do an equal amount
- 14.10.4.2.3. Self-disclosure: the more intimate details you share the closer you feel to someone else
- 14.10.4.3. Mere exposure effect: when a person is constantly exposed to a stimulus repeatedly and ends up liking it
- 14.11. identify important figures in social psychology (e.g., Solomon Asch, Leon Festinger, Stanley Milgram, Philip Zimbardo)
- 14.11.1. Solomon Asch: studied conformity via line tests ([video](#))
- 14.11.2. Leon Festinger: studied cognitive dissonance
- 14.11.3. Stanley Milgram: studied obedience via shocking tests ([video](#))
- 14.11.4. Philip Zimbardo:
- 14.11.5. Rosenthal: Did test proving self-fulfilling prophecy on school children, saying random kids would do better then they ended up doing better ([video](#))