Exam #3 Study Guide

Chapter 5- The Feeling Mind: Motivation and Emotion

I. Pain
   i. Damage to tissue causes
      a) release of special chemicals
      b) stimulates pain receptors
   ii. Pain receptors
   iii. Pain Pathway
   iv. Two regions of cortex
      a) Somatosensory area
      b) Frontal Lobes
   v. Pain reduction
      a) Pressure stimulation
      b) CNS Descending inhibition from Peri-Aquaductal Grey (PAG)
   vi. Gate-Control Theory of Pain Control

II. Motivation
   i. Maslow's Hierarchy of Needs
      a) Physiological Needs
      b) Safety Needs
      c) Belongingness and Love Needs
      d) Esteem Needs
      e) Self-Actualization Needs
   ii. Homeostasis
      a) Body attempts to maintain relatively constant internal environment.
      b) Homeostasis depends upon: internal sensor to provide feedback, a comparator and an adjustment mechanism.

III. Eating and Obesity
   i. Weight is a function of?
   ii. What initiates eating?
   iii. Body Chemistry and the Brain
      a) Glucose
      b) Hypothalamus
   iv. What stops eating (Satiety)?
   v. Lesions of Hypothalamus
      a) VMH Syndrome
      b) LH Syndrome
      c) What do these syndromes suggest?
   vi. Set-point theory of weight regulation
      a) Set-point and metabolism
      b) Set-point and environment
vii. Eating and Obesity
   a) Eating
   b) Expenditure
   c) Lack of activity
   d) Genetic programming/Genetic factor
   e) Drugs

viii. Conventional Intuitions vs. Set-point Theory
   a) Conventional
   b) Set-point

ix. Eating and Eating Disorders
   a) Anorexia
      • Severity
      • Diagnostic Criteria
      • Causes (Bio, Psycho, Social)
   b) Bulimia
      • Binging
      • Compensatory Behaviors
      • Frequency of behaviors/binging
      • Self-evaluation
   c) Epidemiology of Eating Disorders
      • Women
      • Men

IV. Emotion
   i. Mood
   ii. Affect/emotion
      a) Subjective experiences
      b) Internal physiological responses
         • Role of physiological arousal in emotion
         • Intuitive View
         • James-Lange Theory
         • Problems with James-Lange Theory (Cannon)
         • Cannon-Bard Theory
      c) Belief or cognitive appraisal
         • Absence of cognition?
         • Animals
         • Humans
         • Zajonc/LeDoux: emotion is primary
         • Lazarus/Schacter: cognition precedes
            • Cognition-Arousal Theory
            • Schacter’s Infamous Study
            • Excitation transfer or Spillover effect
         • Cognition in depression
            • Distorted cognitions
            • Types of Cognitive distortions/errors
o Changing cognitions changes emotions
  o Sadder but Wiser phenomenon
  o Alloy and Abramson Sadder but Wiser Study

d) Facial Expression
   • Eckman: facial expressions are key
   • Expressed emotion
   • Duchene vs. polite “unfelt” smile
   • Facial feedback hypothesis
     o Definition
     o Golf tee experiment
   • Ekman’s Facial Feedback Theory
   • Facial Feedback and Botox

e) Reaction (Behavior)

V. Lie Detector (take home message slide only)
   a. There is no unequivocal lie response
   b. Traditional Polygraphy, which focuses on emotional reactions, suffers from an unacceptably high false positive rate (innocent folks look guilty)
   c. Assessing recognition may prove more accurate, but possibly less widely applicable
   d. Polygraphs are useful for eliciting admissions and confessions

VI. Cognition and Emotion
   I. Cognitions in depression
   II. Cognitive distortions
      a. Overgeneralization
      b. Selective abstraction
      c. Magnification & minimization
      d. All or nothing thinking
   III. Therapy
   IV. Sadder but Wiser phenomenon
Chapter 5 Key Terms (From Textbook)
1. Achievement
2. Affiliation
3. Anorexia Nervosa
4. Body Mass Index (BMI)
5. Bulimia Nervosa
6. Cannon-Bard Theory
7. Catharsis
8. Display Rule
9. Drive
10. Drive Reduction
11. Glucose
12. Homeostasis
13. Incentive
14. Insula
15. Intrinsic Reward
16. James-Lange Theory
17. Leptin
18. Motivation
19. Satiety
20. Schachter-Singer Two-Factor Theory
21. Self-actualization
22. Set Point
23. Sexual Orientation
24. Somatovisceral Afference Model of Emotion (SAME)
25. Testosterone
26. Yerkes-Dodson Law
Chapter 6 - The Adaptive Mind: Learning

VII. Learning

V. Experience-dependent neural plasticity

VI. Associative learning
   a. Training animals
   b. Superstitious behavior
   c. Phobias

VII. 2 types of associative learning
   a. Classical (stimulus-stimulus)
      i. Pavlov
      ii. Little Albert
      iii. CS, CR, UCS, UCR
      iv. Heroin and Needles
   v. Temporal sequencing of UCS & CS
      1. Delayed Conditioning
      2. Simultaneous
      3. Trace
   vi. Extinction
      1. Spontaneous recovery
      2. Reconditioning: must repair
   vii. Stimulus Generalization
   viii. Discrimination
      1. CS+ and CS-

b. Operant (response-consequence)
   i. Basic premise
   ii. Thorndyke
   iii. Generalization
   iv. Discrimination
   v. Shaping
   vi. Chaining
   vii. Superstitious behavior (AKA Adventitious Learning)

viii. Gradient of Reinforcement

ix. Schedules of Reinforcement (rfx)
   1. Continuous rfx
   2. Partial rfx
      a. Interval schedules
         i. Fixed Interval (FI)
         ii. Variable Interval (VI)
      b. Ratio Schedules
         i. Fixed ratio (FR)
         ii. Variable ratio (VR)
   3. Stretching the schedule of rfx

x. Types of Reinforcement
   1. Positive
2. Negative
   xi. Punishment
       1. Used to decrease an undesirable behavior
   xii. Avoidance learning (phobias) as combination of OC and CC
       1. CC: Generalization & Extinction
       2. OC: avoidance of stimulus (ex: dog) is reinforcing; negative repr
Chapter 6 Key Terms (From Textbook)

1. Acquisition
2. Associative Learning
3. Classical Conditioning
4. Conditioned Reinforcer
5. Conditioned Response (CR)
6. Conditioned Stimulus (CS)
7. Discrimination
8. Extinction
9. Fixed Interval (FI) Schedule
10. Fixed Ration (FR) Schedule
11. Generalization
12. Habituation
13. Higher Order Conditioning
14. Imitation
15. Inhibition
16. Instinct
17. Latent Inhibition
18. Latent Learning
19. Learning
20. Negative Punishment
21. Negative Reinforcement
22. Nonassociative Learning
23. Observational Learning
24. Operant Conditioning
25. Partial Reinforcement Effect in Extinction
26. Partial Reinforcement
27. Positive Punishment
28. Punishment
29. Reflex
30. Sensitization
31. Shaping/Method of Successive Approximations
32. Spontaneous Recovery
33. Systematic Desensitization
34. Token Economy
35. Unconditioned Response (UCR)
36. Unconditioned Stimulus (UCS)
37. Variable Interval (VI) Schedule
38. Variable Ration (VR) Schedule