SOLUTIONS MANUAL

Sixth Edition

Lifespan
Development

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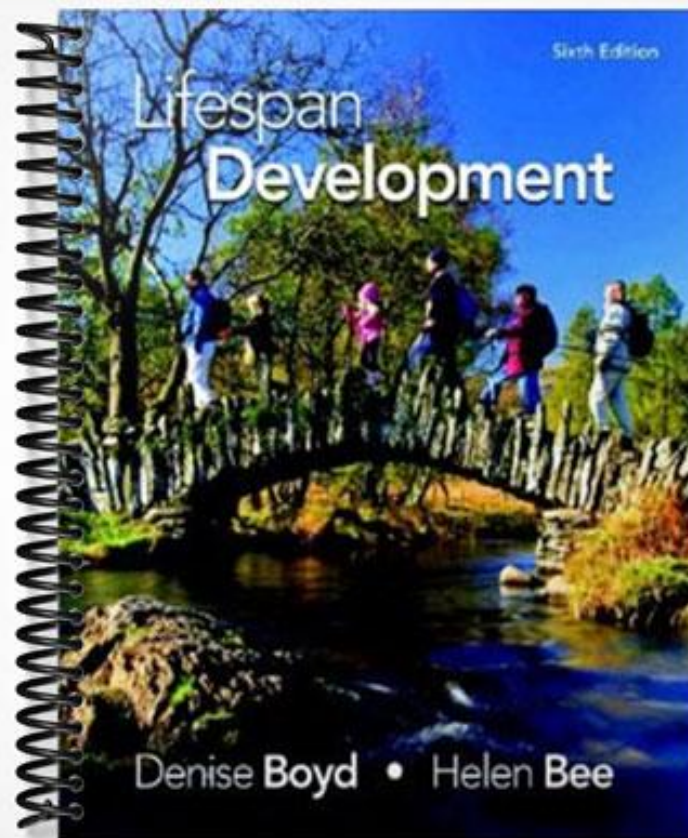
CHAPTER 2
THEORIES OF DEVELOPMENT

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CHAPTER OVERVIEW

Three "families" of theories have significantly influenced the study of development. Some biological and ecological theories focus on individual differences, while others deal with universal aspects of development. The comparison of theories is based on three assumptions about theories and evaluated by criteria for usefulness.

Freud's emphasis is on the importance of both conscious and unconscious processes. The personality is composed of the id, the ego, and the superego that influence our motives. He proposed five psychosexual stages, and he believed that each of the first three stages potentially impact our development. Erikson's theory stated that social forces are more important than unconscious drives as motives for development. He proposes eight stages of personality development across the lifespan, each of which involves resolving a crisis. Psychoanalytic theories provide useful concepts, such as the unconscious, that contribute to our understanding of development. They are, however, difficult to test.

Classical conditioning is learning through the association of unrelated stimuli so that we respond in a similar manner. It helps explain the acquisition of emotional responses, such as fear. Skinner's operant conditioning involves learning based on the consequences of our actions. Reinforcement happens when a behavior is repeated because of the consequences that followed it. When a behavior stops because of a consequence, punishment has occurred. Bandura's social-cognitive theory focuses more on the cognitive elements of learning, such as modeling. Learning theories provide useful explanations of how behaviors are acquired, but they fall short of a truly comprehensive picture of human development.

Piaget's focus is on the development of logical thinking across four stages in childhood and adolescence. Vygotsky's socio-cultural theory is important in developmentalists' attempts to explain how culture impacts development. Information-processing theory uses the computer as a model to explain intellectual processes such as memory and problem-solving. Research confirms the sequence of skill development that Piaget proposed, but it suggests that young children are more capable than he believed. Information-processing theory helps to clarify some of the cognitive processes underlying Piaget's findings as well as our understanding of memory.

Behavior geneticists study the influence of heredity on individual differences and the ways in which individuals' genes influence their environments. Ethologists study genetically determined traits and behaviors that help animals adapt to their environments. Sociobiologists emphasize the genetic basis of

behaviors that promote the development and maintenance of social organizations in both animals and humans. Bronfenbrenner's bioecological theory helps developmentalists categorize environmental factors and their impact on individuals.

Theories vary on three basic assumptions: Are individuals active or passive in their own development? How do nature and nurture interact to produce development? Does development happen continuously or in stages? Useful theories provide hypotheses to test their validity, are heuristically valuable, provide practical solutions to problems, and explain the facts of development. Eclecticism is the use of multiple theoretical perspectives to explain and study human development.

LEARNING OBJECTIVE QUESTIONS

After completing Chapter 2, students should be able to answer the following questions:
2.1   What are the main ideas of Freud's psychosexual theory?
2.2   What is the conflict associated with each of Erikson's psychological stages?
2.3   What are the strengths and weaknesses of psychoanalytic theory?
2.4   How did Watson condition Little Albert to fear white, furry objects?
2.5   How does operant conditioning occur?
2.6   In what ways does social-cognitive theory differ from other learning theories?
2.7   How well do the learning theories explain development?
2.8   How does cognitive development progress, according to Piaget?
2.9   How did Vygotsky use the concepts of scaffolding and the zone of proximal development to explain cognitive development?
2.10   How does information-processing theory explain the findings of developmental psychologists such as Piaget and Vygotsky?
2.11   What are some of the important contributions and criticisms of the cognitive theories?
2.12   How do behavior geneticists explain individual differences?
2.13   What kinds of behaviors are of interest to ethologists and sociobiologists?
2.14   What is the main idea of Bronfenbrenner's bioecological theory?
2.15   What assumptions do the three families of theories make about development?
2.16   On what criteria do developmentalists compare the usefulness of theories?
2.17   What is eclecticism?

