

7th Edition

ADULT DEVELOPMENT AND AGING



John C. Cavanaugh
Fredda Blanchard-Fields



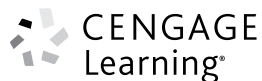
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John C. Cavanaugh

Consortium of Universities of the Washington Metropolitan Area

Fredda Blanchard-Fields



Australia • Brazil • Mexico • Singapore • United Kingdom • United States

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In memory of Fredda Blanchard-Fields, friend and collaborator,
who dedicated her life to educating students.

To Chris

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PREFACE

People's experiences growing older in the 21st century differ dramatically from their parents' and grandparents' experience. The complex issues confronting individuals and societies are the reason a solid grounding in research and theory about adult development and aging is essential for even understanding news events. The health care debates from 2009 to the present bring many issues to the forefront, including Medicare, end-of-life issues, and longevity and the possibility of significant intergenerational policy issues. Other news stories about genetic breakthroughs, stem cell research, brain-imaging techniques, and the latest breakthroughs in treating dementia happen regularly. To understand why these issues are so critical, one must understand aging in a broader, rapidly changing context. That is why *Adult Development and Aging* is now in its seventh edition.

The first few decades of this century will witness a fundamental change in the face of the population—literally. Along with many countries in the industrialized world, the United States will experience an explosive growth in the older adult population due to the aging of the baby-boom generation. Additionally, the proportion of older adults who are African American, Latino, Asian American, and Native American will increase rapidly. To deal with these changes, new approaches need to be created through the combined efforts of people in many occupations—academics, gerontologists, social workers, health care professionals, financial experts, marketing professionals, teachers, factory workers, technologists, government workers, human service providers, and nutritionists, to mention just a few. Every reader of this book, regardless of his or her area of expertise, needs to understand older adults in order to master the art of living.

This seventh edition of *Adult Development and Aging* continues to provide in-depth coverage of the major issues in the psychology of adult development and aging. The seventh edition adds numerous topics and provides expanded coverage of many of the ones discussed in earlier editions.

Changes in *Adult Development and Aging* Seventh Edition

A new feature, **Adult Development in Action**, challenges students to think critically about decisions they might make as career professionals such as health care workers, gerontologists, and activities directors.

We also include more **glossary terms** highlighted throughout each chapter to increase accessibility and provide additional study tools.

Chapter-by-Chapter Additions and Enhancements

Chapter 1

- Introduces “emerging adulthood,” the period between adolescence and full adulthood.

Chapter 2

- “Neuroimaging Techniques” explains how and why the ability to see inside the brain of living people has revolutionized our understanding of relations between the brain and our behavior.
- Increased explanation of the distinctions between structural neuroimaging and functional neuroimaging.
- Description of the brain's structure includes explanation of neurons, dendrites, axon, neurofibers, terminal branches, neurotransmitters, and synapse.
- A new diagram of a neuron illustrates dendrites, axon, neurofibers, and terminal branches.
- “What Age-Related Changes Occur in Neurons?” discusses the decrease in neurons as the brain declines.
- Increased discussion on neurotransmitters, their involvement in brain processes and cognitive aging especially in Alzheimer's patients.
- The section on “Age-Related Changes in Brain Structures” is enhanced so it now includes a discussion of white matter and the study of its structural health.

- New to the chapter is “Linking Structural Changes with Executive Functioning” examining older adults’ ability to focus on relevant information and control their thoughts.
- “Linking Structural Changes with Memory” raises the question of whether Alzheimer’s is an acceleration of aging rather than a separate process.
- Another section has been added; “Linking Structural Changes with Emotion”
- “How Do We Know?: The Aging Emotional Brain” studies Winecoff’s research findings.
- “Linking Structural Changes with Socio-economic Cognition” examines how the aging brain processes complex situations such as those involving moral judgment.
- “Complex Development in the Prefrontal Cortex” examines the critical role of the prefrontal cortex plays on human behavior.
- Investigation of how older adults attempt to compensate for age-related changes to the brain.
- “The Parieto-Frontal Integration Theory” examines the notion that intelligence comes from a distributed and integrated network of neurons in the parietal and frontal areas of the brain.
- “Theories of Brain-Behavior Changes Across Adulthood” includes discussion of the HAROLD, CRUNCH, STAC methods.
- Section 2.4 “Neural Plasticity and the Aging Brain” has been significantly revised to include information on how nutrition influences brain changes and cognitive activity.
- “Current Controversies: Are Neural Stem Cells the Solution to Brain Aging?”
- “Social Policy Implications” asserts the importance of policymakers supporting neuroscience research.

Chapter 3

- Discussion of how chronic stress can accelerate changes in telomeres while moderate exercise can actually slow the rate at which telomeres shorten.
- Discussion and accompanying figure of cardiovascular disease as the leading cause of death in the United States.

- Cardiovascular health as it relates to ethnicity.
- The factors leading to hypertension including heredity, sodium intake, and obesity.
- Menopausal hormone therapy and how decreasing levels of estrogen can contribute to osteoporosis, urinary incontinence, and cardiovascular disease.
- Updated “Current Controversies: Menopausal Hormone Therapy” now discusses the circumstances under which a physician might recommend HRT.
- The nervous system builds on the age-related changes to the brain discussed in chapter 2.
- “Social Policy Implications” discusses preventing falls.

Chapter 4

- New examples of how self-ratings of health reflect socio-economic background.
- Enhanced discussion of how psychoneuroimmunology is being used as a framework to predict health outcomes.
- New discussion of the way Verbrugge and Jette’s model is being used to identify disability in China.
- “How Does Disability in Older Adults Differ Globally?” discusses how adults with disabilities or functional limitations are on the rise around the world.

