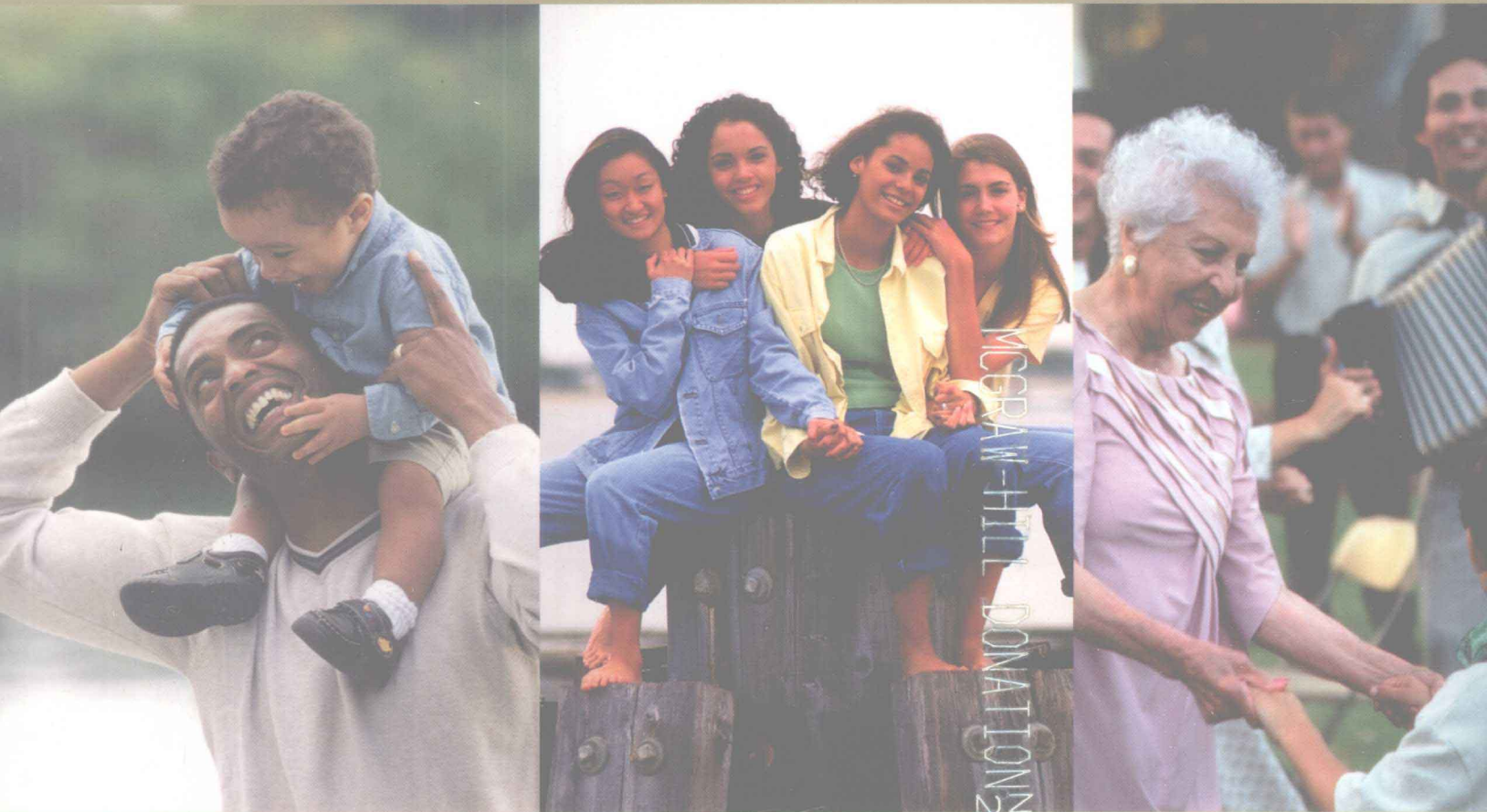


Tenth Edition

LIFE-SPAN DEVELOPMENT



JOHN W.
SANTROCK

McGraw-Hill Education
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Life-Span Development