KEY TERMS

accommodation (p. 34)   learning theories (p. 29)
assimilation (p. 34)   neo-Piagetian theory (p. 36)
behavior genetics (p. 38)   observational learning, or modeling (p. 31)
behaviorism (p. 29)   operant conditioning (p. 30)
bioecological theory (p. 40)   psychoanalytic theories (p. 24)
classical conditioning (p. 29)   psychosexual stages (p. 25)
cognitive theories (p. 33)   psychosocial stages (p. 26)
eclecticism (p. 43)   punishment (p. 30)
ego (p. 24)   reinforcement (p. 30)
equilibration (p. 34)   scheme (p. 34)
ethology (p. 39)   sociobiology (p. 40)
extinction (p. 31)   sociocultural theory (p. 35)
id (p. 24)   superego (p. 24)

information-processing theory (p. 35)

INTEGRATED CHAPTER TEACHING NOTES

Developmental psychologists use theories to formulate hypotheses. At the broadest level are three families of theories—psychoanalytic theories, learning theories, and cognitive-developmental theories. The most comprehensive explanations of developmental phenomena often include ideas from the three major theories as well as those that are derived from biological and contextual theories.

PSYCHOANALYTIC THEORIES (pp. 24-28)

Videos/DVDs	*Everybody Rides the Carousel*
	Freud: The Hidden Nature of Man
	Sigmund Freud

Psychoanalytic theorists believe that developmental change happens because of the influence of internal drives and emotions on behavior.

Freud's Psychosexual Theory

2.1   What are the main ideas of Freud's psychosexual theory?

Most of Freud's ideas about development were derived from his work with adults who were suffering from serious mental disorders. These patients' memories of their early experiences constituted the primary source of data upon which Freud based his theory. One of his most important conclusions about his patients' memories was that behavior is governed by both conscious and unconscious processes. The most basic of these is an instinctual sexual drive he called the libido. Freud believed that it is present at birth and is the force behind almost all our behavior.

Freud stated that personality has a structure with three parts that develop over time. The ***id*** is the part of our personality in which the libido is centered; it is entirely in our unconscious. The ***ego*** is the thinking part of our personality; its job is to keep the needs of the id satisfied. The ***superego*** is the moral judge of our personality that contains the norms and values of our family and of society. Once the superego develops, the ego must satisfy the id without violating the superego's rules. Freud believed that the id is present at birth; the ego develops from age two to about age four or five; and the superego begins to develop at about age six.

> ***Discussion Launcher*** (Learning Objective 2.1, pp. 24-25)
>
> What would the three parts of Freud's theory "say" to you about your desire for cheesecake or to see how fast your new car can go?

The ego is responsible for keeping the three components in balance. Defense mechanisms are created by the ego when any of the three components is in conflict with another. They are automatic, normal, unconscious strategies we use for reducing anxiety.

Freud proposed a series of *psychosexual stages* through which the child moves in a fixed sequence. In each stage, the libido is centered in that part of the body that is most sensitive at that age.

- In a newborn, the focus is on the mouth, and Freud called this the oral stage.
- The second stage puts more focus on the anus and is called the anal stage.
- The third stage focuses on the genitals and is called the phallic stage. Freud asserted that children experience sexual attraction to the opposite-sex parent during the phallic stage. He borrowed names for this conflict from Greek literature. Oedipus was a male character who was involved in a romantic relationship with his mother; Electra was a female character who had a similar relationship with her father. Thus, for a boy, the Oedipus complex involves a conflict between his affection for his mother and his fear of his father; for a girl, the Electra complex pits her bond with her father against her anxiety over the potential loss of her mother's love. To resolve the conflict, both genders abandon the quest to possess the opposite-sex parent in favor of identification with the same-sex parent.
- The fourth stage is called the latency period because Freud believed the libido was not invested in the body during this time.
- The fifth stage, called the genital stage, again focuses on the genitals and results in mature sexual intimacy.

According to Freud, optimum development requires an environment to satisfy the unique needs of each period. An inadequate early environment will result in fixation that leaves unresolved problems and unmet needs that shape our personality as adults. Emphasis on the formative role of the early experience is a hallmark of psychoanalytic theories.

Erikson's Psychosocial Theory

2.2   What is the conflict associated with each of Erikson's psychosocial stages?

Erikson thought development resulted from the interaction between inner instincts and outer cultural and social demands. Therefore, he called his stages *psychosocial* rather than psychosexual. Erikson also believed that development occurred across the entire life span. To do so, one must move through and successfully resolve eight "crises" or "dilemmas." Each crisis is challenged by new relationships, new tasks, or new demands. The healthy resolution of each dilemma results in the development of the characteristic on the positive side of the continuum. Although encountering the negative side of the crisis is necessary for this healthy development, the end result requires a favorable ratio of positive to negative.