Chapter 5

- New section titled “Preventive and Corrective Proactivity (PCP) Model.”
- Additional key words: preventative and corrective adaptations.
- New discussion on high-tech approaches to home modification, including “Granny pods.”
- A discussion of “elderspeak” used in nursing homes.
- “How Do We Know?: Identifying different types of elderspeak in Singapore.”

Chapter 6

- New Chapter opening vignette about Harry Lorayne’s book “Ageless Memory.”
- Additional emphasis on automatic and effortful processing.

- “Age Differences in Encoding versus retrieval” compares the differences in the attention processes of older and younger adults.
- “Neuroscience Evidence” discusses neuroimaging and cognitive neuroscience findings that show age related differences in encoding and retrieval.
- Enhanced discussion on memory includes a study of differences in age with regard to prospective memory, evidence of how memory changes across adulthood, and information on ways to preserve memory as we age.
- “How Do We Know?: Failing to Remember I Did What I Was Supposed to Do.”
- Discussion of memory self-efficacy, the belief one will be able to perform a specific task.
- Stronger discussion of memory and health includes physical implications like temporary global amnesia.
- New “Current Controversies: Concussions and Athletes.”

Chapter 7

- “Neuroscience Research and Intelligence in Young and Middle Adulthood.”
- Discussion of the neural efficiency hypothesis that intelligent people process information more efficiently.
- “How Do We Know?: Age Differences in Information Search and Decision Making.”

Chapter 8

- “Self-Perception and Social Beliefs” examines our self-perception of aging.
- “Attributional Biases” examines whether there are age differences in the tendency to rely more on dispositional attributions, situational attributions, or a combination of both when making casual attributions.

Chapter 9

- “How Do We Know?: Well-being reflected in brain function in emotion and depression.”

- Social Policy Implications now has discussion of interaction between government policy and the experience of aging.

Chapter 10

- New figure: Action of beta-amyloid and tau proteins in relation to neurons.
- Discussion of proposed new diagnostic criteria for Alzheimer’s disease.
- New figure: 12-month prevalence of depression among all U.S. residents by age.
- New figure: Clinical continuum of Alzheimer’s disease showing types of changes over time.

Chapter 11

- New figure on the vulnerability-stress-adaptation model.
- New figure: Family expenditures on a child, by income level and age of child, 2011.
- “Current Controversies: New Diagnostic Criteria for Alzheimer’s Disease.”

Chapter 12

- “Current Controversies: Do women lean out when they should lean in?”
- Updated discussion about unemployment during/ after the Great Recession.

Chapter 13

- Expanded discussion on “brain death” and how it is perceived in both the medical profession and also religion.
- “Discovering Development: A Self-Reflective Exercise on Death.”
- Discussion of neuroimaging research about death anxiety.
- Discussion of insurance coverage with regard to Hospice.
- “Patient Self-Determination and Competency Evaluation” describes the Patient Self-Determination Act and why financial reimbursement for individual physician’s discussion with patients about this issue was not included in the Affordable Care Act 2010.

- “How Do We Know?: Grief Processing and Avoidance in the United States and China.”
- New discussion about college students and the expression of grief.

Chapter 14

- Discussion of the dependency ratio.
- Expanded discussion of Social Security and proposals for reform.
- “Current Controversies: What to do about Social Security and Medicare.”
- New discussion of the way age impacts metabolism.
- “Approaches to Successful Aging” further emphasizes Vaillant’s model.

Writing Style

Although *Adult Development and Aging* covers complex issues and difficult topics, we use clear, concise, and understandable language. All terms were examined to ensure their use is essential; otherwise, they were eliminated.

The text is aimed at upper-division undergraduate students. Although it will be helpful if students completed an introductory psychology or life-span human development course, the text does not assume this background.

Instructional Aids

The many pedagogical aids in the sixth edition have been retained and enhanced in the seventh edition.

- *Learning Aids in the Chapter Text.* Each chapter begins with a chapter outline. At the start of each new section, learning objectives are presented. These objectives are keyed to each primary subsection that follows, and they direct the students’ attention to the main points to be discussed. At the conclusion of each major section are concept checks, one for each primary subsection, that help students spot-check their learning. Key terms are defined in context; the term itself is printed in boldface, with the sentence containing the term’s definition in italic.
- *End-of-Chapter Learning Aids.* At the end of each chapter are summaries, organized by major sections and primary subsection heads. This approach helps students match the chapter outline with the summary. Numerous review questions,

also organized around major sections and primary subsections, are provided to assist students in identifying major points. Integrative questions are included as a way for students to link concepts across sections within and across chapters. Key terms with definitions are listed.

- *Boxes.* Three types of boxes are included. Those titled *How Do We Know?* draw attention to specific research studies that were discussed briefly in the main body of the text. Details about the study’s design, participants, and outcomes are presented as a way for students to connect the information about these issues in Chapter 1 with specific research throughout the text. *Current Controversies* boxes raise controversial and provocative issues about topics discussed in the chapter. These boxes get students to think about the implications of research or policy issues and may be used effectively as points of departure for class discussions. *Discovering Development* boxes give students a way to see developmental principles and concepts in the “real world” as well as some suggestions on how to find others. These boxes provide a starting point for applied projects in either individual or group settings, and help students understand how development is shaped by the interaction of biological, psychological, sociocultural, and life-cycle forces.

Instructor Companion Site

Everything you need for your course in one place! This collection of book-specific lecture and class tools is available online via www.cengage.com/login. Access and download an instructor’s manual, test bank, and PowerPoint slides.