TENTH EDITION

John W. Santrock

University of Texas at Dallas



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LIFE-SPAN DEVELOPMENT

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*With special appreciation to my parents,
Ruth and John Santrock*

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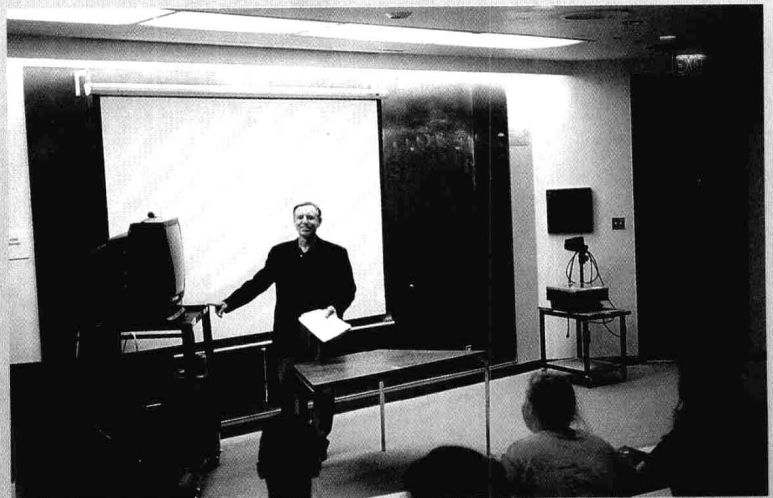
About the Author

John W. Santrock

John Santrock received his Ph.D. from the University of Minnesota in 1973. He taught at the University of Charleston and the University of Georgia before joining the Program in Psychology and Human Development at the University of Texas at Dallas, where he currently teaches a number of undergraduate courses. In 1982, John created the life-span development course at UT-Dallas and has taught it every year since then.

John has been a member of the editorial boards of *Child Development* and *Developmental Psychology*. His research on father custody is widely cited and used in expert witness testimony to promote flexibility and alternative considerations in custody disputes. John also has authored these exceptional McGraw-Hill texts: *Psychology* (7th edition), *Child Development* (10th edition), *Children* (8th edition), *Adolescence* (10th edition), and *Educational Psychology* (2nd edition).

For many years, John was involved in tennis as a player, teaching professional, and coach of professional tennis players. He has been married for more than 35 years to his wife, Mary Jo, who is a realtor. He has two daughters—Tracy, who is a technology specialist at Nortel in Raleigh, North Carolina, and Jennifer, who is a medical sales specialist at Medtronic. He has one granddaughter, Jordan, age 13, and one grandson, Alex, age 1. Tracy recently completed the New York Marathon, and Jennifer was in the top 100 ranked players on the Women's Professional Tennis Tour. In the last decade, John also has spent time painting expressionist art.



John Santrock, teaching in his undergraduate course in life-span development.

Preface

Preparing a new edition of *Life-Span Development* is both a joy and a challenge. I enjoy revising this text because I continue to learn more about the human life span and the journey of life each of us takes. It also is gratifying to revise the text because the feedback from students and instructors has been consistently enthusiastic. The challenge of revising a successful text is always to continue meeting readers' needs and expectations, while keeping the material fresh and up to date. For the tenth edition of *Life-Span Development*, I have expanded coverage in a number of key areas, incorporated the latest research and applications, and fine-tuned the aspects of the book that make learning easier and more engaging.

RESEARCH AND APPLICATIONS

Above all, a text on life-span development must include a solid research foundation.

Recent Research

This edition of *Life-Span Development* presents the latest, most contemporary research on each period of the human life span and includes more than 2,100 citations from the twenty-first century. The new research material includes:

- Paul Baltes' (2003; Baltes & Smith, 2003) most recent ideas about aging with important new material on the very different characteristics of the young old and oldest old (chapter 1).
- The new field of evolutionary developmental psychology (Bjorklund & Pellegrini, 2002) and the epigenetic view of heredity and environment (Gottlieb, 2004) (chapter 3).
- A new section on the biological foundations and environmental experiences involved in infant emotion, including early development of the brain and its link to emotion (Lewis & Steiben, 2004; Thompson, Easterbrooks, & Walker, 2003) (chapter 7).
- Gender differences in prosocial behavior (Eisenberg & Morris, 2004) (chapter 11).
- New section on development of the brain in adolescence (Keating, 2003, 2004) (chapter 13).
- New section on falling out of love (chapter 15).
- New section on stress and disease (chapter 16).
- New coverage of the increasingly discussed mitochondrial theory of aging (chapter 18).

