

The background of the book cover is a photograph of a sandy beach at sunset or sunrise. Three people are walking away from the viewer towards the ocean. Their long shadows are cast on the sand. The sky is a mix of orange, yellow, and blue. The water is visible on the right side of the frame.

Barbara Hansen Lemme

Second Edition

*Development
in Adulthood*

Development in Adulthood

Second Edition

Barbara Hansen Lemme
College of DuPage

ALLYN AND BACON

Boston • London • Toronto • Sydney • Tokyo • Singapore

Vice President and Editor-in-Chief, Social Sciences and Education: Sean W. Wakely
Senior Editor: Carolyn Merrill
Series Editorial Assistant: Amy Goldmacher
Vice President, Director of Field Marketing: Joyce Nilsen
Composition Buyer: Linda Cox
Manufacturing Buyer: Megan Cochran
Cover Administrator: Linda Knowles
Photo Researcher: Laurie Frankenthaler
Production Administrator: Rosalie Briand
Editorial-Production Service: Trinity Publishers Services
Text Designer: Karen Mason
Electronic Composition: Omegatype Typography, Inc.



Copyright © 1999, 1995 by Allyn & Bacon
A Viacom Company
160 Gould Street
Needham Heights, MA 02194

Internet: www.abacon.com
America Online: keyword: College Online

All rights reserved. No part of the material protected by this copyright notice may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the written permission of the copyright owner.

Library of Congress Cataloging-in-Publication Data

Lemme, Barbara Hansen, 1947–
Development in adulthood / Barbara Hansen Lemme.—2nd ed.
p. cm.
Includes bibliographical references and indexes.
ISBN 0-205-27366-1
1. Adulthood—Psychological aspects. 2. Aging—Psychological aspects. 3. Adulthood—Physiological aspects. 4. Aging—Physiological aspects. 5. Aging—Social aspects. I. Title.
BF724.5.L45 1999
155.6—dc21 98-17281
CIP

Printed in the United States of America
10 9 8 7 6 5 4 3 2 03 02 01 00 99

Credits are on page 544, which constitutes a continuation of the copyright page.

Preface

My interest in adult development as a field of study was awakened more than 25 years ago by Bernice Neugarten of the University of Chicago, a pioneer in research on adult development. I was so intrigued by her work that it prompted a change in the direction of my own, culminating in my developing a course in adult development and aging, which I have been teaching ever since. Few texts were available at the time, and none of them reflected my particular approach to the subject matter. I toyed with the idea of writing a text myself, but the timing in terms of my own life course was off. I continued to think and talk about it, and eventually, professional and personal considerations converged in such a way that it was time to, as my grandmother would say, “fish or cut bait.” That led to the first edition of this text. And now you are holding the second edition.

The field has continued to evolve in the interim. As I see it, there are several interesting trends at work. First is the growing realization of the importance of life span and aging issues to our personal and professional lives—within psychology and related fields, in government, and in society in general. This is reflected in myriad ways, from the content of professional meetings to media coverage of aging-related topics to the undergraduate and graduate school curriculum. Much of this interest is driven by the demographic changes sweeping all industrialized societies, including our own. Consider a few examples. Did you know that:

- The leading edge of the baby boom (born between 1946 and 1964), the largest generation in human history, is now in its 50s?
- The average life expectancy (now about 75) has increased more rapidly since 1900 than in the preceeding 5,000 years, and that the fastest-growing segment of the population is age 85 and over?
- Because of changes in the structure of the family, the average married couple now has more living parents than children?
- Two-thirds of the new entrants to the job market are now female?
- The average retirement age is now 62?

Second, the desire to understand the various forces that create developmental diversity among individuals is stronger than ever. Thus, growing emphasis is placed on the context of development—on locating the individual within a social, cultural, ethnic, and historical setting—and on the reciprocal nature of interaction both between individuals and between individuals and their environments. And third, there is increasing interest not only in accumulating a storehouse of knowledge about adulthood and aging, but also in applying that knowledge to solve personal and

social problems that affect the everyday lives of individuals. These trends have helped to shape the approach taken in this text.