Erikson believed that the four childhood stages form the foundation of adult personality. The outcome of stage 1, trust versus mistrust, depend of the reliability of the care and affection infants receive from their primary caretaker. During stage 2, children express their independence. In stage 3, initiative versus

guild, children begin to develop a sense of social initiative to interact with their peers. In stage 4, children focus on acquiring culturally valued skills.

In stage 5, identity versus role confusion, adolescents must examine their identity and the role they occupy to achieve a mature identity. If not, the risk is role confusion arising from the profusion of roles opening up to the teen at this age.

Erikson's adult stages are not strongly tied to age. In the first of the three adult stages, the young adult builds on the identity established in adolescence to confront the crisis of intimacy versus isolation. Young adults face the task of fusing their identity with someone else's. This can be accomplished when one's own identity is well in place.

The middle and late adulthood crises are shaped by the realization that death is inevitable. The crisis in middle adulthood is to establish and guide the next generation. Failing that, the self-absorbed, non-generative adult may feel a sense of stagnation. Older adults experience ego integrity versus despair. The goal is an acceptance of one's life in preparation for facing death in order to avoid a sense of despair.

Discussion Launcher (Learning Objective 2.2, p. 27)

Presuming we want to be on the positive side of Ego Integrity versus Despair when we are older adults (Stage 8), what can we do, starting at whatever age we are now, to increase the likelihood of experiencing integrity rather than despair?

Evaluation of Psychoanalytic Theories

2.3   What are the strengths and weaknesses of psychoanalytic theory?

Five of the strengths of psychoanalytic theories are as follows:
- They focus our attention on the importance of the emotional quality of the child's earliest relationship with caregivers.
- They suggest that the child's needs change with age, so that the parents must constantly adapt to the changing child. The interaction pattern of the family is crucial in the development of personality.
- They provide helpful concepts—such as the unconscious, the ego, and identity—that are part of everyday language as well as psychoanalytic theory. Psychologists are taking a fresh look at the importance of defense mechanisms in coping with anxiety.
- They invented psychotherapy.
- They emphasize continued development during adulthood.

The major weakness of psychoanalytic theories is as follows:
- The concepts lack precise definitions making it extremely difficult to test the theories.

Critical Thinking Questions (Learning Objectives 2.1-2.3, pp. 26-28)

In which of Erickson's stage would you place yourself? Does Erikson's description of it correspond to the challenges and concerns you are confronting?

LEARNING THEORIES (pp. 29-33)

Videos/DVDs	*B. F. Skinner on Behaviorism*
	Observational Learning
	Pavlov: The Conditioned Reflex
	The Power of Reinforcement

Psychologist John Watson believed that, through manipulation of the environment, children could be trained to be or do anything. He coined the term *behaviorism*, which defines development in terms of behavior changes caused by environmental influences. Watson's views represent a way of thinking about development that is common to all of the *learning theories*. These theories focus on how experiences in the environment shape the child.

Classical Conditioning

2.4   How did Watson condition Little Albert to fear white, furry objects?

Classical conditioning begins with an unconditional stimulus that prompts an automatic or unconditioned response. These are unlearned and naturally occurring. When a new stimulus, the conditional stimulus, is presented just before or at the same time as the unconditional stimulus, we learn to associate it with the naturally occurring unconditional stimulus and response. Eventually, we respond to the conditional stimulus the same way we responded to the unconditional stimulus, even if the unconditional stimulus is not present.

Watson viewed developmental change as nothing more than the acquisition of connections between stimuli and responses. To prove his point, he set out to show that he could use the principles of classical conditioning to cause as infant to develop a new emotional response to a stimuli. Watson's subject was 11-month-old "Little Albert" who was exposed to loud noises while he played with a white rat. As a result of the pairing of the rat with the noises, Albert learned to fear the rat so thoroughly that he cried hysterically at the mere sight of it. Moreover, he generalized his fear of the rat to other white, fuzzy objects.

The Little Albert experiment demonstrated that classical conditioning may indeed be the source of developmental changes that involve emotional responses. We learn to associate a person or an event with something pleasant or something unpleasant, and we respond to them the same way we responded to the original person or object.

Discussion Launcher (Learning Objective 2.4, p. 29)

Ask the students to give several examples of classical conditioning and have the students describe what is happening before conditioning, during conditioning, and after conditioning. Include examples involving fears and aversive conditioning.

Feature Box Activity (Learning Objective 2.4, p. 30)
Developmental Science in the Classroom: Systematic Desensitization

In groups, list examples of classical conditioning, and explain how systematic desensitization could be used to help a child overcome her anxiety.

Skinner's Operant Conditioning

2.5   How does operant conditioning occur?

Operant conditioning is a term coined by B. F. Skinner, the most famous proponent of the theory. It involves learning to repeat or stop behaviors because of the consequences they bring about. *Reinforcement* happens when a behavior is repeated because of the consequence that followed it. When a behavior stops because of a consequence, *punishment* has occurred.

There are two types of reinforcement: positive reinforcement and negative reinforcement. Positive reinforcement involves adding a pleasant consequence to an action to increase the probability of the action being continued. Negative reinforcement involves the removal of something unpleasant to accomplish the same purpose as positive reinforcement, namely the increase of the action. Reinforcement is defined by its effect; something is reinforcing only if it increases the probability of some behavior.