Cengage Learning Testing Powered by Cognero

The Test Bank is also available through Cognero, a flexible, online system that allows you to author, edit, and manage test bank content as well as create multiple test versions in an instant. You can deliver tests from your school’s learning management system, your classroom, or wherever you want.

Acknowledgments

As usual, it takes many people to produce a textbook; such is the case with the seventh edition. The editorial group at Cengage is excellent.

I also want to thank the reviewers of the seventh edition, who provided extremely helpful and insightful commentary that improved the book: Leslie Adams Lariviere, Assumption College; Sandra Arntz, Carroll University; Hallie Baker, Muskingum University; Anita Glee Bertram, University of Central Oklahoma; Casey Catlin, University of Nevada-Reno; Lisa Connolly, University of Indianapolis; Alissa Dark-Freudeman, UNC-Wilmington; Mary Dolan, CSU San Bernardino; Lisa Emery, Appalachian State University; Daniella Errett, Pennsylvania Highlands Community College; Carolyn Grasse-Backman, Penn State-Harrisburg; Regina Hughes, Collin College; Bonnie Kin, Brenau University; Ryan Leonard, Gannon University; Donna Makowiecki, Holy Family

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Finally to a group too often overlooked—the sales representatives. Without you, none of this would have any payoff. You are an extension of us and the whole Cengage editorial and production team. What a great group of hard-working folks you are!

Thanks to you all. Live long and prosper!

John C. Cavanaugh

ABOUT THE AUTHOR



Courtesy of John C. Cavanaugh

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STUDYING ADULT DEVELOPMENT AND AGING

1.1 PERSPECTIVES ON ADULT DEVELOPMENT AND AGING

Discovering Development: Myths and Stereotypes about Aging • The Life-Span Perspective • The Demographics of Aging

1.2 ISSUES IN STUDYING ADULT DEVELOPMENT AND AGING

The Forces of Development • Interrelations among the Forces: Developmental Influences • Culture and Ethnicity • The Meaning of Age • Core Issues in Development • *Current Controversies: Does Personality in Young Adulthood Determine Personality in Old Age?*

1.3 RESEARCH METHODS

Measurement in Adult Development and Aging Research • General Designs for Research • Designs for Studying Development • *How Do We Know?: Conflicts between Cross-Sectional and Longitudinal Data* • Integrating Findings from Different Studies • Conducting Research Ethically

SOCIAL POLICY IMPLICATIONS

Summary • Review Questions • Integrating Concepts in Development • Key Terms • Resources

ALTHOUGH TIRED AND A BIT UNSTEADY, DIANA NYAD GOT OUT OF THE WATER AND WALKED UNDER HER OWN POWER ONTO THE BEACH AT KEY WEST, FLORIDA.

At age 64, she had just become the first person ever to swim the 110 miles from Havana, Cuba, to Key West, Florida without the protection of a shark cage. Her feat, completed on September 2, 2013, after more than 50 hours of open water swimming, is just one more in a growing list of accomplishments by people at a point in life once thought to be a time of serious decline in abilities. No more.

From athletes to politicians to people in everyday life, boundaries once thought fixed are being pushed every day. Consider that just since 2008, we have seen the oldest woman ever to compete in swimming in the Olympics, Dara Torres, win Olympic medals at age 41 in Beijing, thus redefining people's beliefs about world-class athletes and mothers (her daughter was aged two at the time). She won three silver medals, missing a gold by .01 second. Competing in her fifth Olympic Games, Torres clearly demonstrated that a combination of

great genes and a highly rigorous training regimen enabled her to compete in a sport in which most world-class women swimmers' careers are over by the time they are in their mid-twenties.

We have also seen Senator John McCain, at age 72, become the oldest person to be nominated for a first term as president by a major political party. Senator McCain had a long, distinguished career as an officer in the U.S. Navy, was a prisoner of war for 5 years during the Vietnam conflict, and went on to be elected to Congress from Arizona. By his own admission, McCain was in better health than many other people of his age at the time of his campaign. When questioned about his age, he pointed out his 96-year-old mother, who accompanied him on many of his campaign trips. His (and his mother's) energy and stamina demonstrated that chronological age alone is a very poor index of people's capabilities.

Diana Nyad, Dara Torres, and John McCain are great examples of how middle-aged and older adults are being looked at differently today. They showed that adults are capable of doing things thought unimaginable or inappropriate just a few years ago. They also illustrate how the normal changes people experience as they age vary across individuals and why we need to rethink common stereotypes about age.

But there is also an entire generation poised to redefine what growing older really means.



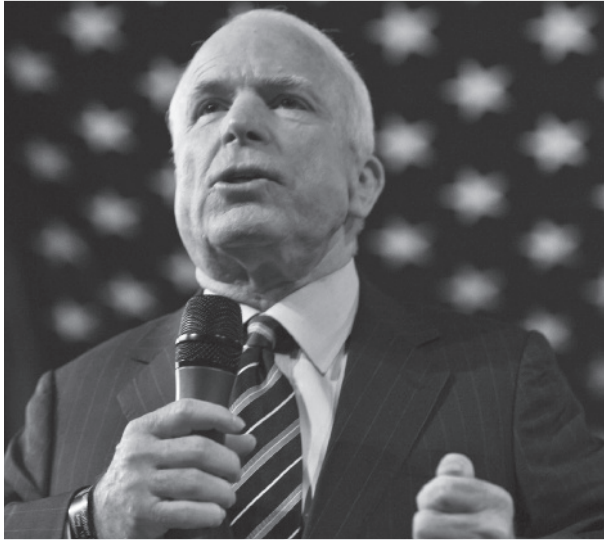
U.S. long-distance swimmer Diana Nyad is pictured before attempting to swim to Florida from Havana August 31, 2013. Nyad jumped into the calm, turquoise waters of Cuba on Saturday and began making her way towards home, Key West Florida, in pursuit of a dream that she says nearly cost her life during a previous attempt in 2012. Her biggest challenges during the 103 mile (166-km) swim, apart from fatigue, were the poisonous jelly fish that float through the Florida Straits, the sharks, the man o'wars, storms, waves and the powerful and unpredictable Gulf Stream, the mighty ocean current that flows west to east between Cuba and Florida.

