Psychology Study Guide

Chapter 1:
Different types of psychologists (clinical, forensic, social, health, industrial etc)
• Clinical: aim to reduce psychological distress. Anxiety, depression, relationship problems, addictions and relationships.
• Forensic: applying theory to criminal investigations, understanding psychological problems associated with criminal behavior, and the treatment of criminals.
• Social: The study of relations between people and groups. Thoughts, feelings and behaviors altered by others. Typically explain human behavior as a result of the interaction of mental states and immediate social situations.
• Health: relatively new. Principles are used to help changes about people’s attitudes about health and illness. Quitting smoking, safe sex. Prevent illness.
• Industrial: evaluating employee behavior for the good of the company. It is often referred to as organizational psychology because of its emphasis on analyzing individuals who work for various organizations.

Case history
• A compilation of the life history of an individual based on interviews and other sources of information.

Interviews
• An in-depth question-and-answer session in which an individual’s life or problems are probed.

Questionnaire
• A highly structured paper and pencil interview.

IQ testing results
• 115 to 129 – Above average; bright
• 130 to 144 – Moderately gifted
• 145 to 159 – Highly gifted
• 160 to 179 – Exceptionally gifted
• 180 and up – Profoundly gifted

Normal Bell Curve

Correlation Studies
• Correlational studies are used to look for relationships between variables. There are three possible results of a correlational study: a positive correlation, a negative correlation, and no correlation. The correlation coefficient is a measure of correlation strength and can range from −1.00 to +1.00.

Perspectives in Psychology and pioneers (Freud)
• Psychoanalytic: Sigmund Freud
• Behaviorism: Pavlov, William McDougall, Thorndike, Watson, Carl Hull, B.F. Skinner, Tolman
• Gestalt: Founded by Max Wertheimer
• Humanistic: Abraham Maslow, Carl Rogers
• Cognitive: Alfred Binet, Chomsky

Chapter 2:
The parts of a neuron
• Dendrite: the primary receiving part of the neuron
• Cell body: the part of the neuron that converts oxygen, sugars, and other nutrients into energy.
• Nucleus: the core of the cell body of a neuron, containing the genes.
• Receptor sites: Spots on the cell body, like the dendrites, that can be stimulated by other neurons.
• Axon: the fibrous body of a neuron that send messages to other neurons or to muscles or glands.
• Myelin sheath: A whitish coating of fatty protective tissue that “insulates” the axons.
• Nodes: Constrictions of the Myelin sheath of an axon that act as booster stations for neural impulses.
• Synapse: Connecting point. Microscopic distance between two neurons.

Parts of the Limbic system
• Hypothalamus: Controls metabolism, sleep, hunger, thirst, sexual behavior, and emotions.
• Amygdala
• Thalamus: Relays sensory information. Visual and auditory systems, conveys information about balance and pain.
• Hippocampus: Learning and memory formation.

Homeostasis
• A state of equilibrium in the physiological system in the human body.

Frontal Lobe
• Higher level thought and reasoning. Primary motor cortex (making plans, forming judgements, and performing movements)

Amygdala
• Part of the limbic system that plays a role in intense positive and negative emotions.

2 hemispheres
• Right: artsy, emotional, creative.
• Left: language processing, organized, scientific.

Corpus Callosum
• Connects the left and right hemispheres and allows them to interact.

Chapter 3:
Absolute threshold
• The minimum amount of stimulus energy to which a receptor can respond. The energy level at which a participant can detect a stimulus 50% of the time.

JND (Just noticeable difference)
• The smallest change in the intensity of a stimulus that can be detected. (the difference threshold)

Weber’s Law
• The difference threshold (JND) is a fixed percentage of the original stimulus.

Sensory Adaptation
• The tendency of sensory receptors to stop responding to a continuing stimulus.

Auditory Nerve
• The auditory pathways from the ear to the brain.

Semicircular canals of the ear
• Horizontal, Posterior, Superior
• Each canal is filled with a fluid called endolymph and contains a motion sensor with little hairs (cilia) whose ends are embedded in a gelatinous structure called the cupula. As the skull twists in any direction, the endolymph is thrown into different sections of the canals. The cilia detect when the endolymph rushes past, and a signal is then sent to the brain.

