

# MHSLS8

ch1

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FACILITATOR: KAREN JONES

COORDINATOR: ANGIE

PROOF: JERRY

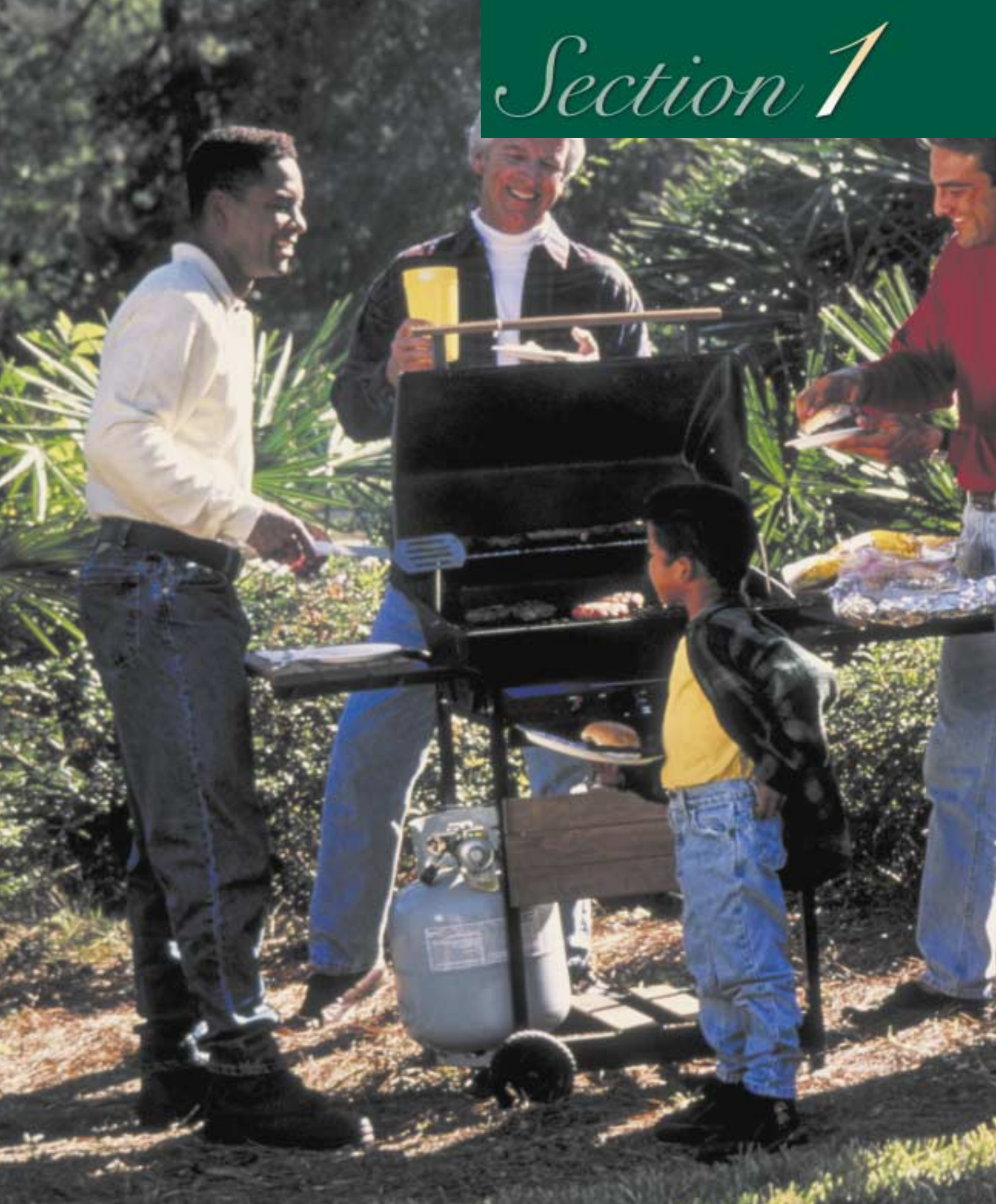
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# Section 1



# The Life-Span Developmental Perspective

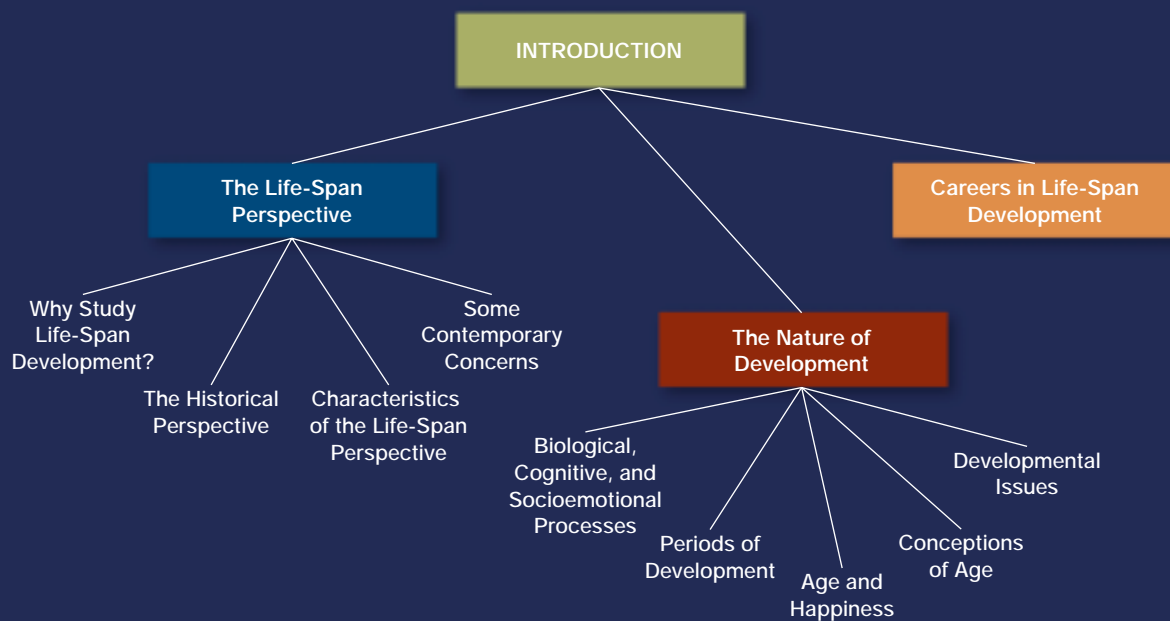
*All the world's a  
stage, And all the men and  
women merely players;  
They have their exits and  
their entrances, And one  
man in his time plays  
many parts . . .*

*William Shakespeare  
English Playwright, 17th Century*

This book is about human development—its universal features, its individual variations, its nature. Every life is distinct, a new biography in the world. Examining the shape of human development allows us to understand it better. Life-Span Development is about the rhythm and meaning of people's lives, about turning mystery into understanding, and about weaving a portrait of who each of us was, is, and will be. In Section 1, you will read two chapters: "Introduction" (chapter 1) and "The Science of Life-Span Development" (chapter 2).



# Chapter 1



# Introduction

*We reach backward  
to our parents and  
forward to our children,  
and through their children  
to a future we will never  
see, but about which we  
need to care.*

Carl Jung  
Swiss Psychiatrist, 20th Century



Ted Kaczynski, the convicted Unabomber, traced his difficulties to growing up as a genius in a kid's body and not fitting in when he was a child.

## *Images of Life-Span Development*

### How Did Ted Kaczynski Become Ted Kaczynski and Alice Walker Become Alice Walker?

THE INTELLECTUAL Ted Kaczynski sprinted through high school, not bothering with his junior year and making only passing efforts at social contact. Off to Harvard at age 16, Ted was a loner during his college years. One of his roommates at Harvard said that Ted had a special way of avoiding people by quickly shuffling by them and slamming the door behind him.

After obtaining his Ph.D. in mathematics at the University of Michigan, Kaczynski became a professor at the University of California at Berkeley. His colleagues there remember him as hiding from social circumstances—no friends, no allies, no networking.

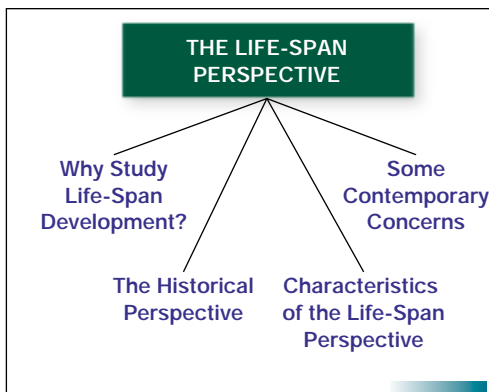


Alice Walker won the Pulitzer Prize for her book *The Color Purple*. Like the characters in her book (especially the women), Walker overcame pain and anger to triumph and celebrate the human spirit.

After several years at Berkeley, Kaczynski resigned and moved to a rural area of Montana where he lived as a hermit in a crude shack for 25 years. Town residents described him as a bearded eccentric. Ted traced his own difficulties to growing up as a genius in a kid's body and sticking out like a sore thumb in his surroundings as a child. In 1996, he was arrested and charged with being the notorious Unabomber, America's most wanted killer who sent sixteen mail bombs in 17 years that left 23 people wounded and maimed, and 3 people dead. In 1998, he plead guilty to the offenses and was sentenced to life in prison.

