History Of Psychology – 2-4% of multiple-choice section

1. Psychology - Scientific study of behavior and mental processes and how they are affected by an organism’s physical and mental state and external environment

Wundt, Tichener, William James, Watson, Skinner, Simon, Rogers, Maslow, Freud

Research and Methods - 6-8 % of Exam

1. Descriptive Studies – Way that psychologists describe behavior using case studies, surveys and naturalistic observations.

Case History – description of one individual

Naturalistic Observation - watching and recording the behavior of organisms in their natural environment

Sampling - using a random sample of a population

Survey – questions and interviews

1. False Consensus Effect – The tendency to overestimate the extents to which others share our beliefs and our behaviors.
2. Reliability – Is used to measure whether individual differences in test scores are due to actual differences in the characteristic being measured or due to chance errors and fluctuations.
3. Validity – Refers to the extent to which a test measures what it purports; the validity of a test must be empirically established – relating the test to particular criterion that is claims to measure.
4. Correlational Studies – When Trying to predict a behavior need to look at how strong the relationship is between two - behaviors. Will not predict causation.
5. Experimental Studies – Researcher controls variables to discover its effect on other variables.
6. Independent Variable- The variable that the experimenter controls.
7. Dependent Variable - (data) Measured by researcher.
   1. Experimental Groups – only experimental group exposed to independent variable .
   2. Control Group – serves as a comparison for evaluating the effect of the treatment.
8. Confounding Variable – An observed effect that may be due to an intervening third variable. Need to identify this variable and eliminate it or experiment will be void.
9. Double-Blind Procedure. –One group receives treatment another receives pseudotreatment. Neither the participant nor the research assistant collecting the data knows whether the participant’s group is receiving treatment.
10. Subject Variable – A condition that is part of the subjects make up, like height, sex, eye color.
11. Mean, Median, Mode – Statistical measures of the central tendency.
    1. Mean – the arithmetic average of distribution obtained by adding the scores and dividing the number of scores.
    2. Median – the middle score in a distribution; half of the scores are above and half below.
    3. Mode – The most frequently occurring score in a distribution.
12. Standard Deviation. – Measure to determine how much scores deviate from the mean score.

Biological Basis of Behavior - 8-10% multiple-choice section

1. Neuron – A nerve cell; the basic building block of the nervous system.
   1. Axon – Extension of a neuron ending in branching terminal fibers, where messages are transmitted. Covered in myelin insulation.
   2. Cell Body – Nucleus s located here, keeps neuron alive.
   3. Dendrites – Receive messages from other neurons
2. Communication between Neurons – Messages are transmitted through neurotransmitters at synapse.
3. Synapse – Junction between the axon tip of the sending neuron and the dendrite or cell body of the receiving neuron.
4. Synaptic Vesicles Open and release neurotransmitter into the synaptic cleft.
5. Different types of Neurotransmitters
   1. Acetylcholine – Enables muscle action
   2. Dopamine – Influences movement, learning attention and emotion
   3. Serotonin - Affects mood, hunger sleep, arousal.
   4. Norepinephrine – Helps control alertness and arousal.
   5. GABA- A major inhibitory neurotransmitter.
   6. Glutamate – A major excitatory neurotransmitter, involved in memory.

Nervous System – Know How it is organized and what each system is used for. Two major divisions are

Peripheral and Central Nervous System.

1. Peripheral Nervous System– Consists of Autonomic (controls self regulated action of internal organs and glands).

And Somatic (controls voluntary movements of skeletal muscle)

1. Automomic Nervous System- Consists of sympathetic ( arousing) and Parasympathetic (calming)
2. Central Nervous System - (Brain and spinal cord)

Brain structure and function and what tools do psychologists use to study the brain.

1. Brainstem - oldest part of the brain, starts at spinal cord. Responsible for automatic survival functions.
2. Reticular formation – a nerve network in the brainstem that plays a role during arousal.
3. Thalamus – Receives information from senses and sends it to higher brain regions.
4. Hypothalamus – Emotion and survival drives.
5. Pituitary gland – Controls other endocrine glands located throughout the body.
6. Cerebral Cortex -

a)Occipital lobe – vision

b) Parietal lobe - sensory information

c) Temporal Lobe – process sounds

d) Frontal Lobes – motor movements

29) Amygdala – Two almond shaped neural clusters that are linked to emotional behavior.

30) Broca’s area - Area for speech production,

31) Wernicke’s Area - Area in brain responsible language comprehension. Words are jumbled

The Endocrine System – The Body’s slow chemical communication system; a set of glands that secrete hormones into the bloodstream.

32) Pituitary Gland – secretes many different hormones, regulates growth and controls other endocrine glands.- Hypothalamus, Thalamus

33) Adrenal Gland – Sits atop the kidney is responsible for secretion of epinephrine, norepinephrine (used in fight or flight reaction).