Continuity
• The tendency to perceive continuous lines and patterns.

Closure
• The tendency to fill in the gaps when perceiving figures.

Proximity
• In perception, the tendency to group objects that are close to each other.

Shape, size constancy
• The tendency to perceive objects as retaining their correct size and shape, regardless of their vantage point.

Interposition
• Objects that block off part of the view of other objects appear closer.
Linear perspective
• Parallel lines appear to be closer to one another as they recede into the distance.

Chapter 4:
ALL Pavlov terms:
• UCS (unconditioned stimulus): Any stimulus that automatically and reliably produced a particular response, such as a reflex.
• CS (conditioned stimulus): An initially neutral stimulus that comes to elicit a response similar to that elicited by UCS
• UCR (unconditioned stimulus): The automatic response to an unconditioned stimulus.
• CR (conditioned stimulus): The learned response to a conditioned stimulus.

Stimulus generalization
• The tendency of a conditioned response to occur to conditioned stimuli that are similar to the original CR.

Stimulus Discrimination
• The tendency of a CR to be weaker or not occur to the CSs that are dissimilar to the original CS or that have undergone extinction.

Classical conditioning
• Establishing a learned association between two stimuli. (Pavlov and dogs)

Operant Conditioning
• The imposition of a contingency, either deliberate or natural. (reinforcer and punisher)

Little Albert Experiment
• Watson and Rayner 1920
• When presented with a white rat, a disturbing noise. Became afraid of other white colored things (white dogs, fur coats, santa claus)

Negative reinforcement
• Something unpleasant is moved away or doesn’t happen when the desired behavior is performed.

Chapter 5:
Acoustic encoding
• The process of remembering and comprehending something that you hear. Repetition of words or putting information into a song or rhythm uses acoustic encoding.

Semantic encoding
• A specific type of encoding in which the meaning of something (a word, phrase, picture, event, whatever) is encoded as opposed to the sound or vision of it. Research suggests that we have better memory for things we associate meaning to and store using semantic encoding.

Iconic encoding
• Very brief sensory memory of some visual stimuli, that occur in the form of mental pictures. Stored for shorter periods of time than echoic memories.

Memory retrieval
• The process of extracting knowledge from long term memory.

Curve of forgetting
• The decline of memory retention in time.

Recall
• Retrieval of detail given minimal cues, as in essay exams.

Recognition
• Retrieval of limited amounts of information given extensive cues, as in some multiple-choice exams.

Fading memory trace
• Memory fades with time.
• Strength: “pop” into mind/ peaks at moment of learning decreases with time.
• Resistance to extinction: how well trace manages over time. Requires consolidation (period in which trace is hardened)

Retroactive and proactive interference
• Proactive: Old causes forgetting of new.
• Retroactive: New causes forgetting of old.

Chunking
• Chunking pieces of information to make them easier to remember. (phone numbers)

Encoding
• Makes information easier to understand after the scanning process.
• We encode by automatic processing: unconscious encoding of incidental information (space, time, frequency, and of well learned information. (word meanings) (dinner last night)
• Effortful processing: encoding that requires attention and conscious effort.
• Kinds of encoding: semantic(meanings), acoustic(sound), visual(iconic)(pictures).

Learning sets
• The strategy that works for you.

Clustering VS Chunking
• Chunking is to STM as Clustering is to LTM.

Chapter 6:
Phonemes
• The basic sounds of a language.

Morphemes
• A combination of phonemes that posses meaning in and of itself.

Pragmatics
• How language changes according to the social situation or context.

Grammar
• Phonemes, morphemes, semantics, and syntax.

Syntax
• Rules for stringing things together into phrases.

Semantics
• Rules for combining phonemes and morphemes into words.

Innate mechanism
• Inborn wiring of the brain that allows for humans to learn and use language.

Noam Chomsky
• Created “innate mechanism theory.”
• Did not believe in just operant condition and imitation to learn language because it did not explain how we make our own sentences.

Concepts
• How language helps us learn and remember. Make clustering and chunking possible and help process STM and encode it efficiently into LTM.