Goals and Thematic Approach

Teaching is my first love. I have tried to write a book for the types of students I have taught over the course of my teaching career—a heterogeneous group from diverse backgrounds, with varying skill levels, goals, and needs. Some are in college for the first time—in fact, some are the first of their families to ever attend college. Others are returning to complete an interrupted undergraduate education. Still others have advanced degrees and are taking additional courses for personal interest or to upgrade skills or retrain for new careers. My goal has been to write a book for this audience—as well as for instructors—that offers substantive, scholarly, comprehensive, and up-to-date coverage of the core concepts and issues in the field of adult development and that at the same time is engaging, interesting, and relevant both personally and vocationally. I have tried to integrate an appreciation of the historical evolution of concepts along with the most current thinking in the field. In addition, I have tried to offer a somewhat different approach to the organization and presentation of content—one that reflects my own experience as a classroom teacher and that seems to work for students. And I have aimed at a smooth, clear, personal writing style—as if I were conversing with the reader in the classroom rather than on the written page.

Theoretical foundations include the life-span developmental perspective and Bronfenbrenner's Ecological Systems Theory. This book recognizes that individuals exist within complex, multilayered environments, and that the nature and structure of forces operating within these environments exert significant influence on development. Thus, the focus is on development-in-context. While the text's primary emphasis is on psychological theories and concepts, sociocultural, historical, biological, economic, and political issues are treated as well. The approach is broadly multidisciplinary. The developmental significance of age, cohort, gender, race/ethnicity, socioeconomic status, and culture is emphasized and integrated throughout. A balanced view of development is presented—neither overly optimistic nor pessimistic—which stresses the nature and origins of developmental diversity.

Features

I'd like to highlight three major distinguishing features of this text, which flow logically from the goals and approach described above. First, pedagogy includes an accessible writing style, clear chapter organization, periodic summaries, in-text definitions of terms, end-of-chapter review questions, and critical thinking questions embedded throughout the text. These features are intended to clarify and reinforce content, and thus increase student motivation and maintain interest while enhancing comprehension and maximizing retention. The critical thinking questions encourage the reader to remain actively involved with the material; the instructor may use them for class discussion purposes. A conscious effort has been made not to clutter the text with ineffective or superfluous pedagogy.

Second, the emphasis on development-in-context is evident in the inclusion of research and theory on the impact of cohort, gender, race/ethnicity, socioeconomic

status, and culture on development. This emphasis helps the student to grasp and appreciate the nature and sources of diversity in development and assists the instructor in presenting a broader perspective and overcoming biases in the research literature, as discussed in Chapter 1. Examples of topics reflecting this approach are listed below.

- Chapter 1: Ageism and cultural, racial, socioeconomic, and gender bias; difficulties in identifying and defining American ethnic groups
- Chapter 2: Bronfenbrenner's Ecological Systems Theory; the impact of gender, social class, and ethnicity on the development and expression of generativity
- Chapter 3: The influence of culture, gender, ethnicity, and age on the development of the self (for example, collectivism versus individualism)
- Chapter 4: Individual and cohort differences in cognitive development
- Chapter 5: Psychosocial explanations of diversity in cognitive aging
- Chapter 6: Age, gender, and ethnic differences in social network formation; gender and age differences in friendship; sexual orientation; male-female differences in sexuality and sexual attitudes
- Chapter 7: Nuclear, traditional, and opportune family structures; age and gender differences in marital satisfaction; same-sex and nonmarried romantic relationships; cultural and ethnic differences in grandparenthood; the influence of race/ethnicity on the caregiver role
- Chapter 8: Increasing diversity in the workforce; significant coverage of gender differences in career development; ethnicity, social class, gender, and the economics of retirement
- Chapter 9: Sources of diversity in primary and secondary aging; variations in physical development and aging among males and females
- Chapter 10: Racial/ethnic, age, and gender differences in health and mortality
- Chapter 11: Age changes and gender differences in the dimensions of subjective well-being; effects of gender, social class, race, and age on locus of control; age, gender, and ethnic differences in rates and nature of mental disorders, coping and help-seeking; need for culturally sensitive treatment
- Chapter 12: Historical changes and cultural differences in attitudes toward death and the experience of grief; gender, age, and cultural differences in death anxiety

Third, this text takes a fresh look at the field and strives for new ways of presenting content, including expanded coverage of high-interest and highly relevant material often overlooked or given short shrift in other texts. Application to real life is integrated throughout, rather than set aside in boxes or end-of-text chapters, and emphasis is placed on relevant social issues. Most chapters open with a personal anecdote that ties some aspect of the chapter content to my personal experience. The focus on application engages student interest and provides a bridge between theory, research, and practice, enabling students to connect the material to their own personal lives as well as demonstrating its utility in their careers. Some examples are listed below.