Punishment is designed to accomplish the opposite of reinforcement—the goal is to stop behavior. Sometimes punishment involves removing "nice" things (like TV), but often it involves adding something unpleasant, such as scolding. Like reinforcement, however, punishment is defined by its effect. Consequences that do not stop behavior cannot properly be called punishments.

Discussion Launcher (Learning Objective 2.5, p. 31)

List times when punishment did not stop your behavior. What happened instead? Devise a more effective plan to change behavior.

One of the problems with punishment is that it often does not cause someone to stop the behavior. An alternative to punishment is *extinction*, which is a decrease in the behavior after repeated non-reinforcement. If a teacher succeeds in reducing a student's undesirable behavior by ignoring it, extinction has occurred.

Discussion Launcher (Learning Objective 2.5, p. 31)

Give several scenarios of getting a child to complete household chores (such as cleaning their room, mowing the lawn, washing the dishes, washing the family car, etc.) and have the students describe how they could use positive reinforcement, negative reinforcement, punishment, and extinction to accomplish the change in behavior.

Operant conditioning research in a laboratory is not concerned with the social affects of behaviors or consequences. In a lab, a behavior can be reinforced or punished every time it occurs. Seldom in real life, however, are the consequences of our behaviors reinforced every time they occur. More often, we receive partial reinforcement in which the behavior is reinforced some of the time. With partial reinforcement, people take longer to learn the behavior, but the results are longer lasting.

Discussion Launcher (Learning Objective 2.5, p. 31)

Why are the results of partial reinforcement longer lasting than continuous reinforcement? Give examples.

Bandura's Social-Cognitive Theory

2.6   In what ways does social-cognitive theory differ from other learning theories?

Albert Bandura states that learning does not always require reinforcement; sometimes we learn from watching others. This is called ***observational learning*** or ***modeling***.

Learning from modeling is not an entirely automatic process. Bandura points out that what an observer learns from watching someone else depends on two things:
- what she pays attention to
- what she is able to remember

Moreover, to learn from a model, an observer must be physically able to imitate the behavior and motivated to perform it on her own. Because attentional abilities, memory, and physical capabilities change with age, what a child learns from any given modeled event may be quite different from what an adult learns from an identical event.

Bandura asserts that children learn not only overt behavior but also ideas, expectations, internal standards, and self-concepts from models. We acquire expectancies about what we can and cannot do, which Bandura calls self-efficacy.

Evaluation of Learning Theories

2.7   How well do the learning theories explain development?

There are several implications of learning theories.
- Learning theories can explain both consistency and change in behavior.
- They tend to be optimistic about the possibility of changing behavior.
- They give an accurate picture of the way many behaviors are learned.
- This approach is really not developmental; it does not tell us much about age-related changes.

Critical Thinking Questions (Learning Objectives 2.4-2.7 pp. 29-33)

Can you describe instances in your everyday life when your behavior is affected by classical conditioning, operant conditioning, and observational learning? How do you use these same principles to affect others' behavior.

COGNITIVE THEORIES (pp. 33-38)

Videos/DVDs	*Cognitive Development*
	Jean Piaget: Memory and Intelligence

Cognitive theories emphasize mental aspects of development, such as logic and memory.

Piaget's Cognitive-Developmental Theory

2.8   How does cognitive development progress, according to Piaget?

Jean Piaget was aware of the fact that all children seem to go through the same kinds of sequential discoveries about their world at about the same age. To explain such age differences, Piaget proposed several concepts that continue to guide development research.

A *scheme* describes an internal cognitive structure that provides an individual with a procedure to follow in a specific circumstance. We begin life with only a few schemes, each of which involves our senses. Examples are looking, tasting, or touching. Later, we develop mental schemes to allow us to use symbols and to think logically. Piaget believed we went from the simple to the complex by three basic processes: assimilation, accommodation, and equilibration.

Discussion Launcher (Learning Objective 2.8, p. 34)

Give examples of schemes, both simple and complex. Include examples of times when a scheme did not work in a particular situation.

Assimilation is the process of applying schemes to experiences. *Accommodation* is a complementary process that involves changing the scheme as a result of new information acquired by assimilation. In Piaget's theory, the process of accommodation is the key to developmental change. When we encounter new information, we use accommodation to reorganize our thoughts, improve our skills, and change our strategies. *Equilibration* is the process of balancing assimilation and accommodation to create schemes that fit the environment—we learn what works and what does not work in particular situations.

Discussion Launcher (Learning Objective 2.8, p. 34)

Describe three or four examples of assimilation and accommodation in your everyday life.

Piaget's research suggested to him that logical thinking evolves across four stages.
▪ During the sensorimotor stage (birth to 18 months), infants use their sensory and motor schemes to act on the world around them.

- In the preoperational stage (18 months to about age six), youngsters acquire symbolic schemes, such as language and fantasy, that they use for thinking and communication.
- During the concrete operational stage (age six to about age 12), children begin to think logically and become capable of solving problems logically.
- In the formal operational stage (from age 12 onward), adolescents learn to think logically about abstract ideas and hypothetical situations.

Piaget believed that the sequence of the stages was fixed, but not the age at which each child moved through them. Consequently, the ages associated with the stages are approximations.

Discussion Launcher (Learning Objective Question 2.8, p. 35)

Remember that Piaget's central question was, "How does thinking develop?" Ask the class to give examples of how his theory answers that question.