ENRIQUE DE LA OSA/Reuters/Landov



Dara Torres of the United States celebrates winning the silver medal in the women's 4 × 100-meter medley relay final during the swimming competitions in the National Aquatics Center at the Beijing 2008 Olympics in Beijing.

AP Images/David J. Phillip



Ap Images/Mary Altaffer

Sen. John McCain, R-Ariz., at age 72 in 2008 was the oldest person to receive a nomination as a presidential candidate of a major political party.

The baby-boom generation, consisting of people born between 1946 and 1964, are on average the healthiest and most active generation to begin reaching old age in history. They are not content with playing traditional roles assigned to older adults, and are doing their best to change the way older adults are perceived and treated.

In this chapter, we examine a seemingly simple question: Who are older people? We will see that the answer is more complicated than you might think. We also consider the ways in which gerontologists study adults and how adults develop.

1.1 Perspectives on Adult Development and Aging

LEARNING OBJECTIVES

- What is gerontology? How does ageism relate to stereotypes of aging?
- What is the life-span perspective?
- What are the characteristics of the older adult population?
- How are they likely to change?

Roberto's great-grandmother Maria is 89 years old. Maria tells Roberto that when she was a young girl in El Paso, there were very few older women in either her family

or the neighborhood. Roberto knows there are many older people, mostly women, in his own neighborhood, and wonders when and why this changed over her lifetime.

Before you read any more, take a minute and think about your own grandparents or great-grandparents. How would you and other people describe them? Do you want to be like them when you are their age?

We are all headed toward old age. How do you want to be thought of and treated when you get there? Do you look forward to becoming old, or are you afraid about what may lie ahead? Most of us want to enjoy a long life like Maria's but don't think much about growing old in our daily lives.

Reading this book will give you the basic facts about growing older. You will learn how to organize these facts by putting them into two contexts: the biopsychosocial framework and the life-span approach. By the time you are finished, you should have a new, different way of thinking about aging.

You already enjoy a major advantage compared with Maria. She and other people her age did not have the opportunity as young students to learn much about what is typical and what is not typical about aging. Until the last few decades, very little information was available about old age, which people generally thought to be characterized only by decline. Over the past 50 years, though, the science of **gerontology**, which is the study of aging from maturity through old age, has flourished. As you can imagine from reading the vignette about Dara Torres and John McCain, and as you will see throughout this book, aging reflects the individual differences you have come to expect across people as they change over time. Still, many myths about old people persist. These myths of aging lead to negative stereotypes of older people, which may result in **ageism**, a form of discrimination against older adults based on their age. Ageism has its foundations in myths and beliefs people take for granted, as well as in intergenerational relations (North & Fiske, 2012). It may be as blatant as believing that all old people are senile and are incapable of making decisions about their lives. It may occur when people are impatient with older adults in a grocery store checkout line. Or it may be as subtle as dismissing an older person's physical complaints with the question "What do you expect for someone your age?" As you will learn by doing the activities in the Discovering Development feature, such stereotypes surround us.

DISCOVERING DEVELOPMENT:

MYTHS AND STEREOTYPES ABOUT AGING

We are surrounded by misconceptions of older adults. We have all seen cartoons making jokes about older adults whose memories are poor or whose physical abilities have declined. Most damaging are the ideas portrayed in the media that older adults are incapable of leading productive lives and making a difference. For example, many greeting cards portray older people as having little memory, no teeth, and no desire for sex. As a way to discover something about development, try to find several examples of myths or stereotypes about aging. Look at those greeting cards, cartoons, advertisements, and articles in popular magazines, television shows, and music. Gather as many as you can, and then check them against the research on the topic discussed in this text. By the end of the course, see how many myths and stereotypes you can show to be wrong.

This book rebuts these erroneous ideas, but it does not replace them with idealized views of adulthood and old age. Rather, it paints an accurate picture of what it means to grow old today, recognizing that development across adulthood brings growth and opportunities as well as loss and decline. To begin, we consider the life-span perspective, which helps place adult development and aging into the context of the whole human experience. Afterward, we consider the fundamental developmental forces, controversies, and models that form the foundation for studying adult development and aging. In particular, we examine the biological, psychological, sociocultural, and life-cycle forces, and the nature–nurture and continuity–discontinuity controversies. We consider some basic definitions of age, and you will see that it can be viewed in many different ways. Finally, by examining various research methods we show how the information presented in this book was obtained.

The Life-Span Perspective

Imagine trying to understand, without knowing anything about his or her life, what your best friend is like. We cannot understand adults' experiences without appreciating what came before in childhood and adolescence. Placing adulthood in this broader context is what the life-span perspective is all about. *The life-span perspective divides human development into two phases:*

an early phase (childhood and adolescence) and a later phase (young adulthood, middle age, and old age). The early phase is characterized by rapid age-related increases in people's size and abilities. During the later phase, changes in size are slow, but abilities continue to develop as people continue adapting to the environment (Baltes, Lindenberger, & Staudinger, 2006).