- Chapter 1: Critical thinking approach to research, providing tools to enable students either to "consume" it more effectively in their personal and academic lives or use it more effectively in their work; discussion of





- advantages and disadvantages of each method and design and of limitations and biases in the research; effects of changing demographics on U.S. society
- Chapter 2: Ecological Systems Theory; extensive coverage of research on generativity, including Kotre's theory and studies of its correlates and antecedents; Costa and McCrae's trait model of personality
- Chapter 3: Development of the self and related components (self-esteem, self-efficacy, identity); individualist versus collectivist cultures; social and evolutionary origins of gender differences
- Chapter 4: Presentation of the decrementalist versus continued potential view of cognitive development in adulthood, including the metaphor of the shipwreck versus the butterfly; comparisons of learning in childhood and adulthood, adult intelligence versus school intelligence, and analytic versus practical intelligence; creativity, wisdom, and expertise
- Chapter 5: Brain plasticity; cognitive intervention studies
- Chapter 6: Extensive coverage of the nature and impact of social support; life-span attachment theory and the effect of early experience on adult relationships; adult friendship; sibling relationships; leaving home; mate selection
- Chapter 7: Family systems theory and family development theory; changing family structures; life-span developmental view of parenthood (early, middle, and late stages); the "sandwich generation"; the caregiver role; family violence
- Chapter 8: The changing work world and workforce; multiple roles (combining work and family); explicit linkage of the economics of aging with gender and race/ethnicity; feminization of poverty; social history of retirement and its continuing evolution; major misconceptions of Social Security
- Chapter 9: Purposeful placement of the material on physical development, illness, and health later in the book to allow fuller development of the life-span perspective and to avoid setting a tone of deterioration and loss early on; environmental modifications to accommodate sensory aging
- Chapter 10: Health promotion and illness prevention; transgenerational design; polypharmacy, signs of drug toxicity, and adverse drug reactions in the elderly
- Chapter 11: Happiness and subjective well-being; religion and spirituality; depression and ruminative coping
- Chapter 12: Right-to-die movement; improving care of the dying

New to This Edition

I know students—and faculty for that matter—are often skeptical of the need for new editions of textbooks. For students, the necessity of buying a new, instead of a used, text can be a financial blow. I believe that this second edition of *Development in Adulthood* offers valuable improvements over the first version. This is owing, in part, to the integration of new research available in the last few years. Some of the improvement results from adjustments made as a result of valuable feedback from students and faculty who have reviewed as well as actually used the first edition. And some of it derives from my own development as an author—my enhanced sense of what works and how to present material effectively. Every chapter has re-

ceived the equivalent of a careful and thorough spring cleaning (revision, reorganization, clarification, update). In addition, some significant revisions have been made.

First, the basic structure of the text has been reorganized in a couple of important ways. The original Chapters 3 and 4, which dealt with various aspects of the development of the self, have been combined and reorganized into one chapter, Chapter 3—The Self: Development and Issues of Culture, Gender, Ethnicity, and Age. No major content areas have been lost in this process, but the presentation of the material has been improved. Chapters 7 and 8 (now 6 and 7) have been reorganized so that matters of general social development are covered in Chapter 6—Social Development, Friendship, and Mate Selection—which allows all of the material dealing with family development and issues to be contained in Chapter 7—Family Ties, Transitions, and Challenges. Finally, the original Chapter 10—Physical Development, Aging, and Health—has been expanded to two chapters: Chapter 9—Physical Development and Aging—and Chapter 10—Health, Longevity, and Prevention. This change has enabled me to expand the coverage of important aspects of physical development as well as to place greater emphasis on health promotion and disease prevention. Again, this adjustment reflects the growing interest in the application of critical knowledge in this area.

Second, where appropriate, boxes highlighting the impact of cohort, ethnicity, culture, and age on individual lives—titled “Understanding the Developmental Context”—have been added. These are found in Chapters 1, 5, 7, 8, 10, and 12. I must confess a resistance to adding special boxes and features, which I feel disrupt the flow of the text. My impression is that some texts have added so many distractions of this type in an attempt to be “relevant” and to cater to market forces that they risk fragmenting the content and becoming a disservice to the reader, who cannot easily discern what is most important. On the other hand, at times there are issues of special interest that do not fit neatly into the body of the chapter or that deserve special emphasis. Thus, in this text boxes are used sparingly but, hopefully, effectively.



