SPENCER A RATHUS



HUMAN LIFESPAN DEVELOPMEN



Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

NOW WITH HDEV ONLINE \$85 US SUGGESTED RETAIL PRICE 0000

THE 4LTR PROCESS

4LTR Press uses a Student-Tested, Faculty-Approved process to meet the unique needs of each course.

HDEV⁵ combines an easy-reference, paperback textbook with portable summary tear-out chapter review cards and an innovative online experience — all at an affordable price. With up-to-date research and events,
 HDEV⁵ covers the most significant topics in human development. Explore human development content anywhere, anytime, and on most devices with HDEV Online!

STUDENTS SAY

Students taking human development as a general requirement often find the theories and applications interesting, but are overwhelmed by the volume of key terms and scientific material. In addition to a visually engaging text, **HDEV Online** provides useful interactive resources such as brief concept clip video animations to help students better understand human development and relate concepts to their everyday interactions.

STUDENT RESOURCES:

- Tear-Out Chapter Review Cards
- HDEV Online available at cengagebrain.com:
 Interactive Reading
 - Interactive Figures
 - Videos
 - Practice Quizzes
 - Flashcards

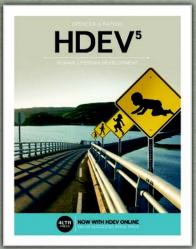
INSTRUCTORS REQUIRE

Those teaching human development need learning solutions that engage today's students paired with up-to-date research and examples. **HDEV**⁵ continues to focus on both current and historical events with personal stories to engage students. New "concept clip" videos in **HDEV Online** provide even more opportunities for students to understand core concepts in a visually engaging manner — while reading the chapter content online, if used in your course lecture, or the night before an exam.

INSTRUCTOR RESOURCES AVAILABLE AT CENGAGE.COM/LOGIN:

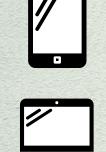
- All Student Resources
- Assignable Chapter Readings and Assessments
- LMS Integration
- Instructor's Manual
 - Lecture Outlines and Additional Topics
 - Classroom Demonstrations and Activities
 - Student Projects and Activities
 - Recommended Videos, Websites, and Podcasts
- Test Bank
- PowerPoint[®] Slides with Embedded Classroom Demos

THE HDEV SOLUTION



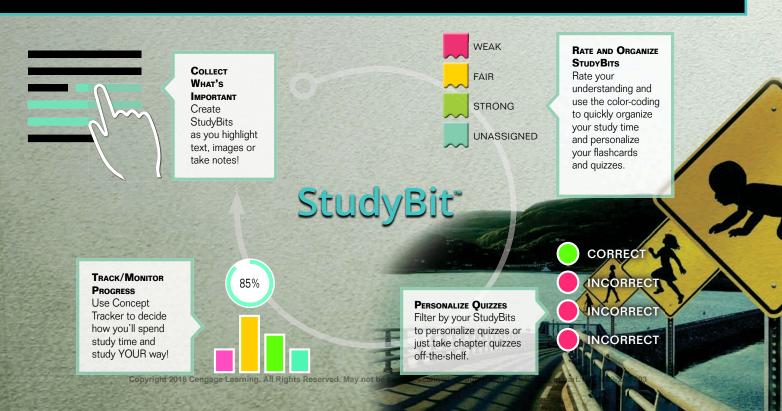






HDEV⁵ delivers all the key terms and core concepts for the **Human Lifespan Development** course. **HDEV Online** provides the complete narrative from the printed text with additional interactive media and the unique functionality of **StudyBits**—all available on nearly any device!

What is a StudyBit[™]? Created through a deep investigation of students' challenges and workflows, the StudyBit[™] functionality of HDEV Online enables students of different generations and learning styles to study more effectively by allowing them to learn their way. Here's how they work:





HDEV⁵

Spencer Rathus

Sr. Vice President, General Manager: Balraj Kalsi Product Manager: Clinton Kernen Content/Media Developer: Sarah Keeling Product Assistant: Eli Lewis Sr. Marketing Manager: Andrew Ginsberg Marketing Coordinator: Quynton Johnson Content Project Manager: Darrell E. Frye Manufacturing Planner: Ron Montgomery Production Service: SPi Global Sr. Art Director: Bethany Casey Internal Designer: Joe Devine, Red Hangar Cover Designer: Lisa Kuhn, Curio Press, LLC/Trish & Ted Knapke, Ke Design Cover Image: Brandon Huttenlocher/ Aurora/Getty Images Special Page Images: Computer and tablet illustration: ©iStockphoto.com/furtaev; Smart phone Illustration: ©iStockphoto. com/dashadima; Feedback image: Rawpixel.com/Shutterstockcom Intellectual Property Analyst:

Alexandra Ricciardi Intellectual Property Project Manager: Carly Belcher

© 2018, 2016 Cengage Learning®

ALL RIGHTS RESERVED. No part of this work covered by the copyright herein may be reproduced or distributed in any form or by any means, except as permitted by U.S. copyright law, without the prior written permission of the copyright owner.