Viewed from the life-span perspective, adult development and aging are complex phenomena that cannot be understood within the scope of a single disciplinary approach. Understanding how adults change requires input from a wide variety of perspectives. Moreover, aging is a lifelong process, meaning that human development never stops.

One of the most important perspectives on life-span development is that of Paul Baltes (1987; Baltes et al., 2006), who identified four key features of the life-span perspective:

1. *Multidirectionality:* Development involves both growth and decline; as people grow in one area, they may lose in another and at different rates. For example, people's vocabulary ability tends to increase throughout life, but reaction time tends to slow down.
2. *Plasticity:* One's capacity is not predetermined or set in concrete. Many skills can be trained or improved with practice, even in late life. There are limits to the degree of potential improvement, however, as described in later chapters.
3. *Historical context:* Each of us develops within a particular set of circumstances determined by the historical time in which we are born and the culture in which we grow up. Maria's experiences were shaped by living in the 20th century in a Chicano neighborhood in southwest Texas.
4. *Multiple causation:* How people develop results from a wide variety of forces, which we consider later in this chapter. You will see that development is shaped by biological, psychological, sociocultural, and life-cycle forces.

The life-span perspective emphasizes that human development takes a lifetime to complete. It sets the stage for understanding the many influences we experience and points out that no one part of life is any more or less important than another.

Basing their theories on these principles, Baltes et al. (2006) argue that life-span development consists of the dynamic interactions among growth, maintenance, and loss regulation. In their view, four factors are critical:

1. As people grow older, they show an age-related reduction in the amount and quality of biologically based resources.
2. There is an age-related increase in the amount and quality of culture needed to generate continuously higher growth. Usually this results in a net slowing of growth as people age.
3. People show an age-related decline in the efficiency with which they use cultural resources.
4. There is a lack of cultural, “old-age friendly” support structures.

Taken together, these four factors create the need to shift more and more resources to maintain function and deal with biologically related losses as we grow old, leaving fewer resources to be devoted to continued growth. As we see throughout this book, this shift in resources has profound implications for experiencing aging and for pointing out ways to age successfully.

The Demographics of Aging

Take a look around at the people you see in your everyday life in your hometown. There have never

been as many older adults as there are now, especially people over age 85. Why? Most important, health care improved during the 20th century, and many fewer women died during childbirth. Also, one of the largest generations ever, the baby boomers, began reaching age 65. Let's take a closer look.

Population Trends in the United States. Look closely at the age distributions in the U.S. population for 2000 and projections for 2025, 2050, and 2100. These show that the population is aging (see Figures 1.1, 1.2, 1.3, and 1.4). In 2000, there were many more people between their mid-30s and 40s than any other age group. Projections for 2025 (when nearly all the baby boomers will have reached age 65) show that the distribution will have changed dramatically; the baby boomers' aging makes the graph look much more rectangular. By 2050, the shape of the distribution will be more like a beehive, as more people continue to live into their 80s, 90s, and 100s. The biggest change by the year 2100 will be in the number of older men.

The coming dramatic change in the number of older adults has already had profound effects on everyone's lives. Through the first few decades of the 21st century, older adults, driven by the baby boomers, will be a major economic and political force. There is legitimate concern that the cost of entitlement programs that support older adults, such as Social Security and other pension systems

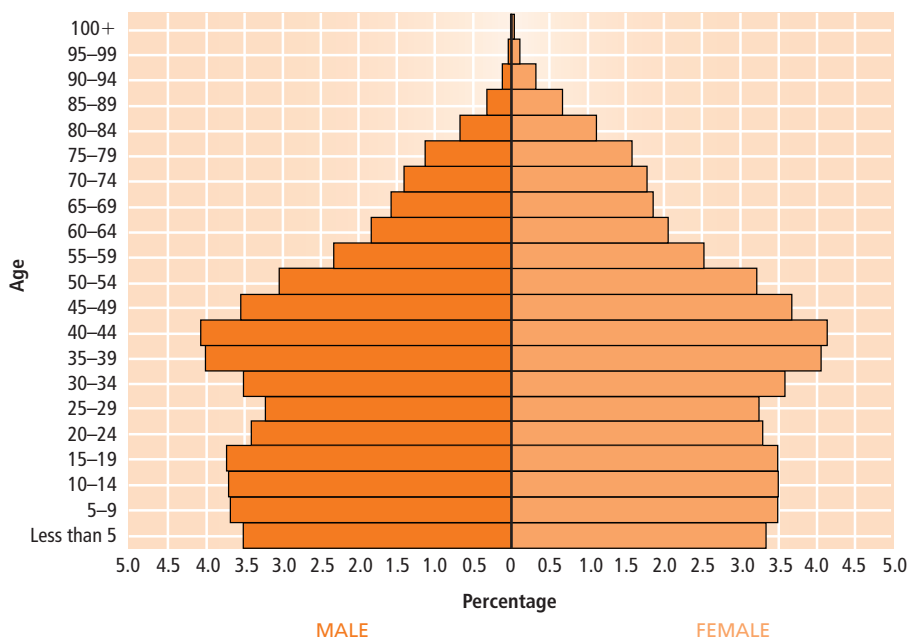


Figure 1.1
Resident population
of the United States as
of July 1, 2000.

Source: National Projections Program, Population Division, U.S. Census Bureau, Washington, D.C. 20233.

Figure 1.2
Projected resident population of the United States as of July 1, 2025.

Source: National Projections Program, Population Division, U.S. Census Bureau, Washington, D.C. 20233.