- New section on source memory in older adults (Hasher, 2003) (chapter 19).
- New section on diversity in older adults' lifestyles, including new subsections on divorce and remarriage, older parents and their adult children, great-grandparenting, sibling relationships, and never-married older adults (chapter 20).
- New coverage of meaning-making coping (Folkman & Moskowitz, 2004; Hayslip & Hansson, 2003) (chapter 21).

Shortly, I will list the main chapter-by-chapter content changes in more detail.

Research in Life-Span Development Interludes

Research in Life-Span Development interludes are new to this edition. Appearing once in each chapter, they provide a more in-depth look at research related to a topic in the chapter. I call them interludes rather than boxes because they follow directly in the text after they have been introduced. In most instances they consist of a description of a research study, including the identity of the participants, the methods used to obtain data, and the main results. In most cases they are research studies that have been conducted in the twenty-first century. Because students often have more difficulty reading about research studies than other text material, I wrote these with an eye toward student understanding. Here are some examples of the new Research in Life-Span Development interludes:

- Memory in the A.M. and P.M. and Memory for Meaningful Information (Hasher & others, 2001; Hess & others, 2003).
- Studying the Newborn's Perception (Bendersky & Sullivan, 2002).
- Young Children's Gender Schemas of Occupations (Levy, Sadovsky, & Torseth, 2000).
- Evaluation of a Family Program Designed to Reduce Drinking and Smoking in Young Adolescents (Bauman & others, 2002).
- Adolescents' Self-Images (Bacchini & Magliulo, 2003).
- Personal Growth Following a Romantic Relationship Breakup (Tashiro & Frazier, 2003).
- The Stress of Caring for an Alzheimer Patient at Home (Kiecolt-Glaser & others, 2003).
- The Women's Health Initiative Study of Widowhood and Health (Wilcox & others, 2003).

Expert Research Consultants

Life-span development has become an enormous, complex field and no single author, or even several authors, can possibly be an expert in many different areas of life-span development. To solve this problem, I have sought the input of leading experts in many different research areas of life-span development. The experts will provide me with detailed evaluations and recommendations for a chapter(s) in their area(s) of expertise. The expert research consultants for *Life-Span Development* (10th edition) were:

Pamela Balls Organista, *University of San Francisco*

Diversity throughout the book

Elizabeth Vera, *Loyola University* Diversity throughout the book

David Moore, *Claremont Graduate School* Chapter 3: Biological Beginnings

Linda Mayes, *Yale University* Chapter 4: Prenatal Development and Birth

Jean Berko Gleason, *Boston University* Chapter 6: Cognitive Development in Infancy; Chapter 8: Physical and Cognitive Development in Early Childhood; and Chapter 10: Physical and Cognitive Development in Middle and Late Childhood

Karen Adolph, *New York University* Chapter 6: Cognitive Development in Infancy

Joseph Campos, *University of California–Berkeley* Chapter 7: Socioemotional Development in Infancy

Ross Parke, *University of California–Riverside* Chapters 9 and 11: Socioemotional Development in Early Childhood, and in Middle and Late Childhood

Elizabeth Susman, *Pennsylvania State University* Chapter 12: Physical and Cognitive Development in Adolescence

James Garbarino, *Boston College* Chapter 13: Socioemotional Development in Adolescence

James Birren, *UCLA* Chapter 16: Physical and Cognitive Development in Middle Adulthood; Chapter 18: Physical Development in Late Adulthood

William Hoyer, *Syracuse University* Chapter 14: Physical and Cognitive Development in Early Adulthood; Chapter 16: Physical and Cognitive Development in Middle Adulthood; Chapter 18: Physical Development in Late Adulthood

Toni Antonucci, *University of Michigan* Chapter 20: Socioemotional Development in Late Adulthood

Robert Kastenbaum, *Arizona State University* Chapter 21: Death and Grieving

Applications

It is important to not only present the scientific foundations of life-span development to students, but also to provide applied examples of concepts and to give students a sense that the field of life-span development has personal meaning for them. Among the new applications are:

- Recent ideas on family policy (Hawkins & Hiteman, 2004; Kalil & DeLeire, 2004) (chapter 1).
- A new section on being a wise consumer of information about life-span development (chapter 2).

