

Chapter Objectives

- To define the concept of theory and explain how one makes use of theory to increase understanding.
- To define the six basic concepts of psychosocial theory.
- To demonstrate how the concepts of psychosocial theory contribute to an analysis of basic processes that foster or inhibit development over the life span.
- To evaluate psychosocial theory, pointing out its strengths and weaknesses.

In this chapter, we will define the concept of theory and introduce the basic concepts of psychosocial theory, which provides the integrating framework for our analysis of human development. In Chapter 3 we will discuss other theories that also account for growth and change. Some of those

theories provided the foundational concepts upon which psychosocial theory was based. Others complement psychosocial theory by offering insight into dynamic processes through which physical, intellectual, emotional, social, and self-development take place. ❖

WHAT IS A THEORY?

A **theory** is a logical system of general concepts that underlies the organization and understanding of observations. The sciences have their formal theories, and we all have our informal, intuitive theories about our social lives. A formal scientific theory is a set of interconnected statements, including assumptions, definitions, axioms, postulates, hypothetical constructs, intervening variables, laws, and hypotheses. The function of this set of interconnected statements is to describe unobservable structures, mechanisms, or processes and to relate them to one another and to observable events. For example, in learning, the information that has been learned is not observable. However, according to certain principles of learning theory, we infer that new learning has taken place when some responses or behaviors become more likely and others become less likely under particular conditions.

A formal theory should meet certain requirements. It should be logical and internally consistent with no contradictory statements. The theory should be testable; that is, its hypothetical constructs should be translatable into testable hypotheses. The theory should be parsimonious, relying on as few assumptions, constructs, and propositions as possible. Finally, a theory should integrate previous research, and it should deal with a relatively large area of science (Miller, 1993). Most current developmental theories do not meet all of these requirements of formal, scientific theories. However, they offer a language of constructs and hypotheses that guide systematic inquiry and compare observations in order to build a body of knowledge. In order to evaluate a theory, we must ask three questions:

1. *Which phenomena is the theory trying to explain?* A theory of intellectual development may include hypotheses about the evolution of the brain, the growth of logical thinking, or the capacity to use symbolism. Such a theory is less likely to explain fears, motives, or friendship. As an example, Jean Piaget offered a developmental theory of the origins of logical thought. In his view, every organism strives to attain equilibrium with its environment, and equilibrium among the cognitive elements within itself. He hypothesized that (a) thought is organized in order to achieve equilibrium; (b) development takes place in a predictable sequence of naturally occurring stages, each with unique strategies for making

meaning out of experiences; and (c) children are active agents in constructing knowledge. His theory has been useful in helping to understand how children differ from adults and how they interpret and explain events. Piaget's theory does not, for example, direct attention to how children learn and remember specific facts, why certain fears persist, or how children and parents achieve a sense of attachment.

Understanding the focus of the theory helps to identify its **range of applicability**. Although principles from one theory may have relevance to another area of knowledge, a theory is evaluated in terms of the behavior it was originally intended to explain.

2. *What assumptions does the theory make?* **Assumptions** are the guiding premises underlying the logic of a theory. In order to evaluate a theory, you must first understand what its assumptions are. Charles Darwin assumed that lower life forms "progress" to higher forms in the process of evolution. Freud assumed that all behavior is motivated and that the unconscious is a "storehouse" of motives and wishes.

The assumptions of any theory may or may not be correct. Assumptions may be influenced by the cultural context that dominates the theorist's period of history, by the sample of observations from which the theorist has drawn inferences, by the current knowledge base of the field, and by the intellectual capacities of the theorist.

3. *What does the theory predict?* Theories add new levels of understanding by suggesting causal relationships, by unifying diverse observations, and by identifying the importance of events that may have gone unnoticed. Theories of human development offer explanations regarding the origins and functions of human behavior and the changes that can be expected in it from one period of life to the next.

We expect a theory of human development to provide explanations about four questions:

1. What are the mechanisms that account for growth from conception through old age, and to what extent do these mechanisms vary across the life span?
2. What factors underlie stability and change across the life span?
3. How do physical, cognitive, emotional, and social functions interact? How do these interactions account for mixtures of thoughts, feelings, health states, and social relationships?
4. How does the social context affect individual development?

THE RATIONALE FOR EMPHASIZING PSYCHOSOCIAL THEORY

We have selected psychosocial theory as an organizing framework for the text because it allows us to identify and integrate information from a wide range of disciplines covering a diversity of topics. Psychosocial theory is not the only or the most widely accepted framework for studying human development, however, it combines three features that are not as clearly articulated or integrated in other theories.

First, psychosocial theory addresses growth across the life span, identifying and differentiating central issues from infancy through old age. This perspective allows one to trace themes from infancy and childhood into adulthood and later life. It also suggests that experiences of adolescence or adulthood can lead to a review and reinterpretation of early periods.

Second, psychosocial theory assumes that individuals have the capacity to contribute to their psychological development at each stage of life. People have the ability to integrate, organize, and conceptualize their experiences in order to protect themselves, cope with challenges, and direct the course of their lives. Therefore, the direction of development is shaped by self-regulation as well as by the ongoing interaction of biological and societal influences.

At the *Quinciniera*, a 15-year-old Mexican-American girl celebrates mass with her family. This ceremony illustrates one way that culture imparts new demands and expectations at critical developmental transitions. What might be the personal and social meaning of this rite of passage?



Third, the theory takes into consideration the active contribution of culture to individual growth. At each life stage, cultural goals and aspirations, social expectations and requirements, and the opportunities that the culture provides make demands that draw forth reactions. These reactions influence which of a person's capabilities will be developed further. This vital link between the individual and the world is a key mechanism of development. In order to preserve and protect its culture, each society encourages patterns of parenting, provides unique opportunities for education, and communicates values and attitudes toward basic domains of behavior, including sexuality, intimacy, and work. Each society has its own view of the qualities that enter into maturity, qualities that are infused into the lives of individuals and help determine the direction of human growth within the society.

One of the great theorists who identified and developed psychosocial theory was Erik H. Erikson. Erikson initially was trained as a psychoanalyst (see the case at the end of this chapter). His theory was influenced by the work of many others, including Sigmund and Anna Freud, Peter Blos, Robert White, Jean Piaget, and Robert Havighurst, whose ideas you will encounter throughout this book. His wife, Joan, was an important intellectual influence as well. Erik and Joan collaborated on the formulation of the first presentation of the psychosocial theory and its eight stages of development in 1950 (J. Erikson, 1988). This theory has provided a rich body of ideas that have been elaborated in our own writings, as well as in the work of many other students of human development.

BASIC CONCEPTS OF PSYCHOSOCIAL THEORY

Psychosocial theory represents human development as a product of the interaction between individual (*psycho*) needs and abilities, and societal (*social*) expectations and demands. The theory accounts for the patterns of individual development that emerge from the more global process of psychosocial evolution.

Psychosocial theory is linked to an earlier use of the construct offered by Julian Huxley (1941, 1942) who introduced the term **psychosocial evolution** to refer to those human abilities that have allowed us to gather knowledge from our ancestors and transmit it to our descendants. Child-rearing practices, education, and modes of communication transmit information and ways of thinking from one generation to the next. At the same time, people learn how to develop new information, new ways of thinking, and new ways of teaching their discoveries to others. Through this process, according to Huxley, psychosocial evolution has proceeded at a rapid pace, bringing with it changes in technology and ideology that have allowed us to create and modify our physical and social environments.

The theory of psychosocial development offers an organizational framework for considering individual development within the larger perspective of psychosocial evolution. The transmission of values and knowledge across generations requires the maturation of individuals who are capable of internalizing knowledge, symbolizing it, adapting it, and transferring it to others. People change and grow systematically, enhancing their potential for carrying their own and succeeding generations forward.

Psychosocial theory is based on six organizing concepts: (1) stages of development, (2) developmental tasks, (3) psychosocial crises, (4) a central process for resolving the crisis of each stage, (5) a radiating network of significant relationships, and (6) coping—the new behavior people generate to meet new challenges. Figure 2.1 shows development as a building process that incorporates these six constructs. The structure grows larger as the radius of significant relationships expands and as the achievements of earlier stages are integrated into the behavior of the next stage of development.

Stages of Development

A **developmental stage** is a period of life that is characterized by a specific underlying organization. A wide variety of behaviors can be viewed as expressing the underlying structure of each stage. At every stage, some characteristics differentiate it from the preceding and succeeding stages. Stage theories propose a specific direction for development, and each new stage incorporates the gains made during earlier stages. At each stage, the accomplishments from the previous stages provide resources for mastering the new challenges. The interplay of the developmental tasks, psychosocial crisis, central process, and significant relationships provides the experiential base for new psy-

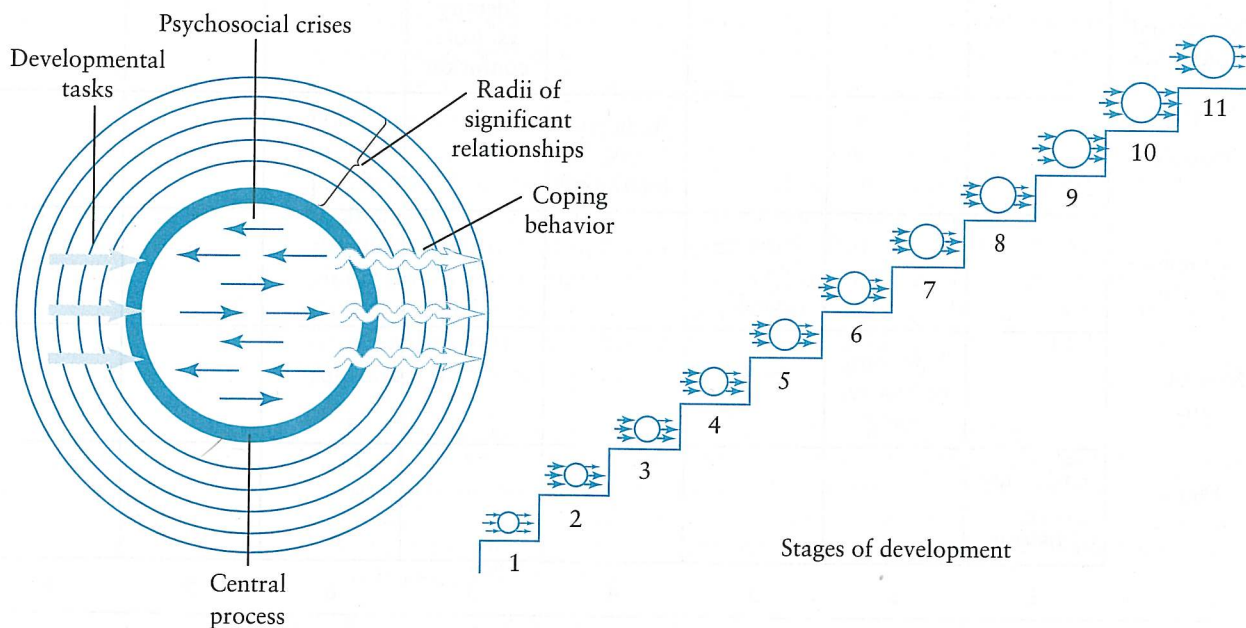


FIGURE 2.1

Six basic concepts of psychosocial theory

chosocial learning, and therefore for development. Each stage is unique and leads to the acquisition of new skills related to new capabilities (Davison et al., 1980; Flavell, 1982; Fischer & Silvern, 1985; Levin, 1986; Miller, 1993).

The stage concept suggests areas of emerging competence or conflict that may explain a range of behaviors. To some extent, you can verify the stage concept through reflection on your own past. You can probably recall earlier periods when you were very preoccupied by efforts first to gain your parents' approval, then to win acceptance by your peers, and later to understand yourself. Each of these concerns may have appeared all-encompassing at the time, but eventually it gave way to a new preoccupation. At each stage, you were confronted with a unique problem that required the integration of your personal needs and skills with the social demands of your culture. The end product was a new orienting mode and a new set of capabilities for engaging in interactions with others.

Erikson (1950/1963) proposed eight stages of psychosocial development. The conception of these stages can be traced in part to the stages of psychosexual development proposed by Freud and in part to Erikson's own observations and rich mode of thinking.

Figure 2.2 is the chart Erikson produced in *Childhood and Society* to describe the stages of psychosocial development. The boxes identify the main psychosocial ego conflicts of the various stages. These ego conflicts produce new ego skills. In Erikson's original model, you will note that the periods of life are given names, such as oral sensory

8. Maturity								Ego integrity vs. Despair
7. Adulthood								Generativity vs. Stagnation
6. Young adulthood							Intimacy vs. Isolation	
5. Puberty and adolescence							Identity vs. Role confusion	
4. Latency							Industry vs. Inferiority	
3. Locomotor-genital							Initiative vs. Guilt	
2. Muscular-anal							Autonomy vs. Shame, doubt	
1. Oral-sensory							Basic trust vs. Mistrust	
	1	2	3	4	5	6	7	8

FIGURE 2.2

Erikson's model of the psychosocial stages of development

SOURCE: Erikson, 1963.

or puberty and adolescence, but no ages. This approach reflected Erikson's emphasis on an individual timetable for development, guided by both biological maturation and cultural expectations.

The concept of the psychosocial stages of development is very good as far as it goes, but Erikson's road map seems incomplete. If the idea of psychosocial evolution has validity—and we believe it does—new stages can be expected to develop as a culture evolves. We have identified 11 stages of psychosocial development, each associated with an approximate age range: (1) prenatal, from conception to birth; (2) infancy, from birth to 2 years; (3) toddlerhood, 2 and 3 years; (4) early school age, 4 to 6 years; (5) middle childhood, 6 to 12 years; (6) early adolescence, 12 to 18 years; (7) later adolescence, 18 to 22 years; (8) early adulthood, 22 to 34 years; (9) middle adulthood, 34 to 60 years; (10) later adulthood, 60 to 75 years; and (11) very old age, 75 until death.

By discussing a prenatal stage, a second stage of adolescent development, and very old age, we are adding three stages to the ones Erikson proposed. This revision is a product of our analysis of the research literature, our observations through research and practice, discussions with colleagues, and suggestions from other stage theorists. The addition of these three new stages provides a good demonstration of the process of theory construction. Theories of human development emerge and change within a cultural and historical context. Patterns of biological evolution and psychosocial evolution occur within a cultural frame of reference. The extension of the adolescent period, for example, is a product of changes in the timing of onset of puberty in modern society, the expanding need for education and training before entry into the world of work, related changes in the structure of the educational system, and the variety of the available life choices in work, marriage, parenting, and ideology.

Figure 2.3 shows the 11 stages of psychosocial development. The age range given for each stage is only an approximation. Each person has his or her own timetable for growth. In addition, differences associated with poverty, health, cultural group (e.g., differing rates of longevity) and exposure to environmental risks lead to different timetables. The lengths of the stages vary, from the nine months of the prenatal period to the roughly 26 years of middle adulthood.












Erikson (1950/1963) proposed that the stages of development follow the **epigenetic principle**; that is, a biological plan for growth allows each function to emerge systematically until the fully functioning organism has developed. An assumption of this and other stage theories is that the psychological development that takes place at each stage will have a significant effect on all subsequent stages. The stages are viewed as a sequence. Although one can anticipate challenges that will occur at a later stage, one passes through the stages in an orderly pattern of growth. In the logic of psychosocial theory, the entire life span is required for all the functions of psychosocial development to appear and become integrated. There is no going back to an earlier stage because experience makes retreat impossible. In contrast to other stage theories, however, Erikson suggested that one can review and reinterpret previous stages in the light of new insight and/or new experiences. In addition, the themes of earlier stages may re-emerge at any point, bringing a new meaning or a new resolution to an earlier conflict. Joan Erikson reflects on the fluidity and hopefulness in this perspective:

This sequential growth . . . is now known to be more influenced by the social milieu than was in previous years considered possible. . . . Where a strength is not adequately developed according to the given sequence for its scheduled period of critical resolution, the supports of the environment may bring it into appropriate balance at a later period. Hope remains constant throughout life that more sturdy resolutions of the basic confrontation may be realized. (J. Erikson, 1988, p. 74–75)

The concept of life stages permits us to consider the various aspects of development at a given period of life and to speculate about their interrelation. It also encourages a

FIGURE 2.3

Eleven stages of the life span

Prenatal	Conception to birth		
Infancy	Birth to 2 years		
Toddlerhood	2 and 3 years		
Early school age	4 to 6 years		
Middle childhood	6 to 12 years		
Early adolescence	12 to 18 years		
Later adolescence	18 to 24 years		
Early adulthood	24 to 34 years		
Middle adulthood	34 to 60 years		
Later adulthood	60 to 75 years		
Very old age	75 until death		

focus on the experiences that are unique to each life period—experiences that deserve to be understood both in their own right and in terms of their contribution to subsequent development. When programs and services are designed to address critical needs in such areas as education, health care, housing, and social welfare, the developmental stage approach allows the designers to focus on the needs and resources of the particular population to be served.

Despite the usefulness of a stage approach, one must avoid thinking of stages as pigeonholes. Just because a person is described as being at a given stage does not mean that he or she cannot function at other levels. It is not unusual for people to anticipate later challenges before they become dominant. Many children of toddler and preschool age,



The epigenetic principle assumes that it takes the entire life span, from the prenatal period through very old age, for all facets of human capacity to emerge. In later adulthood and very old age, grandparents transmit the wisdom of their generation to their grandchildren by teaching them stories, songs, customs, and beliefs.

for example, play “house,” envisioning having a husband or a wife and children. You might say that, in this play, they are anticipating the issues of intimacy and generativity that lie ahead. While some elements of the central psychosocial skills can be observed at all ages, the intensity with which they are expressed at certain times marks their importance in the definition of a developmental stage. Erikson et al. (1986) put it this way:

The epigenetic chart also rightly suggests that the individual is never struggling only with the tension that is focal at the time. Rather, at every successive developmental stage, the individual is also increasingly engaged in the anticipation of tensions that have yet to become focal and in re-experiencing those tensions that were inadequately integrated when they were focal; similarly engaged are those whose age-appropriate integration was then, but is no longer, adequate. (p. 39)

As one leaves a stage, the achievements of that stage are neither lost nor irrelevant to later stages. Erikson (1950/1963) warns us not to become too structural in our thinking. Although the theory suggests that important ego strengths emerge from the successful resolution of conflicts at every stage, one should not assume that these strengths, once established, are never challenged or shaken. Events may take place later in life that call into question the essential beliefs established in an earlier period.

For example, the psychosocial conflict during early school age is initiative versus guilt. Its positive outcome, a sense of initiative, is a joy in innovation and experimentation and a willingness to take risks in order to learn more about the world. Once achieved, the sense of initiative provides a positive platform for the formation of social relationships as well as for further creative intellectual inquiry and discovery. However, experiences in a highly authoritarian school environment or in a very judgmental, shaming personal relationship may cause one to inhibit this sense of initiative or to mask it with a facade of indifference.

The idea of life stages should be used to highlight the changing orientations toward oneself and others that dominate periods of the life span. The essential idea is that the way one perceives and experiences life varies qualitatively from stage to stage. Movement from one stage to the next is the result of changes in several major systems at approximately the same time. The new mixture of needs, capabilities, and expectations is what produces the new orientation toward experience at each stage.

Developmental Tasks

Developmental tasks, the second organizing concept of psychosocial theory, consist of a set of skills and competencies that contribute to increased mastery over one’s environment. These developmental tasks reflect areas of accomplishment in physical, cognitive, social, and emotional development, as well as development of the self-concept. The tasks define what is healthy, normal development at each age in a particular society. The tasks form a sequence: Success in learning the tasks of one stage leads to development and a greater chance of success in learning the tasks of later stages. Failure at the tasks of one stage leads to greater difficulty with later tasks or may even make later tasks impossible to master.

Robert J. Havighurst, who first introduced the concept of developmental tasks, believed that human development is a process in which people attempt to learn the tasks required of them by the society to which they are adapting. These tasks change with age because each society has age-graded expectations for behavior. “Living in a modern society is a long series of tasks to learn” (Havighurst, 1972, p. 2). The person who learns well receives satisfaction and reward; the person who does not suffers unhappiness and social disapproval.

Although Havighurst's view of development emphasizes the guiding role of society in determining which skills need to be acquired at a certain age, it does not totally ignore the role of physical maturation. Havighurst believed that there are **sensitive periods** for learning developmental tasks—that is, times when the person is most ready to acquire a new ability. Havighurst called these periods **teachable moments**. Most people learn developmental tasks at the time and in the sequence appropriate in their society. If a particular task is not learned during the sensitive period, learning it may be much more difficult later on.

Learning that occurs during a sensitive period may enhance learning and performance in this task later in life. Initially, skills are learned in the sensitive period, when much is happening both internally and externally to stimulate that area of growth. Once the sensitive period has passed, however, learning may still continue. Language skills, for example, do not cease to develop after toddlerhood. New and more complex ways of using language are learned throughout life. Much of the elementary and high school curriculum focuses on developing language, including expanding one's vocabulary, developing skills in oral and written communication, and learning new languages. Gerontologists have found that motivation plays a great role in increasing the linguistic skills of elderly people who wish to learn a new language before taking a trip to Europe.

The basic tasks we identify differ from those outlined in Havighurst's writings. Our choice of tasks is based on broad areas of accomplishment that have been identified by researchers as critical to psychological and social growth at each stage of life in a modern, technological culture. We recognize that the demands for growth may differ according to the orientation and complexity of a particular society. The tasks we present as central to successful adaptation in a highly technical, information-age society such as that of the United States are not necessarily the appropriate standards for maturation and growth in a developing country or in a traditional, tribal culture.