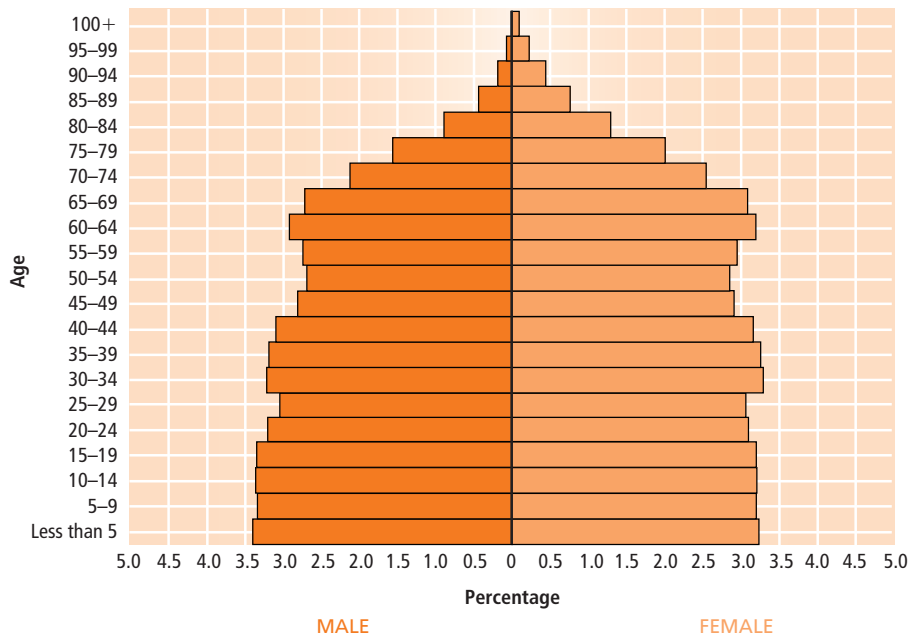
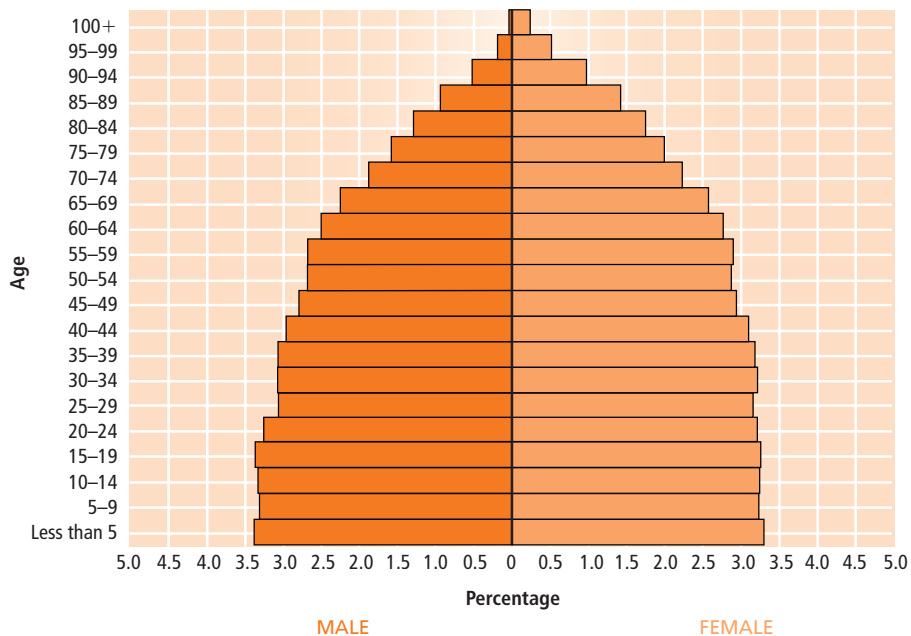


Figure 1.3
Projected resident population of the United States as of July 1, 2050.

Source: National Projections Program, Population Division, U.S. Census Bureau, Washington, D.C. 20233.



as well as Medicare, will become the largest expenditures in the federal and states' budgets, forcing intergenerational conflict over shrinking public resources. The costs for programs that support older adults will be borne by smaller groups of taxpayers in younger generations.

The strain on health and social services will be exacerbated because the most rapidly growing segment of the U.S. population is people over age 85. In fact,

the number of such people will increase over threefold between 2010 and 2050 (from about 5.7 million to over 19 million), compared to a much smaller percentage increase in the number of 20 to 29-year-olds during the same period (from about 42 million to over 56 million) (U.S. Census Bureau, 2012a). As we discuss in Chapter 4, people over age 85 generally need more assistance with daily living than do people under age 85.

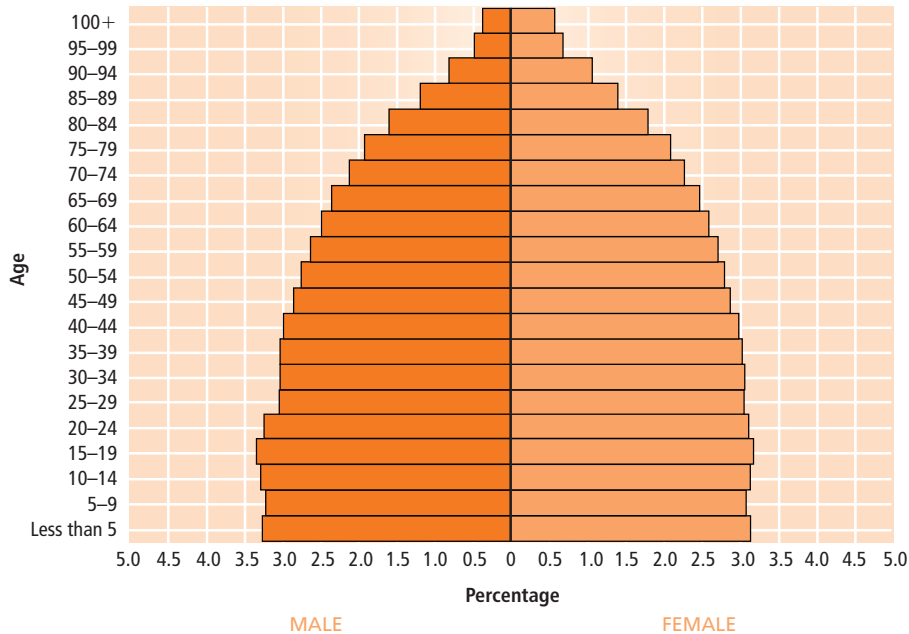


Figure 1.4
Projected resident population of the United States as of July 1, 2100.