A decade before Kaczynski allegedly mailed his first bomb, Alice Walker, who would later win a Pulitzer Prize for her book *The Color Purple*, spent her days battling racism in Mississippi. She had recently won her first writing fellowship, but rather than use the money to follow her dream of moving to Senegal, Africa, she put herself into the heart and heat of the civil rights movement. Walker grew up knowing the brutal effects of poverty and racism. Born in 1944, she was the eighth child of Georgia sharecroppers who earned \$300 a year. When Walker was 8, her brother accidentally shot her in the left eye with a BB gun. By the time her parents got her to the hospital a week later (they had no car), she was blind in that eye and it had developed a disfiguring layer of scar tissue. Despite the counts against her, Walker went on to become an essayist, a poet, an award-winning novelist, a short-story writer, and a social activist who, like her characters (especially the women), has overcome pain and anger.

What leads one individual, so full of promise, to commit brutal acts of violence and another to turn poverty and trauma into a rich literary harvest? How can we attempt to explain how one individual can pick up the pieces of a life shattered by tragedy, such as a loved one's death, whereas another one seems to come unhinged by life's minor hassles? Why is it that some individuals are whirlwinds—successful in school, involved in a network of friends, and full of energy—while others hang out on the sidelines, mere spectators of life? If you have ever wondered what makes people develop, you have asked yourself the central question we explore in this book.



## The Life-Span Perspective

The book is a window into the nature of human development—your own and that of every member of the human species. How might we benefit from examining our development?

### Why Study Life-Span Development?

Perhaps you are or will be a parent or teacher. Responsibility for children is or will be a part of your everyday life. The more you learn about them, the better you can deal with them. Perhaps you hope to gain some insight into your own history—as an infant, a child, an adolescent, or a young adult. Perhaps you want to know more about what your life will be like as you grow through the adult years—as a middle-aged adult, as an adult in old age, for example. Or perhaps you just stumbled onto this course, thinking that it sounded intriguing and that the topic of the human life span would raise some provocative and intriguing issues about our lives as we grow and develop. Whatever your reasons, you will discover that the study of life-span development *is* provocative, *is* intriguing, and *is* filled with information about who we are, how we have come to be this way, and where our future will take us.

This book is about **development**, *the pattern of movement or change that begins at conception and continues through the human life span*. Most development involves growth, although it also includes decline (as in death and dying). Later in the chapter we will explore the concept of development in greater detail.

Thus, in exploring development, we will examine the point in time when life begins until the time when it ends, at least life as we know it. You will see yourself as an infant, as a child, and as an adolescent, and be stimulated to think about how those years influenced the kind of individual you are today. And you will see yourself as a young adult, as a middle-aged adult, and as an adult in old age, and be stimulated to think about how your experiences today will influence your development through the remainder of your adult years.

Life-span development also is an important course in many departments because it is linked with so many different areas of psychology. In many programs its importance is recognized by its being a required or core course. Neuroscience/biolog-

#### development

The pattern of change that begins at conception and continues through the life cycle.

*Human development is the core of societal development and psychology is centrally relevant to it.*

Cigdem Kagitcibasi  
Contemporary Developmental  
Psychologist, Istanbul, Turkey

ical psychology, cognitive psychology, abnormal psychology, social psychology, and virtually all other areas of psychology can be connected with life-span development in terms of exploring how people develop in these areas. For example, how memory works is a key aspect of cognitive psychology. In this book you will read about how memory develops from the time individuals are infants through when they are older adults.

In thinking about the importance of studying life-span development, consider the following research findings:

- Massage therapy facilitates the growth and improves the immune system functioning of preterm infants (Dieter & others, 2001; Field, 1998).
- Secure attachment to parents in adolescence is linked with a host of positive outcomes for adolescents, such as positive peer relations and emotional well-being (Allen, Hauser, & Borman-Spurrell, 1996; Allen & Land, 2001).
- Scientists' ability to extend the life span of human cells in a test tube has implications for the potential expansion of the upper boundary of human life (Bodnar & others, 1998; Shay, 2000).

These are but a few of the thousands of research findings we will examine in this text that can improve our understanding of the human life span. *This is an exciting time of discovery in the field of life-span development.*

Before we further discuss the exciting new findings in this field, let's first turn the clock back and explore its historical development.

## The Historical Perspective

Interest in children has a long and rich history, but interest in adults began to develop seriously only in the latter half of the twentieth century.

**Child Development** Throughout history, philosophers have speculated about the nature of children and how they should be reared. Three such philosophical views are based on the notions of original sin, tabula rasa, and innate goodness. In the **original sin view**, especially advocated during the Middle Ages, children were perceived as being basically bad, born into the world as evil beings. The goal of child rearing was salvation, which was believed to remove sin from the child's life. Toward the end of the seventeenth century, the **tabula rasa view** was proposed by English philosopher John Locke. He argued that children are not innately bad. Instead they are like a "blank tablet," a "tabula rasa" as he called it. They acquire their characteristics through experience. Locke believed that childhood experiences are important in determining adult characteristics. He advised parents to spend time with their children and help them become contributing members of society. In the eighteenth century, the **innate goodness view** was presented by Swiss-born French philosopher Jean-Jacques Rousseau. He stressed that children are inherently good. Rousseau said that because children are basically good, they should be permitted to grow naturally with little parental monitoring or constraint.

During the past century and a half, interest in the nature of children and ways to improve their well-being have continued to be important concerns of our society (Booth & Crouter, 2000). We now conceive of childhood as a highly eventful and unique period of life that lays an important foundation for the adult years and is highly differentiated from them. In most approaches to childhood, distinct periods are identified in which special skills are mastered and new life tasks are confronted. Childhood is no longer seen as an inconvenient "waiting" period during which adults must suffer the incompetencies of the young. We now value childhood as a special time of growth and change, and we invest great resources in caring for and educating our children. We protect them from the excesses of adult work through strict child labor laws. We treat their crimes against society under a special system of juvenile justice. And we have government provisions for helping them when ordinary family support systems fail or when families seriously interfere with the child's well-being.



History of Childhood  
Children's Issues  
Children's Rights  
UNICEF

### original sin view

Advocated during the Middle Ages, the belief that children were born into the world as evil beings and were basically bad.

### tabula rasa view

The idea, proposed by John Locke, that children are like a "blank tablet."

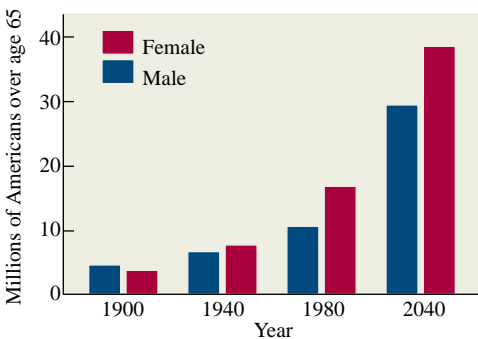
### innate goodness view

The idea, presented by Swiss-born philosopher Jean-Jacques Rousseau, that children are inherently good.

Time Period	Average Life Expectancy (in years)
Prehistoric times	18
Ancient Greece	20
Middle Ages, England	33
1620, Massachusetts Bay Colony	35
19th century, England	41
1900, USA	47
1915, USA	54
1954, USA	70
1998, USA	77

## Figure 1.1

Human Life Expectancy at Birth from Prehistoric to Contemporary Times



## Figure 1.2

### The Aging of America

Millions of Americans over age 65 from 1900 to the present and projected to the year 2040.

Species (common name)	Maximum life span (years)
Human	120
Galápagos turtle	100+
Indian elephant	70
Chinese alligator	52
Golden eagle	46
Gorilla	39
Common toad	36
Domestic cat	27
Domestic dog	20
Vampire bat	13
House mouse	3

## Figure 1.3

Maximum Recorded Life Spans for Different Species

As we see next, although development in childhood is important, a complete view of development requires that we also consider developmental changes in the adult years.

**Life-Span Development** Let's now examine the distinction between the traditional and life-span views of development, and the increased attention given to aging in the twentieth century.

**Traditional and Life-Span Approaches** The *traditional approach* to development emphasizes extensive change from birth to adolescence, little or no change in adulthood, and decline in late old age. Infancy is especially thought to be a time of considerable change, in the traditional approach. In contrast, the *life-span approach* emphasizes developmental change during adulthood as well as childhood (Salthouse, 2000).

**The Twentieth Century** Before the twentieth century, it took 5,000 years of human history to extend human life expectancy by 25 years of age (see figure 1.1). Then in the twentieth century alone, life expectancy increased by 30 years. Improvements in sanitation, nutrition, and medical knowledge led to this amazing increase in life expectancy. Today, for most individuals, childhood and adolescence represent only about one-fourth of their life span (Schaie, 2000).

How much has the older adult population grown in the United States? Figure 1.2 reveals a dramatic increase in the over-65 age group since 1900 and projects continued increases through 2040. A significant increase also will occur in the number of individuals in the 85-and-over and in the 100-and-over age categories. Currently, fewer than 50,000 Americans are 100 years of age or older; in 2050, the projected number is more than 800,000. A baby girl born today has a 1-in-3 chance of living to be 100 years of age!

Although we are living longer, on the average, than we did in the past, the maximum life span of humans has not changed since the beginning of recorded history. The upper boundary of the life span is approximately 120 years, and, as indicated in figure 1.3, our only competition from other species for the maximum recorded life span is the Galápagos turtle.

For too long we believed that development was something that happened only to children. To be sure, growth and development are dramatic in the first two decades of life, but a great deal of change goes on in the next five or six decades of life, too. Consider these descriptions of adult development:

The next five or six decades are every bit as important, not only to those adults who are passing through them but to their children, who must live with and understand parents and grandparents. The changes in body, personality, and abilities through these later decades is great. Developmental tasks are imposed by marriage and parenthood, by the waxing and waning of physical prowess and of some intellectual capacities, by the children's flight from the nest, by the achievement of an occupational plateau, and by retirement and the prospect of final extinction. Parents have always been fascinated by their children's development, but it is high time adults began to look objectively at themselves, to examine the systematic changes in their own physical, mental, and emotional qualities, as they pass through the life span, and to get acquainted with the limitations and assets they share with so many others of their age. (Sears & Feldman, 1973, pp. v–vi)

As the older population continues to increase in the twenty-first century, concerns are raised about the increasing number of older adults that will be without either a spouse or children (traditionally the main sources of support for older adults). In recent decades, American adults were less likely to be married, more likely to be childless, and more likely to be living alone than earlier in the twentieth century. As these individuals become older, their need for social relationships, networks, and supports is increasing at the same time as the supply is dwindling.