Vygotsky's Sociocultural Theory

2.9   How did Vygotsky use the concepts of scaffolding and the zone of proximal development to explain cognitive development?

Vygotsky's **sociocultural theory** asserts that complex forms of thinking have their origins in social interactions rather than in the child's private explorations, as Piaget thought. He asserted that children's learning of new cognitive skills is guided by an adult or a more skilled child who structures the child's learning experience. He called the process scaffolding. To create an appropriate scaffold, the parent must gain and keep the child's attention, model the best strategy, and adapt the whole process to the child's developmental level. He used the term zone of proximal development to signify tasks that are too hard for the child to do alone, but that she can manage with guidance.

Discussion Launcher (Learning Objective Question 2.9, p. 35)

How is scaffolding involved when a parent helps a child with homework?

Vygotsky's theory has educational applications. Like Piaget's ideas, he suggests the importance of opportunities for active exploration. Assisted discovery would play a more important role for Vygotsky; the teacher provides the scaffolding for children's discovery through questions, demonstrations, and explanations. To be effective, the process would have to lie within the zone of proximal development for each child.

Discussion Launcher (Learning Objective 2.9, p. 35)

Both Vygotsky and Piaget would suggest that children learn a great deal from playing in a sandbox. How would they differ in what children would gain from playing in the sandbox?
What would Vygotsky and Piaget each have to suggest about the most valuable use children can obtain while playing in a sandbox?

Information-Processing Theory

2.10   How does information-processing theory explain the findings of developmental psychologists such as Piaget and Vygotsky?

The goal of *information-processing theory* is to explain how the mind manages information. Theorizing about and studying memory processes are central to information-processing theory. Information-processing theorists use the computer as a model of human thinking, with memory processes central to their study. Memory research assumes that the memory system is made up of multiple components and that information moves through the components in an organized way. Information first enters your sensory memory. Next, it moves into short-term memory (often called working memory), the component where all information is processed. Long-term memory is the component where information is permanently stored.

According to the information-processing model, children who are presented with problems such as Piaget's conservation tasks process the information they need to solve such problems in their short-term memories. Some developmentalists have used information-processing theory to explain Piaget's stages. Their theories are called *neo-Piagetian* because they expand on Piaget's theory rather than contradict it. They state that older children and adults can solve complex problems like those in Piaget's research because they can keep more pieces of information in their short-term memories at the same time than younger children can.

Discussion Launcher (Learning Objective 2.10, pp. 35-36)

What do you think? Does information-processing theory explain Piaget's stages?

Evaluation of Cognitive Theories

2.11   What are some of the important contributions and criticisms of the cognitive theories?

Piaget's research findings have been replicated in virtually every culture and in every cohort of children since his work was first published in the 1920s. His contributions to development include the following:

- He authored a theory that forced psychologists to think about child development in a new way.
- He provided a set of findings that were impossible to ignore and difficult to explain.
- He developed innovative methods of studying children's thinking that continue to be important today.

Feature Box Activity (Learning Objective 2.11 p. 38)
Research Report: Piaget's Clever Research

Try Piaget's techniques and report the results to the class.

At times Piaget was wrong about the ages at which children develop specific skills. Although his sequence has been substantiated, children often learned skills at an earlier age than Piaget suggested. He was probably wrong about the generality of the stages themselves—not all children of the same age are able to do the same tasks. The whole process seems to be a great deal less stage-like than Piaget proposed.

At present, there is insufficient evidence to either support or contradict most of Vygotsky's ideas. Studies have shown that children in pairs and groups do produce more sophisticated ideas than individual children who work on problems alone. Additionally, young children whose parents provide them with more scaffolding during the preschool years exhibit higher levels of achievement in elementary school than peers whose parents provide less support of this kind.

Information-processing theory has received a great deal of empirical support that has helped to clarify some of the cognitive processes underlying Piaget's findings, and it has greatly enhanced our understanding of human memory. But critics point out that much of the research involves artificial memory tasks that don't always accurately explain memory in the real world. Piagetians claim that information-processing theory emphasizes explanations of single cognitive tasks at the expense of a comprehensive picture of development. Critiques of both cognitive theories say that they ignore the role of emotions in development.

Discussion Launcher (Learning Objective 2.11, pp. 36-37)

How well do these cognitive theories explain development?

BIOLOGICAL AND ECOLOGICAL THEORIES (pp. 38-41)

Theories that propose links between physiological processes and development represent one of the most important current trends in developmental psychology. Some of these theories focus on individual differences, while others deal with universal aspects of development. All of them address the manner in which environmental factors interact with physiological processes.

Behavior Genetics

2.12   How do behavior geneticists explain individual differences?

Behavior genetics focuses on individual differences. Traits are said to be influenced by genes when related people, such as children and their parents, are more similar than those who are unrelated. It has shown that heredity affects a broad range of behaviors and traits and that they are fairly stable across the lifespan.

Such studies show, however, that environments determine in what way and to what extent apparently hereditary traits affect an individual's development. Critics cite such findings to suggest that psychological characteristics are not completely determined by a person's genetic heritage. Individual behavior is always a joint product of heredity and environment.

Discussion Launcher (Learning Objective 2.12, pp. 38-39)

Encourage the class to speculate as to what we would be like if heredity was the only factor involved in the formation of psychological characteristics.

