Psychology 101 Review Session III

Outlines

• Go through the text material (not about Dr. Ray’s lectures)

• Talk about some example exam questions

• Time for questions about the text and lectures

March 29, 2000
Textbook Chpt. 7, 10, 14, 17 & 18

Topic 1: Thinking, Problem Solving and Language

Topic 2: Motivation / Psychological Motives

Topic 3: Social development and social Processes

Topic 4: Important Aspects of Social Psychology
Topic 1: Thinking, Problem Solving and Language
Thinking means manipulating mental representations for a purpose. Mental representations: concepts and categories

- **Objects are classified on the basis of their properties**
  - **Categories**: natural groupings based on common properties
  - **Concept**: a mental representation of a category
    - “Cat”: small, hairy, and independent creature
Process of categorization

- Defining Features
- Prototypes
- Exemplars

- Categories are organized on hierarchies
Reasoning

- **Inductive**: reason from specific observations to general propositions
- **Deductive**: drawing a conclusion from a set of assumptions
  - The conclusion is true if the premises are true
  - **Syllogism**: formal statements in deductive reasoning.
    - Comprised of 2 premises and a conclusion
Problem Solving

- Process by which we transform one situation into another to meet a goal
- Problems vary by definition:
  - Well-defined versus ill-defined
- Strategies of problem solving:

• Impediments of problem solving
Heuristics

- **Heuristics** are cognitive shortcuts that allow us to make decisions (may border on irrational)
  - **Representative** heuristic: we match an object to its category but don’t process how likely the match is
  - **Availability** heuristic: we decide that the events that we can easily recall are common and typical
Connectionism or parallel distribution processing (PDP)
Frontal Cortex: Role in Thought

■ The Frontal lobes are critical for the processing of thought
  ▪ Dorsolateral prefrontal region: damage here leads to impaired planning, distractability, and deficits in working memory
  ▪ Ventromedial prefrontal region: damage here interrupts connections to the limbic system and results in mood swings, loss of social inhibition, and changes in personality
Language

- A **language** is a system of symbols, sounds, meanings, and rules of combination that allows for communication among humans
  - **Phonemes**: the smallest units of sound
  - **Morphemes**: the smallest units of meaning
  - **Phrases**: are composed of morphemes
  - **Sentences**: strings of morphemes and phrases that express a thought or intention

- Syntax / semantics / pragmatics
- Language and thought
Critical Periods for Language Acquisition

- Critical periods assume that an organism must develop a function within a limited time frame or it will not develop at all.
  - Children easily learn second languages, adults have great difficulty.
  - Isolated children have language impairments.
Language Development

■ The case for nurture:
  ▪ B.F. Skinner: children imitate the utterances of their parents
    • Argues that children receive differential reinforcement for speech sounds

■ The case for nature:
  ▪ Chomksy argued that language acquisition appears to be universal across culture (could not be accounted for by learning)
Language in Animals

- Question: Is language solely a human function?
- Primates cannot speak (no vocal cords)
  - Researchers have examined nonverbal language in primates using symbols

(Figure adapted from Premack & Premack, 1972)
Nonverbal Communication

- Nonverbal communication includes:
  - vocal intonation
  - body language (crossed arms)
  - gestures (often involving the hands or fingers)
  - physical distance
  - facial expressions
  - touch

© 1999 John Wiley and Sons, Inc.
Topic 2: Motivation / Psychological Motives
Motivation

- Motivation refers to the moving force that energizes behavior
  - Direction or goal of motives
  - Strength of motives
- Motives reflect either
  - Biological needs or
  - Psychosocial needs
Perspectives on motivation

Evolutionary Psychology

• Maximizing inclusive fitness
• Pheromoneral communication

Psychodynamic perspective:

• Basic motives
• the Thematic Apperception Test (TAT) / David McClelland
Behaviorist Perspective

- Behaviors are governed by stimuli in the environment
  - Needs reflect a requirement such as food and water
  - Drives are states of arousal that accompany an unfulfilled need
    - Hunger
    - Thirst