For product information and technology assistance, contact us at Cengage Learning Customer & Sales Support, 1-800-354-9706

For permission to use material from this text or product, submit all requests online at **www.cengage.com/permissions** Further permissions questions can be emailed to **permissionrequest@cengage.com**

Library of Congress Control Number: 2016953601

Student Edition ISBN: 978-1-337-11690-9

Student Edition with Online ISBN: 978-1-337-11688-6

Cengage Learning

20 Channel Center Street Boston, MA 02210 USA

Cengage Learning is a leading provider of customized learning solutions with employees residing in nearly 40 different countries and sales in more than 125 countries around the world. Find your local representative at **www.cengage.com**.

Cengage Learning products are represented in Canada by Nelson Education, Ltd.

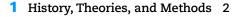
To learn more about Cengage Learning Solutions, visit **www.cengage.com**

Purchase any of our products at your local college store or at our preferred online store **www.cengagebrain.com**

Printed in the United States of America Print Number: 01 Print Year: 2016

SPENCER A. RATHUS

BRIEF CONTENTS



- **2** Heredity and Prenatal Development 24
- **3** Birth and the Newborn Baby: In the New World 50
- **4** Infancy: Physical Development 70
- **5** Infancy: Cognitive Development 90
- **6** Infancy: Social and Emotional Development 110
- **7** Early Childhood: Physical and Cognitive Development 130
- 8 Early Childhood: Social and Emotional Development 154
- 9 Middle Childhood: Physical and Cognitive Development 172
- **10** Middle Childhood: Social and Emotional Development 198
- 11 Adolescence: Physical and Cognitive Development 218
- **12** Adolescence: Social and Emotional Development 240
- **13** Early Adulthood: Physical and Cognitive Development 256
- **14** Early Adulthood: Social and Emotional Development 276
- **15** Middle Adulthood: Physical and Cognitive Development 302
- **16** Middle Adulthood: Social and Emotional Development 320
- **17** Late Adulthood: Physical and Cognitive Development 338
- **18** Late Adulthood: Social and Emotional Development 360
- **19** Life's Final Chapter 380

Answers to Study Tools Questions 400 References 403 Name Index 443 Subject Index 451

Brandon Huttenlocher/Aurora/Getty Image

CONTENTS



History, Theories, and Methods 2

- 1-1 The Development of the Study of Human Development 3
- 1-2 Theories of Development 4
- 1-3 Controversies in Development 15
- 1-4 How Do We Study Development? 17

2 Heredity and Prenatal Development 24

- 2-1 The Influence of Heredity on Development 25
- 2-2 Heredity and the Environment 32
- 2-3 Conception: Against All Odds 33
- 2-4 Prenatal Development 37



3 Birth and the Newborn Baby: In the New World 50

Countdown ... 51

- 3-1 The Stages of Childbirth 52
- 3-2 Methods of Childbirth 54
- 3-3 Birth Problems 56
- 3-4 The Postpartum Period 57
- 3-5 Characteristics of Neonates 62

4 Infancy: Physical Development 70

- 4-1 Physical Growth and Development 71
- 4-2 Development of the Brain and Nervous System 75
- 4-3 Motor Development 79
- 4-4 Sensory and Perceptual Development 81

5 Infancy: Cognitive Development 90

- 5-1 Cognitive Development: Jean Piaget 91
- 5-2 Information Processing 95
- 5-3 Individual Differences in Cognitive Functioning Among Infants 97
- 5-4 Language Development 99

b Infancy: Social and Emotional Development 110

- 6-1 Attachment: Bonds That Endure 111
- 6-2 When Attachment Fails 115
- 6-3 Day Care 120
- 6-4 Emotional Development 122
- 6-5 Personality Development 124



7 Early Childhood: Physical and Cognitive Development 130

- 7-1 Growth Patterns 131
- 7-2 Motor Development 133
- 7-3 Health and Illness 136
- 7-4 Sleep 138
- 7-5 Elimination Disorders 139

- 7-6 Jean Piaget's Preoperational Stage 139
- 7-7 Factors in Cognitive Development 144
- 7-8 Theory of Mind 145
- 7-9 Development of Memory 146
- 7-10 Language Development: Why "Daddy Goed Away" 147