## Characteristics of the Life-Span Perspective

In this book we take a life-span perspective on understanding development. What does it mean to adopt a life-span perspective? According to life-span development expert Paul Baltes (1987, 2000), the **life-span perspective** involves these characteristic beliefs: *Development is lifelong, multidimensional, multidirectional, plastic, contextual, multidisciplinary, and involves growth, maintenance, and regulation.*

**Development Is Lifelong** Is early adulthood the endpoint of development? In the life-span perspective it is not; rather, no age period dominates development. Researchers increasingly study the experiences and psychological orientations of adults at different points in their development. Later in this chapter we will describe the age periods of development and their characteristics.

**Development Is Multidimensional** Development consists of biological, cognitive, and socioemotional dimensions (also later in the chapter, we will explore these key dimensions of life-span development). Even within a dimension, such as intelligence, there are many components, such as abstract intelligence, nonverbal intelligence, and social intelligence.

**Development Is Multidirectional** Some dimensions or components of a dimension increase in growth, others decrease. In language development, when one language (such as English) is acquired early in development, the capacity for acquiring second and third languages (such as French and Spanish) decreases later in development, especially after early childhood (Levitt, 1989). In socioemotional development, heterosexual individuals begin to have more relationships with opposite-sex peers during adolescence as they establish intimate relationships, while their relationships with same-sex peers might decrease (Hartup, 2000). In cognitive development, older adults might become wiser by being able to call on experience to guide their intellectual decision making (Baltes, 2000). However, they perform more poorly on tasks that require speed in processing information (Salthouse, 2000).

**Development Is Plastic** A key developmental research agenda is the search for plasticity and its constraints. Plasticity involves the degree to which characteristics change or remain stable. For example, can intellectual skills still be improved through education for individuals in their seventies or eighties? Or might these intellectual skills be cast in stone by the time people are in their thirties and not be capable of further improvement? In one research study, the reasoning abilities of older adults were improved through retraining (Willis & Schaie, 1994). However, developmentalists debate how much plasticity people have at different points in their development; possibly we possess less capacity for change when we become old (Baltes, 2000; Craik & Salthouse, 2000). Later in the chapter we will discuss the issue of stability and change in development, which has close ties with the concept of plasticity.

### life-span perspective

The view that development is lifelong, multidimensional, multidirectional, plastic, contextual, multidisciplinary, and involves growth, maintenance and regulation.



Exploring Aging Issues

National Aging Information Center

Global Resources on Aging



## CAREERS IN LIFE-SPAN DEVELOPMENT

### K. Warner Schaie, Professor of Human Development

K. WARNER SCHAIE is a professor of human development and psychology at Pennsylvania State University, where he teaches and conducts research on adult development and aging. He also directs the Gerontology Center there. He is one of the pioneering psychologists who helped to create the life-span perspective. He is the author or editor of more than 25 books and more than 250 journal articles and book chapters on adult development and aging. Dr. Schaie conducted the Seattle Longitudinal Study of intellectual development, a major research investigation that revealed that many intellectual skills are maintained or even increase during the years of middle age.



Life-span developmentalist K. Warner Schaie (*right*) with two older adults who are actively using their cognitive skills.



Adult Development and Aging  
The Gerontological Society of America  
Geropsychology Resources

***Development Is Contextual*** The individual continually responds to and acts on contexts, which includes a person's biological makeup, physical environment, cognitive processes, historical contexts, social contexts, and cultural contexts. In the contextual view, individuals are thought of as changing beings in a changing world.

Baltes and other life-span developmentalists (Baltes, 2000; Baltes, Reese, & Lipsitt, 1980; Schaie, 1996, 2000) believe that three important sources of contextual influences are (1) normative age-graded influences, (2) normative-history graded influences, and (3) nonnormative life events.

*Normative age-graded influences* are biological and environmental influences that are similar for individuals in a particular age group. These influences include biological processes such as puberty and menopause. They also include sociocultural, environmental processes such as entry into formal education (usually at about age 6 in most cultures) and retirement (which takes place in the fifties and sixties in most cultures).

*Normative history-graded influences* are common to people of a particular generation because of the historical circumstances they experience. Examples include economic changes (such as the Great Depression in the 1930s), war (such as World War II in the 1940s), the changing role of women, the technology revolution we currently are experiencing, and political upheaval and change (such as the decrease in hard-line communism in the 1990s and into the twenty-first century).

*Nonnormative life events* are unusual occurrences that have a major impact on the individual's life and usually are not applicable to many people. These events might include the death of a parent when a child is young, pregnancy in early adolescence, a disaster (such as a fire that destroys a home), or an accident. Nonnormative life events also can include positive events (such as winning the lottery or getting an unexpected career opportunity with special privileges). An important aspect of understanding the role of nonnormative life events is to focus on how people adapt to them.

### ***Development Is Studied by a Number of Disciplines***

Psychologists, sociologists, anthropologists, neuroscientists, and medical researchers all study human development and share an interest in unlocking the mysteries of development through the life span. Examples of research questions that cut across disciplines include these:

- What constraints on intelligence are set by the individual's heredity and health status?
- How universal are cognitive and socioemotional changes?
- How do environmental contexts influence intellectual development?

***Development Involves Growth, Maintenance, and Regulation*** Baltes and his colleagues (Baltes, 2000; Baltes, Staudinger, & Lindenberger, 1999) believe that the mastery of life often involves conflicts and competition among three goals of human development: growth, maintenance, and regulation.

As individuals age into middle and late adulthood, the maintenance and regulation of their capacities takes center stage away from growth. Thus, for many individuals, the goal is not to seek growth in intellectual capacities (such as memory) or physical capacities (such as physical strength), but to maintain those skills or minimize their deterioration. In Section 9, "Late Adulthood," we will discuss these ideas about maintenance and regulation in greater depth.

So far in this chapter we have explored why it is important to study life-span development, an historical perspective on life-span development, and the life-span perspective. As you will see next, the life-span perspective also addresses a number of contemporary concerns.

## Some Contemporary Concerns

Consider some of the topics you read about every day in newspapers and magazines: genetic research, child abuse, homosexuality, mental retardation, parenting, intelligence, career changes, divorce, addiction and recovery, the increasing ethnic minority population, gender issues, midlife crises, stress and health, retirement, and aging. What life-span experts are discovering in each of these areas has direct and significant consequences for understanding children and adults and our decisions as a society about how they should be treated.

An important theme of this textbook is to provide detailed, contemporary coverage of the roles that health and well-being, parenting and education, and sociocultural contexts play in life-span development.

**Health and Well-Being** Health and well-being have been important goals for just about everyone for most of human history. Asian physicians in 2600 B.C. and Greek physicians in 500 B.C. recognized that good habits are essential for good health. They did not blame the gods for illness or think that magic would cure it—they realized that people have some control over their health and well-being. A physician's role became that of a guide, assisting patients to restore a natural physical and emotional balance.

In the twenty-first century, we once again recognize the power of lifestyles and psychological states in health and well-being (Kennedy, 2001; Manuck & others, 2001; Rosenstock, 2000; Taylor, 1999; Weiss, 2000). In every chapter of this book, issues of health and well-being are integrated into our discussion of life-span development. They also are highlighted in the Internet connections that appear with World Wide Web icons throughout the book.

The topics on health and well-being we will discuss include these:

- Drug and alcohol use during pregnancy
- Genetic counseling
- Breast- versus bottle-feeding
- Early intervention
- School health programs
- At-risk adolescents
- Women's health issues
- Exercise
- Addiction and recovery
- Loneliness
- Adaptive physical skills in aging adults
- Coping with death

**Parenting and Education** We hear a lot about pressures on the contemporary family (Cowan, Powell, & Cowan, 1998; Ellis, 2000; Hetherington, 2000). We will evaluate many different issues related to family functioning and parenting. The topics involved in these issues include:

- Day care
- Working parents and latchkey children
- Effects of divorce on children



Health Links  
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## CAREERS IN LIFE-SPAN DEVELOPMENT

### Luis Vargas, Child Clinical Psychologist

LUIS VARGA is Director of the Clinical Child Psychology Internship Program and a professor in the Department of Psychiatry at the University of New Mexico Health Sciences Center. He also is Director of Psychology at the University of New Mexico Children's Psychiatric Hospital.

Luis obtained an undergraduate degree in psychology from St. Edwards University in Texas, a master's degree in psychology from Trinity University in Texas, and a Ph.D. in clinical psychology from the University of Nebraska–Lincoln.

His main interests are cultural issues and the assessment and treatment of children, adolescents, and families. He is motivated to find better ways to provide culturally responsive mental health services. One of his special interests is the treatment of Latino youth for delinquency and substance abuse. He recently co-authored (with Joan Koss-Chioino) *Working with Latino Youth* (Koss-Chioino & Vargas, 1999), which spells out effective strategies for improving the lives of at-risk Latino youth.



Luis Varga (left) conducting a child therapy session



- The best way to parent
- Child maltreatment
- Support systems for families
- Marital relationships
- Intergenerational relations
- Aging parents

Another life-span concern is homelessness and the impact of this impoverished condition on children's development.