Behavior geneticists also study how individuals' genetic make-up influences the environments in which they are developing, a phenomenon that could occur via either or both of two routes.
- The child inherits his genes from his parents, who also create the environment in which he is growing up, so a child's genetic heritage may predict something about his environment.
- A child's unique pattern of inherited qualities affects the way she behaves with other people, which in turn affects the way adults and other children respond to her. Children's interpretations of their experiences are affected by all their inherited tendencies.

Ethology and Sociobiology

2.13   What kinds of behaviors are of interest to ethologists and sociobiologists?

The relationship between individuals and the setting in which they develop is the emphasis of ecological theories, perspectives that view development as resulting from the degree to which genes help or hinder individuals' efforts to adapt to their environments. One such theory, known as ***ethology***, focuses on the study of animals in their natural environments. Ethologists emphasize genetically determined survival behaviors that are assumed to have evolved through natural selection. Similarly, ethologists believe that emotional relationships are necessary for human infants' survival and that evolution has given us genes that cause us to form these relationships.

Sociobiology emphasizes genes that aid group survival and argues that humans have the best chance for individual survival when they live in groups. They claim that evolution has provided us with genetic programming that helps us cooperate. Sociobiologists look for social rules and behaviors that exist in all cultures.

Critics of ethology and sociobiology claim that these theories underestimate the impact of the environment. Additionally, they are difficult to test. Critics also say that these theories ignore the fact that societies invent ways of enhancing whatever behaviors might be influenced by universal genetics programming.

Discussion Launcher (Learning Objective 2.13, pp. 39-40)

Conduct a debate as to the pros and cons of the biological theories.

Bronfenbrenner's Bioecological Theory

2.14   What is the main idea of Bronfenbrenner's bioecological theory?

Bronfenbrenner's ***bioecological theory*** explains development in terms of relationships between people and their environment, or contexts, as Bronfenbrenner calls them. He attempts to classify all the individual and contextual variables that affect development and to specify how they interact. The contexts of development are like circles within circles.
- The outermost circle, the macrosystem (cultural context) contains the values and beliefs of the culture in which a child is growing up.
- The next level, the exosystem (socio-economic context) includes the institutions of the culture that affect children's development indirectly.
- The microsystem (immediate context) includes those variables to which people are directly exposed such as their families, schools, religious institutions, and neighborhoods. The mesosystem contains the interconnections between these components.
- The biological context, the innermost circle, is the child's genetic make-up and her developmental stage.

Bioecological theory provides us with a way of thinking about development that captures the complexity of individual and contextual variables. It encourages research to examine interactions among these variables.

COMPARING THEORIES (pp. 41-44)

Developmentalists don't think of theories in terms of right or wrong but instead compare theories on the basis of their assumptions and how useful they are in promoting understanding of development. Today's developmentalists take an approach that taps the strengths of each of the major theoretical perspectives.

Assumptions About Development

2.15   What assumptions do the three families of theories make about development?

A theory's assumptions refer to its answers to three questions about development.
- Active or passive—Is a person active in shaping her own environment, or is she a passive recipient of environmental influences?
- Nature or nurture—Does the theory claim more influence from genetics and heredity (nature) or from the environment (nurture)?
- Continuity or discontinuity—Are there stages (emphasizing development in leaps) or no stages (development is a stable, continuous process)?

Usefulness

2.16   On what criteria do developmentalists compare the usefulness of theories?

There are a few general criteria most psychologists use to evaluate the usefulness of a theory.
- Does the theory generate predictions that can be tested with scientific methods?
- Is the theory heuristic (does it stimulate thinking and research)?
- Is it of practical value?
- Does it explain the basic facts of development?

Eclecticism

2.17   What is eclecticism?

Today's developmental scientists try to avoid the kind of rigid adherence to a single theoretical perspective that was characteristic of theorists such as Freud, Piaget, and Skinner. Instead, they emphasize *eclecticism,* which is the use of multiple theoretical perspectives to explain and study human development. The interdisciplinary nature of the study of human development is reflected in this trend as well.

Critical-thinking Questions (Learning Objectives 2.15-2.17, p. 41-44)

Which of the many theories in this chapter do you find to be most useful to your own efforts to understand development? What are the theory's assumptions, and how does it compare to the criteria for usefulness? Finally, what other theories could be used along with it to broaden your understanding of development?

LECTURE ENHANCERS

Psychoanalytic Approaches

The family of theoretical approaches loosely falling under the heading "psychoanalytic" makes some very clear assumptions about human behavior. Although individual theories within this approach differ in some significant ways, they are placed together because of their commonalties. Psychoanalytic approaches to development focus primarily on the role that psyche (soul, spirit, or mind) plays in development. To the extent that one's psyche develops in a healthy fashion, the assumption is that the individual's overall development will be healthy as well. Some of these theories (such as Freud's approach) assume that human development is driven by an unconscious battle between our hedonistic instinctual urges (toward life and death) and socialized behaviors that we have been taught (to not lie or steal, for example).

Freud's Psychosexual Theory

Freud assumed that humans are hedonistic, selfish, sexual, and aggressive beings. Freud also understood that people do not always attempt to harm others, nor do they always attempt to fulfill their sexual urges. This presented Freud with a paradox. An attempt to explain this paradox is at the heart of Freud's theory about personality development. Freud felt that personality (in its complete form) is made up of three elements. These elements are: id, ego, and superego.