Early Childhood: Social and Emotional Development 154

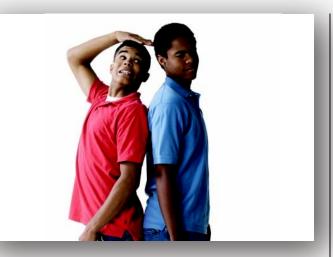
- 8-1 Dimensions of Child Rearing 155
- 8-2 Social Behaviors 158
- 8-3 Personality and Emotional Development 164
- 8-4 Development of Gender Roles and Gender Differences 166

Middle Childhood: Physical and Cognitive Development 172

- 9-1 Growth Patterns 173
- 9-2 Motor Development 175
- 9-3 Disorders That Affect Learning 176
- 9-4 Cognitive Development 178
- 9-5 Moral Development: The Child as Judge 179
- 9-6 Information Processing: Learning, Remembering, Problem Solving 182
- 9-7 Intellectual Development, Creativity, and Achievement 186
- 9-8 Language Development and Literacy 194

10 Middle Childhood: Social and Emotional Development 198

- 10-1 Theories of Social and Emotional Development in Middle Childhood 199
- 10-2 The Family 202
- 10-3 Peer Relationships 204
- 10-4 The School 207
- 10-5 Social and Emotional Problems 210



11 Adolescence: Physical and Cognitive Development 218

- 11-1 Puberty: The Biological Eruption 219
- 11-2 Health in Adolescence 224

rubberball/Getty Images

- 11-3 Cognitive Development: Piaget's Stage of Formal Operations 229
- 11-4 Gender Differences in Cognitive Abilities 231
- 11-5 Moral Development 232
- 11-6 The Adolescent in School 234
- 11-7 Adolescents in the Workforce 235

12 Adolescence: Social and Emotional Development 240

- 12-1 Development of Identity: "Who am I?" 241
- 12-2 Relationships with Parents and Peers 244
- 12-3 Sexuality 247
- 12-4 Juvenile Delinquency 252
- 12-5 Suicide: When the Adolescent has Nothing—Except Everything—to Lose 252

13 Early Adulthood: Physical and Cognitive Development 256

- 13-1 Emerging Adulthood 257
- 13-2 Physical Development 259

- 13-3 Health and Fitness 259
- 13-4 Sexuality 264
- 13-5 Cognitive Development 268
- 13-6 Career Development 271

Early Adulthood:Social and EmotionalDevelopment 276

- 14-1 Separation 277
- 14-2 Intimacy Versus Isolation 279
- 14-3 Seasons of Life 279
- 14-4 Attraction and Love: Forces That Bind? 280
- 14-5 Loneliness 285
- 14-6 The Single Life 286
- 14-7 Cohabitation: Darling, Would You Be My POSSLQ? 288
- 14-8 Marriage: Tying the Knot 290
- 14-9 Parenthood 295
- 14-10 Divorce: Breaking Bonds 297



15 Middle Adulthood: Physical and Cognitive Development 302

- 15-1 Physical Development 303
- 15-2 Health 305
- 15-3 The Immune System 308

- 15-4 Sexuality 309
- 15-5 Cognitive Development 312

15-6 Creativity and Learning 317

16 Middle Adulthood: Social and Emotional Development 320

- 16-1 Theories of Development in Middle Adulthood 322
- 16-2 Stability and Change in Middle Adulthood 325
- 16-3 Work in Middle Adulthood 328
- 16-4 Relationships in Middle Adulthood 329

17 Late Adulthood: Physical and Cognitive Development 338

- 17-1 Physical Development 339
- 17-2 Theories of Aging 345
- 17-3 Health Concerns and Aging 347
- 17-4 Cognitive Development 352

18 Late Adulthood: Social and Emotional Development 360

- 18-1 Theories of Social and Emotional Development in Late Adulthood 361
- 18-2 Psychological Development 364
- 18-3 Social Contexts of Aging 367
- 18-4 Retirement 372
- 18-5 Successful Aging 375

19 Life's Final Chapter 380

- 19-1 Understanding Death and Dying 381
- 19-2 Where People Die 384
- 19-3 Euthanasia: Is There a Right to Die? 385
- 19-4 Life-Span Perspectives on Death 389
- 19-5 Coping with Death 392

Answers to Study Tools Questions 400 References 403 Name Index 443 Subject Index 451

1 History, Theories, and Methods



LEARNING OUTCOMES

After studying this chapter, you will be able to...