We believe that a relatively small number of major psychosocial tasks dominate a person's problem-solving efforts and learning during a given stage. As these tasks are mastered, new competencies enhance the person's ability to engage in more complex social relationships. We assume that successful cultures must stimulate behavior that helps its members learn what they need to know for both their own survival and that of the group.

The tasks may reflect gains in physical skills, cognitive skills, social skills, emotional skills, and elaboration of the self-concept. One of the developmental tasks of infancy, for example, is the formation of a bond of attachment to the caregiver. A person's ability to form close friendships in childhood and intimate relationships in adolescence and adult life builds on the capacity for attachment that is established with a caregiver during infancy.

Keep in mind that one is changing on several major levels during each period of life. Tasks involving physical, emotional, intellectual, and social growth, as well as growth in the self-concept, all contribute to one's resources for coping with the challenges of life. Table 2.1 shows the developmental tasks we have identified as having major effects on the

The birth of a child is often considered a teachable moment, when parents are especially eager to learn what they can in order to protect, nurture, and ensure the optimal development of their infant. What are other examples of teachable moments?

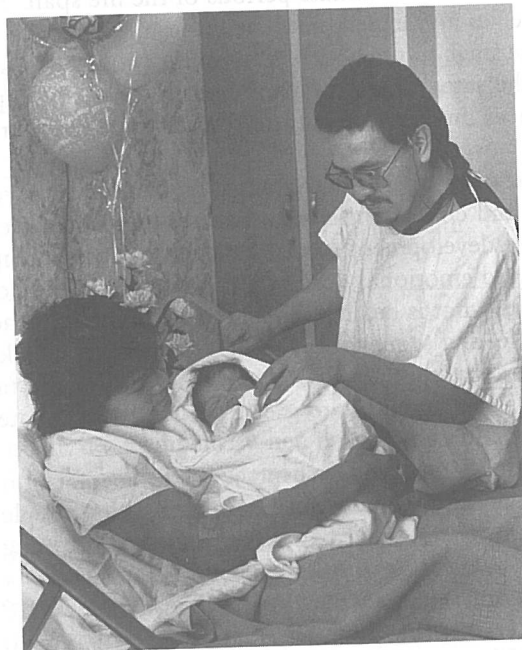


TABLE 2.1 Developmental Tasks Associated with the Life Stages

Life Stage*	Developmental Tasks
Infancy (birth to 2 years)	Maturation of sensory, perceptual, and motor functions Social attachment Sensorimotor intelligence and early causal schemes Understanding the nature of objects and creating categories Emotional development
Toddlerhood (2 and 3)	Elaboration of locomotion Fantasy play Language development Self-control
Early school age (4 to 6)	Gender identification Early moral development Self-theory Group play
Middle (childhood 6 to 12)	Friendship Concrete operations Skill learning Self-evaluation Team play
Early adolescence (12 to 18)	Physical maturation Formal operations Emotional development Membership in the peer group Sexual relationships
Later adolescence (18 to 24)	Autonomy from parents Gender identity Internalized morality Career choice
Early adulthood (24 to 34)	Exploring intimate relationships Childbearing Work Lifestyle
Middle adulthood (34 to 60)	Managing a career Nurturing the marital or other intimate relationship Expanding caring relationships Managing the household
Later adulthood (60 to 75)	Promoting intellectual vigor Redirecting energy toward new roles and activities Accepting one's life Developing a point of view about death
Very old age (75 until death)	Coping with physical changes of aging Developing a psychohistorical perspective Traveling through uncharted terrain

*We do not consider the concept of development tasks appropriate to the prenatal stage.

life experiences of most people in modern society and the stages during which each set of tasks is of primary learning value. There are 42 developmental tasks in the list. Whereas the infant is learning orientations and skills related to the first five, the young adult in the early adulthood stage has already acquired skills related to 27 tasks from the previous stages. New learning may continue in these areas as well as in the four new developmental tasks faced by the young adult. The very old person has all the areas of previous learning to draw from while working on three tasks and the crisis of the final stage.

Mastery of the developmental tasks is influenced by the resolution of the psychosocial crisis of the previous stage, and it is this resolution that leads to the development of new social capabilities. These capabilities orient the person toward new experiences, a new aptitude for relationships, and new feelings of personal worth as he or she confronts the challenges of the developmental tasks of the next

Drawing on a full life of experience and competence, President Jimmy Carter, now in his late 70s, applies his wisdom, talent, and physical energy to support the efforts of Habitat for Humanity.



stage. In turn, the skills learned during a particular stage as a result of work on its developmental tasks provide the tools for the resolution of the psychosocial crisis of that stage. Task accomplishment and crisis resolution interact to produce individual life stories.

Psychosocial Crisis

A **psychosocial crisis**, the third organizing concept of psychosocial theory (Erikson, 1950/1963), arises when one must make psychological efforts to adjust to the demands of one's social environment at each stage of development. The word *crisis* in this context refers to a normal set of stresses and strains rather than to an extraordinary set of events.

Societal demands vary from stage to stage. The individual experiences these demands as mild but persistent guidelines for and expectations of behavior. They may be demands for greater self-control, a further development of skills, or a stronger commitment to goals. Before the end of each stage of development, the individual tries to achieve a resolution, to adjust to society's demands, and at the same time to translate those demands into personal terms. This process produces a *state of tension* that the individual must reduce in order to proceed to the next stage. It is this tension state that produces the psychosocial crisis.

A Typical Psychosocial Crisis

The psychosocial crisis with which you are probably most familiar is identity versus identity confusion, which is associated with later adolescence. An **identity crisis** is a sudden disintegration or deterioration of the framework of values and goals that a person relies on to give meaning and purpose to daily life. An identity crisis usually involves strong feelings of anxiety and depression. The anxiety occurs because the person fears that without the structure of a clear value system, unacceptable impulses will break through and he or she will behave in ways that may be harmful or immoral. The depression occurs because the person suddenly feels worthless. When our previously established goals come to seem meaningless, we are likely to be overwhelmed by a feeling that our actions have no purpose or value.

A college student's identity crisis may be intensified under two conditions, both of which demand a rapid, intense examination of one's values. First, the identity crisis may be heightened when students attend a college where the value orientation departs significantly from their own and where they interact frequently with faculty members. These students believe they should admire and respect adults, especially their profes-

sors, and they suddenly feel at a loss when significant adults challenge their values. They may respond by desperately clinging to their old value system in order to maintain a sense of control or by abandoning all sense of confidence in their values and adopting a stance of complete indifference.

The identity crisis may also be heightened when external demands force students to make a value commitment while they are still uncertain or confused. For some students, the need to decide on a major, to make a commitment to a love relationship, or to take a stand on a campus controversy will reveal that they do indeed know what they want, and they will be reassured that their values are more fully shaped than they had realized. Students who make this happy discovery will move in the direction of identity achievement. Other students, however, who are uncertain about which values and goals are best, may feel overwhelmed when sudden demands for commitment send their existing tentative value structure into disorganization.

At the end of the chapter you will read Erikson's account of his own identity crisis. Erikson never went to college. In his case, conflict about identity was a product of early childhood confusion about his family origins as well as emerging feelings of alienation from family values. His circumstances, coupled with the complexity of his creative intellect, produced an intense crisis.

Psychosocial Crises of the Life Stages

Table 2.2 lists the psychosocial crisis at each stage of development from infancy through very old age. This scheme, derived from Erikson's model shown in Figure 2.2, expresses the crises as polarities—for example, trust versus mistrust, and autonomy versus shame and doubt. These contrasting conditions suggest the underlying dimensions along which each psychosocial crisis is resolved. According to psychosocial theory, most people experience both ends of the continuum. The inevitable discrepancy between one's level of development at the beginning of a stage and society's push for a new level of functioning by the end of it creates at least a mild degree of the negative condition. Even within a loving, caring social environment that promotes trust, an infant will experience some moments of frustration or disappointment that result in mistrust. Even the most industrious, skillful child of middle childhood will encounter some tasks that are too difficult or some feelings of inferiority in comparison with a more talented peer. The outcome of the crisis at each stage is a balance or integration of the two opposing forces. For each person, the relative frequency and significance of positive and negative experiences will contribute to a resolution of the crisis that lies at some point along a continuum from extremely positive to extremely negative.

The likelihood of a completely positive or a completely negative resolution is small. Most individuals resolve the crisis in a generally positive direction, supported

TABLE 2.2 The Psychosocial Crises

Life Stage*	Psychosocial crisis
Infancy (birth to 2 years)	Trust versus mistrust
Toddlerhood (2 and 3)	Autonomy versus shame and doubt
Early school age (4 to 6)	Initiative versus guilt
Middle childhood (6 to 12)	Industry versus inferiority
Early adolescence (12 to 18)	Group identity versus alienation
Later adolescence (18 to 24)	Individual identity versus identity confusion
Early adulthood (24 to 34)	Intimacy versus isolation
Middle adulthood (34 to 60)	Generativity versus stagnation
Later adulthood (60 to 75)	Integrity versus despair
Very old age (75 until death)	Immortality versus extinction

*We do not consider the concept of psychosocial crisis appropriate to the prenatal stage.

In threatening or dangerous situations, such as the conditions of combat, some degree of mistrust and vigilance are adaptive.



moderation, the negative forces result in a clarification of ego positions, individuation, and moral integrity. While a steady diet of mistrust is undesirable, for example, it is important that a trusting person be able to evaluate situations and people for their trustworthiness and to discern cues about safety or danger in any encounter. Recognizing those who may not be concerned about one's needs or welfare is certainly advantageous. However, mistrusting others and being overly careful in all relationships may lead to hopelessness. In every psychosocial crisis, the experiences at both the positive and the negative poles contribute to the total range of a person's adaptive capacities.

Why conceptualize life in terms of crises? Does this idea adequately portray the experience of the individual, or does it overemphasize conflict and abnormality? The term *crisis* implies that normal development does not proceed smoothly. The theory hypothesizes that tension and conflict are necessary elements in the developmental process; crisis and its resolution are basic, biologically based components of life experience at every stage. In fact, they are what drive the ego system to develop new capacities. "Growing pains" occur at every stage of life. Those who expect their problems to be over after adolescence will be sorely disappointed.

The term *psychosocial* draws our attention to the fact that these developmental crises are, in part, the result of cultural pressures and expectations. In the process of normal development, individuals will experience tension regardless of their culture because of the culture's need to socialize and integrate its members. The concept acknowledges the dynamic conflicts between individuality and group membership at each period of life. Although the tension itself is not a result of personal inadequacies, failure to resolve it can seriously limit future growth. To some extent, psychosocial theory attempts to account for failures in development that appear at every stage in life. The concept of crisis implies that at any stage something can interfere with growth and reduce one's opportunities to experience personal fulfillment.

The exact nature of the conflict is not the same at all stages. Few cultural limits are placed on infants. The outcome of the infancy stage depends greatly on the skill of the caregiver. At early school age, the culture stands in fairly direct opposition to the child's initiative in some matters and offers abundant encouragement to initiative in others. In

by a combination of positive experiences combined with natural maturational tendencies. At each successive stage, however, the likelihood of a negative resolution increases as the developmental tasks become more complex and the chances of encountering societal barriers to development rise. A positive resolution of each crisis provides new ego strengths that help the person meet the demands of the next stage.

To understand the process of growth at each life stage, we have to consider the negative as well as the positive pole of each crisis. The dynamic tension between the positive and negative forces respects and reflects the struggles we all encounter to restrain unbridled impulses, to overcome fears and doubts, and to look past our own needs to consider the needs of others. The negative poles offer an insight into basic areas of human vulnerability. Experienced in

Floods, earthquakes, and hurricanes produce unforeseen crises in which homes and communities are destroyed. At different developmental stages, people adapt in unique ways to these crises. Children may experience a loss of confidence in their parents' ability to protect them. Older adults may grieve for the loss of a lifetime of treasure or be inspired by the miracle of their survival.



young adulthood, the dominant cultural push is toward the establishment of intimate relationships; yet an individual may be unable to attain intimacy because of cultural norms against certain expressions of intimacy or restrictions against certain types of unions.

Psychosocial theory suggests that crises are a predictable part of growth. At every life stage, we can anticipate that there will be some discrepancy between the skills that have been developed before it begins and the expectations for growth during the stage. As reflected in the epigenetic principle, the succession of crises occurs in a predictable sequence over the life course. Although Erikson did not specify the exact ages for each crisis, the theory hypothesizes an age-related progression in which each crisis has its time of special ascendancy. The combination of biological, psychological, and soci-

etal forces that operate to bring about change has a degree of regularity that places each psychosocial crisis at a particular period of life.

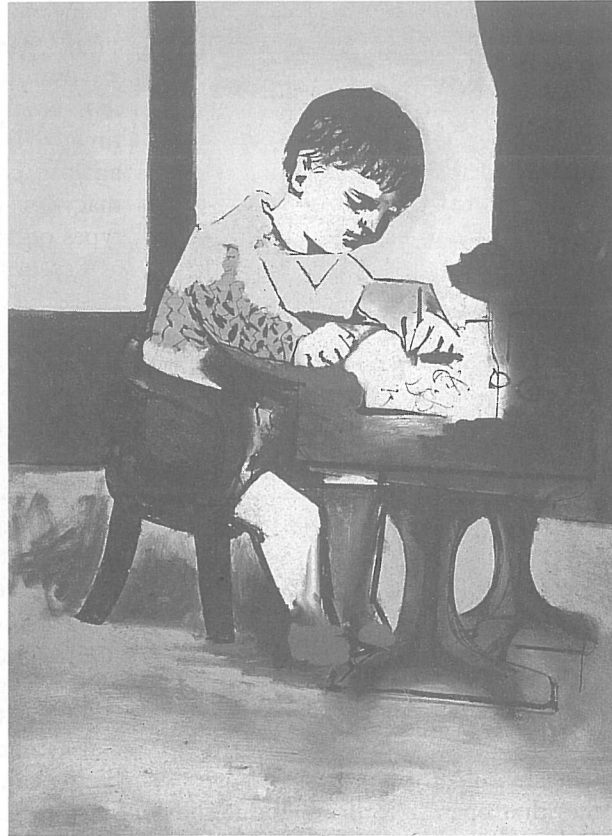
In addition to these predictable crises, any number of unforeseen stresses may arise. Parents' divorce, the death of a sibling, victimization by violence, the loss of a job, and widowhood are examples of unforeseen life crises. The need to cope with them may overwhelm a person, particularly if several occur at the same time. The picture of predictable developmental stress that is emphasized in psychosocial theory must be expanded to include the possibility of unanticipated crises. Although these chance events may foster growth and new competencies, they may also result in defensiveness, regression, or dread. The impact of an unpredictable crisis will depend in part on whether the person is in a state of psychosocial crisis at the time (Cummings, Greene & Karraker, 1991; Larson & Ham, 1993).

The combination of predictable crises, unpredictable crises, and unique historical pressures may bring to light prior crises that require reorganization. For example, during early adulthood, when issues of intimacy versus isolation are salient, it is common to find a reworking of industry versus inferiority as well (Whitbourne et al., 1992). Young adults encounter the very concrete challenges of establishing themselves in the labor market and achieving self-sufficiency through paid employment. The intensity of this additional crisis will depend in part on historical factors, such as the economic and materialistic orientation of the society as a specific age group enters early adulthood. It will also depend on individual factors, especially whether the young adult has developed a clear commitment to occupational values during the earlier period of identity versus identity confusion. Thus, the crises are not resolved and put to rest once and for all: Each crisis is played and replayed both during ongoing developmental changes and when life events challenge the balance that was achieved earlier.

The Central Process for Resolving the Psychosocial Crisis

Every psychosocial crisis reflects some discrepancy between the person's developmental competencies at the beginning of the stage and societal pressures for more effective, integrated functioning. How is the discrepancy resolved? What experiences or processes underlay the person's efforts to cope with the challenges of de-

Paulo, Picasso's son, is shown in deep concentration as he sketches at his desk. Through imitation, a child takes ownership of actions and skills that he or she has observed among adults. It is little wonder that Paulo, surrounded by his fathers' ongoing artistic activity, would be drawn to imitate it.



velopment at each stage? We have offered an extension of psychosocial theory by identifying a central process through which each psychosocial crisis is resolved. The **central process**, the fourth organizing concept of psychosocial theory, links the individual's needs with the requirements of the culture at each life stage. Significant relationships and relevant competencies change at every life stage. Specific modes of psychological work and of social interaction must occur if a person is to continue to grow.

For example, imitation is viewed as the central process for psychosocial growth during toddlerhood (ages 2 and 3), when children expand their range of skills by imitating adults, siblings, television models, playmates, and even animals. Imitation provides toddlers with enormous satisfaction. As they increase the similarity between themselves and admired members of their social groups through imitation, they begin to experience the world as other people and animals experience it. They exercise some control over potentially frightening or confusing events by imitating elements of those occurrences in their play.

The movement toward a sense of autonomy in toddlerhood is facilitated by the child's readiness to imitate and by the variety of models available for observation. Imitation expands children's range of behavior, and through persistent imitative activity, children expand their sense of self-initiated behavior and control over their actions. Repetitive experiences of this kind lead to the development of a sense of personal autonomy.

Imitation is more dominant in the behavioral repertoire during toddlerhood than at any other time in life, although it is often used as a learning and social strategy at other stages. Also, the society—in this case, through the significant relationship with the parents—tells the child, "That's good, Robbie. Now watch Daddy, and do it just the way he does." Not only are this child's tendencies toward imitation internally motivated, but his society is telling him, "Imitate! It will help you learn."

Table 2.3 shows the central processes that lead to the acquisition of new skills, the resolution of the psychosocial crisis, and successful coping at each life stage. Each of

TABLE 2.3 The Central Process for Resolving Each Psychosocial Crisis

Life Stage*	Central Process
Infancy (birth to 2 years)	Mutuality with caregiver
Toddlerhood (2 and 3)	Imitation
Early school age (4 to 6)	Identification
Middle childhood (6 to 12)	Education
Early adolescence (12 to 18)	Peer pressure
Later adolescence (18 to 24)	Role experimentation
Early adulthood (24 to 34)	Mutuality among peers
Middle adulthood (34 to 60)	Person-environment fit and creativity
Later adulthood (60 to 75)	Introspection
Very old age (75 until death)	Social support

*We do not consider the concept of central process appropriate to the prenatal stage.

these processes appears to take on heightened significance during a particular stage, and each can be encouraged through the organization of significant social relationships.

The central process for coping with the challenges of each life stage provides both personal and societal mechanisms for taking in new information and reorganizing existing information. It also suggests the means that are most likely to lead to a revision of the psychological system so that the crisis of the particular stage may be resolved. Each central process results in an intensive reworking of the psychological system, including a reorganization of boundaries, values, and images of oneself and others.

Radius of Significant Relationships

The fifth organizing principle of psychosocial theory is the **radius of significant relationships** (Erikson, 1982, p. 31) (Figure 2.4). Our society is organized in such a way that age-related demands on individuals are communicated through their significant social relationships. For example, the law requires that all 6-year-olds go to school, but it is parents who actually send them there. The law requires that people remain in school until they are 16, but it is peers, teachers, parents, and adolescents' own aspirations that encourage their continued attendance.

The demands exerted on a person by all elements of the social world make up the **societal system**. A person's ego includes a social processing system that is sensitive to social expectations, which serve as natural stimulators of one's social processing mechanisms. Initially, a person focuses on a small number of relationships. During childhood, adolescence, and early adulthood, the number of relationships expands and takes on greater variety in depth and in intensity. In middle and later adulthood, the person often returns to a small number of extremely important relationships that provide opportunities for great depth and intimacy. Most of the demands made on a person are made by people in these significant relationships.

According to Erikson's formulation, readiness to engage in this ever-changing network is a result of the epigenetic plan. At each stage of life, this network determines the demands that will be made on the person, the way he or she will be taken care of, and the meaning that the person will derive from the relationships. The relationship network varies from person to person, but each person has a network of significant relationships and an increasing readiness to enter into more complex social life (Vanzetti & Duck, 1996). The quality of these relationships and the norms for interaction are influenced by the nature of the specific social context.