Sensation and Perception – 7-9% -

34) Difference Threshold ( j.n.d. – just noticeable difference)

a) difference in sensation detectable 50% of time.

b) **Weber’s law – change** necessary for j.n.d. is a proportion of original stimulus.

35) Threshold at what level can we detect stimuli- absolute threshold the minimum stimulation. difference threshold – JND-

36) Signal Detection Theory – predicts when we will detect weak signals.

37) Sensory Adaptation – Attention shift to diminish sensitivity to constant stimulation.

38) Anatomy of EYE and Ear – Blind spot, fovea, rods, cones, Cochlea, inner ear, auditory cortex, semicircular canals.

* Light enters through the cornea
* Lens focuses light on back of retina
* Retina contains rods(dim light), cones (color) Fovea (cones vision is sharpest)

39) Function of EYE and Ear – Visual Information Processing theory, Place theory of hearing.

40) Bottom-up processing-Incoming sensory information works its way up to higher thinking levels

41) Top-down Processing – How our minds interpret drawing from our experience and expectations

Gestalt, Weber’s law, Fechner’s law

States of Conciousness2-4%

42)Waking Consciousness – our conscious awareness of ourselves and our environment

43) Parallel Processing / Serial Processing of Information -

44) Circadian Rhythm – regular biological rhythm.

45) REM Sleep – recurring sleep stage where vivid dreams occur – also known as paradoxical sleep - during hours 3 and 6 of sleep and stage 1 sleep, deep sleep is stage 4.

46) Sleep Disorders - insomnia, narcolepsy, sleep apnea.

Psychoactive Drug States - meditation, psychoactive drugs (stimulant, depressant, Opiates, psychedelic, hypnosis

Activation Synthesis – Hobson & McCarley

Developmental Psychology 7-9%

47) Nature and Nurture of Behavior – Differing sex chromosomes and differing concentrations of sex chromosomes lead to significant physiological sex differences. Gender differences (roles) vary widely depending upon cultural socialization.

48)Behavior Geneticists – Study how much our behavioral differences are due to environmental vs genetic influences

49) Twin Studies – Frequently used to show the genetic influence on behavior using fraternal (twins from separate eggs) or Identical (Single egg).

50)Environmental Influences – include enriched, impoverished environments, peer influences, culture, experience, nature/nurture of gender.

51) Two Theories of gender-typing

a) Social Learning Theory – comprised of rewards and punishments and observation and imitation of models leads to gender typed behavior.

b) Gender Schema Theory – Starts with how kids learn gender from their culture, look at world through gender lens, this leads to gender thinking and gender typed behavior.

52) Learning – Influence of experience (nurture)

53) Maturation – Unfolding of biological patterns (nature)

54) Critical Periods – early development periods during which particular early experiences are essential

55) Schema – A concept or framework that organizes and interprets information – simple schema for cat, a furry four legged animal a toddler may call a dog a cat because it fits the schema.

Piaget Cognitive Development

56) Assimilation - Fit new information into our existing schema

57) Accommodation - Change existing beliefs in response to new knowledge.

of new schema into our experiences.

58) Piaget’s Stages of Development

a) Sensory –motor stage (birth -2) object permanence (peek-a-boo)

b) Preoperational stage (2-7) use of symbols and language; egocentric: lack the principals of conservation ( turn the Erlenmeyer flask upside down)

c) Concrete operational stage (7-11) understand conservation, identity, grounded in concrete experiences

d) Formal operational – (12- adult) abstract reasoning

Social Development

59) Attachment – emotional tie between infant and caretaker (Harlow monkey studies with wire monkey and cloth monkey)

60) Social deprivation and fear – Monkeys that were placed in strange situations without their surrogate mothers lead monkey to fear and withdrawal.

Erikson, Gesell, Piaget, Vygotsky (zpd), Erikson, Ainsworth, Kohlberg, Gilligan

Learning – 7-9 % of multiple-choice section

61) Classical conditioning – Pavlov described learning in terms of stimulus and response. Pairing a neutral Stimulus (s) like a tone right b-4 an unconditioned stimuli (ucs –food) - After several pairings the tone changes to be the conditioned stimuli (CS) this leads to learning where the dog salivates(CR).

62) Operant Conditioning – B.F. Skinner showed how animals learn using reinforcement. **Positive reinforcement** tries to reinforce the behavior by adding something - presenting the reward after the animal does what you want it to do. (when the rat does something you like you give it food), **Negative Reinforcement**  means to remove an aversive stimulus . **Punishment** -tries to diminish the behavior by providing an aversive consequence to decrease the frequency of a behavior, **Positive punishment** means to add something unpleasant – like shock therapy and **negative punishment** means to take something away resulting in something unpleasant ( take away the running wheel for mouse).

63) Cognitive Processes – Skinner felt thoughts, perceptions, expectations do not have a place in psychology

64) Biological Factors – Can constrain animals from learning how to perform a behavior.

65) Social Learning – Learning by observation – Bandura’s experiments.