- 1-1 Relate the history of the study of human development
- Compare and contrast theories of human development
- 1-
 - 1-3 Enumerate key controversies in human development
 - 4 Describe ways in which researchers study human development

After you finish this chapter, go to PAGE 21 for STUDY TOOLS This book has a story to tell. An important, remarkable story—your story. It is about the amazing journey you have already taken through childhood, and about the unfolding of your adult life. Billions of people have made this journey before. You have much in common with them. Yet you are unique, and things will happen to you, and because of you, that have never happened before.

You are unique, and things will happen to you, and because of you, that have never happened before.

1-1 THE DEVELOPMENT OF THE STUDY OF HUMAN DEVELOPMENT

Developmental psychology is the discipline that studies the physical, cognitive, social, and emotional development of humans. It focuses on the many influences on behavior, including the effects of the person's physical, social, and cultural environment, and how these factors interact to influence the developments that occur over time.

Scientific inquiry into human development has existed for little more than a century. In ancient times and in the Middle Ages, children often were viewed as innately evil and discipline was harsh. Legally, medieval children were treated as property and servants. They could be sent to the monastery, married without consultation, or convicted of crimes. Children were nurtured until they were seven years old, which was considered the "age of reason." Then they were expected to work alongside adults in the home and in the field.

The transition to modern thinking about children is marked by the writings of philosophers such as John Locke and Jean-Jacques Rousseau. Englishman John Locke (1632–1704) believed that the child came into the world as a *tabula rasa*—a "blank tablet" or clean slate—that was written on by experience. Locke did not believe that inborn predispositions toward good or evil played an important role in the conduct of the child. Instead, he focused on the role of the environment or of experience. Locke believed that social approval and disapproval are powerful shapers of behavior. But Jean-Jacques Rousseau (1712–1778), a Swiss-French philosopher, argued that children are inherently good and that, if allowed to express their natural impulses, they will develop into generous and moral individuals.

During the Industrial Revolution—a period from the late 18th century through the 19th century when machine-based production replaced much manual labor—family life came to be defined in terms of the nuclear unit of mother, father, and children rather than the extended family. Children became more visible, fostering awareness of childhood as a special time of life. Still, children often labored in factories from dawn to dusk through the early years of the 20th century.

In the 20th century, laws were passed to protect children from strenuous labor, to require that they attend school until a certain age, and to prevent them from getting married or being sexually exploited. Whereas children were once considered the property of parents, laws now protect children from abuse by parents and other adults.

Juvenile courts see that children who break the law receive treatment in the criminal justice system.

developmental psychology the discipline that studies the physical, cognitive, social, and emotional development of humans.

TRUTH OR FICTION ?

WHAT DO YOU THINK? FOLKLORE, COMMON SENSE, OR NONSENSE? SELECT T FOR "TRUTH" OR F FOR "FICTION," AND CHECK THE ACCURACY OF YOUR ANSWERS AS YOU READ THROUGH THE CHAPTER.

- T F During the Middle Ages, children were often treated as miniature adults.
- T F Nail biting and smoking cigarettes are signs of conflict experienced during early childhood.
- T F Research with monkeys has helped psychologists understand the formation of attachment in humans.
- **T F** To learn how a person develops over a lifetime, researchers have tracked some individuals for more than 50 years.

Various thoughts about child development coalesced into a field of scientific study in the 19th and early 20th centuries. G. Stanley Hall (1844-1924) is credited with founding child development as an academic discipline and bringing scientific attention to focus on the period of adolescence. French psychologist Alfred Binet (1857-1911), along with Theodore Simon (1872–1961), developed the first standardized intelligence test near the beginning of the 20th century. Binet's purpose was to identify public school children who were at risk of falling behind their peers in academic achievement. By the start of the 20th century, child development had emerged as a scientific field of study. Soon major theories of the developing child were proposed by theorists such as Arnold Gesell, Sigmund Freud, John B. Watson, and Jean Piaget.

The traditional focus of developmental psychologists has been on childhood and

adolescence because of the dramatic physical and cognitive changes that occur during those years. But in the 20th century, psychologists began to take on a **life-span perspective**, in which they viewed human development as occurring throughout the individual's lifetime.

William Perry and Gisella Labouvie-Vief, for example, have studied the development of cognitive complexity from adolescence to late adulthood. K. W. Schaie and others have studied trends in various mental abilities throughout middle and late adulthood, showing that some abilities decline in middle and late adulthood, but others that represent the accumulation of decades of knowledge can advance into late adulthood. Though young adulthood is the time of peak physical development, people perform at their best on some of the most complex intellectual tasks during midlife, and many people are most well-adjusted during late adulthood.