Contexts of Development

One way of thinking about the impact of the societal system is to consider individuals as embedded in a kaleidoscope of changing, interconnected systems. Children are members of families. Parents and other relatives are members of other important work and community groups that can influence families. Children, as they

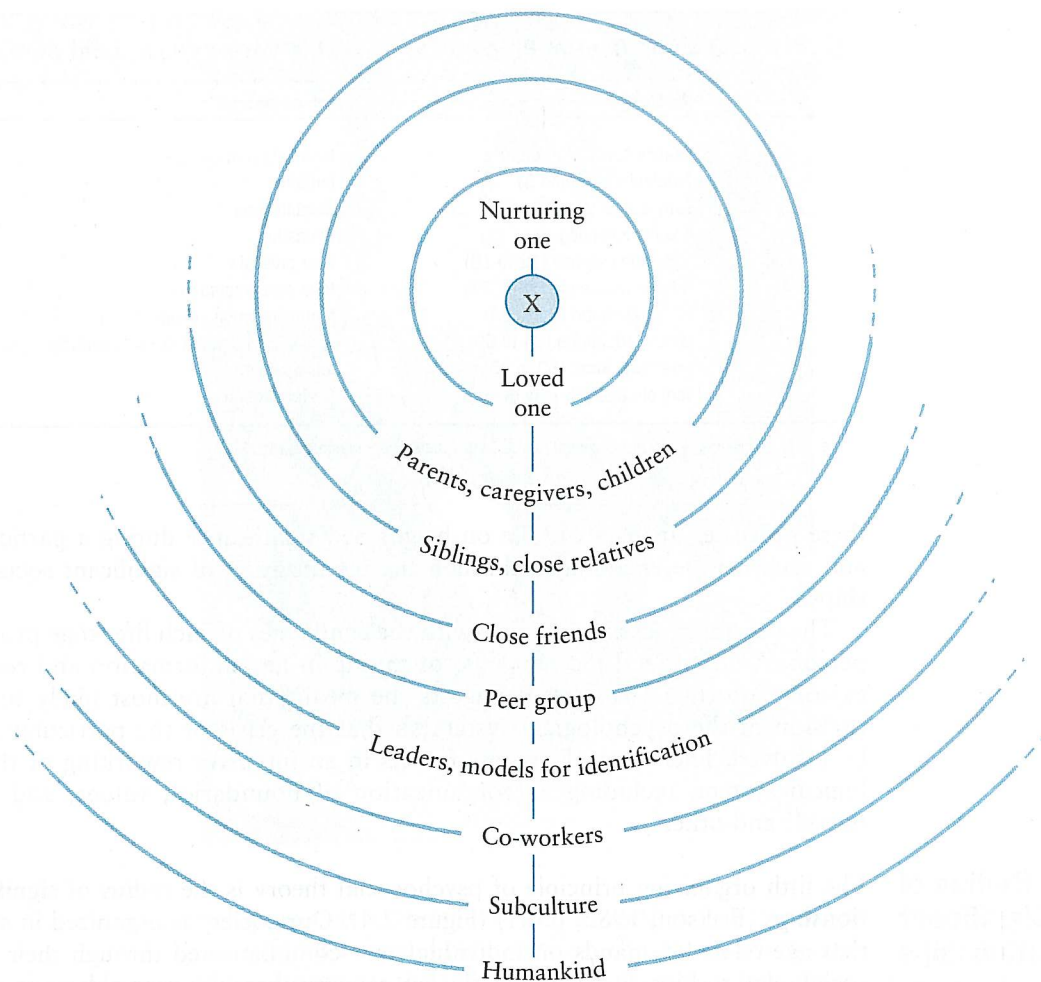


FIGURE 2.4

The radius of significant relationships

grow, may become members of other institutions such as day-care programs, schools, religious groups, community clubs, or athletic teams. Communities are nested in cities, counties, states, and national governments. An understanding of development requires insight into each level of social organization as well as across the culture as a whole. These organizations influence what is expected of each person, the roles they play, the activities they engage in, the resources available to meet these expectations, and the risks they may encounter. In addition, the contexts of development embody social, economic, and historic factors. Events such as war, political revolution, famine, or economic collapse may temporarily alter the prevailing child-rearing values, opportunities for education or employment, and the availability of resources. In addition, these events may increase exposure to violence and separation of family members, or provide exposure to other unpredictable stressors that may disrupt the course of development. Family, culture, and ethnic group are three of the major contexts through which the radius of significant relationships is organized.

Families. All over the world, children are raised by small groups or families. Family is the universal primary social context of childhood. The family continues to be a meaningful context throughout life, especially as we think of the relationship of adults with their aging parents, the formation of new families in adulthood, and the lifelong connections among siblings. Historically, the term *family* has referred to a group of people, usually related by blood, marriage, or adoption. In contemporary U.S. society,

Families are a fundamental component of the radius of significant relations. Family reunions bring generations of a family in contact and preserve the sense of identification with one's ancestry, personal family history, and family values.



however, people who view themselves as members of a family may have no legal relationship or shared ancestral bond. The psychosocial meaning of family continues to be defined as individuals who share a common destiny and who experience a sense of emotional intimacy. People in a family care about one another and take care of one another.

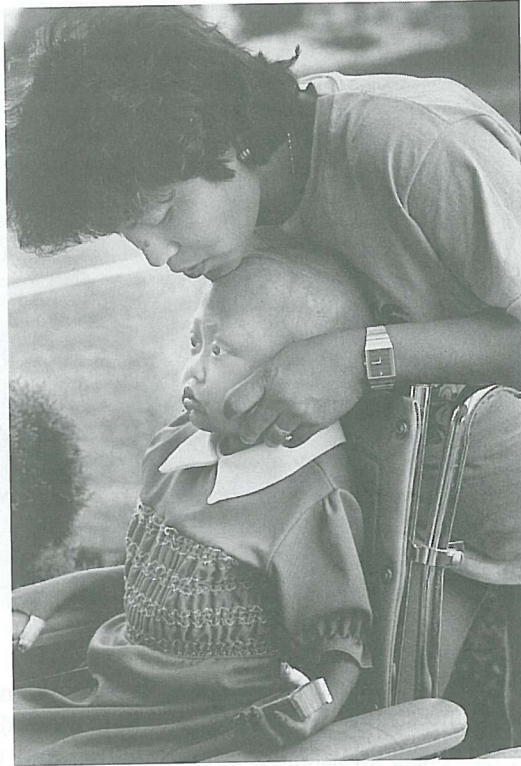
Culture. Culture refers to the socially standardized ways of thinking, feeling, and acting that a person acquires as a member of a society. Culture includes the concepts, habits, skills, arts, technology, religion, and government of a people. It encompasses the tools and symbol systems that give structure and meaning to experience. Often, a culture exerts influence directly through families as well as through other social organizations such as churches and schools. The United States, like other nations, has a culture that has a strong, unifying impact on its citizens. Within the United States, there are also noticeable regional cultural patterns marked by unique vocabulary and dialect, mannerisms, and styles of social interaction. Throughout this book, we will note the great differences in what life, including family life, is like in different cultures, and how the integration of person and culture produces distinctive personal experiences for individuals in various cultures.

Ethnic Groups. Despite the common threads of culture that affect everyone who grows up or lives for a long time in the United States, there are also persistent sub-cultural forces that shape the daily lives of children and adults. The United States is a complex society that is made up of people from a vast array of cultures throughout the world. We call these groups **ethnic subcultures** or **ethnic groups**. People who belong to ethnic groups share socially standardized ways of thinking, feeling, and acting with other members of their group. The subculture may or may not be in conflict with the mainstream culture of the United States. Much of the literature on human development in this country is based on observations of white middle class participants of European ancestry. However, increasing attention is being given to the lifestyles, parenting practices, and family values of various other ethnic groups, and we will try to give special attention to studies that highlight ethnic group comparisons where possible.

Coping Behavior

Coping behavior, the sixth organizing concept of psychosocial theory, consists of active efforts to resolve stress and create new solutions to the challenges of each developmental stage. Robert White (1974) identified three components of the coping process: (1) the ability to gain and process new information, (2) the ability to maintain

After a terrible accident, this child and her mother struggle to preserve the child's optimal level of functioning, find hope in small signs of improvement, and create innovative ways of solving innumerable social, financial, and medical problems. What are the coping resources that make it possible for this mother and child to remain proactive and optimistic?



maintaining their current level of functioning or equilibrium. They are devising coping strategies that will lead to increased information about their future setting and increased competence in it.

In coping with life challenges, individuals create their own strategies, which reflect their talents and motives. Think of the first day of kindergarten for a group of 5-year-olds. Some children are just sitting, shyly watching the teacher and the other children. Others are climbing all over the equipment and eagerly exploring the new toys. Still others are talking to the teacher or the other children, finding out names, making friends, or telling about the bus ride to school. Each of these strategies can be understood as a way of gathering information while preserving a degree of autonomy and integrity in a new and potentially threatening environment. No one way is right or even best, except as it serves the person by allowing access to information, freedom of movement, and some control over the emotions evoked by the new challenge.

An individual's characteristic style of coping appears to be influenced by a variety of factors, including gender, the available resources, the nature of interpersonal relationships, and the accumulation of life experiences. Some people face chronic stressors associated with poverty, illness, or some form of disability. In the face of these demands, one's capacity for coping may become exhausted or one may need to seek help in order to learn new coping strategies.

Prime Adaptive Ego Qualities

Erikson (1978) postulated **prime adaptive ego qualities** that develop from the positive resolution of the psychosocial crisis of a given stage and provide resources for coping with the next. He described these qualities as mental states that form a basic orientation toward the interpretation of life experiences. A sense of competence, for example, permits a person to feel free to exercise his or her wits to solve problems without being weighed down by a sense of inferiority.

The prime adaptive ego qualities and their definitions are listed in Table 2.4. These ego qualities contribute to the person's dominant worldview, which is continuously reformulated to accommodate new ego qualities. The importance of many of the

control over one's emotional state, and (3) the ability to move freely within one's environment.

Coping behavior is an important concept in psychosocial theory because it explains how new, original, creative, unique, and inventive behavior occurs. In addition, it lets us predict that individuals will behave in original, spontaneous, and successful ways in their active social lives. In the face of threat, coping behavior allows for the individual to develop and grow, rather than merely maintain equilibrium or become disorganized.

White illustrated the coping process by describing high school seniors' strategies for coping with the challenge of college. Those who go to the campus, talk to the students there, start reading for courses they will take, or take summer jobs in which they will be interacting with college students are doing more than

TABLE 2.4 Prime Adaptive Ego Qualities

Life Stage	Ego Quality	Definition
Infancy	Hope	An enduring belief that one can attain one's deep and essential wishes
Toddlerhood	Will	A determination to exercise free choice and self-control
Early school age	Purpose	The courage to imagine and pursue valued goals
Middle childhood	Competence	The free exercise of skill and intelligence in the completion of tasks
Early adolescence	Fidelity (I)	The ability freely to pledge and sustain loyalty to others
Later adolescence	Fidelity (II)	The ability freely to pledge and sustain loyalty to values and ideologies
Early adulthood	Love	A capacity for mutuality that transcends childhood dependency
Middle adulthood	Care	A commitment to concern about what has been generated
Later adulthood	Wisdom	A detached yet active concern with life itself in the face of death
Very old age	Confidence	A conscious trust in oneself and assurance about the meaningfulness of life

Source: Based on Erikson, 1978.

prime adaptive ego qualities has been verified by research. For example, hope has been identified as a significant factor in allowing people to cope with adversity as well as to organize their actions to achieve difficult goals (Snyder, 1994). People with a hopeful attitude have a better chance of maintaining their spirits and strength in the face of crisis than people who are pessimistic. In interviews with people in very old age, Erikson and his colleagues found that those who maintained a sense of hope about their own future as well as that of their children were more intellectually vigorous and psychologically resilient than those not characterized by this orientation (Erikson et al., 1986).

Core Pathologies

Although most people develop the prime adaptive ego qualities, a potential **core pathology** or destructive force may also develop as a result of ineffective, negatively balanced crisis resolution at each stage (Erikson, 1982) (Table 2.5). The core pathologies also serve as guiding orientations for behavior. These pathologies move people away from others, tend to prevent further exploration of interpersonal relations, and obstruct the resolution of subsequent psychosocial crises. The energy that would normally be directed toward mastering the developmental tasks of a stage is directed instead toward resisting or avoiding change. The core pathologies are not simply passive limitations or barriers to growth. They are energized worldviews leading to strategies that protect people from further unwanted association with the social system and its persistent, tension-producing demands.

TABLE 2.5 Core Pathologies

Life Stage	Core Pathology	Definition
Infancy	Withdrawal	Social and emotional detachment
Toddlerhood	Compulsion	Repetitive behaviors motivated by impulse or by restrictions against the expression of impulse
Early school age	Inhibition	A psychological restraint that prevents freedom of thought, expression, and activity
Middle childhood	Inertia	A paralysis of action and thought that prevents productive work
Early adolescence	Dissociation	An inability to connect with others
Later adolescence	Repudiation	Rejection of roles and values that are viewed as alien to oneself
Early adulthood	Exclusivity	An elitist shutting out of others
Middle adulthood	Rejectivity	Unwillingness to include certain others or groups of others in one's generative concern
Later adulthood	Disdain	A feeling of scorn for the weakness and frailty of oneself and others
Very old age	Diffidence	An inability to act because of overwhelming self-doubt

Source: Based on Erikson, 1982.

Although we believe that psychosocial theory provides a useful theoretical framework for organizing the vast array of observations in the field of human development, we recognize that it has weaknesses as well as strengths. We want you to be aware of its strengths and its weaknesses so that you can form your own independent judgment of its usefulness and to be alert to how the theory may influence your thinking. The strengths and weaknesses of psychosocial theory that are discussed below are listed in Table 2.6.

Strengths

Psychosocial theory provides a broad context within which to study development. The theory links the process of child development to the later stages of adult life, to the needs of society, and to the ability of societies to interact. Although many scholars agree that such a broad perspective is necessary, few other theories attempt to address the dynamic interplay between individual development and society.

The emphasis of psychosocial theory on ego development and ego processes provides insight into the directions of healthy development throughout life. Concepts central to the theory such as trust, autonomy, identity achievement, generativity, coping, well-being, social support, and intergenerational interdependence have become thoroughly integrated into contemporary human development scholarship (e.g., Snyder, 1994; Ryff, 1995; Zimmerman et al., 1995). At the same time, the theory identifies tensions that may disrupt development at each life stage, providing a useful framework for approaching psychotherapy and counseling.

The concept of normative psychosocial crises is a creative contribution that identifies predictable tensions between socialization and maturation throughout life. Societies, with their structures, laws, roles, rituals, and sanctions, are organized to guide individual growth toward a particular ideal of mature adulthood. If individuals grew in that direction naturally, as a result of an unfolding, genetically guided plan, presumably there would be no need for these elaborate social structures. But every society faces problems when it attempts to balance the needs of the individual with the needs of the group. All individuals face problems when they attempt to experience their individuality while still maintaining the support of their group. Psychosocial theory gives us concepts for exploring these natural tensions.

Weaknesses

One weakness of psychosocial theory is that its basic concepts are presented in language that is abstract and difficult to examine empirically (Crain, 1985; Miller, 1993). Such

TABLE 2.6 Strengths and Weaknesses of Psychosocial Theory

Strengths	Weaknesses
The theory provides a broad context, linking development in various stages of life to the resources and demands of society.	The basic concepts of the theory are abstract and difficult to operationalize.
It emphasizes ego development and directions for healthy development across the life span.	Explanations of the mechanisms for resolving crisis and moving from one stage to the next are not well developed.
It provides a useful framework for psychotherapy.	The specific number of stages and their link to a genetic plan for development have not been adequately demonstrated, especially in adulthood.
It emphasizes the dynamic interplay between a genetic plan and the forces of culture and society in guiding individual development.	The theory and research have been dominated by a male, Eurocentric perspective that gives too much emphasis to the emergence of individuality and not enough to social needs and competence in other cultural contexts.
The concept of normative psychosocial crises provides an effective set of constructs for examining the tension between the individual and society.	The specific way in which culture encourages or inhibits development at each life stage is not clearly elaborated.

All of these young people are in the stage of later adolescence. Some have reached the point of identity achievement; others have not. What determines whether a person moves from one developmental stage to the next?



terms as *initiative, personal identity, intimacy, generativity, and integrity*—concepts included in the psychosocial crises—are hard to define and even more difficult to translate into objective measures. Nonetheless, efforts have been made along this line. James Marcia, Alan Waterman, Anne Constantinople, and others have contributed to an extensive literature that examines the construct of personal identity. Other researchers have tackled the concept of intimacy, and still others have tried to operationalize the concepts of generativity and integrity. Questionnaire measures based on Erikson's psychosocial theory, including the Inventory of Psychosocial Development and Measures of Psychosocial Development (MPD) have been used to trace the emergence of psychosocial crises and their resolution in samples varying in age from adolescence to later adulthood (Constantinople, 1969; Waterman & Whitbourne, 1981;

Hawley, 1988; Whitbourne et al., 1992). In addition to studies meant to test psychosocial theory, many others have a bearing on its constructs. In each of the stages of life that we will be examining, you will find an analysis of research that has a clear link to the constructs of psychosocial theory.

Another weakness of the theory is that explanations of the mechanisms for resolving crises and moving from one stage to the next are not well developed. Erikson has not offered a universal mechanism for crisis resolution, nor has he detailed the kinds of experiences that are necessary at each stage if one is to cope successfully with the crisis of that stage. We have addressed this weakness by introducing the concepts of developmental tasks and a central process for each stage. The developmental tasks suggest some of the major achievements that permit a person to meet the social expectations of each stage. The central process identifies the primary social context within which the crisis is resolved. Using these two mechanisms, one can begin to clarify the process of movement from one stage to the next.

The specific number of stages and their link to a biologically based plan for development have been criticized, most notably in discussions of the stages of adulthood (Crain, 1985). Other human development theorists, such as Robert Peck, Robert Gould, Daniel Levinson, and Marjorie Lowenthal, have taken a more differentiated view of the stages of adulthood and later life. We have responded to these criticisms by treating adolescence as two distinct stages and by adding a fourth stage of adulthood: very old age. You will also read about the important developmental issues of the prenatal period, a stage that Erikson's theory does not consider, but one that clearly plays a central role in setting the stage for a lifetime of vulnerabilities and competences. In our view, these revisions demonstrate the natural evolution of a theoretical framework as it continues to encounter new observations. Nevertheless, the increasing life expectancy, accompanied by a longer period of healthy later life and the elaboration of lifestyles, make it difficult to chart a normative life course from early adulthood into very old age.

Finally, the theory and related research have been criticized as being dominated by a male, Eurocentric, individualistic perspective (Gilligan, 1982). The themes of autonomy, initiative, industry, and personal identity all emphasize the process of individuation. In this and other theories of development, ego development, separateness from family, autonomy, and self-directed goal attainment have been equated with psychological matu-

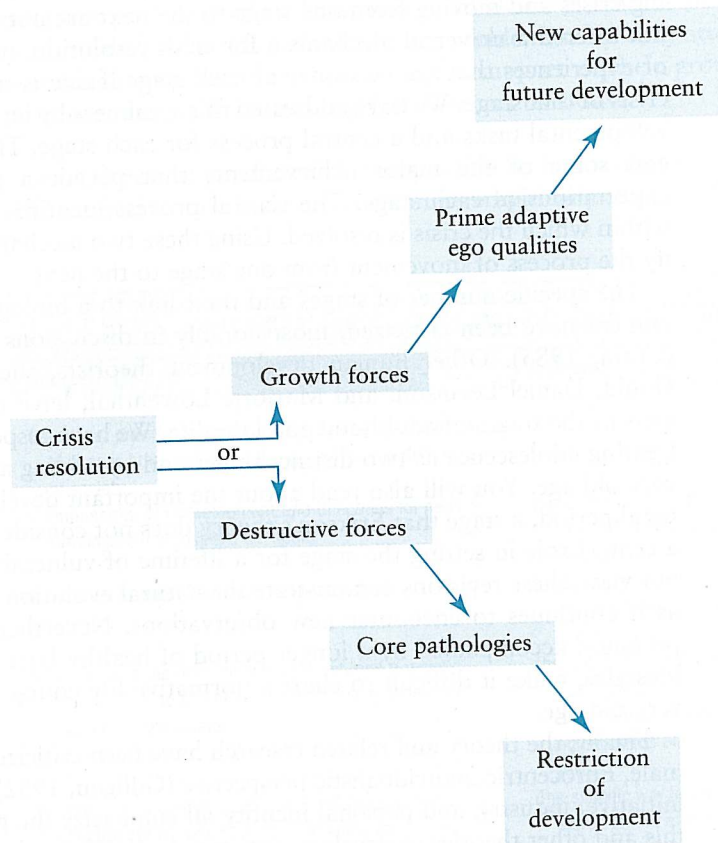
rity. Relatively little attention has been given to themes that have been identified as central to the developmental experiences of girls and young women—themes of interpersonal competence, connection, and affiliation (Josselson, 1987). These themes also seem to be emerging within more collectively oriented ethnic groups, cultures in which maturity is equated with one's ability to support and sustain the success of the family or the extended-family group rather than with one's own achievement of status, wealth, or recognition.

Within the framework of psychosocial theory, the theme of connection is addressed directly through the first psychosocial crisis of trust versus mistrust in infancy, but then the thread is lost until early adolescence and early and middle adulthood, when group identity, intimacy, and generativity direct the focus back to the critical links that individuals build with others. The concept of the radius of significant relationships is present at every phase of life, suggesting that how one defines oneself is always intimately linked to one's meaningful social connections. This construct helps to maintain the perspective of the person interwoven in a tapestry of relationships, focusing especially on family and friends in childhood; the family, peer group, love relationships, and close friends in early and later adolescence; and intimate partners, family, friends, and co-workers in various phases of adult life.

To extend the theme of connection, the text elaborates on developing capabilities for social interaction and differences in socialization practices and outcomes for males and females in our society. A variety of social abilities, including empathy, prosocial behavior, interaction skills, and components of social cognition are traced as they emerge in the context of family relationships, friendship, peer groups, and work. The text considers ethnic groups as well as broader social influences on development and the importance of a collective orientation toward responsibility in caring for children and creating a sense of community.

