UNIT 8 – MOTIVATION, EMOTION, STRESS, and INDIVIDUAL DIFFERENCES (INTELLIGENCE)
PERCENT ON AP EXAM – 11-15%

TERMS YOU MUST KNOW

Reliability
Validity
Intelligence Quotient
Intelligence
Creativity
Crystallized Intelligence
Fluid Intelligence
g Factor
Standardization
Divergent Thinking
Emotional Intelligence
Factor Analysis
Mental Age
Anorexia Nervosa
Motivation
Bulimia Nervosa
Emotion
Drive
Instinct
James Lange Theory
Intrinsic Motivation
Sexual Orientation
Set Point
Cannon Bard Theory
Generalized Anxiety Disorder
Stress
General Adaptation Syndrome
Health Psychology
Type A Behavior Pattern
Biopsychosocial Model
Social Support
Psychoneuroimmunology
Stressors

CONFUSING PAIRS

- Fluid Intelligence (processing speed) v. Crystallized Intelligence (acquired knowledge)
- Validity (test measures what it should) v. Reliability (same scores on a retest)
- Achievement Test (what you've learned) v. Aptitude Test (shows potential for future learning)
- Intrinsic Motivation (for personal satisfaction) v. Extrinsic Motivation (for rewards)
- Theory Y (democratic/intrinsic) v. Theory X (rewards or punishment/extrinsic)
- Lateral Hypothalamus (stimulates hunger - GO) v. Ventromedial Hypothalamus (suppresses hunger - STOP)

IMPORTANT PEOPLE

- William James – function rather than structure
- Carl Lange – emotion based on arousal first
- Hans Selye – General Adaptation Syndrome (stress response – prolonged leads to death or diseases)
- Stanley Schachter – two factor theory of emotion (cognition)
- Jerome Singer – two factor theory of emotion (cognition)
- Abraham Maslow – hierarchy of needs (self-actualization)
- Alfred Binet – modern IQ formula
- David Wechsler – modern IQ tests
- Charles Spearman – one type of intelligence ("g")
- Howard Gardner – multiple intelligences
- Robert Sternberg – three aspects of intelligence (analytical, creative, practical)
- Francis Galton – nature vs. nurture
- Lewis Terman – Sanford-Binet IQ Test
- Paul Ekman – 6 universal emotions
- Daniel Goleman – Emotional Intelligence
- Raymond Cattell – fluid & crystalized intelligence

TERMS STUDENTS MAKE MISTAKE ON

- Framing – based on how something is worded
- Emotional Intelligence – can have high EI but low other intelligence, and vice versa
- Achievement Test – tests what you already learned
- Parasympathetic Nervous System – calms you down
- Instinct – set of behaviors that are both unlearned and set in motion as the result of some environmental trigger
- "g" Factor – general intelligence, good at one thing it correlates to something else
- Social Leadership Styles – need to either lead with an iron fist (lazy workers) or give them freedom
- Two-Factor Theory – experience physiological and emotion at same time
- Fearful Faces – Stored in Amygdala (Emotions)
- James-Lange Theory – physiological experience first then emotion
- Adaptation-Level Phenomenon – hard task low arousal, easy task high arousal
- Need – arouses an organism to action toward a goal
- Drive – "excitatory" state produced by a homeostatic disturbance
- Intrinsic Motivation – do it for the joy of it
- Humans have a need to belong
- Content Validity – testing for what it is supposed too
- Sternberg – general intelligence "g"
- Cerebellum – controls body responses (heart rate, etc.)
- Ventromedial Hypothalamus – stops hunger, stimulate won't eat, destroy will over eat
- Lateral Hypothalamus – starts hunger, stimulate will eat, destroy won't eat

Unit 8 Exam: Testing and Individual Differences

Intelligence (definition of)

Key names:

Spearman – "g-factor" (general intelligence)
Sternberg – "triarchic theory of intelligence" – analytical, creative & practical
Gardner – "multiple intelligences"

Emotional intelligence

Ability to perceive, understand and manage emotions

Measuring Intelligence

Aptitude tests vs. Achievement tests

Binet & Terman's tests

designed to identify children who might have difficulty in school
mental age/chronological age X 100 (10 year-old with mental age of 12 year-old scores 120)
measured reasoning skills
best measure for younger children
intellectually bright children = as smart as average older children
ability to delay gratification can show mental age

WAIS (Wechsler Adult Intelligence Scale) / WISC (Wechsler Intelligence Scale for Children)

Verbal & performance subtests
Most widely used intelligence test today
Normal distribution for WAIS scores? (Average is 100, SD is 15)

Principles of Test Construction

Factor analysis

Identifies clusters of closely related test items

Standardized tests (scores are compared to a pre-tested standardized group)

IQ scores form a Normal curve, with a score of 100 as the mean and a 15pt standard deviation

Reliability (are scores consistent?)

Validity (do scores measure what they are intended to measure?)

Predictive validity- does the test accurately predict the behavior it is designed to predict?

Ex: Predictive Validity of IQ scores (IQ scores have high predictive validity for early grades; for upper grades, the best predictor of future grades is past grades)

Content validity- does the test measure the content of interest?

Extremes of Intelligence

Savant syndrome

(a condition in which a person otherwise limited in mental ability has an exceptional specific skill)

Downs Syndrome (extra #21 chromosome)
Mental retardation (typically have intelligence scores below 70; can range from mild to profound)

Creativity

People are more creative when:

They have a wide base of knowledge about the subject
They have imaginative thinking skills
They have an adventuresome personality
****They are intrinsically motivated (extrinsic motivators make people less creative!)

Influences on Intelligence/ Intelligence Scores

Genetic predispositions of intelligence (identical twins, fraternal twins, adopted siblings)

Heritability

Age: Crystallized vs. fluid intelligence

Gender, racial & cultural biases of intelligence tests

(issues of bias – content validity)

Environment

Flynn Effect

Unit 8 Study Guide: Focus on Motivation & Emotion

MOTIVATION

Theories of Motivation

Maslow's Hierarchy of Needs
Homeostasis
Drive-Reduction Theory
Instinct Theory
Incentive Theory (push and pull)
Arousal Theory

Hunger

Glucose
Insulin
Lateral hypothalamus
Ventral Medial hypothalamus
Set-point theory
Eating disorders (anorexia and bulimia)

Sex

Masters and Johnson sexual cycle

Belongingness

Why we need to belong

Achievement Motivation

Need for achievement
Extrinsic and intrinsic motivation

EMOTION & STRESS

Theories of Emotion

James-Lange Theory
Cannon-Bard Theory
Two-factor Theory (Schacter)
Adaptation-Level Phenomenon
Catharsis Hypothesis
Relative Deprivation Theory
Non-verbal communication
Facial-feedback effect
Feel good, do good phenomenon
Neurological basis for emotion (amygdala)
Physiology of emotion
The universally understood language (facial expressions)

Stress

Stressors
Sympathetic Nervous System
Parasympathetic Nervous System
Stress Appraisal
General Adaptation Syndrome
Epinephrine
Type A/Type B personalities
Psychophysiological illness
Biofeedback
Perceived control