1-2) THEORIES OF DEVELOPMENT

life-span perspective

perspective in which psychologists view human development as occurring throughout the individual's lifetime.

behaviorism Watson's view that science must study observable behavior only and investigate relationships between stimuli and responses. Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in, and I'll guarantee to train them to become any type of specialist I might suggest—doctor, lawyer, merchant, chief, and, yes, even beggar Developmental psychologists and educators attempt to sort out the influences of heredity (maturation) and the environment (experience) in development. John Watson would have argued that this girl's preferences and skills are shaped by experience. Arnold Gesell might have preferred to focus on the expression of her inborn ability.

Tetra Images / Alamy Stock Photo

and thief, regardless of their talents, penchants, tendencies, abilities, vocations, and the race of their ancestors. —John B. Watson (1924, p. 82)

TRUTH

F During the Middle Ages, children were often treated as miniature adults.

Т

It is true that during the Middle Ages, children were often treated as miniature adults. This does not mean that they were given more privileges, however. Instead, more was expected of them.

Theories are formulations of apparent relationships among observed events. They allow us to derive explanations and predictions. Many psychological theories combine statements about behavior (such as reflexes), mental processes (such as whether a reflex is intentional or not), and biological processes (such as maturation of the nervous system). A satisfactory theory allows us to predict behavior. For example, a theory about a reflex should allow us to predict the age at which it will drop out or be replaced by intentional behavior. John B. Watson (1878–1958), the founder of American behaviorism, viewed development in terms of learning theory. He generally agreed with Locke that children's ideas, preferences, and skills are shaped by experience. There has been a long-standing nature-nurture debate in the study of children. In his theoretical approach to understanding children, Watson came down on the side of nurture-the importance of the physical and social environments-as found, for example, in parental training and approval.

Arnold Gesell expressed the opposing idea that biological maturation was the main principle of development: "All things considered, the inevitability and surety of maturation are the most impressive characteristics of early development. It is the hereditary ballast which conserves and stabilizes growth of each individual infant" (Gesell, 1928, p. 378). Watson was talking about the behavior patterns that children develop, whereas Gesell was focusing mainly on physical aspects of growth and development.

Theories such as behavioral theory and maturational theory help developmentalists explain, predict, and influence the events they study. Let's consider theories that are popular among developmentalists today. They fall within broad perspectives on development.



According to John B. Watson (1878-1958), the founder of American behaviorism, a theory about a reflex should allow us to predict the age at which it will drop out or be replaced by intentional behavior. Here Watson is demonstrating the grasp reflex of a newborn infant.

child's experiences during early stages affect the child's emotional and social life at the time and later on.

SIGMUND FREUD'S THEORY OF PSYCHOSEXUAL DEVELOP-

MENT Sigmund Freud's (1856-1939) theory of psychosexual development focused on emotional and social development and on the origins of psychological traits such as dependence, obsessive neatness, and vanity. Freud theorized three parts of the personality: the *id*, *ego*, and superego. The id is present at birth and is unconscious. It represents biological drives and demands instant gratification, as suggested by a baby's wailing. The ego, or the conscious sense of self, begins to develop when children learn to obtain gratification consciously, without scream-

1-2a THE PSYCHOANALYTIC PERSPECTIVE

A number of theories fall within the psychoanalytic perspective. Each owes its origin to Sigmund Freud and views children-and adults-as caught in conflict.

Early in development, the conflict is between the child and the world outside. The expression of basic drives, such as sex and aggression, conflict with parental expectations, social rules, moral codes, even laws. But the external limits-parental demands and social rules-are brought inside or internalized. Once internalization occurs, the conflict takes place between opposing inner forces. The child's observable behavior, thoughts, and feelings reflect the outcomes of these hidden battles.

Let's consider Freud's theory of psychosexual development and Erik Erikson's theory of psychosocial development. Each is a stage theory that sees children as developing through distinct periods of life. Each suggests that the

ing or crying. The ego curbs the appetites of the id and makes plans that are in keeping with social conventions so that a person can find gratification but avoid social disapproval. The superego develops throughout infancy and early childhood. It brings inward

FREUD'S THEORY OF PSYCHOSEXUAL DEVELOPMENT

Sigmund Freud's (1856–1939) theory of psychosexual development focused on emotional and social development and on the origins of psychological traits such as dependence, obsessive neatness, and

vanity. According to Freud, there are five stages of psychosexual development:

- oral
- anal
- phallic
- latency
- genital

the wishes and morals of the child's caregivers and other members of the community. Throughout the remainder of the child's life, the superego will monitor the intentions and behavior of the ego, hand down judgments of right and wrong,

> maturation the unfolding of genetically determined traits, structures, and functions.

the process by which libidinal energy is expressed through different erogenous zones during different stages of development.

stage theory a theory of development characterized by distinct periods of life.

and attempt to influence behavior through flooding the person with feelings of guilt and shame when the judgment is in the negative.