FIGURE 2.5

The mechanism for positive and negative psychosocial development



A Recap of Psychosocial Theory

At the beginning of this chapter we discussed the three questions you must ask in order to evaluate a theory. Let us now answer these questions with respect to psychosocial theory:

1. *Which phenomena is the theory trying to explain?* The theory attempts to explain human development across the life span, especially patterned changes in self-understanding, social relationships, and worldview.
2. *What assumptions does the theory make?* Human development is a product of three factors: biological evolution, the interaction between individuals and social groups, and the contributions that individuals make to their own psychological growth.
3. *What does the theory predict?* There are 11 distinct stages of development. Developmental tasks are dictated by the interaction of the biological, psychological, and societal systems during each stage. A normal crisis arises at each stage of development, and a central process operates to resolve it. Each person is part of an expanding network of significant relationships that convey society's expectations and demands. These relationships also provide encouragement in the face of challenges. New behaviors continue to be possible throughout life.

Development will be optimal if a person can create new behavior and relationships as a result of skill acquisition and successful crisis resolution during each stage of growth. Lack of development and core pathologies result from tendencies that restrict behavior in general and new behavior in particular (especially social behavior). The mechanism for positive and negative development is diagrammed in Figure 2.5.

Chapter Summary

Psychosocial theory offers a life-span view of development, which is a product of the interactions between individuals and their social environments. The needs and goals of both the individual and society must be considered in conceptualizing human development. Predictability is found in the sequence of psychosocial stages, in the central process involved in the resolution of the crisis at each stage, and in the radius of significant relationships. Individuality is expressed in the achievement of the developmental tasks, the balance of the positive and negative poles of each psychosocial crisis and the resulting worldview, and in the style and resources for coping that a person brings to each new life challenge.

The basic concepts of psychosocial theory provide the framework for analyzing development across 11 life stages. Each chapter from 4 through 14 is devoted to one life stage. With the exception of Chapter 4, on pregnancy and prenatal development, each starts with a discussion of the developmental tasks of that life stage. By tracing developments in physical growth, emotional growth, intellectual skills, social relationships, and self-understanding, you can begin to recognize the interrelationship among all of these dimensions during each period of life.

In the second section of each chapter, we describe the psychosocial crisis of the stage under discussion, accounting for the tension by examining the individual's needs and personal resources in light of the dominant societal expectations. In addition to defining the crisis, we conceptualize the central process by which it is resolved. The resolution of the crisis at each stage develops either new ego strengths or new core pathologies.

At the end of each chapter, we use the material we have discussed to analyze a selected topic that is of persistent concern to our society. These topics are controversial, and they may generate sentiment as they deepen understanding. We intend these sections to stimulate the application of developmental principles to other real-world concerns.

Take a moment to study Table 2.7. You can use this table as a guide to the major themes of the text. It may help you to see the connections among the topics within a chapter, or to trace threads of continuity over several periods of life. You may also use this table in constructing a life map for yourself, which will reveal the levels of tension and the major psychosocial factors that are currently affecting your self-concept and your relationships with others.

TABLE 2.7 The Organization of the Text

Life Stage	Developmental Tasks	Psychosocial Crisis
Prenatal (conception to (birth)		
Infancy (birth to 2 years)	Maturation of sensory, perceptual, and motor functions Social attachment Sensorimotor intelligence and early causal schemes Understanding the nature of objects and creating categories Emotional development	Basic trust versus basic mistrust
Toddlerhood (2 and 3)	Elaboration of locomotion Fantasy play Language development Self-control	Autonomy versus shame and doubt
Early school age (4 to 6)	Gender identification Early moral development Self-theory Group play	Initiative versus guilt
Middle childhood (6 to 12)	Friendship Concrete operations Skill learning Self-evaluation Team play	Industry versus inferiority
Early adolescence (12 to 18)	Physical maturation Formal operations Emotional development Membership in the peer group Sexual relationships	Group identity versus alienation
Later adolescence (18 to 24)	Autonomy from parents Gender identity Internalized morality Career choice	Individual identity versus identity confusion
Early adulthood (24 to 34)	Exploring intimate relationships Childbearing Work Lifestyle	Intimacy versus isolation
Middle adulthood (34 to 60)	Managing a career Nurturing the marital or other intimate relationship Expanding caring relationships Managing the household	Generativity versus stagnation
Later adulthood (60 to 75)	Promoting intellectual vigor Redirecting energy toward new roles Accepting one's life Developing a point of view about death	Integrity versus despair
Very old age (75 until death)	Coping with the physical changes of aging Developing a psychohistorical perspective Traveling through uncharted terrain	Immortality versus extinction

Central Process	Prime Adaptive Ego Quality	Care Pathology	Applied Topic
Mutuality with caregiver	Hope	Withdrawal	Abortion The role of the parents.
Imitation	Will	Compulsion	Day care
Identification	Purpose	Inhibition	School readiness
Education	Competence	Inertia	Violence in the lives of children
Peer pressure	Fidelity (I)	Dissociation	Adolescent alcohol and drug use
Role experimentation	Fidelity (II)	Repudiation	Challenges of social life
Mutuality among peers	Love	Exclusivity	Divorce
Person-environment fit and creativity	Care	Rejectivity	Discrimination in the workplace
Introspection	Wisdom	Disdain	Retirement
Social support	Confidence	Diffidence	Meeting the needs of the frail elderly

End of Chapter Case

Erik Erikson illustrates the psychosocial perspective by describing the personal, family, and societal factors that contributed to his own identity crisis. (Erik H. Erikson 1902–1994)

Before I continue my account of psychoanalytic training as I experienced it, I must come to the question of how a wandering artist and teacher came to find in it an occupational identity and a field for the use of his given capacities. Here it must be said first that in the Europe of my youth, the choice of the occupational identity of “artist” meant, for many, a way of life rather than a specific occupation—or, indeed, a way of making a living—and, as today, it could mean primarily an anti-establishment way of life. Yet, the European establishment had created a well-institutionalized social niche for such idiosyncratic needs. A certain adolescent and neurotic shiftlessness could be contained in the custom of *Wanderschaft*; and if the individual had some gifts into the bargain, he could convince himself and others that he should have a chance to demonstrate that he might have a touch of genius.

... There is first of all the question of origin, which often looms large in individuals who are driven to be original. I grew up in Karlsruhe in southern Germany as the son of a pediatrician, Dr. Theodor Homburger, and his wife Karla, née Abrahamsen, a native of Copenhagen Denmark. All through my earlier childhood, they kept secret from me the fact that my mother had been married previously; and that I was the son of a Dane who had abandoned her before my birth. They apparently thought that such secretiveness was not only workable (because children then were not held to know what they had not been told) but also advisable, so that I would feel thoroughly at home in their home. As children will do, I played in with this and more or less forgot the period before the age of three, when mother and I had lived alone. Then her friends had been artists working in the folk style of Hans Thoma of the Black Forest. They, I believe, provided my first male imprinting before I had to come to terms with that intruder, the bearded doctor, with his healing love and mysterious instruments. Later, I enjoyed going back and forth between the painters’ studios and our house, the first floor of which, in the afternoons, was filled with tense and trusting



Erik H. Erikson, the father of psychosocial theory

mothers and children. My sense of being “different” took refuge (as it is apt to do even in children without such acute life problems) in fantasies of how I, the son of much better parents, had been altogether a foundling. In the meantime, however, my adoptive father was anything but the proverbial stepfather. He had given me his last name (which I have retained as a middle name) and expected me to become a doctor like himself.

Identity problems sharpen with that turn in puberty when images of future roles become inescapable. My stepfather was the only professional man (and a highly respected one) in an intensely Jewish small bourgeois family, while I (coming from a racially mixed Scandinavian background) was blond and blue-eyed, and grew flagrantly tall. Before long, then, I was referred to as “goy” in my stepfather’s temple; while to my schoolmates I was a “Jew.” Although during World War I, I tried desperately to be a good German chauvinist, I became a “Dane” when Denmark remained neutral.

... At the time, like other youths with artistic or literary aspirations, I became intensely alienated from everything my bourgeois family stood for. At that point, I *set out* to be different. After graduation from the type of high school called a humanistic *Gymnasium*, ... I went to art school, but always again took to wandering. ... And in those days every self-

respecting stranger in his own (northern) culture drifted sooner or later to Italy, where endless time was spent soaking up the southern sun and the ubiquitous sights with their grand blend of artifact and nature. I was a “Bohemian” then.

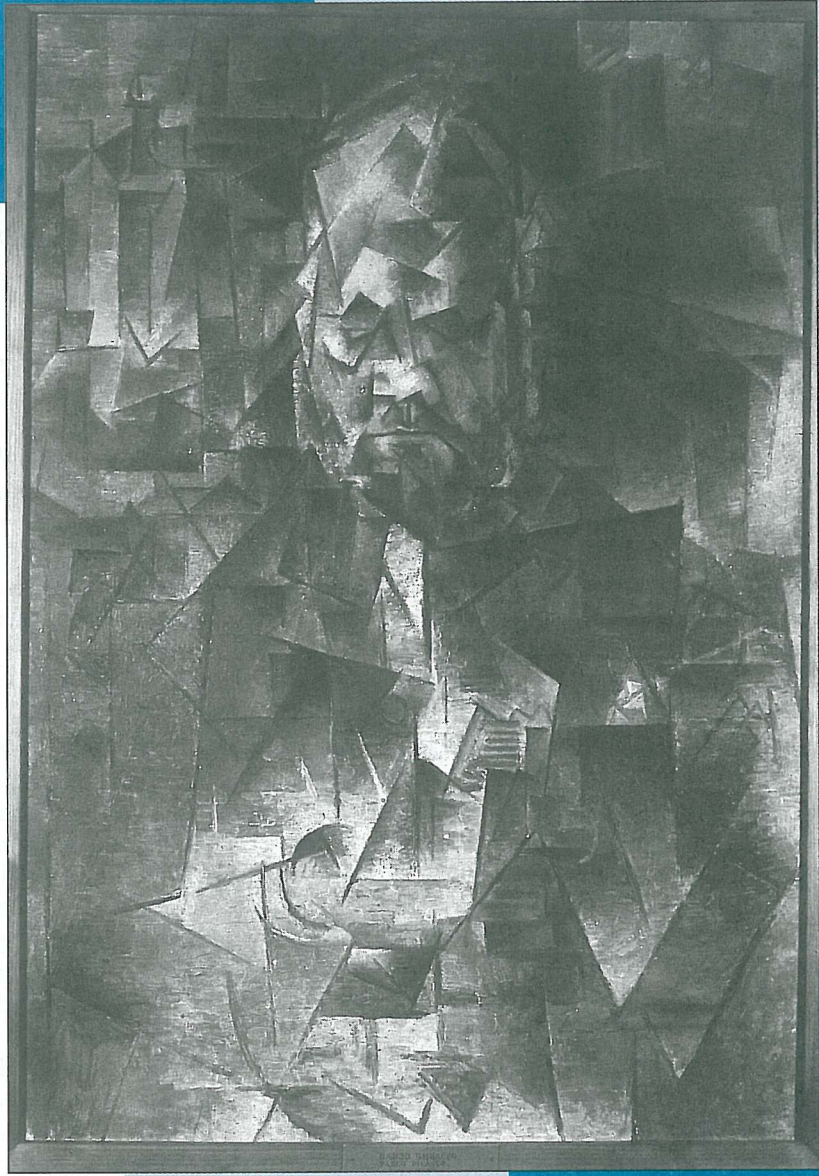
Source: Erikson, 1975.

Thought Questions

As you think about this autobiographical case, consider the following questions:

1. Why did Erikson feel like a “stranger in his own culture”?
2. What are the biological, psychological, and societal factors that contributed to Erikson's identity crisis?
3. What factors from childhood appear to be influencing his experiences as an adolescent?
4. What factors might have contributed to Erikson's ability to cope with the challenges of this period of his life, eventually finding a direction and meaning to which he could commit his talent and energy?
5. Based on what Erikson tells about his childhood and adolescence, how might his own life experiences have influenced the nature and focus of his psychosocial theory?

Chapter 3



Cubism is like theoretical painting. It moves beyond the surface to reveal the elements of which the subject is composed. Theories provide ways of understanding behavior by introducing structures and processes that are not immediately observable.

Major Theories for Understanding Human Development

CHAPTER OBJECTIVES

THE THEORY OF EVOLUTION

Implications for Human Development
Links to Psychosocial Theory

PSYCHOSEXUAL THEORY

Implications for Human Development
Links to Psychosocial Theory

COGNITIVE DEVELOPMENTAL THEORY

Basic Concepts in Piaget's Theory
Implications for Human Development
Vygotsky's Concepts of Cognitive Development
Implications for Human Development
Links to Psychosocial Theory

THEORIES OF LEARNING

Classical Conditioning
Implications for Human Development
Operant Conditioning
Implications for Human Development
Social Learning
Implications for Human Development
Cognitive Behaviorism
Implications for Human Development
Summary of the Learning Theories
Links to Psychosocial Theory

CULTURAL THEORY

Implications for Human Development
Links to Psychosocial Theory

SOCIAL ROLE THEORY

Implications for Human Development
Links to Psychosocial Theory

SYSTEMS THEORY

Implications for Human Development
Links to Psychosocial Theory

CHAPTER SUMMARY

END OF CHAPTER CASE

Chapter Objectives

- To review the basic concepts of seven major theories that have guided research in the study of human development. These theories include: evolutionary theory, psychosexual theory, cognitive developmental theory, theories of learning, cultural theory, social role theory, and systems theory.
- To examine the implications of each theory for the study of human development.
- To clarify the links between each theory and psychosocial theory.

I imagine that you are taking a long road trip across the country. In order to plan your route and find your way, you might want a map of the United States, which gives you major highways and the location of urban centers and major scenic areas. However, you will probably want to get more detailed maps of the states you will visit. Once you arrive at a city, or a state or national park, you will need tourist maps showing the historic sites, shopping areas, hotels, and walking trails of the specific location so that you can enjoy each spot to its fullest.

With respect to this book, psychosocial theory is like the map of the United States. It provides the broad, conceptual umbrella for our approach to the study of human development. However, we need other theories to explain behavior at different levels of analysis. The theories presented in this chapter are like the maps of the states, cities, and special scenic areas. They guide research and thinking in a variety of specific aspects of human development.

First, we present the parent theory, evolution, to provide a sense of the large picture of species change over long time periods. Evolutionary theory places the study of individual development in the broad context of the history of the species. Next,

psychosexual theory will be discussed. A forerunner of psychosocial theory, psychosexual theory explains the relationship of mental activity to changing needs, wishes, and drives with a particular focus on the role of sexual and aggressive needs. Another developmental perspective, cognitive theory, describes the maturation of capacities for logical thought. Learning theory, cultural theory, social role theory, and systems theory each introduce mechanisms that explain how the environment makes its unique impact on the person and guides the content as well as the direction of growth. These theories attempt to account for individual differences in life stories by offering various processes of adaptation to the social environment.

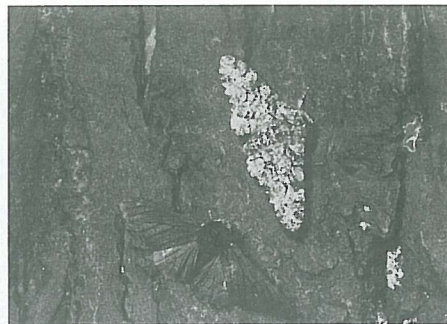
The use of a family of theoretical perspectives helps to maintain flexibility in interpreting behavior and facilitates our understanding of the integration of individuals and social systems. With each theory, a brief explanation of the focus of the theory and a few major constructs are presented, along with an analysis of the contributions of the theory to the study of development and links to psychosocial theory. In subsequent chapters, additional ideas from many of the theories will be presented as they relate to specific topics. ❖

THE THEORY OF EVOLUTION

The theory of evolution explains how diverse and increasingly more complex life forms come to exist. Evolutionary theory assumes that the natural laws that apply to plant and animal life also apply to humans. The **law of natural selection** explains how, over generations, species gradually change to respond to changing environmental conditions (Darwin, 1859/1979). The law of natural selection claims that behavior is adapted to the environment in which it occurs. Natural selection operates at the level of genes that are passed, via an individual organism's reproductive success, from one generation to the next. Reproductive success, sometimes called **fitness**, varies among members of a species (Archer, 1991).

Every species produces more offspring than can survive to reproduce because of limitations of the food supply and natural dangers. Darwin observed that there was quite

The value of variability in the species is illustrated in the fate of the silvery and black peppered moths. As their environment became increasingly polluted, the silver peppered moths were more readily seen and eaten, but the dark peppered moths survived.



a bit of **variability** among members of the same species in any given location. The variability he observed was due to genetic differences. As a result of varying patterns of genetic makeup, some individuals were better suited than others to their immediate environment and were more likely to survive, mate, and produce offspring. These offspring were also more likely to have characteristics appropriate for that location. Overall, the species would change to become more successful, or it would evolve into a new species. If the environment changed (in climate, for example), only certain variations of organisms would survive, and again species would evolve. Forms of life that failed to adapt would become extinct. It is important to understand that it is the variability within a species that ensures the species' continuation or its development into new forms.

Two subspecialties that have emerged from evolutionary theory are ethology and sociobiology. **Ethology** is an extension of evolutionary theory into the realm of animal and human behavior. It focuses on describing the unique adaptive behaviors of specific species, such as mating, caregiving, or strategies for obtaining resources. Through comparisons among species, this type of study helps clarify the contributions of each generation to the long-term survival of the species (Charlesworth, 1992).

Sociobiology is the scientific study of the biological basis of social behavior. It focuses on practices within populations that increase the likelihood of certain genes surviving in subsequent generations of offspring (Wilson, 1978). It, too, takes a comparative approach, looking at the potential role of genes in guiding the nature and quality of such practices as the subordination of females, polygamy, homosexuality, and altruism within populations and across species.

Implications for Human Development

Evolutionary theory assumes that human beings arrived at their current forms through a long process of natural selection. Thus, one must conclude that the basic biological mechanisms underlying human behavior, such as the development of the brain, the capacity for coordinated movement, the nature of infant instincts, and the sensory and perceptual systems, are a result of their adaptive advantage (Gray, 1996). With its focus on reproductive success, evolutionary theory highlights three phases of the life history: healthy growth and development leading up to the reproductive period; success in mating and the conception of offspring; and the ability to parent offspring so they can reach reproductive age and bear offspring of their own (Charlesworth, 1992).

An organism is most vulnerable during childhood; children require care if they are to survive to reproductive age. It is important to understand that biological capacities and the environments in which they can be expressed operate together to produce behavior. A genetic plan, shaped through hundreds of generations, guides infants' predispositions, capacities, and sensitivities. Evolutionary theory points out that infants come into the world with a range of innate capacities and potentials. They have competence that permits them to establish social contact, to organize information, and to recognize and communicate their needs. At the same time, these innate capacities are expressed within specific contexts. The quality of parenting, adequacy of resources, and competition for resources with other siblings are examples of environmental factors to which infants must adapt. Childhood experiences shape the future of the human species by providing the context for the establishment of attachments, meaningful

From an evolutionary perspective, the attachment behavioral system is central to the offspring's survival. Adults have strategies for monitoring and protecting their young, and infants have capacities for alerting their caregivers when they are frightened or upset. What behaviors in human infant-mother pairs help them stay connected in times of distress?



social competence, and problem-solving capacities, all of which have a bearing on an individual's behavior in adulthood, particularly the ability to form intimate relationships and to parent offspring. In adolescence and adulthood, the evolutionary focus shifts to emerging reproductive capacities—the ability to find a mate, reproduce, and rear one's young so that they can reach their own reproductive age. The adaptive success of one generation is based largely on its ability to pass its genetic information on to future generations.

The evolutionary perspective draws attention to the interconnection between an individual's life history and the long-range history of the species. Principles of natural selection operate slowly over generations. However, the reproductive success of individuals over the course of their own life span will determine whether their genetic material continues to be represented in the larger population. Many general areas of

human behavior are functionally relevant to the successful survival and fitness of individuals and groups (Charlesworth, 1992). They include:

- Reproductive strategies, such as having few or many sex partners; or early or later entry into sexual activity.
- Infant immaturity requiring prolonged care.
- Infant-caregiver attachment.
- Parent-child conflicts and sibling rivalry.
- Peer group formation and functions, especially cooperation, competition, dominance, and submission.
- Pair bonding and mate selection.
- Helping behavior and altruism.
- Learning as adaptive behavior.
- Individual creation and modification of the environment.
- Social evolution and the elaboration of rites, rituals, and religions.

The evolutionary perspective directs attention to the importance of variability for a species' survival. Although theories of development typically focus on general patterns of continuity and change across individuals, evolutionary theory prompts one to attend to individual differences as a given in the study of development. They are not a factor to ignore or exclude as a source of error, but a factor to attend to in order to understand the capacity of the human species to adapt successfully to a wide variety of environmental conditions.

Links to Psychosocial Theory

Evolutionary theory is the larger framework within which broad issues of individual adaptation, species adaptation, and species survival are considered. Erikson drew heavily upon concepts first introduced in Huxley's (1942) theory of **psychosocial evolution**. Huxley studied the processes through which human beings influenced their own adaptation. He focused on the creation of new information and the invention of strategies for communicating that information from one generation to the next. Psychosocial theory translates the idea of species adaptation to the individual level through the concepts of the psychosocial crisis and coping. Each individual encounters a necessary developmental struggle in which individuals repeatedly experience tension between their own traits and capacities and the requirements and demands of the environment.

Each generation within a society faces similar challenges to cycle critical resources to the young, to nurture competence and a capacity for caring in the new generation of adults, and to inspire younger generations with hope and anticipation about the prospects of growing old. Within cultural groups, rites and rituals serve to protect and preserve resources, direct the rearing of children, and assist individuals through key transitions. Groups that adapt successfully are those that effectively cycle resources, help new members, and pass along information that will help individuals cope with future challenges.