- Drive reduction theory argues that we behave in order to satisfy needs and reduce drives
Cognitive Perspective

- Goals refer to positive outcomes that are established by social learning
  - Finding a mate

- Goals can be set and persons can monitor their own progress toward the goal
  - Note that this view of motivation relies on conscious processing rather than unconscious processing
  - Feedback about progress toward the goal is key to motivating performance

© 1999 John Wiley and Sons, Inc.
Maslow’s Hierarchy of Needs

- Physiological (e.g., hunger, thirst)
  - Safety (e.g., housing, money)
  - Love or belongingness (e.g., intimacy)
  - Esteem (e.g., respect from peers)
  - Self-actualization (e.g., creative art, service to others)
Eating Disorders

- Western society is obsessed with thinness
  - Contributes to eating disorders in young white females
    - Anorexia: self-induced starvation leading to loss of 15% or more of body weight (described first in 1689)
      - Cardiovascular issues (low heart rate and blood pressure)
      - Low metabolism
      - Cessation of menstruation
    - Bulimia:
      - Binge eating followed by purging

© 1999 John Wiley and Sons, Inc.
Hypothalamic Regulation of Eating

- Hypothalamus receives information regarding nutrient levels in body
  - **Lateral region**
    - Stimulation induces eating
    - Lesions of the lateral region produce starvation
  - **Ventromedial region**
    - Lesions induce overeating
    - Stimulation inhibits eating

© 1999 John Wiley and Sons, Inc.
Obesity

- Obesity is an excess level of fat in the body
  - Defined as weight that is 15% above ideal

- Risks of obesity
  - Physical
    - Heart disease, diabetes, or stroke
    - Early mortality
  - Psychological
    - Negative stereotypes about the obese
    - Basis for discrimination in jobs and housing
    - Difficulty in relationships

© 1999 John Wiley and Sons, Inc.
Hormones and Sexual Motivation

- **Organizational effects:** prenatal exposure to androgens alters the neural circuits in brain and spinal cord
  - Adult behavior of androgenized subject is masculine
  - In the absence of androgens, “Nature’s impulse is to create a female…”

- **Activational effects:** alteration of adult levels of hormones can alter the intensity of a behavior that is modulated by that hormone

© 1999 John Wiley and Sons, Inc.
Psychological motives

- Need for relatedness
- Achievement and other agency motives
Topic 3: Social development and social Processes
Social Development

- **Social Development** encompasses the changes in feeling, interpersonal thought, and behavior across the lifespan.

- Critical issues in social development include:
  - *Attachment* and its implication for adult functioning
  - *Socialization* by parents and peers
Attachment

- Attachment refers to an enduring emotional tie between child and caretaker.
- Attachment involves:
  - Desire of the child to be close to the caretaker.
  - A sense of security around the caretaker.
  - Feelings of distress when the caretaker is absent.

- Separation Anxiety
Harlow’s Studies of “Contact Comfort”

- Infant monkeys were raised in isolation (to avoid disease) and were housed with artificial mothers
  - The monkeys could choose between a wire-mesh “monkey” that provided food or a “mother” covered in terry cloth that did not provide food
    - Harlow noted that the infants clung to the terry cloth mother as though “attached” to that mother
    - These results did not support the idea that attachment is based on feeding

Bowlby’s Theory
- Attachment Imprinting
- Internal working models of relationships
Attachment Patterns

The Strange Situation reveals 4 patterns of attachment:

- **Securely attached**: Child welcomes the mothers return and seeks closeness to her
- **Avoidant**: Child ignores the mother
- **Ambivalently attached**: Child exhibits anger at the mother while seeking to be close to her
- **Disorganized**: Child may approach the other but gaze away from her, and may show odd motor behavior (rocking) and dazed facial expressions

- Adult attachment
Socialization

- Socialization refers to the process by which children learn the beliefs, values, skills, and behavior patterns of their culture.