According to Freud, there are five stages of psychosexual development: *oral, anal, phallic, latency*, and *genital*. If a child receives too little or too much gratification during a stage, the child can become *fixated* in that stage. For example, during the first year of life, which Freud termed the *oral stage*, "oral" activities such as sucking and biting bring pleasure and gratification. If the child is weaned early or breast-fed too long, the child may become fixated on oral activities such as nail biting or smoking, or even show a "biting wit."

FICTION

T (F) Nail biting and smoking cigarettes are signs of conflict experienced during early childhood.

Actually, there is no evidence that nail biting and smoking cigarettes are signs of conflict experienced during early childhood. The statement must therefore be considered "fiction."

In the second, or *anal*, stage, gratification is obtained through control and elimination of waste products. Excessively strict or permissive toilet training can lead to the development of anal-retentive traits, such as perfectionism and neatness, or anal-expulsive traits, such as sloppiness and carelessness. In the third stage, the *phallic stage*, parent-child conflict may develop over masturbation, which many parents treat with punishment and threats. It is normal for children to develop strong sexual attachments to the parent of the other sex during the phallic stage and to begin to view the parent of the same sex as a rival.

By age five or six, Freud believed, children enter a *latency stage* during which sexual feelings remain unconscious, children turn to schoolwork, and they typically prefer playmates of their own sex. The final stage of psychosexual development, the *genital stage*, begins with the biological changes that usher in adolescence. Adolescents generally desire sexual gratification

psychosocial development Erikson's theory, which emphasizes the importance of social relationships and conscious choice throughout eight stages of development. through intercourse with a member of the other sex. Freud believed that oral or anal stimulation, masturbation, and male– male or female–female sexual activity are immature forms of sexual conduct that reflect fixations at early stages of development.

Evaluation Freud's views about the anal stage have influenced child-care workers to recommend that toilet training not be started too early or handled punitively. His emphasis on the emotional needs of children has influenced educators to be more sensitive to the possible emotional reasons behind a child's misbehavior. Freud's work has also been criticized. For one thing, Freud developed his theory on the basis of contacts with adult patients (mostly women) (Hergenhahn & Henley, 2014), rather than observing children directly. Freud may also have inadvertently guided patients into expressing ideas that confirmed his views.

Some of Freud's own disciples, including Erik Erikson, believe that Freud placed too much emphasis on basic instincts and unconscious motives. He argues that people are motivated not only by drives such as sex and aggression but also by social relationships and conscious desires to achieve, to have aesthetic experiences, and to help others.

ERIK ERIKSON'S THEORY OF PSYCHOSOCIAL DEVELOPMENT Erik Erikson (1902–1994) modified Freud's theory and extended it through the adult years. Erikson's theory, like Freud's, focuses on the development of the emotional life and psychological traits, but Erikson focuses on social relationships rather than sexual or aggressive instincts. Therefore, Erikson speaks of **psychosocial development** rather than of *psychosexual development*. Furthermore, Erikson places

greater emphasis on the ego, or the sense of self. Erikson (1963) extended Freud's five stages to eight to include the concerns of

ERIKSON'S THEORY OF PSYCHOSOCIAL DEVELOPMENT

Erik Erikson (1902–1994) modified Freud's psychosexual theory and extended

it through the adult years. Erikson's theory, like Freud's, focuses on the development of the emotional life and psychological traits, but Erikson focuses on social relationships rather than sexual or aggressive instincts. He expanded Freud's five stages to eight, to include the stages of adult development. Erik Erikson was concerned with the development of our sense of identity—who we are and what we stand for. He was especially concerned with the crisis in identity that affects adolescents in our culture. How would you describe this

adolescent's apparent sense of identity?

adulthood. Rather than label his stages after parts of the body, Erikson labeled them after the **life crisis** that people might encounter during that stage.

Erikson proposed that social relationships and physical

maturation give each stage its character. For example, the parent-child relationship and the infant's dependence and helplessness are responsible for the nature of the earliest stages of development.