- Expanded coverage of post-partum depression (Bonari & others, 2004; Clay & Seehusen, 2004) (chapter 4).
- Child care strategies for parents (McCartney, 2003) (chapter 7).
- Emotion-coaching and emotion-dismissing parents (chapter 9).
- Television and adolescent sexual behavior (Ward, 2003) (chapter 12).
- Evaluation of low-carb diets and effective strategies for losing weight, as well as a new section on alcoholism (Noakes & Clifton, 2004; Stern & others, 2004) (chapter 14).
- Women in happy and unhappy marriages (Gallo & others, 2003) (chapter 15).
- A new section on substance use in older adults (chapter 18).
- Meaning-making coping and spirituality in helping individuals cope with a death (Folkman & Lazarus, 2004; Hayslip & Hansson, 2003) (chapter 21).

In addition to giving special attention throughout the text to health and well-being, parenting, and educational applications, the tenth edition of *Life-Span Development* also includes *Careers in Life-Span Development* inserts in every chapter. They profile an individual whose career relates to the chapter's content. Most of these inserts have a photograph of the person at work. A number of new individuals are featured in the *Careers in Life-Span Development* in this edition. In addition, a *Careers in Life-Span Development* appendix follows Chapter 1 and describes a number of careers in education/research, clinical/counseling, medical/nursing/physical, and family/relationships categories. Numerous Web links provide students with opportunities to read about these careers in greater depth.

ADULT DEVELOPMENT, AGING, AND DIVERSITY

Two very important aspects of a text on life-span development are strong coverage of adult development and aging, as well as diversity.

Adult Development and Aging

Instructors have repeatedly told me that most life-span texts don't give adequate attention to adult development and aging. In the tenth edition, I have substantially modified, expanded, and updated the adult development and aging content, continuing a process I began a number of editions ago. Examples of new coverage include:

- Recent research on exercise and brain tissue loss in older adults (Colcombe & others, 2003).
- How the health care system too often fails older adults (Wenger & others, 2003).
- Recent research that documents variability in emerging adulthood (Cohen & others, 2003).
- New coverage of perimenopause and updated research on hormonal replacement therapy (Landgren & others, 2004; National Institutes of Health, 2004).

- Expanded coverage of stress in midlife, including recent research on daily hassles as well as an updated discussion of midlife crisis (Almeida & Horn, 2004; Lachman, 2004).
- Recent research on the Mankato Nuns (Mortimer & others, 2004; Snowdon, 2003).
- New section on aging and the immune system (Hawkey & Cacioppo, 2004).
- Information about mild cognitive impairment (MCI) and its possible link as a risk factor for Alzheimer disease (Grundman & others, 2004; Jungworth & others, 2004).
- New coverage of gender differences in emotional support experienced by older adults (Gurung, Taylor, & Seeman, 2003; Nacumey & Newsom, 2004).
- Discussion of recent study on cognitive factors involved in the severity of grief (Boelen, van den Bout, & van den Hout, 2003).