In the past decade the American educational system has come under attack (Freiberg & Driscoll, 2000; Spring, 1998). A national committee appointed by the Office of Education concluded that children are being poorly prepared for the increasingly complex future they will face. The educational topics we will explore include these:

- Variations in early childhood education
- Ethnicity, social class, and schools
- Programs to improve children's critical thinking
- School and family coordination
- Cooperative learning
- How to avoid stifling children's creativity
- Bilingual education
- The best schools for adolescents

**Sociocultural Contexts** The tapestry of American culture has changed dramatically in recent years. Nowhere is the change more dramatic than in the increasing ethnic diversity of America's citizens. This changing demographic tapestry promises not only the richness that diversity produces, but also difficult challenges in extending the American dream to all individuals.

Sociocultural contexts include four important concepts: context, culture, ethnicity, and gender. A **context** is the setting in which development occurs. This setting is influenced by historical, economic, social, and cultural factors. Every person's development occurs against the backdrop of cultural contexts. These contexts or settings include homes, schools, peer groups, churches, cities, neighborhoods, university laboratories, the United States, Canada, China, Japan, Egypt, and many others. Each of these settings has meaningful historical, economic, social, and cultural legacies (Brislin, 2000; Triandis, 2000).

**Culture** is the behavior patterns, beliefs, and all other products of a particular group of people that are passed on from generation to generation. Culture results from the interaction of people over many years. A cultural group can be as large as the United States or as small as an African hunter-gatherer group. Whatever its size, the group's culture influences the behavior of its members (Cole, 1999; Kagitcibasi, 1996; Valsiner, 2000). For example, the United States is an achievement-oriented culture with a strong work ethic. However, recent comparisons of American and Japanese children showed that Japanese children are better at math, spend more time working on math at school, and do more math homework than American children (Stevenson, 1995, 2000; Stevenson & Hofer, 1999). **Cross-cultural studies** involve a comparison of a culture with one or more other cultures. The comparison provides information about the degree to which development is similar, or universal, across cultures, or is instead culture-specific.

The topics on culture that we will discuss include these:

- Child-care policy around the world
- Vygotsky's sociocultural cognitive theory
- Gender roles in Egypt and China
- Cross-cultural comparisons of secondary schools
- Marriage around the world
- Death and dying in different cultures

### context

The settings, influenced by historical, economic, social, and cultural factors, in which development occurs.

### culture

The behavior patterns, beliefs, and all other products of a group that are passed on from generation to generation.

### cross-cultural studies

Comparisons of one culture with one or more other cultures. These provide information about the degree to which children's development is similar, or universal, across cultures, and to the degree to which it is culture-specific

**Ethnicity** (the word *ethnic* comes from the Greek word for “nation”) *is based on cultural heritage, nationality characteristics, race, religion, and language.* Not only is there diversity within a culture such as the United States, there also is diversity within each ethnic group. These groups include African Americans, Latinos, Asian Americans, Native Americans, Polish Americans, Italian Americans, and so on. Not all African Americans live in low-income circumstances. Not all Latinos are Catholics. Not all Native Americans are high school dropouts. It is easy to fall into the trap of stereotyping an ethnic group by thinking that all of its members are alike. A more accurate ethnic group portrayal is diversity (McLoyd, 1998, 1999, 2000).

Among the ethnicity topics we will examine are these:

- Similarities, differences, and diversity
- Immigration
- Support systems for ethnic minority individuals
- Ethnicity and schooling
- Value conflicts
- Being old, female, and ethnic

**Gender** *is the sociocultural dimension of being female or male.* Sex refers to the biological dimension of being female or male. Few aspects of our development are more central to our identity and social relationships than gender (Crawford & Unger, 2000; Eagly, 2000). Society’s gender attitudes are changing. But how much? The gender-related topics we will discuss include these:

- The mother’s role and the father’s role
- Parental and peer roles in gender development
- Gender similarities and differences
- Femininity, masculinity, and androgyny
- Carol Gilligan’s care perspective
- Gender communication patterns
- Family work
- Gender and aging

We will integrate the discussion of sociocultural contexts into each chapter. A “Sociocultural Worlds of Development” box also appears in most chapters. Turn to the first one now for a discussion of women’s international struggle for equality. Next, we will explore another contemporary concern in life-span development—social policy.

**Social Policy** *Social policy is a national government’s course of action designed to influence the welfare of its citizens.* A current trend is to conduct developmental research that will lead to effective social policy (Sanders, 2000; Zigler & Hall, 2000). When more than 20 percent of all children and more than half of all ethnic minority children are being raised in poverty, when 40 to 50 percent of all children can expect to spend at least 5 years in a single-parent home, when children and young adolescents are giving birth, when the use and abuse of drugs is widespread, when the specter of AIDS is present, and when the provision of health care for the elderly is inadequate, our nation needs revised social policy.

The shape and scope of social policy is strongly tied to our political system. Our country’s policy agenda and the welfare of the nation’s citizens are influenced by the values held by individual lawmakers, the nation’s economic strengths and weaknesses, and partisan politics.

Marian Wright Edelman, president of the Children’s Defense Fund, has been a tireless advocate of children’s rights. Especially troublesome to Edelman (1995) are the indicators of social neglect that place the United States at or near the lowest rank for industrialized nations in the treatment of children. Edelman says that parenting and nurturing the next generation of children is our society’s most important func-



Two Korean-born children on the day they became United States citizens. Asian American and Latino children are the fastest-growing immigrant groups in the United States. *How diverse are the students in this class on life-span that you now are taking? How are their experiences in growing up likely similar to or different than yours?*

### ethnicity

A characteristic based on cultural heritage, nationality characteristics, race, religion, and language.

### gender

The social dimension of being male or female.

### social policy

A national government’s course of action designed to influence the welfare of its citizens.



Diversity

Social Policy

Trends in the Well-Being of Children and Youth



# SOCIOCULTURAL WORLDS OF DEVELOPMENT

## Women's Struggle for Equality: An International Journey

WHAT ARE some of the educational, political, family, and psychological conditions of women around the world? They include the following (Culbertson, 1991):

### Women and Education

The countries with the fewest women being educated are in Africa, where in some areas women are receiving no education at all. Canada, the United States, and Russia have the highest percentages of educated women. In developing countries, 67 percent of the women and 50 percent of the men over the age of 25 have never been to school. In 1985, 80 million more boys than girls were in primary and secondary educational settings around the world.

### Women and Psychosocial Issues

Women around the world, in every country, experience violence, often from someone close to them. Partner abuse occurs in one of every six households in the United States, with the vast majority of the abuse being directed at women by men (Browne, 1993; Goodman & Quas, 2000). In a survey, "The New Woman Ethics Report," wife abuse was listed as number one among 15 of the most pressing concerns facing society today (Johnson, 1990). Although most countries around the world now have battered women's shelters, beating women continues to be accepted and expected behavior in some countries.

In a study of depression in high-income countries, women were twice as likely as men to be diagnosed as depressed (Nolen-Hoeksema, 1990). In the United States,

from adolescence through adulthood, females are more likely than males to be depressed (Davison & Neale, 2000; McGrath, Kelly, & Rhodes, 1993). Many sociocultural inequities and experiences have contributed to the greater incidence of depression in females than males. Also, possibly more women are diagnosed with depression than actually have depression.



Around the world women too often are treated as burdens rather than assets in the political process. *What can be done to strengthen women's roles in the political process?*



Marian Wright Edelman, president of the Children's Defense Fund (shown here interacting with young children), has been a tireless advocate of children's rights and has been instrumental in calling attention to the needs of children. *What are some of these needs?*

tion and that we need to take it more seriously than we have in the past. She points out that we hear a lot from politicians these days about "family values," but that when we examine our nation's policies for families, they don't reflect the politicians' words.

Our aging society and older persons' status in this society raise policy issues about the well-being of older adults. Special concerns are escalating health-care costs and the access of elderly to adequate health care.

Who should get the bulk of government dollars for improved well-being? Children? Their parents? The elderly? **Generational inequity**, a social policy concern, is the condition in which an aging society is being unfair to its younger members. *This occurs because older adults pile up advantages by receiving inequitably large allocations of resources, such as Social Security and Medicare.* Generational inequity raises questions about whether the young should have to pay for the old and whether an "advantaged" older population is using up resources that should go to disadvantaged children. The argument is that older adults are advantaged because they have publicly pro-

# SUMMARY TABLE 1.1

## The Life-Span Perspective

Concept	Processes/ Related Ideas	Characteristics/Descriptions
Why Study Life-Span Development?	Reasons	<ul style="list-style-type: none"> <li>• Responsibility for children is or will be a part of our everyday lives. The more we learn about children, the more we can better deal with them and assist them in becoming competent human beings.</li> <li>• Life-span development gives us insights about our development as adults as well.</li> </ul>
	Defining Development	<ul style="list-style-type: none"> <li>• Development is the pattern of movement or change that begins at conception and continues through the human life span.</li> <li>• Development includes growth and decline.</li> </ul>
The Historical Perspective	Child Development	<ul style="list-style-type: none"> <li>• Interest in children has a long and rich history.</li> <li>• In the Renaissance, philosophical views were prominent, including the notions of original sin, tabula rasa, and innate goodness.</li> </ul>
	Life-Span Development and Aging	<ul style="list-style-type: none"> <li>• The traditional approach emphasizes extensive change in childhood but stability in adulthood; the life-span perspective emphasizes that change is possible throughout the life span.</li> <li>• In the twentieth century alone, life expectancy has increased by 30 years.</li> </ul>
Characteristics of the Life-Span Perspective	Baltes' View	<ul style="list-style-type: none"> <li>• The life-span perspective involves these basic contentions: Development is lifelong, multidimensional, multidirectional, plastic, contextual, multidisciplinary, and involves growth, maintenance, and regulation.</li> </ul>
Some Contemporary Concerns	Development and Well-being of Children and Adults	<ul style="list-style-type: none"> <li>• Today, the development and well-being of children and adults capture the interest of the public, scientists, and policy makers.</li> <li>• Among the important contemporary concerns are family issues, parenting, education, sociocultural contexts, and social policy.</li> <li>• Three important sociocultural contexts are culture, ethnicity, and gender.</li> </ul>

vided pensions, health care, food stamps, housing subsidies, tax breaks, and other benefits that younger groups do not have. While the trend of greater services for the elderly has been occurring, the percentage of children in poverty has been rising.