I am especially aware of the importance of social support in life in general and during challenging periods in particular. I have been very fortunate to be able to rely on the support of a number of individuals, whom I am pleased to acknowledge here. Since the inception of this project, I have benefited from the enthusiastic support and wise counsel of my editor at Allyn and Bacon, Carolyn Merrill. We have been, as she once said, “on the same page”—a true collaboration for which I am very grateful and from which I’m sure this text has profited. I have known Carolyn since her days as our publisher’s representative for Allyn and Bacon and have been delighted to watch her rise in the world of academic publishing. Her infectious good humor and optimism are a good match to my own style, and I have enjoyed our working relationship and friendship enormously. So thank you, Carolyn . . . again. Additional Allyn and Bacon personnel deserving thanks are Rosalie Briand, production coordinator, and Amy Goldmacher, editorial assistant, for helping in numerous ways throughout this process, as well as Laurie Frankenthaler, for her creative photo research. Another very special thank-you must go to John and Evelyn Ward of Trinity Publishers Services, with whom I was fortunate enough to work on both



editions of this text and whose job it was to manage the actual production process. Once again, I felt that I had “friends at court,” an instant affinity with people whose approach to work and life seemed to match my own, and from whom I received invaluable advice, assistance, and reassurance. Some day I hope to meet these people in person!

In addition, my thanks go to the many publisher’s reviewers whose suggestions, criticisms, and encouragement at various points along the way were invaluable. Reviewers of the first edition were Harriet Amster, University of Texas, Arlington; Janet Belsky, Middle Tennessee State University; Barbara Biales, College of St. Catherine; Stephanie Clancy, Southern Illinois University; Lisa B. Elliott, Monroe Community College; Bernard Gorman, Hofstra University and Nassau Community College; Dorothy Jackson, Ohio State University; Janey W. Johnson, University of Maryland; Phyllis M. Ladrigian, Nazareth College; Kathleen Malley, Boston University; David B. Mitchell, Southern Methodist University; David Payne, University of Kentucky; Dean Rodeheaver, University of Wisconsin, Green Bay; R. Kevin Rowell, University of Central Arkansas; Jane Rysberg, California State University at Chico; Susan Krauss Whitbourne, University of Massachusetts, Amherst; Joseph L. White, University of California, Irvine. Reviewers of the second edition were Paul C. Amrhein, University of New Mexico; Gary Creasey, Illinois State University; Bernard S. Gorman, Nassau Community College; Dale A. Lund, University of Utah; Romy Nocera, Bowling Green State University; Jenny Overeynder, State University of New York at Geneseo; Lisa Pavlik, Bergen Community College; Nancy K. Rice, State University of New York at Geneseo; Sue V. Saxon, University of South Florida; Wayne Weiten, Santa Clara University.

Once again, I want to acknowledge the ongoing assistance of Diana Fitzwater, reference librarian at the College of DuPage, who tirelessly provided me with the research support and reference materials I needed along the way. Finally, I want to express my deep gratitude and love to my friends and family, who have in so many ways enriched my life, especially my mom, June Hansen, my sister, Judith Hansen Enos, and Ron and Becca, husband and daughter, special blessings indeed.

Contents

Preface	ix
---------	----

1 THE STUDY OF DEVELOPMENT IN ADULthood **1**

Demography and a Changing View of Adulthood	2
Increased Life Expectancy • The Baby Boom • Why Study Adult Development?	
Life-Span Developmental Perspective	9
Development Is a Lifelong Process • Development Includes Both Gains and Losses • Development Is Multidimensional, Multidirectional, and Multicausal • Development Is Plastic • Development Is Embedded in Historical, Cultural, and Social Contexts • Development Is a Multidisciplinary Field	
Research Concepts, Methods, and Designs	13
Two Key Concepts in Research: Reliability and Validity • Methods of Collecting Data • Nondevelopmental Versus Developmental Research • General Research Designs • Developmental Research Designs	
Special Considerations and Limitations in the Research	27
Ethics • Ageism • Cultural, Racial, Socioeconomic, and Gender Bias • Box 1.1, Difficulties in Identifying and Defining American Ethnic Groups	
Review Questions	37
Key Terms	38