Diversity

Diversity is another key aspect of life-span development. I made every effort to explore diversity issues in a sensitive manner in each chapter. In addition to weaving diversity into discussions of life-span topics, I've included *Diversity in Life-Span Development* interludes in each chapter. Coverage of diversity includes these new Diversity interludes:

- Culture and Child Rearing (chapter 2)
- The Increased Diversity of Adopted Children and Adoptive Parents (chapter 3)
- Prenatal Care in the United States and Around the World (chapter 4)
- Bilingual Education (chapter 10)

The discussion of diversity also includes extensive new material in the Diversity in Life-Span Development interlude in chapter 1—Women's Struggle for Equality: An International Journey (UNICEF, 2004), the transition to parenting for African American and Latino couples (Florsheim & others, 2003), updated and expanded coverage of illness and health in children around the world (UNICEF, 2003) (chapter 8), developmental pathways to gay and lesbian identity (Savin-Williams & Diamond, 2004) (chapter 12), a new section on global traditions and changes in adolescence (Larson & Wilson, 2004) (chapter 13), updated and expanded coverage of ethnic identity with a special focus on immigration and generational change (Phinney, 2003; Umana-Taylor, 2004) (chapter 13), updated and expanded discussion of gay and lesbian couples (Peplau & Beals, 2004) (chapter 15), and recent research comparing Mexican American widows and widowers (Angel, Douglas, & Angel, 2003) (chapter 21).

ACCESSIBILITY AND INTEREST

The new edition of this text should be accessible to students because of the extensive rewriting, organization, and learning system.

Writing and Organization

Every sentence, paragraph, section, and chapter of this book was carefully examined and, when appropriate, revised and rewritten. The result is a much clearer, better-organized presentation of material in this new edition.

The Learning System

I strongly believe that students should not only be challenged to study hard and think more deeply and productively about life-span development, but should also be provided with an effective learning system. Instructors and students have commented about how student-friendly this book has become in recent editions.

Now more than ever, students struggle to find the main ideas in their courses, especially in courses like life-span development, which include so much material. The learning system centers on learning goals that, together with the main text headings, keep the key ideas in front of the reader from the beginning to the end of the chapter. Each chapter has no more than five main headings and corresponding learning goals, which are presented side-by-side in the chapter-opening spread. At the end of each main section of a chapter, the learning goal is repeated in a featured called "Review and Reflect," which prompts students to review the key topics in the section and poses a question to encourage them to think critically about what they have read. At the end of the chapter, under the heading, "Reach Your Learning Goals," the learning goals guide students through the bulleted chapter review.

In addition to the verbal tools just described, maps that link up with the learning goals are presented at the beginning of each major section in the chapter. At the end of each chapter, the section maps are assembled into a complete map of the chapter that provides a visual review guide. The complete learning system, including many additional features not mentioned here, is presented later in a section titled Visual Tour for Students.

CHAPTER-BY-CHAPTER CHANGES

All 21 chapters of *Life-Span Development*, tenth edition, feature substantial changes. The highlights of these changes follow.



CHAPTER 1 Introduction

- New discussion of recent research on exercise and brain tissue loss in older adults.
- New coverage of a recent study on how the health care system often fails older adults.
- New discussion of Baltes & Smith's view on differences between the young old and oldest old.
- New section on socioeconomic status (SES) and coverage of Jeanne Brooks-Gunn and her colleagues' research on children living in poverty.

- New coverage of recent research comparing six risk factors in lives of children growing up in poor and middle-income circumstances.
- Discussion of recent ideas on family policy.
- New material on a worldwide study of how a lower percentage of girls than boys receive no education at all, including new figure 1.4.
- New Research in Life-Span Development interlude: Memory in the A.M. and P.M. and Memory for Meaningful Information, including new research figure 1.7.

**CHAPTER 2****The Science of Life-Span Development**

- New section on Physiological Measures.
- New Research in Life-Span Development interlude: Research Journals.
- New section on Being a Wise Consumer of Information about Life-Span Development.
- New Diversity in Life-Span Development interlude: Culture and Child Rearing.

**CHAPTER 3****Biological Beginnings**

- Extensive rewriting and reorganization of chapter; inclusion of several new introductions to topics and transitions between topics for improved clarity and understanding.
- New section on evolutionary developmental psychology.
- Much-expanded coverage of adoption, including new Diversity in Life-Span Development interlude: The Increased Diversity of Adopted Children and Adoptive Parents.
- New Research in Life-Span Development interlude: Genetics and Life Expectancy.
- New research on the recent reduction in multiple births by IVF mothers.
- Deletion of section on heredity, environment, and intelligence with movement of that material to chapter 10, where intelligence is discussed.
- New section, The Epigenetic View (Gottlieb, 2004).