- We are born with id and it represents our biological urges. Freud felt that we are driven by aggressive and sexual urges—these are the biological urges that underlay the id. When we are born, this is who we are. According to Freud, id operates according to the pleasure principle by constantly striving for the instant gratification of its urges. The problem here, however, is that reality quickly teaches us that we can't always get what we want or that we can't always get what we want safely.

- It is through these contacts with reality that ego develops. It is ego's job to attempt to help id satisfy its urges but to do so in a way that will keep id safe. If id wants to rob a bank, for example, it would simply march in and take the money. But ego realizes that there are others who want to keep that money. Ego, then, might develop a plan for how to rob the bank and not get caught.

- Something is still missing. We know that individuals do not always rob banks no matter how much they would like to have the money. If everyone simply found safe ways to do the bad things they would like to do, society would not survive for long. According to Freud, it is through society (in

particular socialization from parents) that we gain our sense of right versus wrong. This moralistic, socialized aspect of personality Freud called superego. It is the superego that causes us to feel guilt and remorse when we have done something that we have been taught is wrong.

The implications of this theory of personality development are quite profound. If an individual does not learn to deal effectively with reality (if ego is not strong enough, for example), id may get what it wants but not do so safely. This could result in being put in prison, or even being killed if someone decides they really are not going to let you have their money. Likewise, a superego that is too strong may believe that rules should never be broken regardless of the circumstances. Many expectant parents have broken the speed limit on the way to the hospital which would violate one of the rules that superego has accepted.

Healthy personality development depends upon a healthy balance of these three aspects of personality. To the extent that these three are in balance, a healthy personality is possible. If they are out of balance, however, personality problems and/or disorders might result. An id that is too strong results in an individual that cannot delay his or her satisfaction, may become overly thrill-seeking, and may constantly place the individual in danger. An overly strong ego, however, might result in an individual that is cunning, conniving, and manipulative. The individual may be extremely good at getting what he or she wants, sometimes at the expense of others. If superego is overly active, the individual may be overly cynical, judgmental, reserved and inflexible. A healthy personality can be restored to the extent that the individual is able to correct the imbalance. This could be done by squelching the strength of the aspect that is too strong, or by attempting to bolster one or more of the other aspects of personality to compensate. According to Freud, such attempts to reestablish a balance would require psychoanalytic sessions.

Erikson's Psychosocial Theory

Erikson's theory is important in the lifespan development literature for several reasons. First, unlike Freud's theory that assumes that most of our development will be completed by the time we are about five or six, Erikson clearly believed that development occurs throughout the lifespan. Second, Erikson's theory challenges the assumption that crisis is always bad.

Erikson believed that all individuals would progress through the stages of development systematically throughout the lifespan. In this fashion, Erikson felt it was possible to understand someone's behaviors to the extent that we understand what phase of life they are in (and, therefore, what crisis they are confronting).

Erikson's theory assumes that in order to make healthy progress in our development, we must risk at the next phase of our life the very characteristic we struggled so hard to acquire in the current phase. The young adult, for example, is striving to develop an intimate relationship. To successfully accomplish this, however, requires that she or he be able to develop a shared identity (which requires some giving up of one's own identity). If you look at the phase prior to this, however, you will note that the crisis of adolescence is to develop a sense of identity. In this fashion, developing intimacy requires risking the identity just formed during adolescence.

Erikson believed that individuals make progress in life by confronting and resolving social crises. Rather than perceiving crisis as unhealthy or bad, then, he assumed that crises are good to the extent that we can positively resolve them. When crises are positively resolved, we mature and make progress as an individual because we are more complex than we were before. This clearly has implications for how one would approach adolescence or even such issues as the potential existence of a midlife crisis.

Learning Theories

Learning theories of development make very different assumptions about human development. Freudian theory assumes that most of human development is driven by biological urges. The Humanistic alternative assumes that human development is driven by the quest for self-actualization. Learning theories emphasize the impact of the environment on the developing person more than any of these other theoretical viewpoints.

Pavlov's Classical Conditioning

Early research on learning focused on how organisms associate two events. In other words, how do we learn that two events go together? Research by Ivan Pavlov in the early 1900's addressed this very issue. Pavlov was doing research on digestion in dogs, noting that they would salivate when food was placed in their mouths. This led Pavlov to conclude that saliva is an important aspect of digestion. While doing this research, however, he also noticed that the dogs would salivate to other things that could be associated with food, such as the food dish, the sight of the individual who usually fed them, etc. Pavlov became interested in how these associations are learned.

Pavlov discovered that organisms learn to associate (or connect) events together to the extent that they have been paired together in the past. Thus, the dogs have learned what the feeder looks like, and they anticipate being fed when they see him. This kind of simple learning can only explain simple behaviors that get associated with other behaviors that are automatic. Dogs, for example, automatically salivate when food is placed in their mouths. It is relatively easy, then, to teach them to salivate to the sound of a ringing bell if you follow that sound by putting food in their mouths. After a few such pairings, the ringing of the bell causes the dog to anticipate getting food, and it starts to salivate.