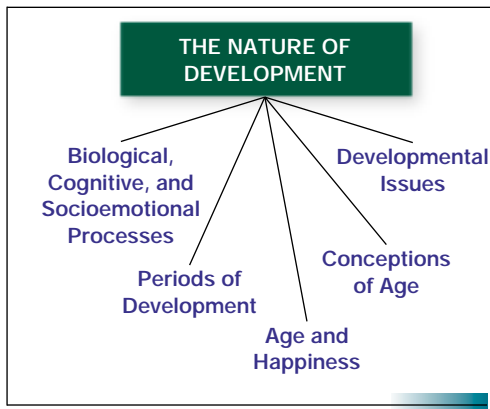
Bernice Neugarten (1988) says the problem should be viewed not as one of generational inequity, but rather as a major shortcoming of our broader economic and social policies. She believes we need to develop a spirit of support for improving the range of options for all people in our society. Also, it is important to keep in mind that children will one day become older adults and will in turn be supported by the efforts of their children (Williams & Nussbaum, 2000). If there were no Social Security system, many adult children would have to bear the burden of supporting their elderly parents and spend less of their resources on educating their children (Schaie, 2000).

At this point we have discussed a number of ideas about why we should study life-span development, a historical perspective on life-span development, the life-span perspective, and contemporary concerns. A review of these ideas is presented in summary table 1.1.

Earlier in the chapter we described Paul Baltes' view of the life-span perspective's characteristics. Next, we will further explore the nature of development, examining in greater detail some of the topics Baltes presented along with other ways of thinking about development.



Maggie Kuhn, founder of the Gray Panthers.



### generational inequity

An aging society's being unfair to its younger members because older adults pile up advantages by receiving inequitably large allocations of resources.

### biological processes

Changes in an individual's physical nature.

### cognitive processes

Changes in an individual's thought, intelligence, and language.

### socioemotional processes

Changes in an individual's relationships with other people, emotions, and personality.

*The first cry of a newborn in Chicago or Zamboango, in Amsterdam or Rangoon, has the same pitch and key, each saying, "I am! I have come through! I belong! I am a member of the human family." . . . babies arriving, suckling, growing into youths restless and questioning. Then as grown-ups they seek and hope. They mate, toil, fish, quarrel, sing, fight, pray.*

Carl Sandburg  
American Poet, 20th Century

*One's children's children's children. Look back to us as we look to you; we are related by our imaginations. If we are able to touch, it is because we have imagined each other's existence, our dreams running back and forth along a cable from age to age.*

Roger Rosenblatt  
American Writer, 20th Century

## The Nature of Development

Each of us develops partly like all other individuals, partly like some other individuals, and partly like no other individuals. Most of the time, our attention is directed to an individual's uniqueness. But psychologists who study life-span development are drawn to our shared as well as our unique characteristics. As humans, we all have traveled some common paths. Each of us—Leonardo da Vinci, Joan of Arc, George Washington, Martin Luther King, Jr., you—walked at about 1 year, engaged in fantasy play as a young child, and became more independent as a youth. Each of us, if we live long enough, will experience hearing problems and the deaths of family members and friends.

At the beginning of the chapter, we defined *development* as the pattern of movement or change that begins at conception and continues through the life span. The pattern of movement is complex because it is the product of biological, cognitive, and socioemotional processes.

### Biological, Cognitive, and Socioemotional Processes

**Biological processes** involve changes in the individual's physical nature. Genes inherited from parents, the development of the brain, height and weight gains, changes in motor skills, the hormonal changes of puberty, and cardiovascular decline all reflect the role of biological processes in development.

**Cognitive processes** involve changes in the individual's thought, intelligence, and language. Watching a colorful mobile swinging above the crib, putting together a two-word sentence, memorizing a poem, imagining what it would be like to be a movie star, and solving a crossword puzzle all reflect the role of cognitive processes in development.

**Socioemotional processes** involve changes in the individual's relationships with other people, changes in emotions, and changes in personality. An infant's smile in response to her mother's touch, a young boy's aggressive attack on a playmate, a girl's development of assertiveness, an adolescent's joy at the senior prom, and the affection of an elderly couple all reflect the role of the socioemotional processes in development.

Biological, cognitive, and socioemotional processes are inextricably intertwined. For example, consider a baby smiling in response to its mother's touch. This response depends on biological processes (the physical nature of touch and responsiveness to it), cognitive processes (being able to understand intentional acts), and socioemotional processes (the act of smiling often reflects a positive emotional feeling and smiling helps to connect us in positive ways with other human beings).

Also, in many instances biological, cognitive, and socioemotional processes are bidirectional. For example, biological processes can influence cognitive processes and vice versa. In section 9, "Late Adulthood," you will read about how poor health (a biological process) is linked to lower intellectual functioning (a cognitive process). You also will read about how positive thinking about the ability to control one's environment (a cognitive process) can have a powerful effect on an individual's health (a biological process).

Thus, although usually we will study the different processes (biological, cognitive, and socioemotional) in separate locations, keep in mind that you are examining the development of an integrated individual with a mind and body that are interdependent (see figure 1.4).

### Periods of Development

For the purposes of organization and understanding, we commonly describe development in terms of periods. The most widely used classification of developmental periods involves the following sequence: prenatal period, infancy, early childhood, middle and late childhood, adolescence, early adulthood, middle adulthood, and late adulthood. Approximate age ranges are listed below for the periods to provide a general idea of when a period begins and ends.

The *prenatal period* is the time from conception to birth. It involves tremendous growth—from a single cell to an organism complete with brain and behavioral capabilities, produced in approximately a 9-month period.

*Infancy* is the developmental period extending from birth to 18 or 24 months. Infancy is a time of extreme dependence upon adults. Many psychological activities are just beginning—language, symbolic thought, sensorimotor coordination, and social learning, for example.

*Early childhood* is the developmental period extending from the end of infancy to about 5 or 6 years. This period is sometimes called the “preschool years.” During this time, young children learn to become more self-sufficient and to care for themselves, develop school readiness skills (following instructions, identifying letters), and spend many hours in play with peers. First grade typically marks the end of early childhood.

*Middle and late childhood* is the developmental period extending from about 6 to 11 years of age, approximately corresponding to the elementary school years. This period is sometimes called the “elementary school years.” The fundamental skills of reading, writing, and arithmetic are mastered. The child is formally exposed to the larger world and its culture. Achievement becomes a more central theme of the child’s world, and self-control increases.

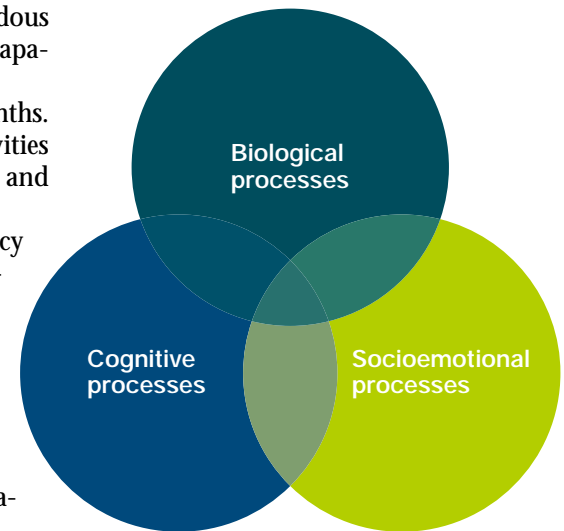
*Adolescence* is the developmental period of transition from childhood to early adulthood, entered at approximately 10 to 12 years of age and ending at 18 to 22 years of age. Adolescence begins with rapid physical changes—dramatic gains in height and weight, changes in body contour, and the development of sexual characteristics such as enlargement of the breasts, development of pubic and facial hair, and deepening of the voice. At this point in development, the pursuit of independence and an identity are prominent. Thought is more logical, abstract, and idealistic. More time is spent outside of the family.

*Early adulthood* is the developmental period beginning in the late teens or early twenties and lasting through the thirties. It is a time of establishing personal and economic independence, career development, and, for many, selecting a mate, learning to live with someone in an intimate way, starting a family, and rearing children.

*Middle adulthood* is the developmental period beginning at approximately 40 years of age and extending to about 60. It is a time of expanding personal and social involvement and responsibility; of assisting the next generation in becoming competent, mature individuals; and of reaching and maintaining satisfaction in a career.

*Late adulthood* is the developmental period beginning in the sixties or seventies and lasting until death. It is a time of adjustment to decreasing strength and health, life review, retirement, and adjustment to new social roles.

Life-span developmentalists increasingly distinguish between two age groups in late adulthood: the *young old*, or *old age* (65 to 74 years of age), and the *old old*, or *late old age* (75 years and older). Still others distinguish the *oldest old* (85 years and older) from younger older adults (Pearlin, 1994). Beginning in the sixties and extending to more than 100 years of age, late adulthood has the longest span of any period of development. Combining this lengthy span with the dramatic increase in the number of adults living to older ages, we will see increased attention given to differentiating the late adulthood period.



*Figure 1.4*

### Developmental Changes Are the Result of Biological, Cognitive, and Socioemotional Processes

These processes are interwoven as individuals develop.