**CHAPTER 4****Prenatal Development and Birth**

- Expanded discussion of alcohol effects on the fetus, including recent research linking moderate drinking to preterm risk and birth size.
- Updated coverage of cocaine use by pregnant women, including increasing evidence of its negative effects.
- New discussion of risks to the fetus and child when a pregnant woman eats certain fish.

- New Diversity in Life-Span Development interlude: Prenatal Care in the United States and Around the World, including new figure 4.6 on the use of timely prenatal care by women from different ethnic groups in the United States.
- Updated research on low birth weight infants, including new figure 4.8.
- New section on kangaroo care, including recent research of its positive effects on preterm infants.
- New Research in Life-Span Development interlude: Tiffany Field's Research on Massage Therapy.
- Much-expanded coverage of postpartum depression, including new figure 4.11.

**CHAPTER 5****Physical Development in Infancy**

- New coverage of shaken baby syndrome.
- Discussion of recent study indicating that the cephalocaudal pattern does not always hold.
- New coverage of a national research study documenting that many U.S. babies are being fed too few fruits and vegetables and too much junk food.
- Research updating of breast feeding, including recent data on the increase in breast feeding by U.S. mothers.
- Research updating of SIDS, including coverage of the role of arousal.
- Research updating of toilet training.
- Discussion of dynamic systems theory is moved to the beginning of the motor development section for better student comprehension, and updated and revised.
- New discussion of Karen Adolph's research, including new figure from her research.
- Coverage of recent research study by Amy Needham and her colleagues, revealing that "sticky mittens" benefit infants' exploration of objects, including new figure 5.14 of the "sticky mittens" research.
- Improved discussion of the ecological theory of perception for better student understanding.
- New Research in Life-Span Development interlude: Studying the Newborn's Perception, with coverage of the visual preference method, habituation and dishabituation, tracking, and equipment.
- New coverage of binocular vision and its emergence at 3 to 4 months of age, providing a powerful cue to depth.
- Expanded coverage of hearing in infancy to include changes in the perception of loudness, pitch, and localization.

**CHAPTER 6****Cognitive Development in Infancy**

- New section on cognitive processes in Piaget's theory with new coverage of schemes, organization, equilibrium, and equilibration.

- New Research in Life-Span Development interlude, including the violated-expectations method and new figure related to it.
- New summary figure 6.1 of the six substages of sensorimotor development.
- New coverage of attention, including recent research on distractibility in infants and links between attention and memory in infancy.
- Updated discussion of infant memory.
- New section on language rules with new summary figure 6.7.
- Extensive rewriting and reorganization of language section with the development of language now preceding the section on biological and environmental influences.



CHAPTER 7 **Socioemotional Development in Infancy**

- Extensive rewriting of material on emotional development based on Joseph Campos' work.
- New discussion of the roles of biological foundations and environmental experience in emotion.
- New section on early developmental change in emotion, including new figures 7.1 and 7.2.
- New section on temperament in the biological foundations of temperament.
- New section on the significance of attachment.
- Change of section title and discussion from day care to child care.
- Coverage of recent research on the transition to parenting for African American and Latino couples.
- Extensively updated coverage of the National Institute of Child Health and Development's longitudinal study of child care in a new Research in Life-Span Development interlude.
- Coverage of recent commentary by experts on child care and child care expert Kathleen McCartney's child care strategies for parents.



CHAPTER 8 **Physical and Cognitive Development in Early Childhood**

- New coverage of growth hormone deficiency in young children.
- New coverage of eating inadequate amounts of quality meats and dark green vegetables in low-income families, which is linked to iron deficiency anemia.
- New discussion of the contexts of safety and accident prevention, based on Bronfenbrenner's theory, including new figure.
- Significantly updated discussion of the state of illness and health in the world's children.
- Added example of the zone of proximal development; clarified discussion of language and thought in Vygotsky's theory.