2 THEORIES OF PSYCHOSOCIAL DEVELOPMENT **39**

Organismic, Mechanistic, and Contextual Models	40
Bronfenbrenner's Ecological Systems Theory	41
Rigor Versus Relevance: Caught Between a Rock and a Soft Place? • A Systems Approach: Reciprocal Interactions • Phenomenology: Through the Eyes of the Beholder • The Ecological View of the Environment	
Ages and Stages: The Psychoanalytic Tradition	47
Stage Theory Defined • Freud, Jung, and Erikson • Erikson's Eight Stages of Psychosocial Development • A Closer Look at Generativity	

• Levinson's Seasons of a Man's Life • Havighurst's Developmental Tasks • A Final Look at Stage Theory: Major Criticisms • Multiple Meanings of Time and Age	
Trait Models: McCrae and Costa's Five-Factor Model of Personality Defining a Trait • Defining the Five Factors	68
Do I Know You? Stability Versus Change in the Adult Personality Methodological Concerns • A Historical View of the Issue: The Pendulum Swings • What Changes and What Stays the Same?	69
Review Questions	77
Key Terms	78

3	<i>THE SELF: DEVELOPMENT AND ISSUES OF CULTURE, GENDER, ETHNICITY, AND AGE</i>	79
Defining the Self		80
Contributions of William James • Psychology • Sociology • Psychoanalysis • Setting Things Straight: A Confusion of Monikers		
The Self-Concept: The Cognitive Theory of Self Viewing the Self-Concept as a Self-Schema • Cognitive Impact of the Self-Concept • How Many of You Are There?		84
Self-Esteem: The Assessment of One's Worth Importance of a Sense of Worth • Building Blocks of Self-Esteem		88
I Think I Can, I Think I Can: A Look at Self-Efficacy Sources of Self-Efficacy • Correlates of Self-Efficacy • Gender Differences in Self-Efficacy		92
Identity: Who Am I and Where Am I Going? Identity Defined: Erikson's Psychosocial Theory • Formation of Identity: Marcia's Identity Status Approach • A Critique of the Identity Status Model		95
The Self in Cross-Cultural Perspective Collectivism Versus Individualism		99
Women, Men, and Identity Formation Traditional Gender Roles • Social Versus Evolutionary Origins • Prominence of the Male Model of Development • Identity Research and Women		103
Race/Ethnicity and the Development of the Self Self-Esteem Among Black Americans • Self-Efficacy Among Black Americans • Identity Formation Among Blacks • Race, Ethnicity, and Socioeconomic Status • Ethnic Groups and Core Characteristics: Hispanics, Asian Americans, and Native Americans		108
Effect of Age on the Self: A Phenomenological Look Maintaining Continuity • You're Only as Old as You Feel: The Impact of Subjective Age • Impact of Age on Self-Esteem • Defenses Used to Protect the Self • Causes of Low Self-Esteem in Late Adulthood		113

Review Questions	123
Key Terms	125

v
◆
Contents

4 ***COGNITIVE PROCESSES IN ADULTHOOD, PART I: DIMENSIONS AND DIRECTIONS*** 126

A Life-Span View of Cognitive Development	127
Evolution of Cognitive Psychology • Defining Adult Intelligence • Key Perspectives of Life-Span Cognitive Development • Growth, Stability, or Decline?	
Evidence of Cognitive Decline: The Decrementalist View	138
Major Findings	
Evidence of Cognitive Growth: The Continued-Potential View	146
Adult Life-Span Learning • Quantitative Versus Qualitative Gains in Adult Cognition • Expertise, Wisdom, and Creativity • Successful Cognitive Aging	
Review Questions	160
Key Terms	161

5 ***COGNITIVE PROCESSES IN ADULTHOOD, PART II: INFLUENCES AND EXPLANATIONS*** 162

Research and Measurement Issues	162
Psychosocial Explanations	165
Exposure to a Stimulating Environment • Psychological Factors • Demographic Variables	
Information-Processing Explanations	170
Box 5.1, History as Context • Attention • Speed of Processing • Memory • Status of Information-Processing Approaches	
Physiological Explanations	186
Changes in the Brain with Age • Changes In and Between Neurons, and Plasticity	
Applications of Cognitive Aging Research	193
Final Thoughts About Adult Cognitive Development	193
Review Questions	194
Key Terms	195