- Issues in socialization:
Authoritarian parents produce children with low independence, low self-esteem, and an external locus of control.
Socialization of Gender

- **Gender** refers to the psychological meaning of being male or female.
- **Gender roles** specify the range of behaviors considered appropriate for females and for males.
- **Gender schemas** refer to mental representations that differentiate one sex from another.
  - "Men are more aggressive"
  - "Women are more nurturing"
# Psychosocial Theory of Development

## Table 14.5: Erikson's Psychological Stages in Relation to Other Models of Development

<table>
<thead>
<tr>
<th>Life Period</th>
<th>Erikson's Psychosocial Stage</th>
<th>Freud's Psychosexual Stage</th>
<th>Piaget's Cognitive Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infancy</td>
<td>Basic trust versus mistrust: Development of interpersonal expectations and hope</td>
<td>Oral</td>
<td>Sensorimotor</td>
</tr>
<tr>
<td>Toddlerhood</td>
<td>Autonomy versus shame and doubt: Development of will and self-control</td>
<td>Anal</td>
<td>Preoperational</td>
</tr>
<tr>
<td>Preschool and early school years</td>
<td>Initiative versus guilt: Development of conscience and purpose</td>
<td>Phallic</td>
<td></td>
</tr>
<tr>
<td>Late childhood</td>
<td>Industry versus inferiority: Development of competence</td>
<td>Latency</td>
<td>Concrete operational</td>
</tr>
<tr>
<td>Adolescence</td>
<td>Identity versus identity confusion: Development of commitment and sense of integration</td>
<td>Genital</td>
<td>Formal operational</td>
</tr>
<tr>
<td>Young adulthood</td>
<td>Intimacy versus isolation: Development of adult love</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midlife</td>
<td>Generativity versus stagnation: Development of care for the next generation and for one's legacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Old age</td>
<td>Integrity versus despair: Development of wisdom</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Erikson’s model describes psychosocial development, which is not independent of either the development of pleasure-seeking motives, as described by Freud, or cognition, as described by Piaget. Among the major theories we have discussed, however, Erikson’s is the only one that posits development through adulthood.

© 1999 John Wiley and Sons, Inc.
Topic 4: Important Aspects of Social Psychology
Social Psychology examines the influence of social processes on the way people think, feel, and behave.

Examples of social psychology issues include:

- **Attitudes** towards objects and people
  - Importance in advertising
- **Stereotypes** about nations and people
- Knowledge of others and yourself
Attitudes

- An **attitude** is an association between an act or object and an evaluation
  - Involves positive or negative impressions
  - Involves three components:
    - **Cognitive**: “Marijuana is a gateway drug”
    - **Emotional**: “Marijuana is extremely dangerous”
    - **Behavioral**: “I will not smoke marijuana”

- Attitudes vary in **strength**: refers to whether the attitude is durable (long lasting) and whether the attitude alters behavior

© 1999 John Wiley and Sons, Inc.
Why Would Behaviors Not be Predicted by Attitudes?

- The attitude and the behavior may be at different levels of generality and specificity
  - Better prediction when attitude and behaviors are specific and match in generality
- Attitudes are only one determinant of behavior
- Attitudes can involve implicit and explicit components
  - Implicit (automatic components) may dominate but are difficult to assess
Two Major Paths leading to attitude changes

- Persuasion central/peripheral route
- Cognitive dissonance
Cognitive Dissonance

- Resembles “drive reduction” theory
  - Subjects asked to lie about a boring study after accepting $1 showed greater attitude change about the task than did subjects paid $20 to lie

© 1999 John Wiley and Sons, Inc.
Social Cognition

- Social cognition refers to how we mentally reconstruct the social world
- Cognitive models are being used to understand social phenomena
  - Schemas as organizing principles
  - Connectionist models and parallel processing
  - The notion of implicit versus explicit processing in social cognition

• Alternative theory: Self-perception theory
Social Schemas

- Schemas are patterns of thought that organize our experiences
  - **Person** schemas: Represent specific people or types of people (librarians, extroverts)
  - **Situation** schemas: Represent different kinds of social situations (how to use silverware at a formal dinner)
  - **Role** schemas: Represent shared expectations for a person in a role (student, professor, parent)
  - **Relationship** schemas: Represent expectations about self and others in unique relationships

© 1999 John Wiley and Sons, Inc.
Stereotypes and Prejudice

- Schemas allow us to enter new social situations with some idea as to how we and others are to act.