One unique aspect of the human species is our ability to modify the environment in significant ways. We not only adapt to the environment but also alter it to suit our needs. Many of these modifications of the environment increase the chances that individuals within the group will survive; however, some modifications introduce grave risks. Psychosocial theory indicates a direction of individual growth in which the adults of a society use their competence and power to ensure the safety and well-being of future generations.

PSYCHOSEXUAL THEORY

Freud's (1933/1964) psychosexual theory focuses on the development of an individual's emotional and social life. Although much of this theory has been revised, refuted, or repressed, many contributions of psychosexual theory continue to influence contemporary personality theories and the study of development. Freud focused on the impact of sexual and aggressive drives on the individual's psychological functioning. He distinguished between the impact of sexual drives on mental activity and their effect on reproductive functions. Based largely on material from therapeutic sessions with his patients, Freud recognized the profound influence of sexuality on mental activity. In addition, he came to believe that very young children had strong sexual drives. He argued that although children are incapable of reproduction, their sexual drives operate to direct aspects of their fantasies, problem solving, and social interactions.

The most enduring contribution of psychosexual theory is the identification of domains of consciousness, referred to as the **conscious**, the **preconscious**, and the **unconscious**. Many explanations for seemingly irrational behavior can be found by analyzing the conflicting sexual and aggressive needs, fears, and wishes that are housed in the unconscious.

Psychosexual theory describes three basic structures of the personality: the **id** (the sexual and aggressive impulses), the **ego** (reality-oriented functions), and the **superego** (the moral, ethical principles). As ego develops, the child becomes increasingly adept

Freud's patients visited him in his office in Vienna, surrounded by cultural artifacts that were sources of stimulation to his own thinking. Central to the office was the famous couch. Freud invented the technique of free association as a way to gain insight into the unconscious.





In each of us, the id is the source of instincts and impulses. At age 22, Picasso drew this devilish caricature of himself, suggesting his impulsive, primate nature.

Implications for Human Development

at satisfying id impulses in ways that are socially acceptable and do not offend the moral and ethical content of the superego.

Frequently, id impulses become so strong that they threaten to overwhelm the ego. For example, a man may find himself extremely jealous of the time his wife is spending with their infant. He may have strong, hostile feelings toward the infant or his wife—feelings he believes are unacceptable. Under these conditions, Freud argued, defense mechanisms come into play to protect the ego from guilt and anxiety. **Defense mechanisms** include a variety of mental “tricks” that recast or distort the feelings so that they are more acceptable, or bury them so that they are removed from consciousness. Repression is a global defense in which the feelings and thoughts are simply pushed into the unconscious. Denial, claiming that the feelings or the experience never happened, and projection, placing the blame for the feelings onto someone else, are two of the more common, primitive defense mechanisms. At moments of heightened emotionality or threat, everyone uses some form of defense to help them preserve some semblance of control. However, the use of defense mechanisms to manage anxiety over a long time can be destructive to reality testing and to forward movement in adapting to the new, altered reality.

Psychosexual theory describes five stages of development: the oral, anal, phallic, latent, and genital stages. At each stage, the focus of conflict around the expression of sexual and aggressive impulses changes. The stages reflect shifts in the body areas where pleasure is experienced, and shifts in the orientation to self and social relationships.

In adolescence, a resurgence of sexual and aggressive energy challenges many of the ego’s earlier coping strategies. The ego must find new ways to express and modify impulses. An essential aspect of this process is thought to be the separation of ego from earlier figures of attachment and investment of energy in the self as well as in new social relationships.

Psychosexual theory emphasizes the importance of the tension between interpersonal demands and intrapsychic demands in the shaping of personality. The ego develops skills for dealing with the realities of the interpersonal world. It also develops skills for satisfying personal needs and for imposing personal standards and aspirations on the way these needs are satisfied. The expectations of others, particularly parents, are internalized and given personal meaning in the formation of the superego. By developing this idea, Freud was able to show how a child translated the demands of the interpersonal world into his or her own personal way of functioning. At the same time, new demands and experiences continue to play a role in the development of personality. Freud focused on the effects of sexual impulses on personal and interpersonal life throughout adulthood.

One of the major early contributions of psychoanalytic theory was the identification of the influence of childhood experiences on adult behavior. Freud argued that the basic dynamics of personality are established by the age of 6 or 7. Psychoanalytic theory was unique in its focus on stages of development, family interactions, and unresolved family conflicts as explanations for ongoing adult behavior. The emphasis Freud gave to the importance of parenting practices and their implications for psychosexual development provides one of the few theoretical frameworks for examining parent-child relationships. Many of the early empirical studies in developmental psychology focused on issues that derived from his theory, such as child-rearing and discipline practices, moral development, and childhood aggression.

The psychoanalytic approach recognizes the importance of motives, emotions, and fantasies that guide behavior. Within this framework, human behavior springs at least

as much from emotional needs as from reason. The theory suggests that underlying motives and wishes explain behaviors that otherwise might not make sense. Psychoanalytic theory recognizes domains of thought that may not appear to be logical to the observer, but that make sense from the point of view of the person. Many domains of mental activity, including fantasies, dreams, primary process thoughts and symbols, and defense mechanisms, influence how individuals make meaning from their experiences. Through the construct of the unconscious, Freud provided a means for conceptualizing explanations for thoughts and behaviors that appear irrational, self-destructive, or contradictory. The idea that development involves efforts to find acceptable outlets for strong, often socially unacceptable impulses still guides therapeutic intervention with children, adolescents, and adults.

Another critical point is Freud's open recognition of the role of sexual impulses during childhood. Freud believed that a sexual relationship with a loving partner is important for healthy adult functioning. He concluded that sexual impulses have a direct outlet in behavior during adult life. Freud recognized that children have sensual needs for stimulation and satisfaction, but they seemed to have no acceptable means to satisfy those needs. Today we are more aware of a child's need for hugging, snuggling, and physical warmth with loving caregivers, but most adults in our society still find it difficult to acknowledge that young children have sexualized impulses. Childhood wishes and needs, bottled up in the unconscious by defense mechanisms, guide behavior indirectly through symbolic expression, dreams, or, in some cases, the symptoms of mental disorders. We need only look at a daily newspaper to recognize that the acceptance and expression of sexual impulses continue to be points of conflict in modern society. Controversies over sexual dysfunction, sexual abuse, rape by strangers and acquaintances, sexual harassment in the workplace, sexually transmitted diseases, contraception, abortion, infidelity, and homophobia reveal the difficulties Americans have in dealing with the expression of sexual impulses.

Links to Psychosocial Theory

Both psychosexual theory and psychosocial theory are stage theories that address basic, qualitative changes in self-understanding and social orientation. Erikson, having been trained in psychoanalysis under Anna Freud and having been mentored by Freud and other members of the Analytic Institute, readily acknowledged his intellectual ties to Freud's psychosexual theory. Freud and Erikson both posited five stages from infancy through adolescence. Psychosexual theory deals with conflicts the child experiences in satisfying basic needs and impulses, especially sexual and aggressive impulses, within socially acceptable boundaries. Psychosocial theory expands this view by considering the broad range of social demands and social expectations that confront children at each point in development as well as the wide variety of competencies and social resources children have for meeting those demands.

Freud emphasized the role of sexual impulses in directing and shaping personality and social life.

Of particular note is the difference between how Freud and Erikson conceptualized the period of middle childhood. Freud referred to this time as **latency**, and argued that it was a time of relative quiet with respect to sexual and aggressive drives when no new personality characteristics were emerging. Erikson gave emphasis to these years as a time of critical focus on ego skills and mastery, highlighting the social expectations for children during the period from ages 6 to 12 to begin developing competence in skills and knowledge that are valued by the culture.

Both psychosocial theory and psychosexual theory describe characteristics and functions of the ego system. However, psychosocial theory goes beyond childhood and adolescence, suggesting the direction for ego development in early, middle, and later adulthood. Psychosocial theory gives a greater role to the individual in guiding and shaping the direction of development through the introduction of coping strategies that may redefine conflicts and identify new resources.

Sexual impulses and needs are central to the psychosexual analysis. In the psychosocial framework, sexual behavior is considered within the complex network of



social relations. Sex-role development, sexual relationships, sex-role identity, intimacy, marriage, and nurturing the marriage relationship are all elements of psychosocial development that are addressed as the product of a complex synthesis of thoughts, wishes, behaviors, and social expectations at various stages of life.

Psychosexual theory suggests that basic issues of personal development are in place by adolescence. The results of this development are played out for the remainder of adult life in a person's defensive style, fixations, typical sexual behavior and sexual fantasies, and the strategies for sublimating sexual and aggressive impulses. In contrast, psychosocial theory assumes that development goes on throughout life. The skills resulting from accomplishing new developmental tasks are learned and new social abilities are achieved. The radius of significant relationships expands, bringing new expectations and new sources of social support. As new conflicts arise, they stimulate new growth, and new ego qualities emerge as a result of successfully coping with each new challenge.

COGNITIVE DEVELOPMENTAL THEORY

Cognition is the process of organizing and making meaning of experience. Interpreting a statement, solving a problem, synthesizing information, critically analyzing a complex task—all are cognitive activities. Perhaps the most widely known and influential of the modern cognitive theorists is Jean Piaget. His concepts provide the initial focus of this section. Recent interest in the social framework within which cognition develops has been stimulated by the work of L. S. Vygotsky. Several of his important contributions, introduced toward the end of this section, complement and expand the developmental perspective on how cognition emerges and changes over the life course.

Basic Concepts in Piaget's Theory

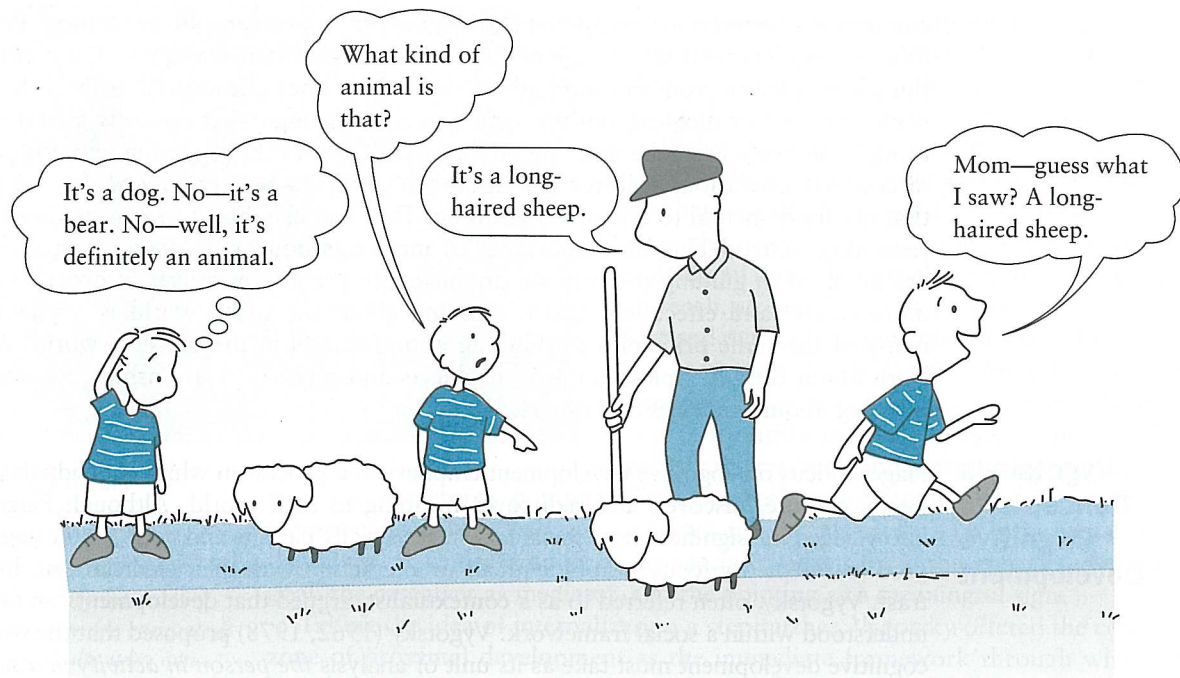
According to Piaget, every organism strives to achieve equilibrium. **Equilibrium** is a balance of organized structures, whether motor, sensory, or cognitive. When structures are in equilibrium, they provide effective ways of interacting with the environment. Whenever changes in the organism or in the environment require a revision of the basic structures, they are thrown into disequilibrium (Piaget, 1978/1985). Piaget focused both on equilibrium with the environment, achieved through the formation of **schemes** (the structure or organization of action in thought) and **operations** (the mental manipulation of schemes and concepts) that form systematic, logical structures for comprehending and analyzing experience, and on equilibrium within the schemes and operations themselves.

Equilibrium is achieved through **adaptation**, a process of gradually modifying existing schemes and operations in order to take into account change or discrepancies between what is known and what is being experienced (Figure 3.1). Adaptation is a two-part process in which the continuity of existing schemes and the possibility of altering schemes interact. One part of adaptation is **assimilation**, the tendency to interpret new experiences in terms of an existing scheme. Assimilation contributes to the continuity of knowing. The second part of adaptation is **accommodation**, the tendency to modify familiar schemes in order to account for new dimensions of the object or event that are revealed through experience.

Piaget hypothesized that cognitive development occurs in four stages, each characterized by a unique capacity for organizing and interpreting information. At each new stage, competences of the earlier stages are not lost but are integrated into a qualitatively new approach to thinking and knowing. The essential features of the stages are introduced here. They will be discussed in greater detail in subsequent chapters.

The first stage, **sensorimotor intelligence**, begins at birth and lasts until approximately 18 months of age. This stage is characterized by the formation of increasingly complex sensory and motor schemes that allow infants to organize and exercise some control over their environment.

The second stage, **preoperational thought**, begins when the child learns a language and ends about age 5 or 6. During this stage, children develop the tools for representing schemes symbolically through language, imitation, imagery, symbolic play, and symbolic drawing. Their knowledge is still very much tied to their own perceptions.

**FIGURE 3.1**

Adaptation = assimilation and accommodation

The third stage, **concrete operational thought**, begins about age 6 or 7 and ends in early adolescence, around age 11 or 12. During this stage, children begin to appreciate the logical necessity of certain causal relationships. They can manipulate categories, classification systems, and hierarchies in groups. They are more successful at solving problems that are clearly tied to physical reality than at generating hypotheses about purely philosophical or abstract concepts.

The final stage of cognitive development, **formal operational thought**, begins in adolescence and persists through adulthood. This level of thinking permits a person to conceptualize about many simultaneously interacting variables. It allows for the creation of a system of laws or rules that can be used for problem solving. Formal operational thought reflects the quality of intelligence on which science and philosophy are built.

At the start of each new stage, the child experiences a type of egocentrism or imitation in point of view. With experience, children gain new objectivity about their perspective and are able to step back from the situation and see it more flexibly. Each of the stages will be described in some detail in subsequent chapters.

Implications for Human Development

Piaget's theory has had an enormous influence on research in the study of cognition. At the risk of oversimplifying, let us give a few of the implications of the theory for the study of child development. First, the theory suggests that cognition has its base in the biological capacities of the human infant—knowledge is derived from action. For example, infants learn about the features of objects by grasping and sucking on them. Second, discrepancies between existing schemes or concepts and contemporary experiences promote cognitive development. Encounters with all types of novelty, especially experiences that are moderately distinct rather than widely different from what is already known, are important for advancing new ideas and new ways of organizing thought. Extending this idea, encounters with differences in opinions through discussion and reading are just as important in adolescence and adulthood as encounters with different types of sensory materials in infancy and toddlerhood.

Third, infants do have the capacity for thinking and problem solving. Although infants do not make use of symbolic strategies, they are able to establish certain logical

connections between means and ends that guide their problem-solving efforts. Fourth, infants, toddlers, and school age children think in different ways, and the ways they think are different from the ways adults think. This does not mean that their thinking is unorganized or illogical, but the same principles of logic that typically govern adult thought do not govern the thinking of young children. Fifth, beginning with the period of concrete operations children can approach problems using many of the principles that are fundamental to scientific reasoning. They can also begin to reason about their reasoning—introducing the importance of **metacognition** or the many strategies that are involved in guiding the way we organize and prepare ourselves in order to think more clearly and effectively. Sixth, thinking about the social world is regulated by many of the same principles as thinking about objects in the physical world. As we learn about the principles that govern objects and physical relationships, we are also learning about ourselves and others.

Vygotsky's Concepts of Cognitive Development

Piaget's focus on cognitive development emphasizes a process in which individuals investigate, explore, discover, and rediscover meaning in their world. Although Piaget acknowledged the significance of social factors, especially parents and peers, in the cognitive process, his theory focuses on individuals in interaction with their environment. In contrast, Vygotsky, often referred to as a **contextualist**, argued that development can only be understood within a social framework. Vygotsky (1962, 1978) proposed that the study of cognitive development must take as its unit of analysis *the person in activity in a setting*. The person and the culture are intricately interwoven through the process of social interaction. New levels of understanding begin at an interpersonal level as two individuals, initially an infant and an adult, coordinate their interactions. Eventually interpersonal collaboration becomes internalized to make up the child's internal mental framework. Through continuous interaction with others, especially adults and older children, a child revises and advances his or her levels of understanding.

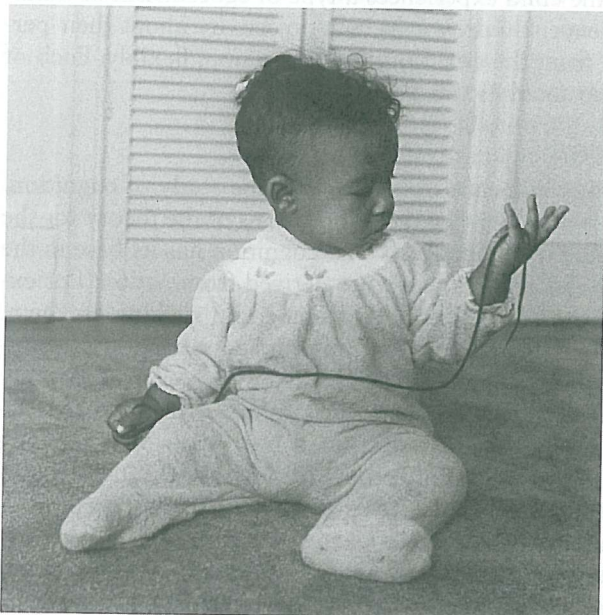
"New understanding, gained through collaboration, is a product of the child's original understanding, the partner's different understanding, the child's difficulties with the task and the ways they are expressed in the course of their interaction, the partner's response to those difficulties, and so on. Since this process evolves over time, and each person's responses depend on what the other has previously done or said, the outcome is one that cannot be attributed to either one or the other. The unit of analysis extends beyond the individual." (Tudge & Winterhoff, 1993, p. 76).

Three of the central concepts in Vygotsky's theory are introduced here: culture as a mediator of cognitive structuring, movement from the intermental to the intramental, and the zone of proximal development.

Vygotsky argues that cognitive development can only be understood in the context of culture. Think for a moment about the many ways that culture shapes the content of thought and the processes through which ideas are developed. A simple conversation between a mother and a child or a situation in which a grandparent is trying to instruct a young child include layers of cultural beliefs and strategies—beliefs about what children think about, the skills they are encouraged to attain, the sources of information that are available to them, the ways that information is shared, the kinds of activities that children, adolescents, and adults are permitted to engage in, and the limits that are placed on participation in certain settings or certain forms of interaction (Miller, 1993).

Of the many elements of culture that shape cognition, one that was of special interest to Vygotsky was the idea of tools and signs as human inventions that shape thought. Technical *tools* like plows, cars, and weapons and *signs*, sometimes referred to as psychological tools, like symbolic systems, counting systems, and strategies for remembering, modify the person's relationship to the environment.

Experimentation with a string is an example of sensorimotor exploration. This infant is discovering the properties of the string through tactile, visual, and motor strategies. What are some examples of sensorimotor exploration that you continue to use as an adult?





Vygotsky's theory emphasizes the social context of cognitive development. Children often learn by interacting with older, more competent peers or adults who can answer their questions and show them how to solve problems.

meaningful gesture—pointing. The caregiver's understanding of the gesture and **intermental** coordination between caregiver and infant result in an **intramental** process for the infant, an understanding of the special relationship in this case between the desired goal, the caregiver as mediator, and the pointing as a meaningful sign.

Taking the idea of internalization a step further, Vygotsky offered the concept of the **zone of proximal development** as the immediate framework through which learning and development converge. The zone is "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p.86).

We have all experienced a situation in which we were able to solve a task only with the assistance and advice of someone else. The typical efforts of parents to help a child put together a jigsaw puzzle by suggesting strategies, like selecting all the straight-edged pieces first to make the border, or sorting the many pieces into those with a similar color, is an example of how learning takes place within the zone. Vygotsky suggests that the level of functioning a person can reach when taking advantage of the guidance of others reflects the functions that are in the process of maturation, as compared to those that have already matured. Learning within the zone of proximal development sets into motion the reorganization and internalization of existing developmental competence, which then become synthesized at a new, higher intramental level.

Implications for Human Development

Vygotsky's theory suggests that the boundaries between the individual and the environment are much less clear than one might infer from most other theories of human development. In fact, he directs attention to the guiding role of social interaction and culture in shaping and orienting cognition, thus bringing the study of cognitive development into much greater harmony with many of the concepts of psychosocial theory than might be seen in Piaget's framework.