Early experiences affect future developments. With parental support, most children resolve early life crises productively. Successful resolution of each crisis bolsters

their sense of identity—of who they are and what they stand for—and their expectation of future success.

ard Ransier/Cardinal/Corbis

Erikson's views, like Freud's, have influenced child rearing, early childhood education, and child therapy. For example, Erikson's views about an adolescent identity crisis have entered the popular culture and have affected the way many parents and teachers deal with teenagers. Some schools help students master the crisis by means of life-adjustment courses and study units on self-understanding in social studies and literature classes.

WATSON: THE FOUNDER OF AMERICAN BEHAVIORISM

John B. Watson (1878–1958) is considered the founder of American behaviorism. He was a major force in early 20th century psychology, arguing that psychologists should study only observable behavior, not thoughts, fantasies, and other mental images. He viewed development in terms of learning theory. He generally agreed with Locke that children's ideas, preferences, and skills are shaped by experience. In the long-standing naturenurture debate in the study of children, his theoretical approach to understanding children comes down on the side of nurture.

Evaluation Erikson's views are appealing in that they emphasize the importance of human consciousness and choice. They are also appealing in that they portray us as prosocial and helpful, whereas Freud portrayed us as selfish and needing to be compelled to comply with social rules. There is also some empirical support for the Eriksonian view that positive outcomes of early life crises help put us on the path to positive development (Gfellner & Armstrong, 2012; Marcia, 2010).

1-2b THE LEARNING PERSPECTIVE: BEHAVIORAL AND SOCIAL COGNITIVE THEORIES

During the 1930s, psychologists derived an ingenious method for helping five- and six-year-old children overcome bed-wetting from the behavioral perspective. Most children at this age wake up and go to the bathroom when their bladders are full. Bed wetters, though, sleep through bladder tension and reflexively urinate in bed. To address this problem, the psychologists placed a special pad beneath the sleeping child. Wetness in the pad closed an electrical circuit, causing a bell to ring and waking the sleeping child. After several repetitions, most children learned to wake up before they wet the pad. How? They learned through a technique called *classical conditioning*, which we explain in this section.

The so-called bell-and-pad method for bed-wetting is a more complicated example of learning theory being

> applied to human development. Most applications of learning theory to development are found in simpler, everyday events. In this section, we consider two theories of learning: behaviorism and social cognitive theory.

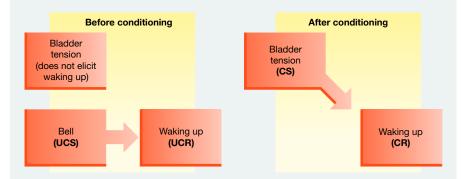
> **BEHAVIORISM** John B. Watson argued that a scientific approach to development must focus on observable behavior only and not on things like thoughts, fantasies, and other mental images.

> > life crisis an internal conflict that attends each stage of psychosocial development.

identity crisis according to Erikson, a period of inner conflict during which one examines one's values and makes decisions about one's life roles.

CHAPTER 1: History, Theories, and Methods 7

FIG.1.1 SCHEMATIC REPRESENTATION OF CLASSICAL CONDITIONING



Before conditioning, the bell is an unlearned or unconditioned stimulus (UCS) that elicits waking up, which is an unlearned or unconditioned response (UCR). Bladder tension does not elicit waking up, which is the problem. During the conditioning procedure, bladder tension repeatedly precedes urination, which in turn causes the bell to ring. After several repetitions, bladder tension has become associated with the bell, making bladder tension into a learned or conditioned stimulus (CS) that causes the child to awaken. Awakening in response to bladder tension is a learned or conditioned response (CR).

Classical conditioning is a simple form of learning in which an originally neutral stimulus comes to bring forth, or elicit, the response usually brought forth by a second stimulus as a result of being paired repeatedly with the second stimulus. In the bell-and-pad method for bed-wetting, psychologists repeatedly pair tension in the children's bladders with a stimulus that awakens

classical conditioning a

simple form of learning in which one stimulus comes to bring forth the response usually brought forth by a second stimulus by being paired repeatedly with the second stimulus.

operant conditioning a simple form of learning in which an organism learns to engage in behavior that is reinforced.

reinforcement the process of providing stimuli following responses that increase the frequency of the responses.

positive reinforcer a reinforcer that, when applied, increases the frequency of a response.

negative reinforcer a reinforcer that, when removed, increases the frequency of a response.

extinction the cessation of a response that is performed in the absence of reinforcement.

them (the bell). The children learn to respond to the bladder tension as if it were a bell; that is, they wake up (see Figure 1.1).

SKINNER AND BEHAVIORISM

B.F. Skinner, (1904–1990), picked up the behaviorist mandate from John Watson. Behaviorists argue that much emotional learning is acquired through conditioning. Skinner introduced the key concept of positive and negative reinforcement in operant conditioning. He was interested in popularizing his views on psychology and wrote a novel, *Walden Two*, which supported his views and achieved a sort of cult following.