- Schemas can be rigid and prone to error:
  - **Stereotypes**: Represent characteristics assigned to persons based on their membership in a specific group
  - **Prejudice**: Involves judging others based on a stereotype
  - **Discrimination**: Acting negatively toward a person
Racism

- Racism reflects a negative attitude toward members of a racial group
  - Stereotype is the cognitive component
  - Prejudice is the emotional component
  - Discrimination is the behavioral component

- Roots of racism may lie in personality
  - The Authoritarian Personality involves the tendency to hate people who are different
  - This personality type is associated with a dominant, stern father and a submissive mother

© 1999 John Wiley and Sons, Inc.
Attrition

- **Attribution** refers to the process of inferring the causes of mental states and behaviors of yourself and of others.

- We are “intuitive scientists”:
  - Try to determine the extent to which situations, persons, and behaviors vary with each other.
  - **External attributions**: Behavior is due to the situation: “The boss yelled at me because this is April 15th and his taxes are not done…”
  - **Internal attributions**: Behavior reflects the person: The boss yells at everyone… even his mom…”

© 1999 John Wiley and Sons, Inc.
Biases in Social Cognition

- **Correspondence bias**: Tendency to assume internal causes for persons behavior, rather than external situations.

- **Self-serving bias**: Tendency for a person to view themselves more positively than they deserve:
  - Person who sees a photograph of themselves may question how the camera could take a “bad picture”.
Interpersonal Attraction

- Factors that contribute to attraction:
  - **Proximity**: we like/love those who are physically close to us
    - Classroom romances
  - **Interpersonal rewards**: we are rewarded in relationships by others (wit, charm, goods)
  - **Similarity**: “Birds of a feather flock together”: we spend time with those who share our attitudes, values, and interests
  - **Physical Attractiveness**: can be a potent factor; persons opt for persons at the same level of physical attractiveness

© 1999 John Wiley and Sons, Inc.
Bystander Non-intervention Effect

Model of Bystander Intervention

(Figure adapted from Darley & Latane, 1968, pp. 70-71)
Aggression

- **Aggression** refers to the intentional injury of another person

  - Aggression can occur in many different contexts
    - **Inter-male aggression**: fighting between males
    - **Maternal aggression**: directed towards strangers by mother
    - **Instrumental aggression**: aggression that serves an end (e.g. dog trained to attack)
    - **Predation**: violence designed to obtain food
    - **Sexual aggression**: usually directed at females by a male

© 1999 John Wiley and Sons, Inc.
Neural Control of Aggression

Stimulus → Sensory reception

- Amygdala
- Hypothalamus
- Pituitary gland
- Other endocrine glands

Thalamus → Cortex

Midbrain motor circuits → Spinal cord

Aggressive behavior
Social Influence

The mere presence of others can alter human behavior

- **Social facilitation**: the presence of others can facilitate performance (noted in rats, cockroaches, and humans)
  - Amount of food consumed during a meal
  - Winding a fishing reel

© 1999 John Wiley and Sons, Inc.
Obedience

- Critical issue: Why do humans obey orders that cause injury or death to others?
  - Nazi Germany and My Lai, Vietnam
  - Obedience: compliance to the orders of authority

- Milgram’s Obedience study:
  - Person is asked to deliver shocks to a learner when the learner makes mistakes in a test
  - Shocks range from 15-450 volts
  - The learner stops responding after 300 volts
  - 66% of subjects went to 450 volts...

© 1999 John Wiley and Sons, Inc.
Example Exam Questions
Margot knows that all students who attend Lawrence High School are required to study French. Because Margot's nephew attends Lawrence High School, she assumes he is studying French. Margot is using __________reasoning.