Several specific implications of Vygotsky's work can be inferred (Davydov, 1995). First, the mental structures and functioning of people raised in a specific culture will be different from those raised in other cultures, just as the thinking of a toddler is different from the thinking of an adult. Second, because of the way that intermental experiences and networks structure intramental events, one's family and others who influence and control the structure of early learning and problem-solving experiences will have a strong influence on the structure of one's thinking. Third, individuals can promote their own cognitive development by seeking interactions with others who can help draw them to higher levels of functioning within their zone of proximal development.

Links to Psychosocial Theory

Both cognitive developmental theory and psychosocial theory focus on development as a product of ongoing interactions between the individual and the environment. For both theories, psychological development is a product of some discrepancies, referred to as disequilibrium in cognitive developmental theory and as psychosocial crises in

psychosocial theory. Piaget's theory, like psychosocial theory, proposes a set of stages of development, with each stage growing from and integrating achievements of earlier stages. Piaget considered development in four stages that covered the period from infancy through adolescence. Erikson described these same years in five stages, drawing a greater distinction in functioning between early and middle childhood than did Piaget. Although contemporary scholars are addressing issues of changes in cognitive functioning in adulthood, Piaget's theory does not offer any hypotheses about the qualitative changes that might follow the period of formal operational reasoning, whereas psychosocial theory makes clear predictions about the direction of ego development in early, middle, and later adulthood.

Perhaps the most significant distinction between the theories is their focus or range of applicability. Piaget's focus, as well as that of Vygotsky, is on the cognitive domain, especially the process of knowledge acquisition and logical reasoning. The meaning a person makes of a situation depends largely upon the stage of mental development attained. Feelings, social relationship, and self-understanding are viewed as cognitive schemes that are constructed with the same logic that the person applies to the understanding of objects. Psychosocial theory considers the emotional domain as a pervasive filter through which a person organizes and interprets experience. The nature of the resolution of each psychosocial crisis guides a person's ability to adapt and mature within society. As a psychotherapist, Erikson was aware of the many instances in which one's reasoning abilities and problem-solving skills were disrupted by strong emotional conflicts, unconscious wishes and fears, and conflicting social demands. He draws attention to the broad array of outlooks and coping strategies—such as trust and mistrust, hope and withdrawal—that determine the direction of psychological development from one period of life to the next. For example, feelings of hope or hopelessness will influence a person's willingness to engage in new learning situations with interest and enthusiasm or with caution and apprehension. The nature of one's cognition during a period of life will be influenced by one's psychosocial orientation.

Vygotsky's theory provides an important link between Piaget's emphasis on the maturation of logical reasoning, and psychosocial theory's emphasis on the maturation of self in society by emphasizing the interpersonal nature of cognition. The idea of a zone of proximal development relates closely to the construct of the radius of significant relationships, highlighting the unique interpersonal and cultural context of all aspects of knowing, whether it is knowing about the logic of the physical world or about the logic of relationships.

THEORIES OF LEARNING

Learning theorists have proposed mechanisms to account for the relatively permanent changes in behavior that occur as a result of experience. The reason that humans have such an extensive capacity to adapt to changes in the environment is that they are so well equipped to learn. Four theories of learning that have made significant contributions to the study of human development are reviewed below: (1) classical conditioning, (2) operant conditioning, (3) social learning, and (4) cognitive behaviorism.

Classical Conditioning

The principles of classical conditioning, sometimes referred to as Pavlovian conditioning, were developed by Ivan Pavlov (1927/1960). **Classical conditioning** highlights the types of learning that occur when events take place close together in time and thereby acquire similar meaning. In much of his work, Pavlov used the salivary reflex as the response system. He carried out an extensive body of research in an effort to understand the conditions under which stimuli in the environment other than food would elicit or inhibit salivation.

The model for classical conditioning is seen in Figure 3.2. The four basic elements in a classical conditioning experiment are the neutral stimulus (NS), the unconditioned stimulus (UC), the unconditioned response (UR), and the conditioned response (CR). Before conditioning, the bell is a **neutral stimulus (NS)**. It elicits a response of interest or

attention, but nothing more. The sight and smell of food are **unconditioned stimuli (US)** that elicit salivation, the **unconditioned response (UR)**. No learning is required for the smell of food to evoke salivation. During conditioning trials, the bell is rung shortly before the food appears. The dog is said to have been conditioned when it salivates to the sound of the bell, even before the food is presented. The bell, therefore, comes to control the salivation response. It becomes a **conditioned stimulus**. The bell is no longer neutral; it has come to have meaning as a signal for food. Salivation that occurs in response to the bell alone is called the **conditioned response (CR)**. You might be able to relate to this form of learning by thinking of your own reaction when you look at your watch or the clock and realize that it is approaching dinner time. Often, just knowing that it is nearing the time when you usually eat is a stimulus for feeling hunger pangs.

Conditioning does not take place randomly between any two events linked in time. A conditioned response is established to the degree that there is a “meaningful” relationship between the NS and the US. Usually they must occur together many times before conditioning is established. Furthermore, the NS itself is not totally neutral. A visual stimulus such as a colored light will prompt visual orienting, for instance, whereas an auditory stimulus may simply increase attention or arousal. In a conditioning experiment, the learner builds many associations simultaneously. Although the focus of a particular experiment may be on establishing a link between one NS and one US, the learner will build links among many elements of the environment—its visual, auditory, and olfactory components, including the US. Pavlovian conditioning provides a model for understanding how multiple associations, sometimes stored at the unconscious level, can be established and triggered in the process of concept formation, memory, and problem solving (McClelland & Rumelhart, 1986; Rumelhart & McClelland, 1986).

Implications for Human Development

Classical conditioning can account for a great deal of the associational learning that occurs throughout life. When a specific symbol is paired with an image, emotional reaction, or object, that symbol takes on new meaning. The associations that are made through classical conditioning may involve labels and concepts, but they do not necessarily require language skills. During infancy and toddlerhood, a variety of positive and negative emotional reactions are conditioned to people, objects, and environments as the child develops attachments. Your reactions to the taste of a certain type of food or the feel of a particular material may be the result of conditioned learning that has persisted until adulthood. Similarly, fears can be the results of classical conditioning. Many people recall at least one frightening experience from childhood, such as nearly drowning, being beaten, or falling from the top of a slide. The association of fear or pain with a specific target may lead to systematic avoidance of that object for the rest of one's life.

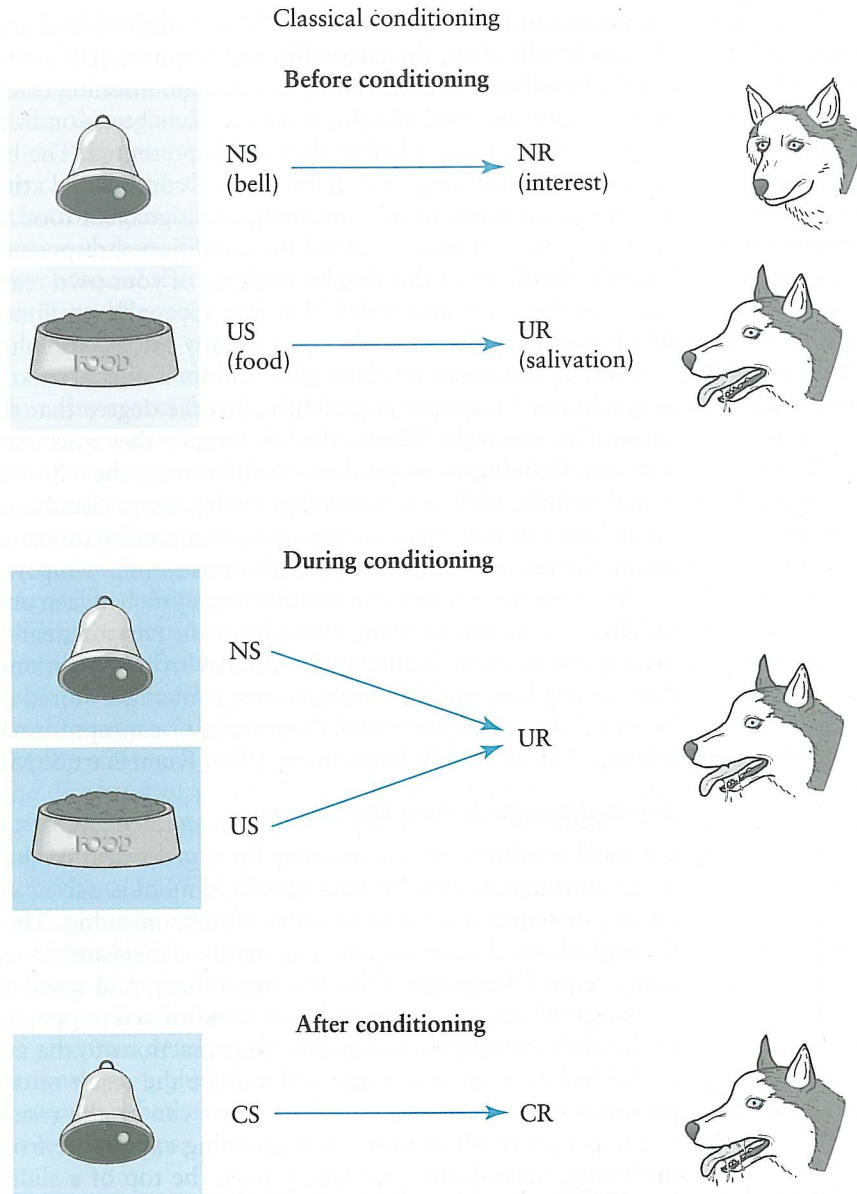
Operant Conditioning

Operant conditioning emphasizes the role of repetition and the consequences of behavior in learning. In this type of learning process, behaviors are strengthened when they are followed by positive consequences and weakened when they are followed by negative consequences. One of the best-known American learning theorists, B. F. Skinner, developed many of the principles of operant conditioning. Skinner's (1938) work focused on the modification of voluntary behaviors as a result of the consequences of those behaviors. In the traditional operant conditioning experiment, the researcher selects a response in advance and then waits until the subject makes the desired response (or at least a partial response). Then the experimenter presents a reinforcement. **Reinforcement** is operationally defined as any stimulus that makes a repetition of the response more likely.

There are two kinds of reinforcers. Some, such as food and smiles, increase the rate of response when they are present. These are called positive reinforcers. Others, such as electric shock, increase the rate of response when they are removed. These are called negative reinforcers. Suppose a mother gets upset whenever she hears her baby cry. She may try a number of things to stop the crying—rocking, feeding, talking, or changing the baby's diapers. If one of these behaviors leads to an end to the noise, it

FIGURE 3.2

Classical conditioning



NS = Neutral stimulus

NR = Neutral response

US = Unconditioned stimulus

UR = Unconditioned response

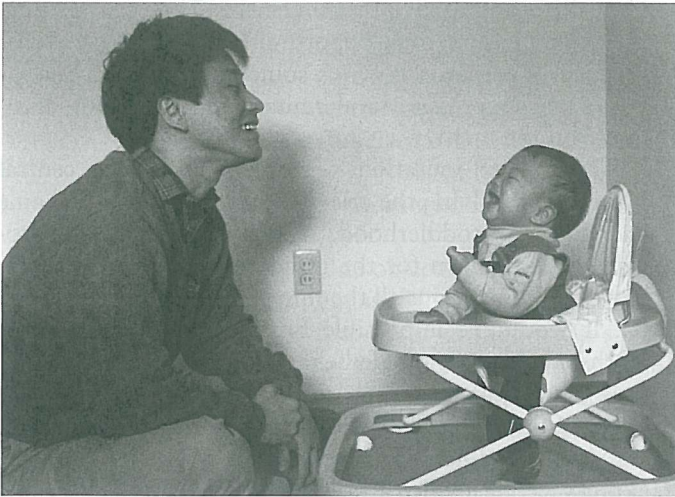
CS = Conditioned stimulus

CR = Conditioned response

Before conditioning, the bell is a neutral stimulus that evokes interest but no other response. With several pairings of the bell and food, the bell becomes a conditioned stimulus that evokes the conditioned salivation response.

is reinforced. The mother is more likely to try that behavior the next time. The baby's cry is a negative reinforcer because when it stops, the specific caregiving response is strengthened.

In many instances, the behavior to be learned is one that has never been performed before. How can you be reinforced for making a complex response if you have never done it? One means of developing a new complex response is **shaping**. (Davey & Cullen, 1988). The response is broken down into its major components. At first a response that is only an approximation of one element of the behavior is reinforced. Gradually new elements of the behavior are added, and a reinforcement is given only



Smiling is an important positive reinforcement. The dad's smile encourages the child, and the child's laughter keeps the dad engaged in the dialogue. What are some other examples of how social behavior serves as a positive reinforcement?

conditions of continuous reinforcement are very vulnerable to **extinction**—that is, if the reinforcement is removed for several trials, performance deteriorates rapidly.

Some schedules vary the amount of time or the number of trials between reinforcements. This procedure is called **intermittent reinforcement**. The learner responds on many occasions when no reinforcement is provided but does receive reinforcement every once in a while. Such schedules result in the most durable learning. Intermittent reinforcement lengthens the time an operant behavior remains in the learner's repertoire after reinforcement has been permanently discontinued (Ferster & Culbertson, 1982).

An intermittent reinforcement schedule is probably most like real life. It would be very difficult for anyone to learn a behavior if every instance of it had to be reinforced. A child often exhibits a new response when no observers are present, when teachers are attending to other matters, or in the context of other behaviors that are followed by a negative consequence. Research on operant conditioning demonstrates that conditions of intermittent reinforcement are precisely those under which the longest-lasting habits are formed.

Implications for Human Development

The principles of operant conditioning apply whenever the environment sets up priorities for behavior and conditional rewards or punishments for approximating a desired behavior. People change whenever their operant behaviors adapt to changes in environmental contingencies. The environment controls the process of adaptation through the role it plays in establishing and modifying contingencies (Skinner, 1987). Behavior can be modified in the desired direction as long as the person who is guiding the conditioning has control over the distribution of valued rewards. These principles are especially applicable to the learning that takes place during toddlerhood (ages 2 and 3) and early school age (4 to 6). Children of these ages are unlikely to be able to consider the existing framework of reinforcement. Once individuals analyze a reinforcement schedule, they may choose to adapt to it, resist it, or redefine the environment in order to discover new sources of reinforcement.

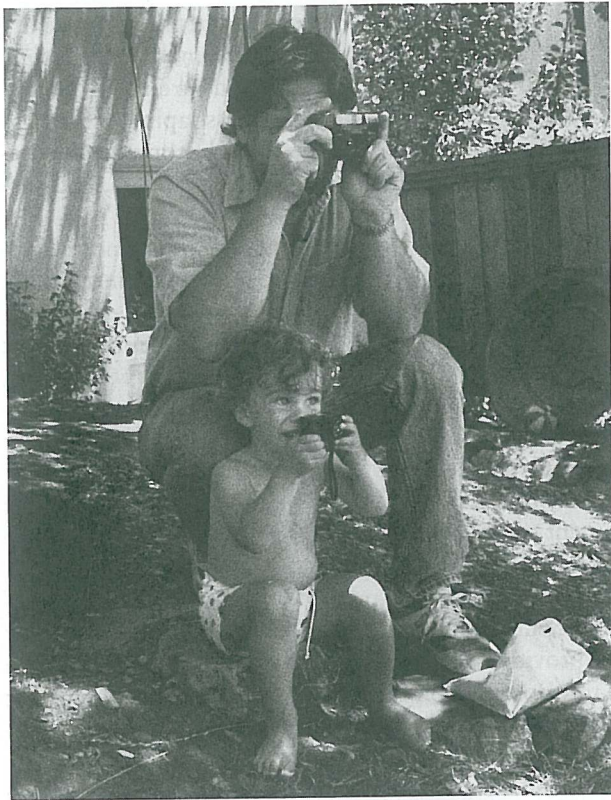
The operant conditioning process occurs throughout life. Although one typically thinks of adults establishing the reinforcement schedules that shape the behavior of children, it is clear that a child's behavior is often a reinforcement for an adult. A child's smile or laugh, or enthusiasm or attention, are the rewards that modify a parent's or a teacher's behavior. Negative reinforcement is a process that is often used to account for moral behavior. In a well-socialized person, anxiety and guilt build up in anticipation of performing some socially unacceptable behavior. By resisting the temptation to perform the misbehavior, the anxiety and guilt are reduced. Thus, restraint or social control is negatively reinforced.

Social Learning

The concept of **social learning** evolved from an awareness that much learning takes place as a result of observing and imitating other people's behavior (Bandura & Walters, 1963). Changes in behavior can occur without being linked to a specific pattern

when two or three components of the response are linked together. Once the person makes a complete response, earlier approximations are no longer reinforced. Parents often use the shaping process to teach their young children such complicated behaviors as using the toilet, table manners, and caring for their belongings.

Within the field of operant conditioning, research has been devoted to understanding which conditions of learning result in the strongest, longest-lasting habits. **Schedules of reinforcement** refers to the frequency and regularity with which reinforcements are given. A new response is conditioned rapidly if reinforcement is given on every learning trial. This schedule is called **continuous reinforcement**. Responses that are established under



Social learning theory emphasizes the role of observation and imitation as means of learning new behaviors. Can you think of a new response that you recently learned through imitation?

of positive or negative reinforcement. They can also occur without numerous opportunities for trial-and-error practice. A person can watch someone perform a task or say a new expression and imitate that behavior accurately on the first try.

The role of **imitation** is emphasized as the central process in resolving the crisis of autonomy versus shame and doubt in toddlerhood. At that age, imitation provides a mechanism for the rapid acquisition of new behaviors. Think about all the things a child of 4 can say or do. It would be impossible for parents to deliberately teach a child every single behavior—they would have no time left to eat, sleep, or work. Children must acquire much of their knowledge by observing and imitating others. Adults provide the **models** for many activities. They express feelings, voice attitudes, perform tasks, and enact their moral values. By observing and imitating many of these behaviors, children become socialized into their family's and community's way of life.

Early research in social learning theory was devoted to identifying conditions that determine whether or not a child will imitate a model (Bandura, 1971, 1977, 1986). Children have been found to imitate aggressive, altruistic, helping, and stingy models. They are most likely to imitate models who are prestigious, who control resources, or who themselves are rewarded. Bandura and Walters

(1963) suggested that children not only observe the behaviors carried out by a model, but they also watch what happens to the model. When the model's behavior is rewarded, the behavior is more likely to be imitated; when the model's behavior is punished, the behavior is more likely to be avoided. When naughty behaviors go unpunished they too are likely to be imitated. This process is called **vicarious reinforcement**. Through observational learning, a child can learn a behavior and also acquire the motivation to perform the behavior or resist performing that behavior depending on what is learned about the consequences linked to the behavior. Thus, observational learning can hold the key to self-regulation and the internalization of standards for resisting certain behaviors as well as for enacting behaviors (Grusec, 1992).

Recent directions in social learning theory have taken an increasingly cognitive orientation, sometimes referred to as social cognition (Bandura, 1989, 1991). Through observational learning, the child becomes acquainted with the general concepts of the situation as well as the specific behaviors. Direct reinforcement or nonreinforcement provides one type of information about how to behave in a certain situation. In addition, people watch others, learn about the consequences of their actions, and remember what others have told or shown them and what they have read or learned about the situation. Over time, one forms a symbolic representation for the situation, the required behaviors, and the expected outcomes. A worker may learn that with one type of supervisor, it is appropriate to ask lots of questions and offer suggestions for ways of solving problems, while with another supervisor, it is better to remain quiet and try not to be noticed. The rules for behavior in each setting are abstracted from what has been observed in watching others, what happened following one's own behavior in the past, and what one understands about the demands in the immediate situation.

Implications for Human Development

The principles of social learning theory are assumed to operate in the same way throughout life. The concept of social learning highlights the relevance of models' behavior in guiding the behavior of others. These models may be parents, older siblings, peers, entertainment stars, or sports heroes. Since new role models may be encountered at any life stage, new learning through the process of observational learning is always possible. Exposure to a certain array of models and a certain pattern of rewards or punishments

results in the encouragement to imitate some behaviors and to inhibit the performance of others. The similarity in behavior among people of the same ages reflects their exposure to a common history of models, rewards, and punishments. Recognition of the potential impact one has as a model for others, especially in the role of parent, teacher, clinician, counselor, or supervisor ought to impart a certain level of self-conscious monitoring about the behaviors one exhibits and the strategies one employs in the presence of those who are likely to perceive one as a model for new learning.