Skinner's Operant Conditioning

Such learning of associations, however, seems insufficient to explain more complex behaviors like learning to drive a car or learning to do algebra. A second type of learning is needed. This type of learning has been called operant conditioning. The most influential advocate of this type of learning was B. F. Skinner. He felt that individuals become the persons they do because of their reinforcement histories. Skinner believed that individuals learn to repeat behaviors that have been reinforced in some way and will stop engaging in behaviors that have been punished in some fashion. There are two kinds of reinforcements—positive and negative. With both types of reinforcement, the goal is the same: to encourage the behavior. What differs is how this is accomplished.

With positive reinforcement, the behavior is followed by something that the individual will experience as pleasant. We may take our child to McDonalds for dinner, for example, if she cleans her room. The assumption here is that the child will become more likely to clean her room the next time because doing so this time resulted in a positive reinforcement. With negative reinforcement, the goal is also to increase the number of times a behavior occurs. Rather than accomplishing this by administering something pleasant, however, it is accomplished by taking something unpleasant away. An instructor might, for example, remove a failing grade when an assignment is turned in. In this case, the desired behavior (turning the assignment in) was accomplished by taking a bad thing away (a failing grade).

Punishment has the opposite goal of reinforcement. The goal is to eliminate or reduce a behavior. A child who breaks a vase, for example, may be made to sit in the corner for time out. The idea here is that the unwanted behavior is followed by something unpleasant to teach the child that the unwanted behavior should not happen again. Negative reinforcement and punishment are often confused. The simplest trick to keeping the two of these clear, however, involves asking one question. What is the goal? If the goal is

to increase a behavior, it must be reinforcement. If the goal is to decrease a behavior, it requires punishment.

Bandura's Social Cognitive Learning Theory

Albert Bandura expanded on traditional learning theory by suggesting that learning can take place through simple observation. Even if a child is not directly reinforced for a particular behavior, it can be learned. Anyone who has ever had a child repeat something they would have preferred not to have had repeated knows this. Bandura also suggested that not all individuals will find the same things reinforcing. Indeed, some of us will engage in behaviors not because they will be externally reinforced but because we find them intrinsically (internally) reinforcing.

Cognitive Theories

Cognitive theories focus on how changes in the ways individuals think bring about changes in their behaviors, their personalities, and their basic interactions with other persons. What are the implications of viewing development along cognitive lines? Piaget assumed that individuals build theories (schemes) about the world. When new information comes in, the individual compares that information with existing theories. If the information is consistent with an existing scheme, it will be included in that category (a process called assimilation). If it does not fit into that scheme, others may be searched or a new scheme may be developed (a process called accommodation). Individuals develop cognitive theories to help simplify and make sense of their world.

One major implication of a cognitive approach, then, is that the manner in which the individual processes information will have a profound impact on how that information is perceived and how the individual responds to it. This suggests that no two persons will, necessarily, respond to the same event in the same way because they may be applying different theories about the world to that information. If two individuals see a man slap another man on the back, how they interpret that event may depend on their schemes about the world or about the individuals engaging in the behaviors. If one of these observers has been told that the two men are friends, he may assume that the slap on the back was one of affection. If the other observer, however, was told that these two men were total strangers, the behavior may seem out of place with that information.

To truly understand individuals, we must understand how they are perceiving and interpreting information about the world. If an individual is displaying inappropriate attitudes or behaviors, such as prejudice or discrimination, then we can only rectify that to the extent that we force the individual to confront his or her schemes and develop new ones that are more informed. According to these approaches, if you want to change someone's attitude, you must change the way they think. The assumption is that changing the way they think will trickle down and change the way they behave.

INSTRUCTOR RESOURCES

Media

- *B. F. Skinner on Behaviorism.* (28 minutes, RIM Media Productions). Discusses Skinner's theory of behavior modification, behavioral technology, and the uses of positive reinforcement in shaping human behavior.
- *Cognitive Development.* (20 minutes, CRM/McGraw-Hill films, 1973). Begins with a brief overview of Piaget's stages and some of his terminology. Shows two contrasting kindergartens: one based on "discovery" learning and the other on a strict application of the principles of behaviorism.
- *Cognitive Development.* (60 minutes, Films for the Humanities and Sciences). Discusses and illustrates Piaget's stages as well as the ideas of Bruner and information-processing theorists.
- *Everybody Rides the Carousel.* (72 minutes, Pyramid Film &Video, 1976). Describes Erikson's theory of life span personality development.
- *Freud: The Hidden Nature of Man*. (27 minutes, Learning Corporation of America, 1970). Assesses the psychologist's theories of psychoanalysis, the Oedipus complex, the unconscious, and the id, ego, and superego.
- *Jean Piaget: Memory and Intelligence.* (44 minutes, Davidson Films, in French with carefully written English subtitles). Piaget is filmed giving a lecture to a Japanese conference on preschool education.
- *Observational Learning.* (23 minutes, Longman Publishers). General introduction to the social learning approach to developmental psychology. Robert Liebert explains how parents, peers, and the media affect a child's behavior.
- *Pavlov: The Conditioned Reflex.* (28 minutes, Films for the Humanities and Sciences, black and white). Reviews the life and career of Pavlov and includes rare footage of Pavlov at work.
- *The Power of Positive Reinforcement.* (28 minutes, CRM/McGraw-Hill Films 1978). Application of the principles of operant conditioning to business and industry.
- *Sigmund Freud.* (17 minutes, Insight Media). Uses documentary footage to take viewers into Freud's home in Vienna and offers a rare view of Freud's personal world.