6 ***SOCIAL DEVELOPMENT, FRIENDSHIP, AND MATE SELECTION*** 196

Overview of Social Relationships	196
Nature of Relationships • Benefits of Relating • Social Support • Convoy Model of Social Relationships • Equity Theory: A Theory of Social Interaction • Ethnic Differences	

Impact of Early Experience on Adult Relationships	210
Erikson's Psychosocial Stages • Attachment Theory • Attachment Theory and Romantic Love • Concluding Thoughts	
Friendship	218
Research Problems • Nature of Friendship • Functions of Friendship • Gender Differences • Friendship Development over the Life Span • The Future of Friendship	
Leaving Home: Transition from the Family of Origin	225
Mate Selection: Who Marries Whom and Why?	227
Propinquity: "The Girl (or Boy) Next Door" • Attractiveness: "I Know What I Like" • Similarity (Homogamy): "Birds of a Feather" • Reciprocity: "You Scratch My Back and I'll Scratch Yours" • Complementarity: "Completing the Self" • The Right Person at the Right Time: "Timing Is Everything"	
Sexuality	232
Male-Female Differences in Sexual Attitudes • Sexuality Among Young and Middle-Aged Adults • Late-Life Sexuality • Sexual Orientation	
Review Questions	235
Key Terms	236

7 *FAMILY TIES, TRANSITIONS, AND CHALLENGES* 237

Family Development	237
Family Life Cycle • Family Developmental Tasks • Cycle of Generations • Limitations of the Family Development Model • Changing Families, Changing Times	
Marriage: Establishing a Family of One's Own	247
Research Limitations • Statistical Trends • Components of Romantic Love • Marital Roles • Alternative Unions (Same-Sex and Nonmarried Romantic Relationships) • Marital Satisfaction • Divorce • Widowhood	
Parenthood	263
A Life-Span View of Parenthood • Changing Roles • Delayed Parenthood • The Transition to Parenthood: Changes in Lifestyle and Family Life • Where's Daddy? • Children and Marital Satisfaction • The Middle Years of Parenthood • The Later Years of Parenthood • The Context of Parenthood	
Intergenerational Ties	272
Parent-Adult Child Relationships • Grandparenthood • Box 7.1, Grandparenthood Among the Navajo	
Adult Sibling Relationships	276
Sibling Relationships as Attachments • Unique Qualities • Pattern over Time • Functions of the Sibling Relationship • Additional Questions	
Family Caregiving	280
Caregiving as a Normative Experience • Changed Nature of Caregiving • Who Is the Caregiver? • Caregiving Career • Caregiver Tasks • Caregiver Stress • Research Limitations	

Family Violence	287
A Brief History of the Study of Domestic Violence • Incidence • Causal Factors • Abuser and Victim Profiles • Consequences of Family Violence • Developmental Patterns in Adult Abusive Relationships • Intervention	
Review Questions	293
Key Terms	295

8 *WORK AND RETIREMENT* 296

Nature of Work	297
Significance of Work in Adult Life • Varied Meanings of Work • Why Work? • Callings, Careers, and Jobs • A Changing Work World	
Career Development	305
Career Cycle • Challenges to the Traditional View: Increasing Diversity of Career Paths • Why Do We Choose the Work We Do? • How Effectively Do We Choose? • Age and Job Satisfaction • Growing Up and the Dream	
Gender and Work: Women's Career Paths and Special Career Issues	314
Changing Nature of Women's Work and Working Women • Women's Career Patterns and Work Experiences • Multiple Roles: Combining Career and Family	
Retirement and Leisure	328
Retirement as a Life Stage: A Brief Social History • Research Limitations • A Life-Span View of Retirement • Predictors of Retirement • Retirement as a Developmental Process • Impact of Retirement on Individual Well-Being • Economics of Retirement: Social Security and Pensions • Work and Retirement: The Twenty-First Century • Box 8.1, Finding Niches for Golden Workers • Importance of Leisure over the Life Span	
Review Questions	343
Key Terms	343

9 *PHYSICAL DEVELOPMENT AND AGING* 345

What Is This Thing Called Aging?	346
Primary Versus Secondary Aging • Current Conceptions of Aging	
Physical Development in Adulthood	351
Changes in the Skin and Connective Tissue • Changes in the Skeletal System • Changes in Skeletal Muscle • Changes in the Cardiovascular System • Changes in the Respiratory System • Changes in the Immune System • Changes in the Endocrine System • Changes in the Reproductive System • Changes in Sensory Capacity with Age	
Theories of Biological Aging	369
Aging by Design: Programmed Theories of Aging • Aging by Accident: Stochastic Theories of Aging • In Search of an Integrated Theory • The Goal of Aging Research: Adding Life to Years or Years to Life?	