Source: National Projections Program, Population Division, U.S. Census Bureau, Washington, D.C. 20233.

Diversity of Older Adults in the United States. Just like people your age, older adults are not all alike. The number of older adults among ethnic minority groups is increasing faster than among European Americans. For example, the number of Native American elderly has increased by nearly two-thirds in recent decades; Asian and Pacific Islander elderly have quadrupled; older adults are the fastest-growing segment of the African American population; and the number of Latino American elderly is also increasing rapidly (U.S. Census Bureau, 2012a). Projections for the future

diversity of the U.S. population are shown in Figure 1.5. You should note the very large increases in the number of Asian, Native, and Latino American older adults relative to European and African American older adults.

Future older adults will be better educated. In 2010, a little more than half of the people over age 65 have only a high school diploma or some college, and about 25% have a bachelor's degree or higher. By 2030 it is estimated that 85% will have a high school diploma, and 75% will have a college degree (U.S. Census Bureau, 2012a). These dramatic changes will be due mainly to

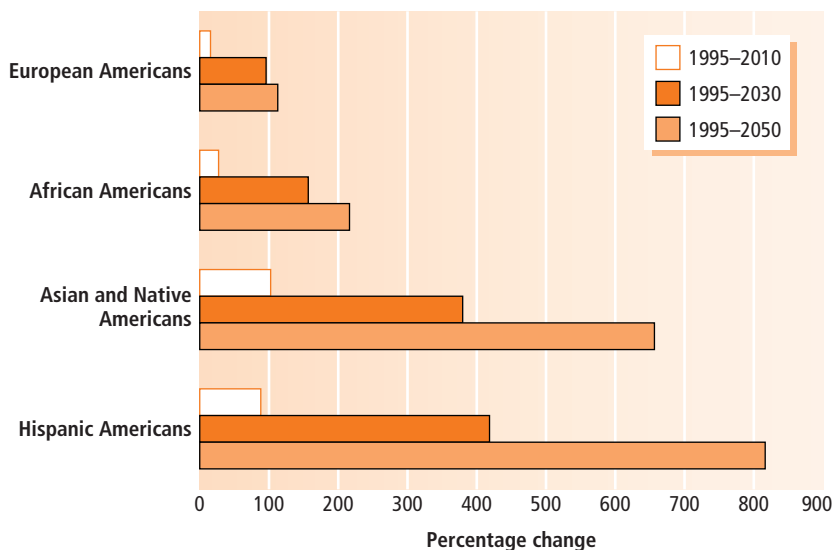


Figure 1.5
Projected growth of minority populations of older adults in the United States 1995-2050.

Source: Data from the U.S. Census Bureau.

better educational opportunities for more students and greater need for formal schooling (especially college) to find a good job. Also, better-educated people tend to live longer, mostly because they have higher incomes, which give them better access to good health care and a chance to follow healthier lifestyles. We examine these issues in more detail in Chapter 4.

You probably know some older adults who are fiercely independent, who view the challenges of aging as something you face mainly alone or with help from professionals. You also probably know others who view themselves as part of a larger unit, typically family, and see the same challenges as something one faces with other family members as a group. In more formal terms, the first group of people represents individualism, and the second group reflects collectivism (Ajrouch, 2008; Phillips, Ajrouch, & Hillcoat-Nalletamby, 2010).

As the number of ethnic minority older adults continues to increase, an important emerging issue will be the differences in these perspectives. This matters because the ways in which intervention is done differ a great deal. For those who emphasize individualism, the emphasis and approach is very much focused on only the person in question. In contrast, intervention with those who fit the collectivism approach needs to include the broader family or even friendship network. As the United States becomes more diverse, these views, which reflect different cultures globally, will increasingly need to be taken into account by all organizations.

Population Trends Around the World. The population trends in the United States are not unique. As you can see in Figures 1.6 and 1.7 the number of older adults will increase dramatically in nearly all areas of the world over the next several decades. (The figures show the expected changes between 2000 and 2030.) Overall, the “oldest” area of the world will continue to be Europe. The “youngest” area will continue to be Africa, where overall poor access to health care and a high incidence of conflict and AIDS significantly shorten lives (U.S. Census Bureau, 2012b).

Economically powerful countries around the world, such as China, are trying to cope with increased numbers of older adults that strain the country’s resources. Due to China’s one child policy; by 2030 there are projected to be about 20 million more older adults than children under 15. The economic impact will be significant for China, and in general the aging of the world’s workforce and population in general will have significant effects on the world economy (Krueger & Ludwig, 2007; Tyers & Shi, 2012). For example, pension and health care costs will increase dramatically, and there will be fewer workers to bear the burden in many industrialized countries. Canada leads the industrialized world in the rate of increase in the older adult population: between 2000 and 2030, it will increase by 126%.