### Asking Questions . . . What Is the Best Age to Be?

ASKING QUESTIONS reflects our active curiosity.

Children—especially young children—are remarkable for their ability to ask questions. The favorite question of my granddaughter, Jordan, when she was 3½ years old was “Why?” and she used the word *why* relentlessly. As strong as question asking is early in our life, many of us ask fewer questions as adults.

Asking questions can help us engage in critical thinking about many domains of life-span development. Consider the question we asked in the text: “What is the best age to be?” Have you ever thought about this in any depth? It is an intriguing question, and one I always ask in the life-span development course I teach. Last year, one student spent about 10 minutes developing the argument that the best age to be is 28 years old. She stressed that at 28 a person is old enough to have experienced enough things in life to show maturity yet still be physically healthy and strong enough to fully enjoy life. Many other students, of course, did not agree and asked her questions, such as “If you are only 30 yourself, how do you know 28 is the best age?” and “Aren’t there factors in many individuals’ lives that might make a different age be the best age for them?”

Be curious. Ask questions. Ask yourself what is the best age to be. Ask your friends the same question and be sure to ask some people of different ages this question.

The periods of the human life span are shown in figure 1.5, along with the processes of development—biological, cognitive, and socioemotional. The interplay of these processes produces the periods of the human life span.

## Age and Happiness

When individuals report how happy they are and how satisfied they are with their lives, no particular age group says they are happier or more satisfied than any other age group (Diener & others, 1999). In one study in eight Western European countries, there was no difference in the percentage of people who were satisfied with life at different ages: 78 percent of 15- to 24-year olds, 78 percent of 35- to 44-year-olds, and 78 percent of those 65 years and older (Ingelhart & Rabier, 1986). Similarly, slightly less than 20 percent of each of the age groups reported that they were “very happy.”

Why might older people report just as much happiness and life satisfaction as younger people? Every period of the life span has its stresses, pluses and minuses, hills and valleys. Although adolescents must cope with developing an identity, feelings of insecurity, mood swings, and peer pressure, the majority of adolescents develop positive perceptions of themselves, feelings of competence about their skills, positive relationships with friends and family, and an optimistic view of their future. And while older adults face a life of reduced income, less energy, decreasing physical skills, and concerns about death, they are also less pressured to achieve and succeed, have more time for leisurely pursuits, and have accumulated many years of experience that help them adapt to their lives with a wisdom they may not have had in their younger years. Because growing older is a certain outcome of living, we can derive considerable pleasure from knowing that we are likely to be just as happy as older adults as when we were younger.

## Conceptions of Age

In our description of the periods of the life span, we associated approximate age bands with the periods. However, life-span expert Bernice Neugarten (1988) believes we are rapidly becoming an age-irrelevant society. She says we are already familiar with the 28-year-old mayor, the 35-year-old grandmother, the 65-year-old father of a preschooler, the 55-year-old widow who starts a business, and the 70-year-old student. Neugarten stresses that choices and dilemmas do not spring forth at 10-year intervals. Decisions are not made and then left behind as if they were merely beads on a chain. Neugarten argues that most adulthood themes appear and reappear throughout the human life span. The issues of intimacy and freedom can haunt couples throughout their relationship. Feeling the pressure of time, reformulating goals, and coping with success and failure are not the exclusive property of adults of a particular age.

Neugarten’s ideas raise questions about how age should be conceptualized. Some of the ways age has been conceptualized are as chronological age, biological age, psychological age, and social age (Hoyer, Rybash, & Roodin, 1999).

**Chronological Age** *Chronological age is the number of years that have elapsed since a person’s birth. Many people consider chronological age synonymous with the concept of age.* However, some developmentalists argue that chronological age is not very relevant to understanding a person’s psychological development (Botwinick, 1978). A person’s age does not cause development. Time is a crude index of many events and experiences, and it does not cause anything.

**Biological Age** *Biological age is a person’s age in terms of biological health.* Determining biological age involves knowing the functional capacities of a person’s vital organ system. One person’s vital capacities may be better or worse than those of others of comparable age. The younger the person’s biological age, the longer the person is expected to live, regardless of chronological age.

*“How old would you be if you didn’t know how old you were?”*

Satchel Paige  
American Baseball Pitcher, 20<sup>th</sup> Century

### chronological age

The number of years that have elapsed since a person’s birth; what is usually meant by “age.”

### biological age

A person’s age in terms of biological health.

### psychological age

An individual’s adaptive capacities compared to those of other individuals of the same chronological age.

### social age

Social roles and expectations related to a person’s age.

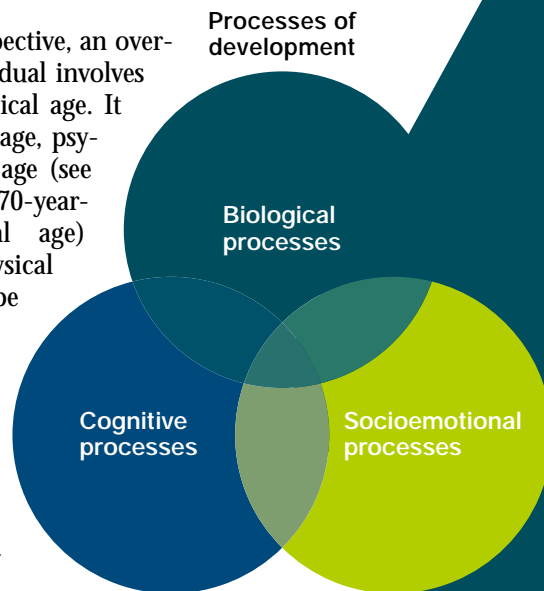
### nature-nurture issue

*Nature* refers to an organism’s biological inheritance, *nurture* to environmental influences. The “nature” proponents claim biological inheritance is the most important influence on development; the “nurture” proponents claim that environmental experiences are the most important.


**Psychological Age** *Psychological age is an individual's adaptive capacities compared to those of other individuals of the same chronological age.* Thus, older adults who continue to learn, are flexible, are motivated, control their emotions, and think clearly are engaging in more adaptive behaviors than their chronological agemates who do not continue to learn, are rigid, are unmotivated, do not control their emotions, and do not think clearly.

**Social Age** *Social age refers to social roles and expectations related to a person's age.* Consider the role of "mother" and the behaviors that accompany the role (Huyck & Hoyer, 1982). In predicting an adult woman's behavior, it may be more important to know that she is the mother of a 3-year-old child than to know whether she is 20 or 30 years old. We still have some expectations for when certain life events—such as getting married, having children, becoming a grandparent, and retiring—should occur. However, as Neugarten concluded, chronological age has become a less accurate predictor of these life events in our society.

From a life-span perspective, an overall age profile of an individual involves more than just chronological age. It also consists of biological age, psychological age, and social age (see figure 1.6). For example, a 70-year-old man (chronological age) might be in good physical health (biological age), be experiencing memory problems and not coping well with the demands placed on him by his wife's recent hospitalization (psychological age), and have a number of friends with whom he regularly golfs (social age).



**Periods of Development**

	Late adulthood (60s–70s to death)
	Middle adulthood (35–45 to 60s)
	Early adulthood (20s, 30s)
	Adolescence (10–12 to 18–21 years)
	Middle and late childhood (6–11 years)
	Early childhood (2–5 years)
	Infancy (Birth–18/24 months)
	Prenatal period (Conception–Birth)

**Developmental Issues**

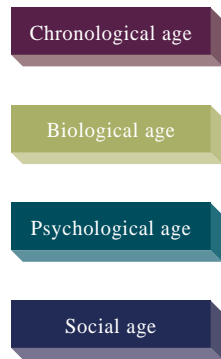
The most important developmental issues include nature and nurture, continuity and discontinuity, and stability and change.

**Nature and Nurture** *The nature-nurture issue involves the debate about whether development is primarily influenced by nature or nurture. Nature refers to an organism's biological inheritance, nurture to its environmental experiences.* "Nature" proponents claim that the most important influence on development is biological inheritance. "Nurture" proponents claim that environmental experiences are the most important influence.

According to the nature advocates, just as a sunflower grows in an orderly way—unless defeated by an unfriendly environment—so does the human grow in an orderly way. The range of environments can be vast, but the nature approach argues that the genetic blueprint produces commonalities in growth and development. We walk before we talk, speak one word before

*Figure 1.5*  
**Processes and Periods of Development**

The unfolding of life's periods of development is influenced by the interaction of biological, cognitive, and socioemotional processes.



## Figure 1.6

Conceptions of Age

### continuity-discontinuity issue

The issue regarding whether development involves gradual, cumulative change (continuity) or distinct stages (discontinuity).

### stability-change issue

The issue of whether development is best described as involving stability or as involving change. This issue involves the degree to which we become older renditions of our early experience or instead develop into someone different from who we were at an earlier point in development.

two words, grow rapidly in infancy and less so in early childhood, experience a rush of sexual hormones in puberty, reach the peak of our physical strength in late adolescence and early adulthood, and then physically decline. The nurture proponents acknowledge that extreme environments—those that are psychologically barren or hostile—can depress development. However, they believe that basic growth tendencies are genetically wired into humans.

By contrast, other psychologists emphasize the importance of nurture, or environmental experiences, in development. Experiences run the gamut from the individual's biological environment (nutrition, medical care, drugs, and physical accidents) to the social environment (family, peers, schools, community, media, and culture).

**Continuity and Discontinuity** Think about your development for a moment. Did you become the person you are gradually, like the slow, cumulative way a seedling grows into a giant oak? Or did you experience sudden, distinct changes in your growth, like the way a caterpillar changes into a butterfly (see figure 1.7)? For the most part, developmentalists who emphasize nurture usually describe development as a gradual, continuous process. Those who emphasize nature often describe development as a series of distinct stages.