Review Questions	375
Key Terms	375

10 *HEALTH, LONGEVITY, AND PREVENTION* **376**

Health, Disease, and Disability	376
Defining and Measuring Health, Disease, and Illness • Age and Health • Effects of Gender and Race on Health • Box 10.1, Transgenerational Design: Designing Products and Environments for People of All Ages	
Prevention of Illness and Promotion of Health	389
Three Levels of Prevention • Matching the Program to the Person • Risk Factors • Context of Health and Illness: An Ecological View • An Overview of Preventive Behaviors • Medication Use Among Older Adults: A Special Health Issue • Long-Term Care • Successful Aging: A Multidimensional Effort	
Review Questions	404
Key Terms	404

11 *COPING, ADAPTATION, AND MENTAL HEALTH* **405**

Happiness	406
Most People are Happy • Determinants of Happiness • Religious Involvement and Spirituality	
Stress and Locus of Control	407
Nature of Stress • Effects of Stress • Beliefs About Personal Control • Concluding Thoughts	
An Overview of the Mental Health Status of Adults	416
Age-Related Trends in Mental Disorders • Gender Differences in Rates of Mental Disorders • Gender, Age, and Racial/Ethnic Differences in Help Seeking • Science of Prevention	
A Look at Two Mental Disorders in Adulthood	424
Major Depression • Alzheimer's Disease	
Review Questions	438
Key Terms	439

12 *DEATH, DYING, AND BEREAVEMENT* **440**

Death in the Twentieth Century	441
Attitudes Toward Death	442
The Death-Denying Society • Psychology's Approach to Death • Death Anxiety	

The Dying Person	447
Contributions of Kübler-Ross • Dying Well • Hospice • Right-to-Die Movement: Suicide, Assisted Suicide, and Euthanasia • Improving Care of the Dying	
Grief and Bereavement	454
Cultural and Historical Context of Grief • Grief Process • Box 12.1, Death and Grief Among the Lakota Sioux • Unanticipated and Anticipated Death • Health and Mortality Risks of Bereavement • The Funeral and Other Leave-Taking Rituals • Condolence Behavior • Bereavement as a Transition	
Review Questions	468
Key Terms	468
Glossary	469
References	483
Name Index	523
Subject Index	532

The Study of Development in Adulthood

1

I remember looking out the window as the plane began to descend and seeing nothing but ocean. Finally, a speck of land began to appear—the island on which I would spend the next week. It was a coral atoll, six feet above sea level, the district center of one of the island groups of the Pacific. I spent the next three months like this, moving among the islands of American Samoa and Micronesia, studying the effects of rapid cultural change. My first experience as a field researcher was an extraordinary one. Having grown up in the Midwest, this was my initial exposure to another culture, let alone cultures as diverse as those represented among these islands. My light Norwegian coloring set me apart from the native populations in such a way that for the first time I felt as an outsider feels. The inherent difficulties of doing research were compounded by the personal difficulties of adjustments to climate, food, and social customs, as well as loneliness, boredom, and, on occasion, anxiety. I met many local people, Peace Corps workers, politicians, international jet-setters, and famous oceanographers. I explored islands where some of the major battles of World War II took place, where tanks still stood sentry in the waters offshore, and where unexploded shells and mines kept some areas cordoned off all these years later. I mistakenly wandered into the compound of a U.S. president and found myself surrounded by machine guns. I was faced with the suspicion by some that I was a CIA agent. I saw my country from the vantage point of others for the first time. Just on the brink of adulthood, at age 21, I had an experience of a lifetime. And I was never the same.

This is a book about adult life, that period that begins around the end of adolescence—somewhere between age 18 and the early 20s in most cases—and ends with death. In other words, this is a book about most of the human life span. Each chapter opens with something from my experience that is related to the chapter content—like the story you just read. This serves both as a way of introducing myself and, hopefully, also connects the chapter with real life.

The goals of this opening chapter are as follows: to provide an overview of adult development as a field of study; to establish a perspective or point of view that will direct the chapters to follow; to review the major research methods and designs