Cognitive Behaviorism

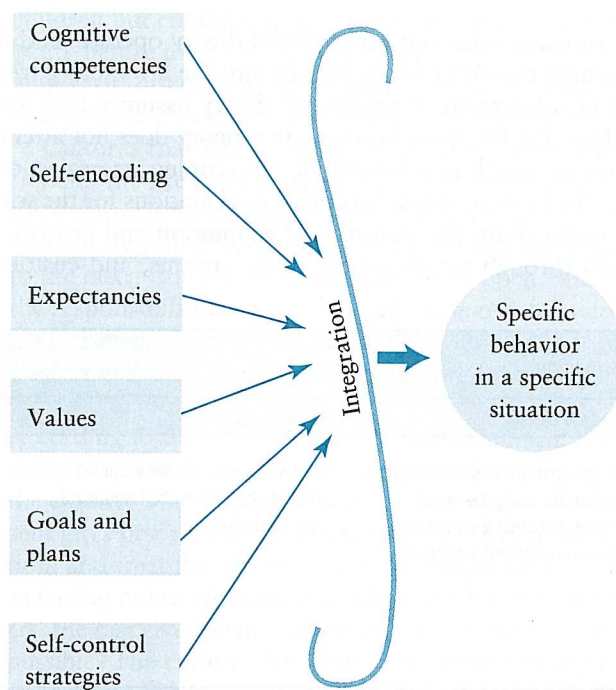
One objection that has been raised frequently against classical and operant conditioning as theories of learning is that they have no language or concepts to describe events that occur in the learner's mind. **Cognitive behaviorists** study the many internal mental activities that influence behavior. Edward Tolman (1932/1967, 1948) discussed the notion of an intervening set of responses that influence learning. He said that the learner develops a **cognitive map**, an internal mental representation of the learning environment. Individuals who perform a specific task in a certain environment attend primarily to that task, but they also form a representation of the rest of the setting. The map includes expectations about the reward system in operation, the existing spatial relationships, and the behaviors accorded highest priority. An individual's performance in a situation represents only part of the learning that has occurred. The fact that people respond to changes in the environment indicates that a complex mental map actually develops in this situation.

According to Walter Mischel (1973, 1979), at least six cognitive factors must be taken into account if a person's behavior is to be understood: cognitive competencies, self-encoding, expectancies, values, goals and plans, and self-control strategies (Figure 3.3). **Cognitive competencies** consist of knowledge, skills, and abilities. **Self-encoding** is the evaluation and conceptualization of information about the self. An interesting finding in this area is that depressed people tend to evaluate themselves more realistically than those who are not depressed. Mischel (1979) argued that "to feel good about ourselves we may have to judge ourselves more kindly than we are judged" (p. 752). In other words, most people who are not chronically depressed may bias their evaluations of themselves in a self-enhancing way.

Expectancies refer to expectations about one's ability to perform, the consequences of one's behavior, and the meaning of events in one's environment. **Values** consist of the relative importance one places on the outcomes of situations. One person may value high levels of task performance, while another may value success in social situa-

FIGURE 3.3

Six cognitive dimensions that influence behavior



tions. One's behavior in a situation is influenced by how one values its possible outcomes. *Goals and plans* are personal standards of performance and the strategies one develops for achieving them. Obviously individuals differ in their goals and plans; these differences will lead to considerable variation in behavior. **Self-control strategies** are the techniques an individual develops for regulating his or her own behavior. Self-control helps us to understand how we can leave the realm of stimulus control in order to gain control over our behavior. The more aware we are of the effects of stimuli on our behavior, the more effectively we may overcome, channel, or eliminate their influence. Of these six areas, the one that has received considerable attention among those interested in learning and performance is the area of expectancies.

Implications for Human Development

Cognitive behaviorism suggests that through the full range of learning processes including classical conditioning, operant conditioning, and observational learning, the learner acquires cognitive structures that influence subsequent learning and performance. The learner acquires an outlook on the learning situation. This outlook influences the learner's feeling of familiarity with the task, motivation to undertake the task, optimism about performing the task successfully, and strategies for approaching the task. In addition to everything a parent, teacher, or supervisor might do to structure a learning environment, one must always take into account the outlook the learner brings to the task. Differences in expectancies, self-control strategies, values, and goals all influence the way individuals approach a learning situation.

Summary of the Learning Theories

All four of the learning theories contribute insights into human behavior (Table 3.1). Classical conditioning can account for the extensive network of associations that are formed between symbols and stimuli, enduring emotional reactions to one's environment, and the organization of learning associated with reflexive patterns. Operant conditioning emphasizes the acquisition of behavioral patterns on the basis of their consequences. Social learning theory adds the important element of imitation. People learn new behaviors by watching others. Through social learning, individuals develop an understanding of the social consequences of behavior leading to new patterns of behavioral expression and self-regulation. Finally, cognitive behaviorism suggests that a complex set of expectations, goals, and values can be treated as behavior and can influence performance. Although information or skills can be learned, they will not be expressed in behavior unless expectations about the self and the environment justify their enactment. This perspective highlights the person's capacity to guide the performance of new learning.

Links to Psychosocial Theory

The learning theories and psychosocial theory operate on different levels of abstraction. The learning theories provide insight into the laws that govern many of the basic mechanisms of adaptation. Psychosocial theory assumes that growth and change continue throughout the life span; however, the theory does not attempt to account for the exact processes by which new behaviors, new coping strategies, or new ego strengths are acquired. The learning theories provide explanations for the ways that the patterns of daily events might shape the direction of adaptation and growth. They offer insight into the processes through which society's rules, norms, and customs become internalized and

TABLE 3.1 Four Learning Processes

Classical Conditioning	Operant Conditioning	Social Learning	Cognitive Behaviorism
When two events occur very close together in time, they acquire similar meanings and produce similar responses.	Responses that are under voluntary control can be strengthened or eliminated, depending on the consequences associated with them.	New responses can be acquired through the observation and imitation of models.	In addition to new responses, the learner acquires a mental representation of the situation, including expectations about rewards and punishments, the kinds of responses that are appropriate, and the physical and social settings in which they occur.

translated into habits, preferences, and expectations. The learning theories emphasize the significance of the immediate environment in directing the course of growth. They speak less to the epigenetic process to which Erikson referred as he described a predictable pattern in the nature and direction of development over the life span.

CULTURAL THEORY

The concept of **culture**, although defined in a wide variety of ways by anthropologists, sociologists, psychologists, and political scientists, is meant here to refer to the learned systems of meanings and patterns of behaviors that are shared by a group of people and transmitted from one generation to the next. **Physical culture** encompasses the objects, technologies, structures, tools, and other artifacts of a culture. **Social culture** encompasses the norms, roles, beliefs, values, rites, and customs (Herkovits, 1948; Triandis et al., 1980; Rohner, 1984; Betancourt & Lopez, 1993).

On a general level, culture has been described as a **worldview**, a way of making meaning of the relationships, situations, and objects encountered in daily life. Basic ideas such as whether people are considered to be in control of nature or a part of nature, who is included in the definition of family, what characteristics are considered signs of mental health or mental illness, which acts are construed as hostile and which as nurturing, which aspects of the environment are considered dangerous and which are valued—all these and many other mental constructions are shaped by the culture into which one is born (Kagitcibasi, 1990). Culture guides development, not only through encounters with certain objects, roles, and settings, but through the meanings linked to actions as well.

The principle of **cultural determinism**, created by Ruth Benedict (1934/1950), suggests that the individual's psychological experiences are shaped by the expectations, resources, and challenges posed by one's specific cultural group. The extent to which development is viewed as distinct stages of life depends on the degree to which socialization within a culture is characterized by continuity or discontinuity.

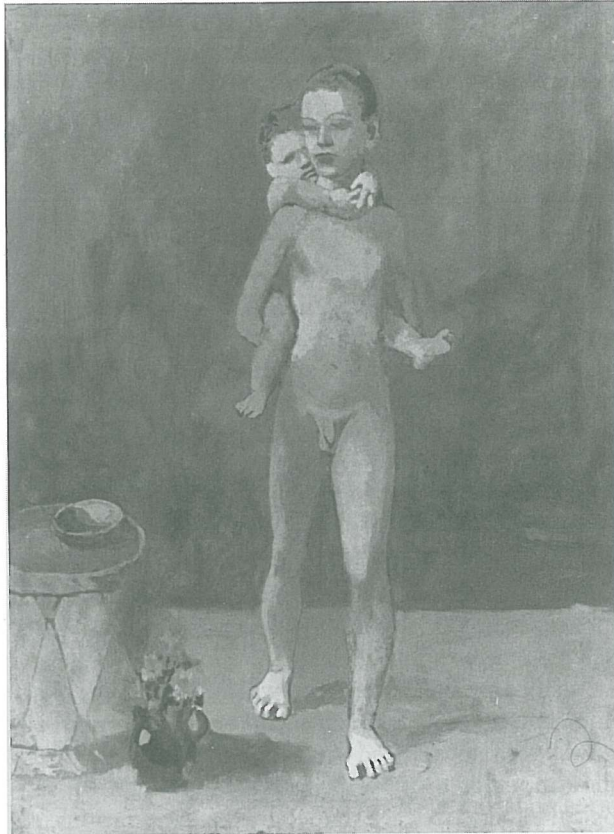
Continuity is found when a child is given information and responsibilities that apply directly to his or her adult behavior. For example, Margaret Mead (1928/1950) observed that in Samoan society, girls of 6 or 7 years of age commonly took care of their younger siblings. As they grew older, their involvement in the caregiving role increased; however, the behaviors that were expected of them were not substantially changed.

Discontinuity is found when a child is either barred from activities that are open only to adults or forced to "unlearn" information or behaviors that are accepted in children but considered inappropriate for adults. The change from expectations of virginity before marriage to expectations of sexual responsiveness after marriage is an example of discontinuity. In some societies, sexuality and sex play are viewed as inappropriate behavior for children but appropriate for adults.

Cultures that have discrete, age-graded expectations for individuals at different periods in the life span produce a pattern of development in which age groups have distinct characteristics and appear to function at different skill levels. These societies are marked by public ceremonies, graduations, and other rites of passage from one stage to the next. Cultures that are permissive, open, and recognize few distinctions between the responsibilities of children and those of adults do not produce age-graded stages of development. In those societies, development is a much more gradual, fluid transformation in which adult competencies are built directly on childhood accomplishments.

Implications for Human Development

According to the concept of cultural determinism, the events of the various stages of development will be experienced as stressful or calm depending on how they are noted by the culture. This contrast is seen in the ways in which different cultures mark an adolescent girl's first menstruation (Mead, 1949/1955). In some societies people fear menstruation, and treat the girl as if she were dangerous to others. In other societies she is viewed as having powerful magic that will affect her own future and that of the tribe. In still others, the perceived shamefulness of sex requires that the menstruation be kept as secret as possible. The culture thus determines how a biological change is marked and how the transition will be perceived.



This painting of two brothers illustrates the concept of cultural continuity. The older brother assumes responsibility for the protection and care of his younger sibling. When he is an adult, we can imagine that he will draw on these experiences for the love and care of his own children.

Links to Psychosocial Theory

small sample of the peoples of the world. In particular, advances in the social sciences in the United States, Canada, Japan, Australia, and Europe have not been matched by the study of development in the less economically developed nations within Africa, Latin American, and Asia. Thus, attempts to identify and establish universal principles of development must always be tempered by the realization that our scientific observations do not reflect the variations in cultural environments that guide the socialization process and the paths to maturity and aging (Nsamenang, 1992).

A life story is influenced by identification with **ethnic group** norms and values, as well as by the overarching norms and values of the dominant culture. The relative contribution of ethnic group influences to a person's development depends on the intensity of the family's loyalty to the group, the balance of time spent with members of one's own ethnic group and with members of other cultural groups, and the way the group is viewed or treated within the larger society (Phinney, 1996). In studying patterns and processes of development, we must keep in mind that people of various ethnic groups may have unique views on such issues as the definition of appropriate child behavior and successful maturity, the nature of gender roles, and the proper balance between individual achievement and responsibility to family and community.

Psychosocial theory is based on the assumption that culture makes a fundamental contribution in shaping an individual's development. In fact, Erikson argued that basic cultural values could be interpreted from infant caregiving practices. By observing how adults respond to infants' needs one could understand key cultural values regarding generosity, self-control, independence, or cooperation. Just as evolutionary theory asserts that adaptation is a product of the interaction between the organism and the physical environment, psychosocial theory assumes that individual development is a product of continuous interaction between the developing child and the demands and resources of the cultural environment.

In contrast to Ruth Benedict's view that the degree to which development appears stagelike depends on the continuity or discontinuity of the society, psychosocial theory argues for stages of development. However, the stages themselves are derived from the

Societies vary in the extent to which they expect people to make significant life decisions during each period and in the range of choices they make available. American adolescents are asked to make decisions regarding sex, work, politics, religion, marriage, and education. In each of these areas, the alternatives are complex and varied. As a result, adolescence is prolonged and the risk of leaving this period without having found a solution to these problems is great. In cultures that offer fewer choices and provide a clearer path from childhood to adulthood, adolescence may be brief and relatively free of psychological stress.

The study of development must be approached with appreciation for the cultural context. Cultural expectations for the timing of certain life events, such as schooling, work, marriage, childbearing, and political and religious leadership, influence the tempo and tone of one's life history. Cultures also vary in the personal qualities they admire and those they consider inappropriate or shameful. A society's standards of beauty, leadership, and talent determine how easily an individual can achieve status within it.

One of the criticisms of scientific knowledge about development is that it lacks the diversity of cultural contexts. If we accept the idea of cultural determinism, we must agree that development can only be fully understood by taking into consideration the particular ecological and cultural context in which it occurs. Much of what we know about development is based on a very

Kwanza is created to strengthen the cultural identity of the African-American ethnic group. Family members participate in rituals that highlight a common ancestry and shared cultural values.

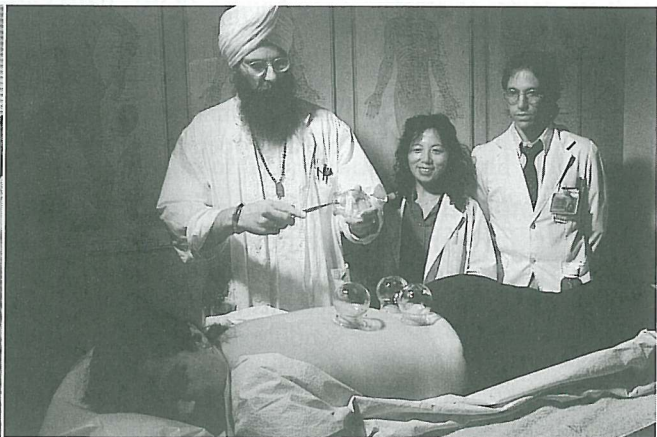
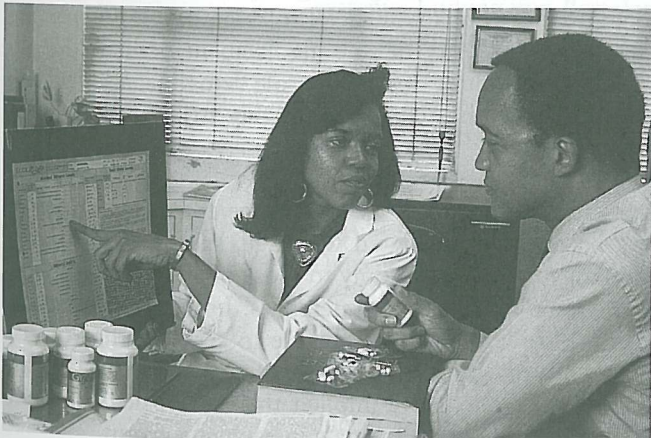


view that all cultures must be able to adapt to changes in economic, environmental, and intercultural conditions. Stages of individual development are interwoven with the ability of the society to adapt and continue. Psychosocial theory suggests, for example, that the way trust is established will differ from one culture to the next, but that all societies have mechanisms for building levels of trust and mistrust during the period of infancy. The psychosocial stages emerge as the mechanisms of socialization within each culture call them forth.

SOCIAL ROLE THEORY

The social role of “healer” can be found in most cultures. Although the costumes and the techniques may differ, healers typically have access to knowledge not known by most of the people in the society. What are some of the role expectations associated with healers in our society?

Another approach to conceptualizing the effect of the environment on development is suggested by such social psychologists as Orville Brim (1966) and such sociologists as Talcott Parsons (Parsons & Bales, 1955). They trace the process of socialization and personality development through the person’s participation in increasingly diverse and complex social roles. A role is any set of behaviors that has a socially agreed-upon function and an accepted code of norms (Biddle, 1979; Biddle & Thomas, 1966; Brown, 1965). The term role was taken from the context of the theater. In a play, actors’ behaviors are distinct and predictable because each actor has a part to play and follows a script. You will recall this metaphor from Shakespeare’s analysis in *As You Like It*, “All the world’s a stage, and all the men and women merely players; They have their exits and their entrances; And one man in his time plays many parts” (Act 2, scene 7).



BOX 3.1 ROLE STRAIN AND PARENTHOOD

A recurring theme in the literature on parenthood is the experience of role strain. **Role strain** can be defined as a sense of overload that results when too many expectations are associated with a role (Biddle, 1986). Each of the four dimensions of social roles may contribute to strain in the role of parent. When parenting is added to other adult roles, especially those of worker and spouse, the demands of the new role may seem overwhelming. Because the parent role has great intensity, the sense of involvement in all the behaviors associated with the role intensifies, and so does anxiety about failure to meet the expectations of the role. First-time parents especially may have little confidence in their ability to fulfill their roles, and the level of worry associated with the role rises accordingly.

The parent role does indeed take a lot of time. Most first-time parents underestimate how much time infants and toddlers require. When new parents, especially mothers, reflect on the time they spend in a variety of social roles, they point to the parent role as more time-consuming than any other role, now or in the past.

Role strain linked with parenting is related to the structure of the role. Some adults have a very clear set of ideas about how they should enact their parent role, but many are unsure. Husbands and wives are likely to differ in their views on child-rearing techniques. These differences require time to resolve. Because of the hardships or distress they recall from their own childhoods, many adults do not want to raise their children the way they were raised. They have to learn a new script for this role.

There are at least four ways to minimize the role strain associated with the parent role (Cowan & Cowan, 1988; Nickols, 1994; Bornstein, 1995):

1. When the rewards for role enactment are frequent, the demands of the role seem less onerous. Adults who have a lot of encouragement from family, friends, and community for their active involvement in parenting will probably feel less stressed about the amount of time and effort they invest in it.
2. The ability to delegate role responsibilities can reduce role strain. Adults who can hire others to help with some of the parenting responsibilities or who can turn to family members for help will experience less role strain than those who are solely responsible for the parenting role. Couples who can flexibly alter and share household responsibilities in response to the demands of parenting will experience more satisfaction and less strain.
3. The ability to integrate several aspects of the role in one activity can reduce role strain. Some parents become quite inventive about ways to maintain contact with their infant and still carry out their household chores and other work and also have time with each other.
4. Role strain is reduced when marriage partners reach consensus about their parent roles. New parents who have resolved their differences regarding child-rearing philosophy, child-care activities, and the division of household responsibilities experience less role strain and a higher level of marital satisfaction than those who continue to have opposing views on these issues.

Role theory applies this same framework to social life (Biddle, 1986). The three elements of concern to role theory are the patterned characteristics of social behavior (**role enactment**), the parts or identities a person assumes (**social roles**), and the scripts or shared expectations for behavior that are linked to each part (**role expectations**).

Social roles serve as a bridge between the individual and the society. Every society has a range of roles, and individuals learn about the expectations associated with them. As people enter new roles, they modify their behavior to conform to these role expectations. Each role is usually linked to one or more related, or reciprocal, roles. The student and the teacher, the parent and the child, and the salesperson and the customer are in reciprocal roles. Each role is partly defined by the other roles that support it. The function of the role is determined by its relation to the surrounding role groups to which it is allied.

Four dimensions are used to analyze the impact of social roles on development: the number of roles a person occupies, the intensity of role involvement or how deeply identified the person is with the role, the amount of time the role demands, and the extent to which the expectations associated with each role are highly structured or flexible and open to improvisation.

Implications for Human Development

All cultures offer new roles that await individuals as they move from one stage of life to another. These roles may be directly associated with age, such as the role of a high school student. Other roles may be accessible only to those of a certain age who demonstrate other relevant skills, traits, or personal preferences. In many elementary schools, for example, the fifth-grade students become eligible to serve in the role of crossing guard to help the younger children get across the streets near the school. Families, organizations, and the larger community have implicit theories of development that determine what role positions open up for individuals in each age group.

Some of the most important life roles persist across several stages, including child, parent, and sibling. The expectations for role performance remain the same in some respects, but change in others. We can begin to see how social roles provide consistency to life experiences and how they prompt new learning.

Links to Psychosocial Theory

Role relationships provide a central mechanism through which the socialization process takes place. In psychosocial theory, one might think of the radius of significant relationships as an interconnected web of reciprocal roles and role relationships through which the expectations and demands of society make themselves known. The idea of reciprocity in roles is closely linked to the concept of interdependence of people in different psychosocial stages. The capacity of adults to resolve the crises of their life stages and to achieve new ego strengths is intricately linked to the ability of children and youth to flourish and grow (Box 3.1). Social role theory helps clarify why this is so important since children and adults occupy many reciprocal roles.

In the following chapters, we describe a number of life roles especially related to family, school, and work. As the number of roles that individuals fill simultaneously increases, they must learn some of the skills of role playing, role differentiation, and role integration. The developmental crisis of later adolescence (individual identity versus identity confusion) emphasizes the significance of being able to integrate several diverse roles so that one may maintain a sense of personal continuity. With each new role, one's self-definition changes and the potential for influencing the world increases.

SYSTEMS THEORY

Systems theories attempt to describe and account for the characteristics of systems and view individuals as interconnected elements (Sameroff, 1982). To a large degree, these theories highlight *differences in perspective*. Systems theories take the position that the whole is more than the sum of its parts. Any **system**, whether it is a cell, an organ, an individual, a family, or a corporation, is composed of *interdependent elements* that share some common goals, interrelated functions, boundaries, and an identity. The system cannot be wholly understood by identifying each of the component parts. The processes and relationships of those parts make for a larger coherent entity. The language system, for example, is more than the capacity to make vocal utterances, to use grammar, and to acquire vocabulary. It is the coordination of these elements in a useful way within a context of shared meaning. Similarly, a family system is more than the sum of the characteristics and competence of the individual family members.