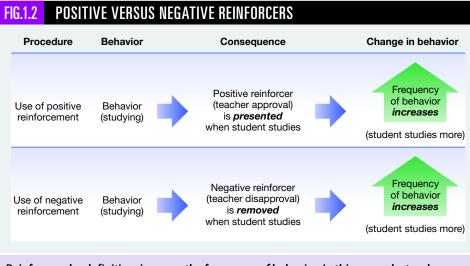
Behaviorists argue that much emotional learning is acquired through classical conditioning. In operant conditioning (a different kind of conditioning), children learn to do something because of its effects. B. F. Skinner introduced the key concept of reinforcement. Reinforcers are stimuli that increase the frequency of the behavior they follow. Most children learn to adjust their behavior to conform to social codes and rules to earn reinforcers such as the attention and approval of their parents and teachers. Other children, ironically, may learn to misbehave because misbehavior also draws attention. Any stimulus that increases the frequency of the responses preceding it serves as a reinforcer.

Skinner distinguished between positive and negative reinforcers. **Positive reinforcers** increase the frequency of behaviors when they are *applied*. Food and approval usually serve as positive reinforcers. **Negative reinforcers** increase the frequency of behaviors when they are *removed*. Fear acts as a negative reinforcer in that its removal increases the frequency of the behaviors preceding it. Figure 1.2 compares positive and negative reinforcers.

Extinction results from repeated performance of operant behavior without reinforcement. After a number of trials, the operant behavior is no longer

> shown. Children's temper tantrums and crying at bedtime can often be extinguished by parents' remaining out of the bedroom after the children have been put to bed. Punishments are aversive events

> > that suppress or *decrease* the frequency of the behavior they follow. (Figure 1.3 compares negative reinforcers with punishments.) Many learning theorists agree that punishment is undesirable in rearing children for reasons such as punishment does not in itself suggest an alternative acceptable form of behavior; punishment tends



Reinforcers, by definition, increase the frequency of behavior. In this example, teacher approval is a positive reinforcer because it increases the frequency of behavior when it is *applied*. Teacher disapproval functions as a negative reinforcer because *removing* it increases behavior—in this case, studying. But teacher disapproval can backfire when other students show strong approval of a student's disobeying the teacher.

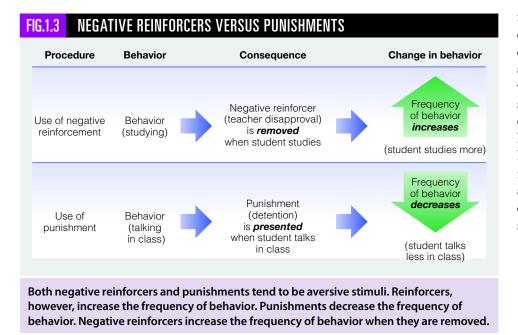
to suppress behavior only when its delivery is guaranteed; and punishment can create feelings of anger and hostility.

Research suggests that when teachers praise and attend to appropriate behavior and ignore misbehavior, studying and classroom behavior improve while disruptive and aggressive behaviors decrease (Coffee & Kratochwill, 2013; Jenkins et al., 2015). By ignoring misbehavior or by using *time out* from positive reinforcement, we can avoid reinforcing children for misbehavior. In using time out, children are placed in drab, restrictive environments for a specified time period such as 10 minutes when they behave disruptively.

Operant conditioning is used every day in the *socialization* of young children. Parents and peers influence children to acquire behavior patterns they consider to be appropriate to their gender through the elaborate use of rewards and punishments. Thus, boys may ignore other boys when they play with dolls and housekeeping toys but play with boys when they use transportation toys.

Many children are thus taught to engage in behavior that may please others more than it pleases themselves.

SOCIAL COGNITIVE THEORY Behaviorists tend to limit their view of learning to conditioning. **Social cognitive theorists** such as Albert Bandura (1986, 2011, 2012) have shown that much learning also occurs by observing other people, reading, and viewing characters in the media. People may need practice to refine their skills, but they can acquire the basic know-how through observation.



Observational learning occurs when children observe how parents cook, clean, or repair a broken appliance. It takes place when adults watch supervisors sketch out sales strategies on a blackboard or hear them speak a foreign language. In social cognitive theory, the people after whom we pattern our own behavior are termed *models*.

social cognitive theory a cognitively oriented learning theory that emphasizes observational learning.

CHAPTER 1: History, Theories, and Methods 9