A) deductive  
B) inductive  
C) presumptive  
D) analogical  
E) hypothetical

Difficulty: Easy   Type: Conceptual
Which of the following best summarizes the findings of the research study that examined the influence of culture on categorization by comparing the results of categorization tasks completed by North American college students with that of Manu (Liberian) farmers? (Answer: D)

A) People in different cultures categorize objects similarly when the objects are of a life-sustaining nature, such as bowls of rice or other staples.
B) People in different cultures categorize objects in different ways depending on the speed with which the objects are presented.
C) People in different cultures categorize objects similarly if all other aspects of the study are similar, such as education level, vocational skills, and family.
D) People in different cultures categorize objects in different ways depending on their use of, and familiarity with, these objects in their environment.

Topic: Culture and Categorization   Difficulty: Difficult   Type: Factual
In a series of experiments conducted in order to compare the color recognition abilities of the Dani people of New Guinea with those of English-speaking test subjects, researchers found that ____________.

A) English speaking subjects were able to select and match more bright colors than were the Dani
B) Dani were able to select and match more bright colors than were the English-speaking subjects
C) Dani were able to select and match more subtle color variations than were the English-speaking subjects
D) both groups performed about the same—correctly selecting basic colors more often than less distinctive shades

Topic: Language and Thought  Difficulty: Medium
Type: Factual
Jeff suffered a head injury in a skiing accident. Since that time he has suffered from fits of temper and has had difficulty controlling his behavior in public. This evidence suggests that Jeff most likely suffered damage to ___________.

A) his dorsolateral prefrontal circuits
B) neither frontal lobe
C) his ventromedial prefrontal cortex
D) both frontal lobes
E) lateral hypothalamus

Difficulty: Medium   Type: Conceptual
Bob is a student with ______ achievement motivation. He has selected a major that suits his abilities, committed to a study schedule that is rigorous but not impossible, and worked hard to achieve his goals.

A) low  
B) average  
C) medium-high  
D) high  
E) poor

Answer: D
John would like to know if his son will grow up to be a homosexual. The best indicator would be if ___________.

A) the boy's grandfather demonstrated any homosexual inclinations
B) his son acts like a "sissy" and likes "girl things"
C) the boy interacts with a homosexual role-model, such as a teacher
D) his son is molested by a homosexual pedophile
E) his son often disobey school rules

Difficulty: Medium   Type: Conceptual
Konrad Lorenz conducted studies in imprinting; the tendency of __________.

A) children to form attachments to caregivers other than their natural parents during the first six months of life

B) children to except cultural ideas and values as they are conveyed by their natural parents and other caregivers during the first year of life

C) young animals of certain species to imitate behaviors that promote survival and are demonstrated by their natural parents and others of the same species

D) young animals of certain species to follow an animal to which they were exposed during a sensitive period early in their lives

Topic: Bowlby's Theory   Difficulty: Medium   Type: Factual   Answer: D
Contessa is a high school student who exhibits self-confidence, does well in school, and is trusting and engaging with peers. She is also well liked by her peers. It is likely that Contessa, as a child, was ___________.

A) popular  
B) ambivalent  
C) securely attached  
D) disorganized  
E) avoidant

Answer: C

Topic: Later Development  Difficulty: Medium  Type: Conceptual
According to the _________________ model of persuasion, knowing how to appeal to a person requires figuring out the probability that they will think much about the arguments.

A) persuasion equation
B) evaluative probability
C) contemplation likelihood
D) elaboration likelihood
E) internal working

Answer: D

Topic: Central and Peripheral Routes  Difficulty: Medium  Type: Factual
Darley and Latane conducted an important study of bystander intervention by pumping smoke into a waiting room that had either one individual or three individuals in it. Which of the following best states the results of this study?

A) 75% of the individuals that were in groups of three reported the smoke, while only 38% of those in groups with indifferent confederates reported the smoke, and only 10% acted when alone.

B) 75% of the individuals that were alone reported the smoke, while only 38% of those in groups of three reported the smoke, and only 10% acted when in the presence of two indifferent individuals.

C) 75% of the individuals that were alone reported the smoke, while only 10% of those in groups of three reported the smoke.

D) 75% of the individuals that were in groups of three reported the smoke, while only 10% of those alone took any action.

Difficulty: Difficult   Type: Factual