But that’s nothing compared to the explosive increase in the population of older adults that faces developing countries (U.S. Census Bureau, 2012b). For example, Egypt, Malaysia, and Singapore will see a fivefold increase in older adults by 2050, with many other countries, such as Brazil (fourfold), also experiencing very significant increases.

Economic conditions in different countries have a powerful effect on aging. One way to see this is to ask whether the parents of adults in households in developing countries are alive. Given that the parents are over age 50 (if they are alive), the relationship between economic situation and age becomes clearer. Banerjee and Duflo (2010) found that the odds of having a living parent was about the same for all adults whose daily per capita expenditures were \$4 or less, and increased steadily the higher the daily expenditure got. For example, the probability of having a living parent for adults whose daily expenditures were between \$6 and \$10 was 36 percentage points higher than for adults with a daily expenditure of \$1 or \$2. Additionally, for



This Latina older woman represents the changing face of older adults in the United States.

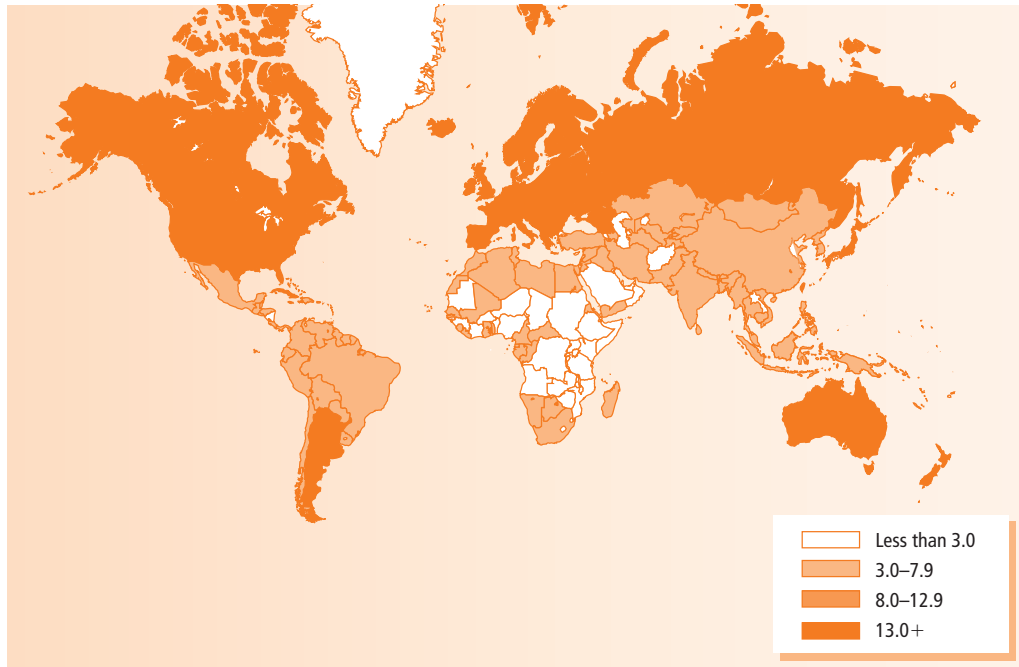


Figure 1.6
Percentage of people in countries globally aged 65 and over, 2000.

Source: U.S. Census Bureau, 2000a.

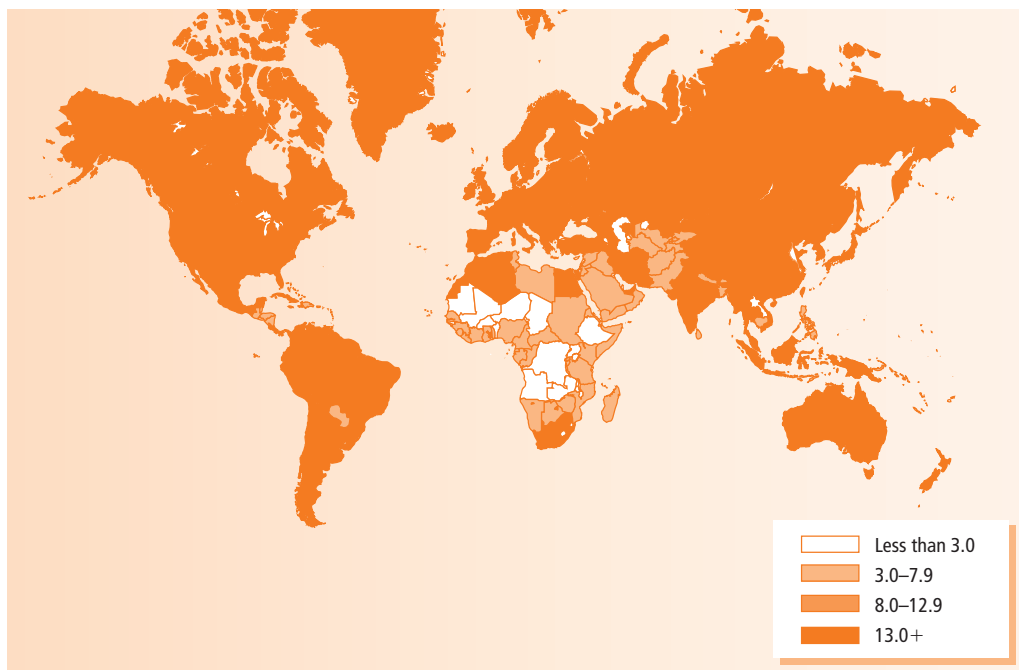


Figure 1.7
Percentage of people in countries globally aged 65 and over, 2030.

Source: U.S. Census Bureau, 2000a.