The **continuity-discontinuity issue** focuses on the extent to which development involves gradual, cumulative change (continuity) or distinct stages (discontinuity). In terms of continuity, a child's first word, though seemingly an abrupt, discontinuous event, is actually the result of weeks and months of growth and practice. Puberty, though also seemingly an abrupt, discontinuous occurrence, is actually a gradual process occurring over several years.

In terms of discontinuity, each person is described as passing through a sequence of stages in which change is qualitatively rather than quantitatively different. As the oak moves from seedling to giant oak, it becomes *more* oak—its development is continuous. As the caterpillar changes to a butterfly, it is not just more caterpillar, it is a *different kind* of organism—its development is discontinuous. For example, at some point a child moves from not being able to think abstractly about the world to being able to. This is a qualitative, discontinuous change in development, not a quantitative, continuous change.

**Stability and Change** Another important developmental topic is the **stability-change issue**, which addresses whether development is best described by stability or by change. The stability-change issue involves the degree to which we become older renditions of our early experience or whether we develop into someone different from who we were at an earlier point in development. Will the shy child who hides behind the sofa when visitors arrive be a wallflower at college dances, or will the child become a sociable, talkative individual? Will the fun-loving, carefree adolescent have difficulty holding down a 9-to-5 job as an adult or become a straitlaced, serious conformist?

The stability-change issue is linked with Paul Baltes' (1987, 2000) belief, which we discussed earlier, that plasticity or change is an important life-span issue. Recall that in the life-span perspective, plasticity or change is possible throughout the life span, although experts such as Baltes argue that older adults often show less capacity for change than younger adults.

One of the reasons adult development was so late in being studied was the predominant belief for many years that nothing much changes in adulthood. The major changes were believed to take place in childhood, especially during the first 5 years of life. Today, most developmentalists believe that some change is possible throughout the human life span, although they disagree, sometimes vehemently, about just how much change can take place, and how much stability there is. The important issue of stability and change in development will reappear on many occasions in our journey through the human life span.

An important dimension of the stability-change issue is the extent to which early experiences (especially in infancy) or later experiences are the key determinants of a

person's development. That is, if infants experience negative, stressful circumstances in their lives, can those experiences be overcome by later, more positive experiences? Or are the early experiences so critical, possibly because they are the infant's first, prototypical experiences, that they cannot be overridden by an enriched environment later in development?

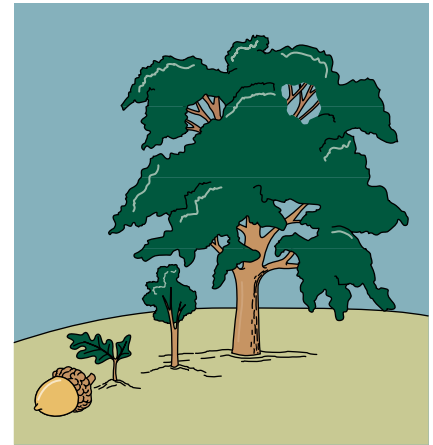
The early-later experience issue has a long history and continues to be hotly debated among developmentalists (Cairns, 1998). Some believe that unless infants experience warm, nurturant caregiving in the first year or so of life, their development will never be optimal (Waters & others, 1995). Plato was sure that infants who were rocked frequently became better athletes. Nineteenth-century New England ministers told parents in Sunday sermons that the way they handled their infants would determine their children's future character. The emphasis on the importance of early experience rests on the belief that each life is an unbroken trail on which a psychological quality can be traced back to its origin (Kagan, 1992, 1998, 2000).

The early-experience doctrine contrasts with the later-experience view that, rather than a statue-like permanence after change in infancy, development continues to be like the ebb and flow of a river. The later-experience advocates argue that children are malleable throughout development and that later sensitive caregiving is just as important as earlier sensitive caregiving. A number of life-span developmentalists, who focus on the entire life span rather than only on child development, stress that too little attention has been given to later experiences in development (Baltes, Lindenberger, & Staudinger, 1998; Schaie & Willis, 2001; Willis & Reid, 1999). They argue that early experiences are important contributors to development, but no more important than later experiences. Jerome Kagan (2000) points out that even children who show the qualities of an inhibited temperament, which is linked to heredity, have the capacity to change their behavior. In his research, almost one-third of a group of children who had an inhibited temperament at 2 years of age were not unusually shy or fearful when they were 4 years of age.

People in Western cultures, especially those steeped in the Freudian belief that the key experiences in development are children's relationships with their parents in the first 5 years of life, have tended to support the idea that early experiences are more important than later experiences. But the majority of people in the world do not share this belief. For example, people in many Asian countries believe that experiences occurring after about 6 to 7 years of age are more important aspects of development than earlier experiences. This stance stems from the long-standing belief in Eastern cultures that children's reasoning skills begin to develop in important ways in the middle childhood years.

One recent book—*The Myth of the First Three Years*—supports the later experience argument (Bruer, 1999). The argument is made, based on the available research evidence, that learning and cognitive development do not occur only in the first 3 years of life but rather are lifelong. The author concludes that too many parents treat the first 3 years as if a switch goes off, after which further learning either does not take place or is greatly diminished. That is not to say experiences in the first 3 years are unimportant, but rather that later experiences are too. This book has been highly controversial, with early-experience advocates being especially critical of it (Bornstein, 2000).

**Evaluating the Developmental Issues** As we further consider these three salient developmental issues—nature and nurture, continuity and discontinuity, and stability and change—it is important to point out that most life-span developmentalists recognize that extreme positions on these issues are unwise. Development is not all nature or all nurture, not all continuity or all discontinuity, and not all stability or all change (Lerner, 1998). Both nature and nurture, continuity and discontinuity, stability and change characterize our development through the human life span. For example, in considering the nature-nurture issue, the key to development is the *interaction* of nature and nurture rather than either factor alone. For instance, an individual's cognitive development is the result of heredity-environment



### Figure 1.7 Continuity and Discontinuity in Development

Is our development like that of a seedling gradually growing into a giant oak? Or is it more like that of a caterpillar suddenly becoming a butterfly?



*What is the nature of the early and later experience issue in development?*



Careers in Life-Span Development  
Exploring Psychology Careers  
Nonacademic Careers in Psychology

## CAREERS IN LIFE-SPAN DEVELOPMENT

interaction, not heredity or environment alone. (Much more about the role of heredity-environment interaction appears in chapter 3.)

Although most developmentalists do not take extreme positions on these three important issues, there is spirited debate regarding how strongly development is influenced by each of these factors (Appelbaum & Conger, 1996). Are girls less likely to do well in math because of their “feminine” nature, or because of society’s masculine bias? How extensively can the elderly be trained to reason more effectively? How much, if at all, does our memory decline in old age? Can techniques be used to prevent or reduce the decline? For children who experienced a world of poverty, neglect by parents, and poor schooling in childhood, can enriched experiences in adolescence remove the “deficits” they encountered earlier in their development? The answers given by developmentalists to such questions depend on their stances regarding the issues of nature and nurture, continuity and discontinuity, and stability and change. The answers to these questions also influence public policy decisions about children, adolescents, and adults, and influence how we each live our lives as we go through the human life span.

Now that you have learned about the field of life-span development, you might be considering a career in this field. Let’s explore what types of careers are available in life-span development.

## Careers in Life-Span Development

A career in life-span development is one of the most rewarding vocations you can pursue. In such a career you can help individuals reach their full potential and function competently. Professionals who work in the field of life-span development often feel a sense of pride in their ability to contribute in meaningful ways to people’s lives. At the end of this chapter you will find an appendix, “Exploring Careers in Life-Span Development,” where you can find out some of the careers that are available in this field and read about what individuals currently in life-span careers have to say about them and the importance of this course you now are taking in life-span development.

Some of you might be quite sure about what you plan to make your life’s work. Others of you might not have decided on a major yet and might be uncertain which career path you want to follow. Each of us wants to find a rewarding career and enjoy the work we do.

If you decide to pursue a career in life-span development, what options are available to you? Many. College and university professors teach courses in many different areas of life-span development, education, family development, nursing, and medicine. Counselors, clinical psychologists, nurses, pediatricians, and geriatric specialists help individuals of different ages cope more effectively with their lives and improve their health and well-being. Educators and teachers help individuals become more knowledgeable.

Although an advanced degree is not absolutely necessary in some areas of life-span development, you can expand your opportunities (and income) considerably by obtaining a graduate degree. Many careers in life-span development pay reasonably well. For example, psychologists earn well above the median salary in the United States. Also, by working in the field of life-span development you can guide people in improving their lives, understand yourself and others better, possibly advance the state of knowledge in the field, and have an enjoyable time while you are doing these things.

If you are considering a career in some area of life-span development, would you prefer to work with infants? children? adolescents? the elderly? As you go this term, try to spend some time with individuals of different ages. Observe their behavior. Talk with them about their lives. Think about whether you would like to work with people of this age in your life’s work.