A system cannot violate laws that govern the functioning of the parts, but at the same time it cannot be explained solely by those laws. Biological functioning cannot violate the laws of physics and chemistry, but the laws of physics and chemistry cannot fully explain biological functioning. Similarly, children's capacities for cognitive growth cannot violate the laws of biological functioning, but biological growth does not fully explain quality of thought.

Individuals, families, communities, schools, and societies are all examples of **open systems**. Ludwig von Bertalanffy (1950, 1968) defined open systems as structures that maintain their organization even though their parts constantly change. Just as the water in a river is constantly changing while the river itself retains its boundaries and course, so the molecules of human cells are constantly changing while the various biological systems retain their coordinated functions.

Systems move in the direction of adjusting to or incorporating more and more of the environment into themselves in order to prevent disorganization as a result of environmental fluctuations (Sameroff, 1982). Adaptation, whether the concept is articulated by Darwin, Piaget, Skinner, or Bandura, seems to be a fundamental process. Ervin Laszlo (1972) described this property of an open system as **adaptive self-regulation**. A system uses **feedback mechanisms** to identify and respond to environmental changes. The more information about the environment the system is capable of detecting, the more complex these feedback mechanisms must be. When the oxygen level of the environment is reduced, for example, you tend to grow sleepy. While you sleep, your breathing slows and

you use less oxygen. Some of these adjustments are managed unconsciously by the organization of biological systems. Others are managed more deliberately by efforts to minimize the effects of environmental changes. Most systems have a capacity for storing or saving resources so that temporary shortages do not disrupt their operations.

When open systems are confronted by new, or changing environmental conditions, they have the capacity for **adaptive self-organization**. The system retains its essential identity by creating new substructures, by revising the relationships among components, or by creating new, higher levels of organization that coordinate existing substructures.

From the systems perspective, the components and the whole are always in tension. What one understands and observes depends on where one stands in this complex set of interrelationships. All living entities are parts and wholes. A person is a part of a family, a classroom or workgroup, a friendship group, and a society. A person is also a whole—a coordinated complex system composed of physical, cognitive, emotional, social, and self subsystems. Part of the story of human development is told in an analysis of the adaptive regulation and organization of those subsystems. Simultaneously, the story is told in the way larger systems fluctuate and impinge on individuals, forcing adaptive regulation and reorganization as a means of achieving stability at higher levels of system organization.

In an effort to elaborate and clarify the interlocking system of systems in which human behavior takes place, Urie Bronfenbrenner (1979) offered the following topography of the environmental structure (Figure 3.4):

A **microsystem** is a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics.

A **mesosystem** comprises the interrelations among two or more settings in which the developing person actively participates (such as, for a child, the relations among home, school, and neighborhood peer group; for an adult, among family, work, and social life).

An **exosystem** refers to one or more settings that do not involve the developing person as an active participant, but in which events occur that affect, or are affected by, what happens in the setting containing the developing person.

The **macrosystem** refers to consistencies in the form and content of lower-order systems (micro-, meso-, and exo-) that exist, or could exist, at the level of the subculture or the culture as a whole, along with any belief systems of ideology underlying such consistencies. (Bronfenbrenner, 1979, pp. 22, 25, 26)

Bronfenbrenner argues that development is influenced directly by the interactions that take place within a single microsystem, such as the family, and by the similarities and differences in patterns of interaction that occur across the various systems in which the person functions (the mesosystem). In addition, events in other adjoining systems, such as decisions in the workplace that affect the parent's work schedule, or decisions in city government that affect resources for the local schools, have an impact on development even though the child does not participate directly in these settings. Further, the roles, norms, and resources within settings as well as the interrelationships among systems have a unique pattern of organization and reflect an underlying set of beliefs and values that differ from one culture or ethnic group to the next. These cultural characteristics are transmitted to the developing person.

Implications for Human Development

The relevance of systems theory for human development can be most readily appreciated in its application to families. Family system theories focus on how families establish and maintain stable patterns of functioning. Families are viewed as emotional units identifiable by certain **boundaries** and **rules** (Broderick, 1993). The boundaries of the family determine who is considered to be a family member and who is an outsider. They influence the way information, support, and validation of the family unit are sought and the way new members are admitted into the family. Some families have very strict rules that maintain a narrow boundary around the family. Few sources of information or contact are admitted. Other families extend the sense of belonging to a wide range of people who bring ideas and resources to the family system.

Family systems are maintained by patterns of communication. Positive and negative feedback loops operate to stabilize, diminish, or increase certain types of interactions.

Specific examples of microsystems and systems in the exosystem are given, but many other systems could be shown. Arrows in the mesosystem show a two-way, or bidirectional influence; arrows in the exosystem are unidirectional, since the developing person does not participate in those settings.

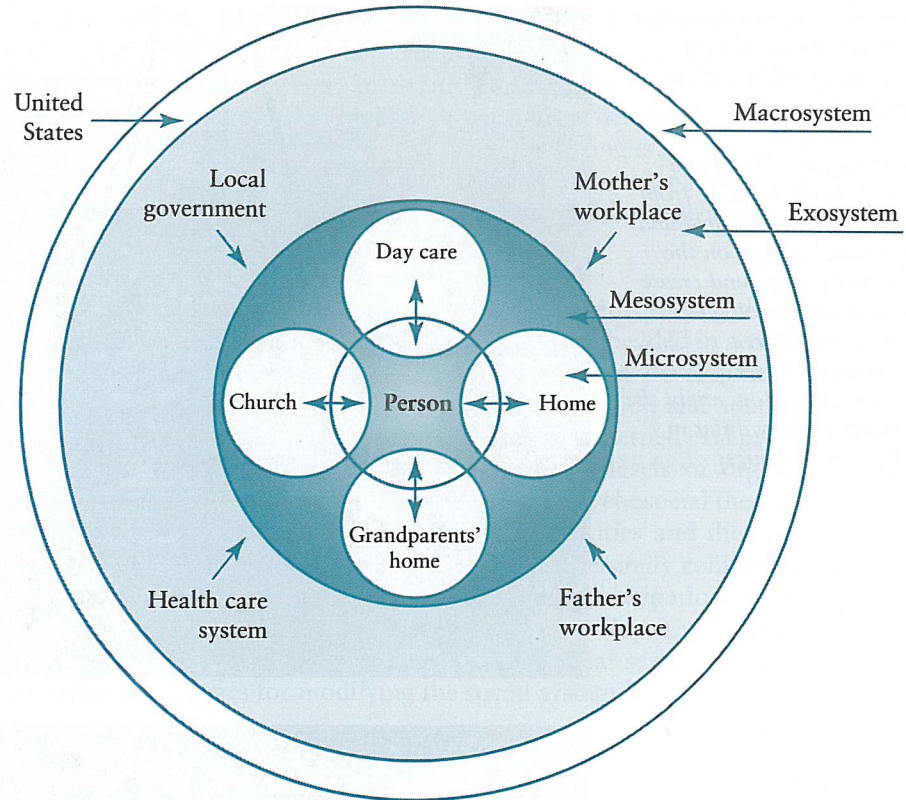


FIGURE 3.4

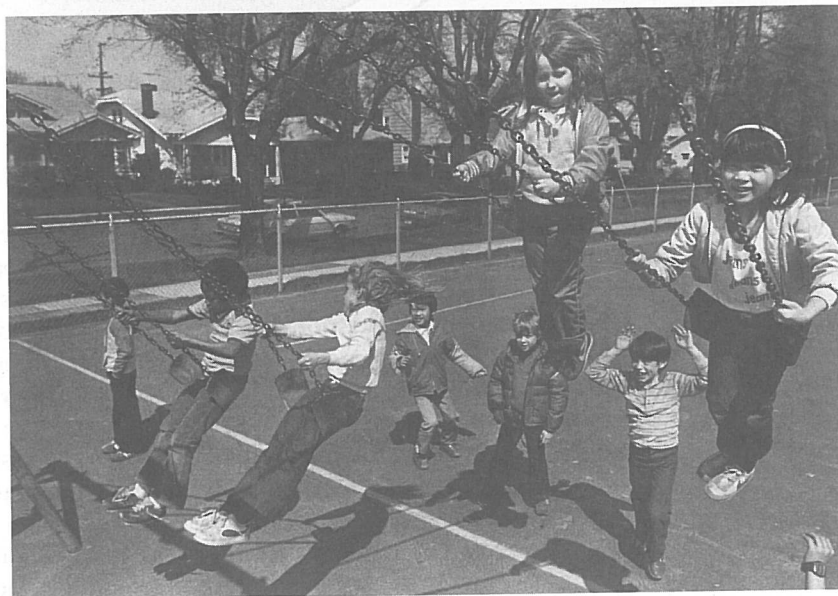
A topography of the relationship among systems
SOURCE: Adapted from Bronfenbrenner, 1979.

A feedback loop is positive when a child offers a suggestion and a parent recognizes and compliments the child on that suggestion. In such a pattern, the child is encouraged to continue to offer suggestions, and the parent comes to view the child as someone who has valuable suggestions to offer. A feedback loop is negative if a parent ignores the child's suggestion or scolds the child for making it. The child is less likely to make further suggestions, and the parent is likely to view the child as someone who has no valuable ideas to offer. Many positive and negative feedback loops operate in all families to sustain certain underlying qualities of the system, such as the power hierarchy, the level of conflict, and the balance between autonomy and dependency among the members.

One of the most commonly noted characteristics of family systems is the interdependence of the family members. Changes in one family member are accompanied by changes in the others. Imagine for a moment that family members are standing in a circle and holding a rope. Each person is trying to exert enough tension on the rope to keep it tight and preserve the circular shape. The amount of tension each person must exert depends on what every other person is doing. Now imagine that one member of the family lets go of the rope and steps away. In order to retain the shape and tension of the rope, everyone else has to adjust his or her grip. Letting go of the rope is an analogy for many kinds of changes that can occur in a family—a parent becomes ill, a child goes off to college, or a parent takes on a demanding job outside of the home. The system adjusts by redefining relationships, modifying patterns of communication, and adjusting its boundaries. The members and their interdependencies change. Similar adjustments must be made if a member is added to the family system, or when the system undergoes some other major transition.

The systems theory perspective offers an especially productive approach to clinical problems. A person who has been identified as dysfunctional is treated not as a lone individual but as part of a family system. From a systems theory perspective, the assumption is that the person's problems occur as a result of the way the person—

Systems theory emphasizes the interconnection of systems. Children adapt their play to their neighborhood microsystem. The hand-made swing hanging from a tree in a grassy field and the metal swings on the asphalt playground create two distinct ecologies in which to observe coordinated peer interaction. How might the quality of play differ in these two settings?



whether a child, a parent, or a grandparent—is treated by other family members. The only way to bring about changes in the person's functioning is to alter the functioning of the other members of the system as well. If the person is "underfunctioning"—that is, acting irresponsibly, not communicating, not performing at his or her level of capability, withdrawing, or acting impulsively—one assumes that others in the family are "overfunctioning"—that is, assuming many of the person's roles and responsibilities in order to "take up the slack." The dysfunctional behavior is maintained because it is a component of an emotional unit. In other words, the dysfunction belongs neither to the person nor to the other family members but to the particular interdependence among the family members that appears to be necessary to preserve the viability of the family system as a whole (Bowen, 1978).

By definition, family systems are also interdependent with adjacent systems. Thus, the understanding of families requires an analysis of the resources and demands of other social systems that impinge on families, and the opportunities families have for influencing adjoining systems. A woman who is experiencing an extremely demanding,

stressful, and sexist work environment, for example, may be constantly tired, tense, and irritable in her behavior toward her family members. She may bring home the resentments from work in the way she treats and expects to be treated by males and females in her family. If the job is important to her and to her family, no one may be willing to acknowledge the disruptive impact the work setting is having on family life. Family violence, the effects of unemployment on families, participation of mothers in the labor force, day care, and the role of parents in their children's schooling are all being examined from a systems perspective.

Links to Psychosocial Theory

Psychosocial theory embraces the basic assumption of systems theory, that an understanding of development requires an analysis of the child embedded in a number of interrelated systems. Systems theory, however, is not really a developmental theory. Systems are expected to change through adaptive self-regulation and adaptive self-organization. The direction of this change is not necessarily patterned except that it is expected to move in the direction of creating new, higher levels of organization to coordinate newly developed substructures. According to psychosocial theory, however, change is developmental. With expanding cognitive capacities and the resolution of each new psychosocial crisis, a child is propelled into increasingly complex social systems and encounters new stimulation for growth through participation in a greater variety of social relationships. At each new stage, children develop new coping skills and devise strategies for new levels of participation in the social system. Eventually, they create innovative approaches for modifying the social system itself.

Chapter Summary

The seven theoretical perspectives we have reviewed take distinct approaches to continuity and change across the life span. Evolutionary theory provides an overall temporal framework within which to understand individual development. Although a life span of 85 or 90 years may seem long, it is but a flicker in the 1 to 2 million years of human biological adaptation. Evolutionary theory highlights the genetically governed aspects of growth and development. The environment provides the specific conditions that require adaptation. However, adaptive change can occur only if it is supported by the genetically based characteristics of the organism. The basic mechanism that accounts for species change over many generations is natural selection.

Ethology, the study of evolutionarily significant behaviors, provides a systematic approach to analyzing reproductive practices, care-giving behaviors, strategies for obtaining resources, and other behaviors that contribute to individual and species survival.

According to psychosexual theory, development is seen as following a biologically determined path along which changing patterns of social relationships follow the unfolding of sexual impulses and the sexualization of body zones. Culture plays a major role in establishing the taboos and acceptable patterns of sexual gratification that lead to conflicts, fixations, and strategies for sublimation. Sexual impulses, wishes, and fears, many of which are unconscious, guide behavior and give it meaning. Psychosexual theory emphasizes the years of infancy and childhood as those in which basic personality patterns are established. It also identifies the family, especially the parent-child relationship, as the primary context within which conflicts related to the socialization of sexual impulses are resolved.

Psychosexual theory describes three basic structures of the personality: id, ego, and superego. Defense mechanisms are strategies the ego uses to protect itself from being overwhelmed by id impulses or the punishing influences of the superego. As ego develops, the child becomes increasingly adept at satisfying id impulses in ways that are socially acceptable. In adolescence, a resurgence of id energy challenges many of the ego's earlier coping strategies. Ego must find new ways to express and modify impulses. An essential aspect of this process is thought to be the separation of ego from earlier objects of attachment and investment of energy in the self as well as in new social relationships.

Cognitive developmental theories focus on the etiology of rational thought and the capacity for scientific reasoning. Piaget's cognitive theory, like psychosexual theory, views development as a product of a biologically guided plan for growth and change. The elements that make cognitive growth possible are all present in the genetic information that governs the growth of the brain and nervous system. However, the process of intellectual growth requires interaction with a diverse and responsive environment. Cognitive de-

velopment is fostered by recognition of discrepancies between existing schemes and new experiences. Through the reciprocal processes of assimilation and accommodation, schemes are modified and integrated to form the basis for organizing and explaining experience.

Vygotsky's contribution places the development of higher mental processes in a dynamic social context. Although thinking and reasoning are dependent upon biologically based capacities, the way mental activity is organized reflects unique characteristics of the social context, especially as culture is transmitted through language, tools, and social relationships.

Learning theories focus on the mechanisms that permit individuals to respond to their diverse environments and the permanent changes in thought and behavior that accompany changes in the environment. Behavior can be shaped and modified by systematic changes in environmental conditions. According to learning theorists, human beings have an especially flexible behavioral system. No assumptions are made about universal stages of growth. As conditions in the environment change, response patterns also change. Similarity among individuals at a particular period of life is explained by the fact that they are exposed to similar environmental conditions, patterns of reinforcement, and models.

Cultural theory, like learning theories, emphasizes the role of the environment in directing the course of development. Within this framework, the significance of biological maturation depends on the interaction between the individual and the social context. The possibilities for cultural variation are enormous. What we define as the normal or natural pattern and tempo of change in competence, roles, and status depends largely on the way a society recognizes and treats individuals of different ages, gender, and degree of kinship.

Instead of looking at the environment at the microscopic level of the learning theories, considering every unique stimulus and its corresponding response, social role theory suggests that learning is organized around key social functions called roles. As people attempt to enact roles, they integrate their behavior into meaningful units. Meaning is provided by the definition of the role and the expectations of those in reciprocal roles. Development is a product of entry into an increasing number of complex roles over the life span. As children acquire and lose roles, they change their self-definitions and their relationships with social groups. Most societies define roles that are linked with gender, age, marital status, and kinship. These roles provide patterning to the life course. However, the patterns are understood to be products of the structures and functions of the society rather than of genetic information.

Systems theory takes a unique scientific perspective. Rather than seeking to analyze causal relationships, systems theory emphasizes the multidimensional sources of influence on individuals, and the simultaneous influence of individuals on the systems of which they are a part. Each person is at once a component of one or more larger systems and a system unto itself. One must approach the study of child development from many angles, identifying the critical resources, the flow of resources, and the transformation of resources that underlie an adaptive process of reorganization and growth.

End of Chapter Case

Robert Meyer, a single parent, and his adopted daughter, Juliet.

Our family came to be as a sort of dream. I was a single man, working in a well-paying position as the executive director of a fund-raising agency for a residential treatment facility for chemically dependent kids. I am a substance abuser, that is, a chemically dependent person recovering from addiction to alcohol and drugs. I had just purchased my home and was wanting to give something back to society. At the time, I was considering becoming a foster parent. I approached the social service department of the county where I live and was directed to the "fostadopt" program.

To make a long story short, while I was doing a home study for the program, a friend of mine who noticed what I was doing asked me if I might be interested in a newborn child. She had a friend who was pregnant and wanting to give up her child for adoption, but hadn't chosen a family or parent yet. We met, both had good feelings about the other, and entered a contract. . . . Also, it should be mentioned that the birth mother was chronically alcoholic, 39 years old, homeless, and without much prenatal care. She continued to drink throughout her pregnancy. . . .

Juliet was born premature, weighing three pounds thirteen ounces. I was there for the deliv-

ery, which was not normal, as planned. Juliet was in the intensive care nursery for five days, and came home with me after she reached four pounds. She was born very small because of the alcoholism and prematurity and she's still not on the charts. At 2 years of age she weighs eighteen pounds, but developmentally she's beyond the charts in her intelligence. . . .

The difference between the way I was raised and the way I raise Juliet are far apart and the same in many ways. I sleep with Juliet a lot and, for the first six months of life together, we shared the same bed. This was something that never existed in the home I grew up in. Also, Juliet stays up a lot longer than I did as a child because it is our only time together after a long day of work and day care. I was raised at home by my mother, who took care of me and the household while my father worked all day. Today I have to find the best substitute for the job of child care, and it is away from the house. We wake before the sun, get dressed, and drive 20 miles to the day care. I go to work for nine hours and pick her up and drive home in traffic. We return home after sunset. Lots of our meals are bought at restaurants as a means of saving time.

Juliet is a part of me. We go almost everywhere together, not only for her entertainment but to my social events and affairs. I take Juliet along to as many things as possible, much to the displeasure of others who don't want to hear from an infant. I spoil my child with all sorts of extras, and I work an additional part-time job to afford this luxury. I feel as if I spend more time with Juliet than my parents did with me. I'm not sure how accurate this is, since I don't remember much from my twos and threes. But, as a single parent, I am the sole person responsible to feed, change, doctor, pick up, drop off, etc.

Juliet and I have created a bonding with each other that is stronger than any I ever had with either of my parents, as well as a friendship. The type of parenting that I practice is that of learning by experiment and experience. I try to be as direct as you can with an infant. I try to listen and answer, not yell and shut down with anger and frustration.

. . . I see my role as parent as a great job. I'm both a parent and a friend. We both teach each other about life and how it works. Sometimes I'm more amazed with what Juliet knows than with what I can teach her. Watching the process of growing and learning from the beginning is a wonderful experience that fulfills my life greatly.

Source: Nestor, 1991.

Thought Questions

As you think about this case of a single-parent dad raising a high-risk, infant daughter, consider the ways that each of the theories presented in this chapter might be applied.

1. How might psychosocial inventions such as foster parenting and adoptive parenting serve an evolutionarily adaptive role?
2. What ideas does evolutionary theory offer about men as primary caregivers?
3. How might psychosexual theory interpret the issues of drug and alcohol addiction raised in this case?
4. According to psychosexual theory, what experiences in Juliet's infancy might have enduring effects on her personality development?
5. Robert Meyer says that he parents by experiment and experience. How does this strategy relate to Piaget's view of the process of cognitive development?
6. How do Robert and Juliet function in what Vygotsky calls the "zone of proximal development" for one another?
7. How might principles of the learning theories relate to the patterns of adaptation that are revealed in this case? Consider evidence for the following concepts: associational learning; positive and negative reinforcement; shaping; observational learning, expectancies; goals and plans; self-control strategies.
8. What aspects of this case might support the principles of cultural determinism? What aspects challenge this concept?
9. How are ideas such as role enactment, role expectations, reciprocal roles, and role strain related to the case? What is the impact of role learning for Robert?
10. What various microsystems make up Juliet's mesosystem? Robert's mesosystem? How do factors in the exosystem influence the process of foster child placement and adoption? What are aspects of the macrosystem that might influence the ease or difficulty with which Robert enacts his role as an adoptive father?