Bandura, Tolman and Rescorla, Skinner, Pavlov, Watson

Cognition – 8-10% of multiple-choice section

66) Memory – Encoding - Getting information in – Effortful and automatic, Ebbinghsus’ (pioneering research on memory) studies of retention, Information Storage and Retrieval, explicit and implicit memory. Forgetting – retrieval failure(proactive and retroactive interference)

67) Language-made up of phoneme( smallest distinctive sound unit) Morpheme (smallest unit that carries a unit)N. Chomsky.

68) Thinking-Linguistic relativity hypothesis suggested language determines thought, it is more accurate to say language influences thought.

69) Problem Solving and Creativity - Problem solving can be interfered with tendencies for confirmation bias and fixation. Trial and error, heuristics.

Motivation and Emotion – 6-8% of multiple-choice section

70) Biological Bases - hunger thirst, pain avoidance.

71) Theories of Motivation – Maslow Hierarchy of motivation – needs based highest is self actualization.

72) Hunger, Thirst, and Pain – Stomach contractions, hypothalamus, environments.

73) Social Motives – learned motivation through social cultural motives.

74) Theories of Emotion –

* James-Lang Theory, - emotion is result of perception of bodily changes and behavior
* Cannon-Bard – emotion is result of perception of stimulus causing both physiological changes and subjective feelings

75) Stress – leads to blocked efforts to achieve a goal.

McClelland, Fromm, James-Lang, Cannon-Bard, Schachter-Singer

Personality 5-7% of multiple-choice section

76) Personality Theories and Approaches – Freud (jung) , Humanistic theory (maslow, rogers) , Existential (Yalom).Social Cognitive Theory,

77) Assessment Techniques – Reliable (same results over time) , Valid (measure what you are supposed to be measuring). 1) interview 2) Observations 3) self-report 4) projective tests

78) Growth and Adjustment – Know freud stages and his defense mechanisms.

Freud, Allport, Cattell, Eysenck’s, Maslow, Rogers, Rotter’s, Bandura, Mischel,

Testing and Individual Differences – 5-7% of multiple-choice section

79) Standardization and norms

80) Reliability and Validity

81) Types of Tests

82) Ethics and Standards in Testing

83) Intelligence – origins – Alfred Binet, predicting school achievement. Louis Terman the innate IQ – The G factor - (Spearman) Multiple Intelligence theory(Gardner) Practical Intelligence - academic, practical and creative intelligence(Sternberg Wagner). Intelligence Testing –

Spearman, Thurstone, Guilford, Cattell, Gardner, Sternberg

Abnormal Psychology – 7-9% of multiple-choice section

84) Definitions of Abnormal Psychology- 1) atypical 2) disturbing 3) maladaptive 4) unjustifiable FOR THE SOCIAL SITUATION

85) Theories of Psychopathology – Psychoanalytic, biological, social cultural

86) Diagnosis of Psychopathology – has signs and symptoms described in DSM and has persisted for more than 6 weeks.

87) Types of Disorders

Anxiety

Somatoform – take the form of physical disorders.

Mood –depression, mania caused biological, social, attachments, cognitive (maladaptive thoughts)

Schizophrenic -

Organic – natural physiological cause (not drug induced)

Personality – paranoid, narcissistic, antisocial

Dissociative - amnesia, multiple personality

Treatment of Psychological Disorders. – 5-7 % of multiple-choice

88)Treatment Orientations – Behavioral, humanistic, psychoanalytic/psychodynamic, cognitive-behavioral, and biological

89)Administration of Therapy – one-on-one basis (clinical) or group setting (support group, family therapy), outpatient basis (counseling center or hospital)

90)Prevention and Intervention techniques

Freud, Rogers, Beck, Ellis,

Social Psychology 7-9% of multiple choice

91)Structure and Function of Group – how group dynamics affect behavior of group

92)Attribution – Theory that we tend to give a casual explanation for someone’s behavior. Often by crediting it to either the situation or the person’s disposition. Our behavior changes with the situations that we encounter.

93)Fundamental Attribution Error – the tendency for observers when analyzing another’s behavior to underestimate the impact of the situation and to overestimate the impact of the personal disposition “I am not spock”

94)Social cognition – how the social environments influences thoughts, perception and belief.

1. Attribution – motivation to explain behavior
   1. Situational – environment
   2. Dispositional – within the individual
   3. Fundamental attribution error –overestimate dispositional and underestimate situational.
   4. Self-serving bias –use dispositional aspects for good behavior and situational to excuse our own behavior.

Stanley Milgram – six degrees of separation, obedience to authority

Gordon Allport - Allport is known as a "trait" psychologist. One of his early projects was to go through the dictionary and locate every term that he thought could describe a person. This is known as the "lexical hypothesis." From this, he developed a list of 4500 trait like words. He organized these into three levels of traits.

Zimbardo’s Prison Study

1. Students assigned to guard or prisoner roles
2. Studetn behavior reflected his/her assigned role