Another important aspect of exploring careers is to talk with individuals who work in various jobs. For example, if you have some interest in becoming a school counselor, call a school, ask to speak with the counselor, and set up an appointment to discuss their career. If you have an interest in becoming a nurse, think about whether you might prefer working with babies, adolescents, or the elderly. Call a hos-



Nursing is but one of the many rewarding careers that involve life-span development. *What might be some others?*

<b>Jobs/Careers</b>	<b>Degree</b>	<b>Education</b>	<b>Training</b>	<b>Description of Work</b>
Audiologist	Undergraduate degree	Minimum 4 years	Courses and supervisory training in hearing science	Assess and identify presence and severity of hearing loss, as well as problems in balance
Child clinical psychologist or counseling psychologist	Ph.D or psy.D	5–7 years postundergraduate	Includes clinical training; involves a 1-year internship in a psychiatric hospital or mental health facility.	Diagnose problems, administer psychological tests, conduct psychotherapy
Child life specialist	Undergraduate degree	4 years of undergraduate study	Often trained in child development or education, but usually includes additional training in a child life program.	Work with children and their families before they are admitted to a hospital; monitor child patient's activities
Child psychiatrist	M.D.	7–9 years postundergraduate	Four years of medical school, plus an internship and residency in child psychiatry are required.	Similar to a clinical psychologist, but a psychiatrist can prescribe drugs whereas clinical psychologist cannot
Child welfare worker	Undergraduate degree is minimum	4 years minimum	Coursework and training in social work or human services.	Employed by the Child Protective Services Unit of each state to protect children's rights; monitor cases of child maltreatment
College/university professor in development, education, family development, nursing, social work	Ph.D. or master's degree	5–6 years for Ph.D. (or D.Ed.) postundergraduate; 2 years for master's degree postundergraduate	Take graduate courses, learn to conduct research, attend and present papers at professional meetings	Teach courses in child development, adolescence, adult development and aging, education, or nursing; conduct research; train undergraduates
Day-care supervisor	Varies by state	Varies by state	The Department of Public Welfare in many states publishes a booklet with the requirements for a day-care supervisor.	Direct day-care or preschool programs
Early childhood educator	Master's degree (minimum)	2 years of graduate work (minimum)	Coursework in early childhood education and practice in day-care or early childhood centers with supervised training.	Usually teach in community colleges that award a degree in early childhood education; train individuals for careers in day care
Elementary or secondary school teacher	Undergraduate degree (minimum)	4 years	Wide range of courses with a major or concentration in education.	Teach one or more subjects; prepare the curriculum; give tests, assign grades, and monitor students' progress
Family and consumer science educator	Undergraduate degree (minimum)	Four years or more	Coursework in a family and consumer education department; internship	Teaching in middle or high school about such topics as nutrition, relationships, sexuality, parenting, and human development
Gerontologist	Master's degree or Ph.D.	2–5 years postundergraduate	Coursework, research training in gerontology	Study the aging process, as well as impact of aging on government programs, social policy, and service delivery
Geriatric physician	M.D	7–9 years postundergraduate	Four years of medical school, plus a residency in geriatric medicine	Diagnose medical problems of the elderly, evaluate treatment options, and make recommendations for nursing care or other arrangements

*continued*

**Figure 1.8** Jobs and Careers in Life-Span Development

<b>Jobs/Careers</b>	<b>Degree</b>	<b>Education</b>	<b>Training</b>	<b>Description of Work</b>
Geriatric nurse	R.N.	2–5 years	Courses in biological sciences, nursing care, and mental health in a school of nursing; supervised clinical training and in geriatric settings	Provide prevention and intervention for chronic and acute health problems in the elderly
Geropsychologist	Ph.D.	5–7 years postundergraduate	Includes clinical and research training, 1-yr internship, 1–2 yr post-doctoral training; license is usually required.	Provide intervention, assessment, and support for the elderly. Recommend interventions when needed.
Home health aide	No education required	—	Brief training session by agency	Provide direct services to the elderly in the elderly person's home; give assistance in basic self-care tasks
Medical social worker	M.S.W.	1–2 years postundergraduate	Undergraduate training in social work; graduate training in social work and supervised training in medical settings; state certification usually required	Coordinate a variety of support services to the elderly and their families when the elderly have a severe or long-term disability.
Pediatrician	M.D.	7–9 years of medical school	Four years of medical school, plus an internship and residency in pediatrics.	Monitor infants' and children's health, and treat their diseases; advise parents about infant and child development
Pediatric nurse	R.N.	2–5 years	Courses in biological sciences, nursing care, and pediatrics (often in a school of nursing); supervised clinical experiences in medical settings.	Monitor infants' and children's health, work to prevent disease or injury, help children achieve optimal health, and treat children with health deviations
Physical therapist	Undergraduate degree	Courses and training in physical therapy	Course work in physical therapy in a specialized program; state certification usually required	Work directly with individuals of all ages who have a physical disability to help them function as competently as possible. Consult with other professionals and coordinate services.
Preschool/Kindergarten teacher	Usually undergraduate degree	4 years	Coursework in education with a specialization in early childhood education; state certification usually required.	Direct the activities of prekindergarten children, many of whom are 4 years old.
Recreational therapist	No education required	—	Specialized training in agency or setting; previous coursework in psychology, education, gerontology, or the arts may be helpful	Direct activities for the elderly. Try to engage the elderly in a range of activities, from dance to organized social interaction. Work in nursing homes, hospitals, senior centers, and other settings.
Rehabilitation counselor	Master's degree or Ph.D.	2–5 years postgraduate	Coursework, clinical training, research in rehabilitation counseling	Provide rehabilitation to individuals who have impaired physical functioning.
School psychologist	Master's degree or Ph.D.	5–6 years of graduate work for Ph.D. or D.Ed.; 2 years for master's degree	Includes coursework and supervised training in school settings, usually in a department of educational psychology.	Usually, work with secondary school students, assisting them in educational and career planning; also see students who have school-related problems.

## SUMMARY TABLE 1.2

### The Nature of Development and Careers in Life-Span Development

Concept	Processes/ Related Ideas	Characteristics/Descriptions
The Nature of Development	Biological, Cognitive, and Socioemotional Processes	<ul style="list-style-type: none"> <li>Development is influenced by an interplay of biological, cognitive, and socioemotional processes.</li> </ul>
	Periods of Development	<ul style="list-style-type: none"> <li>The life span is commonly divided into the following periods of development: prenatal, infancy, early childhood, middle and late childhood, adolescence, early adulthood, middle adulthood, and late adulthood.</li> <li>Some experts on life-span development, however, believe too much emphasis is placed on age; Neugarten believes we are moving toward a society in which age is a weaker predictor of development in adulthood.</li> </ul>
	Age and Happiness	<ul style="list-style-type: none"> <li>In studies covering adolescence through old age, people report that they are not happier at one point in development than at others.</li> </ul>
	Conceptions of Age	<ul style="list-style-type: none"> <li>We often think of age only in terms of chronological age. However, a full evaluation of age requires consideration of four dimensions of age: chronological, biological, psychological, and social.</li> </ul>
	Developmental Issues	<ul style="list-style-type: none"> <li>The nature-nurture issue focuses on the extent to which development is mainly influenced by nature (biological inheritance) or nurture (experience).</li> <li>Developmentalists describe development as continuous (gradual, a cumulative change) or as discontinuous (abrupt, a sequence of stages).</li> <li>Is development best described as stable or changing? The stability-change issue focuses on the degree to which we become older renditions of our early experience or develop into someone different from who we were earlier in development. A special aspect of the stability-change issue is the extent to which development is determined by early versus later experiences.</li> <li>Most developmentalists recognize that extreme positions on the nature-nurture, continuity-discontinuity, and stability-change issues are unwise. Despite this consensus, there is still spirited debate on these issues.</li> </ul>
Careers in Life-Span Development	Many Options	<ul style="list-style-type: none"> <li>Careers in life-span development can be extremely rewarding.</li> <li>These careers offer a number of options in the education, helping, and health professions.</li> </ul>

pital, ask to speak with the nursing department, and set up an appointment to speak with the nursing coordinator about a nursing career.

Something else that should benefit you is to work in one or more jobs related to your career interests while you are in college. Many colleges and universities have internships or work experiences for students who major in such fields as life-span development. In some instances, these opportunities are for course credit or pay. Take advantage of these opportunities. They can provide you with valuable experiences to help you decide if this is the right career area for you, and they can help you get into graduate school if you decide to go.

For brief descriptions of many jobs and careers in life-span development, see figure 1.8.

At this point we have discussed the nature of development and careers in life-span development. To review these ideas, see summary table 1.2. In the next chapter we will discuss the science of life-span development.



## Key Terms

development 00  
 original sin view 00  
 tabula rasa view 00  
 innate goodness view 00  
 life-span perspective 00  
 context 00  
 culture 00  
 cross-cultural studies 00

ethnicity 00  
 gender 00  
 social policy 00  
 generational inequity 00  
 biological processes 00  
 cognitive processes 00  
 socioemotional processes 00  
 chronological age 00

biological age 00  
 psychological age 00  
 social age 00  
 nature-nurture issue 00  
 continuity-discontinuity issue 00  
 stability-change issue 00

## Key People

John Locke  
 Jean-Jacques Rousseau

Paul Baltes  
 Marian Wright Edelman

Bernice Neugarten  
 Jerome Kagan



## Taking It to the Net

1. Janice plans to join a small family practice group upon completion of her medical school pediatrician residency. Why should Janice, as a pediatrician, be involved in detecting and helping to prevent violence in the lives of her young patients?  
[http://www.ama-assn.org/sci-pubs/amnews/pick\\_01/hlsb0101.htm](http://www.ama-assn.org/sci-pubs/amnews/pick_01/hlsb0101.htm)
2. Derrick has heard about a recent book that has stirred up a lot of controversy about the role of parents and peers in development.

What is the book, what is its premise, and why has it generated so many strong feelings?

<http://www.edweek.com/ew/vol-18/04parent.h18>

3. Carmen is completing her PhD in clinical psychology. She is interested in geropsychology. What are some of the areas in which geropsychologists might conduct research and practice?  
[http://bama.ua.edu/~appgero/apa12\\_2/qualifications/qualificationsmain.html](http://bama.ua.edu/~appgero/apa12_2/qualifications/qualificationsmain.html)

## OLC Preview

To further test your knowledge of this chapter or to explore our extensive online resources that accompany *Life-Span Development*,

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