Language and thinking
• Language might shape how we think and how we think shapes our language.

What is thinking?

Algorithm
• (Problem solving) Technique that produces the correct solution by following a series of steps.

Heuristic
• (Problem solving) Techniques that have worked in the past but doesn't guarantee success.

Chapter 7:
Charles Spearman: Britney Spears.
• S factor: Specific skill for a certain task.
• G factor: General intelligence factor: general mental ability.
Achievement test
• Measure of how much learning/ skills acquire over time.
Aptitude test
• A form of testing that measures a person’s ability to learn new skills or perform unfamiliar tasks.
Crystallized VS fluid intelligence
• Fluid: creating new ideas, thinking outside the box.
• Crystallized: learning from experience.
Chapter 8:
Emotions
• Changes in physiology that are evaluated cognitively and may lead to change in conscious theory.
James Lange Theory
• Perception of stimulus ————> physiological response ————> experience of emotion.
Cannon Bard Theory
• Perception of stimulus ————> physiological response and experience of emotion.
Drives
• Hunger, thirst, sleep, (sex)
Hypothalamus
• Controls all drives.
Sleep stages
• Awake/ relaxed: alpha waves.
• Stage 1: Pulse slows, relax, uneven breathing, irregular waves. Beta waves: small, irregular waves.
• Stage 2: Eyes roll (10 minutes later) strange images and thoughts. *sleep spindles: fast, irregular K complexes.
• Stage 3: (30 minutes later) muscles relax, blood pressure decreases, breathing becomes easier. *Theta waves: deeper sleep. Delta waves: slow, regular waves (REM)
• Stage 4: Delta sleep/ dreamless oblivion/ 20 minutes then drift up towards lighter sleep.
Myoclonic jerk
• A sudden spasm in the body caused by a tiny burst of brain activity.
Hierarchy of Motives (just know them generally)
• Achievement, affiliation, standards, certainty, power, hostility, dependancy.
Ego Ideal
• The perfect “you.”
Chapter 9:
Freud and the neo-Freudians
• Unconscious controls everything. Basic energy called libido (directed at maximizing pleasure.)
• Neo-freudians: accepted basic ideas but veered away in two ways:
  • Placed more emphasis on the role of the conscious mind (interpreting experience and coping with the environment.
  • Doubted that sex and aggression were all-consuming motivations.
Psychosexual stages
• Oral (0–18 months): pleasure centers around the mouth.
• Anal (18 mo-3yrs): pleasure focuses on bowel and bladder elimination.
• Phallic (3–6yrs): pleasure zones in the genitals
• Latency (6-puberty): Sexuality is dormant, children play with peers of same sex.
• Genital: Maturation of sexual interests.
Karen Horney
• Pointed out bias in Freud’s work. Developed a theory on the need for security called Basic Anxiety.
• The feeling of being alone in an unfamiliar hostile world - central theme in childhood. The interaction between parents and child dealing with this forms basis of a person’s personality.
• Secure with parents, secure with everybody else.

Carl Jung
• Neo-freudian.
• Persona: mask presented to world.
• Shadow: deep, passionate inner person.
• Believed in personal unconscious (repressed memories) and collective unconscious (a collection of behavior and memory common to all humans)
• Said Freud did not give enough emphasis to the importance of culture and inherited temperaments.

Carl Rogers
• stresses self image/ phenomenological self- the way we see ourselves.
• Unconditional positive regard vs. Conditional positive regard.

Behavior theory of personality
• Personality is largely composed of learned habitual ways of responding to situations that arise in one’s life.

Skinner and Bandura?
• Bandura: (Social cognitive perspective) emphasize importance of learning and cognition.
• Skinner: (Strict behavioral approach) Operant conditioning. Reinforcers continue behavior.

Different kind of personality tests
• Big Five personality theory
• Objective tests: results are unaffected by examiner.

Projective tests
• Participants are expected to project aspects of their personality into responses of ambiguous stimuli.
  • Thematic apperception: Make up stories about pictures.
  • Non standardized tests:
    • Sometimes I feel__________
  • Rorschach Inkblot tests