- New Research in Life-Span Development interlude: How Parents Can Subtly Suggest False Events to Their Children.
- New discussion of recent research on the transformation of the relatively stimulus-driven toddler to the more flexible, goal-directed, problem-solving young child.
- New section on the Reggio Emilia approach to early childhood education.
- New section on curriculum controversy in early childhood education.
- New section on what constitutes school readiness.



CHAPTER 9 **Socioemotional Development in Early Childhood**

- New discussion of gender differences in shame.
- New section on emotion-coaching and emotion-dismissing parents.
- Much-expanded, updated discussion of the evolutionary theory of gender.
- New discussion of recent research on links between individual hostility and marital hostility and the use of physical punishment with children.
- Expanded, updated discussion of gender and peer relations, including new figure on developmental changes.
- Expanded coverage of authoritative parenting and Ruth Chao's research on parenting styles in Asian American families.
- Much-expanded and updated coverage of different types of child abuse.
- New Research in Life-Span Development interlude: Young Children's Gender Schemas of Occupations, including new research figure.
- Added discussion of recent research on sex-assignment surgery and the adjustment of genetic males raised as girls.



CHAPTER 10 **Physical and Cognitive Development in Middle and Late Childhood**

- New Images of Life-Span opening story: Zhang Liyin, which focuses on the pressures of achievement placed on children in sports.
- Updated coverage of obesity and exercise in children, including recent research.
- Updated, expanded discussion of learning disabilities.
- Updated coverage of ADHD.
- New discussion of imagery and elaboration as memory strategies children can use, including new research figure.
- Updated new section on the roles of heredity and environment in intelligence, previously covered in chapter 3, with

new coverage of stereotype threat and Robert Serpell's work on culture and intelligence.

- New Research in Life-Span Development interlude: The Abecedarian Project, and updated coverage of early intervention.
- New Diversity in Life-Span Development interlude: Bilingual Education.



CHAPTER 11

Socioemotional Development in Middle and Late Childhood

- Much-expanded and updated coverage of links between self-esteem and performance, initiative, and happiness.
- New discussion of Kohlberg's interest in a seventh stage of moral development and expanded discussion of criticisms of his theory, including assessment issues.
- New Research in Life-Span Development interlude: The Consistency and Development of Prosocial Behavior.
- New coverage of gender differences in prosocial behavior.
- New discussion of William Pollack's ideas about real boys.
- Expanded and updated coverage of self-care/latchkey children.
- Updated coverage of peer relations, including coverage of average children, longitudinal research on peer statuses in childhood and problem behaviors in adulthood, and bullying.
- New section on contemporary approaches to student learning and assessment, with subsections on direct instruction, constructivist approach, and accountability.



CHAPTER 12

Physical and Cognitive Development in Adolescence

- New discussion of television and adolescent sexual behavior.
- New coverage of developmental pathways to gay or lesbian identity in adolescence.
- New material on the roles of self-regulation, parental monitoring, and parent-adolescent communication in adolescent sexual risk-taking.
- New figure 12.6 on cross-cultural comparisons of adolescent pregnancy rates.
- New section on changes in the brain during adolescence.
- Updated coverage of adolescent drug use.
- Recent research on factors involved in becoming a regular smoker in adolescence.
- New Research in Life-Span Development interlude: Evaluation of a Family Program Designed to Reduce Drinking and Smoking in Young Adolescents, including two research figures (fig. 12.8 and fig. 12.9).
- New coverage of changes in sleep during adolescence.



CHAPTER 13

Socioemotional Development in Adolescence

- New Research in Life-Span Development interlude: Adolescents' Self-Images.
- Updated and expanded coverage of ethnic identity with a special focus on immigration and generational change.
- New section, Emotional Development, including recent research and views, and new figure 13.3 on extremes of emotion in adolescents and their mothers and fathers.
- Expanded evaluation of links between adolescent-parent attachments and adolescent outcomes.
- New section, Global Traditions and Changes in Adolescence, with contemporary coverage of cross-cultural comparisons involving adolescent health, gender, families, peers, and schools.
- New section on how adolescents around the world spend their time, including new figure 13.7.



CHAPTER 14

Physical and Cognitive Development in Early Adulthood

- Expanded discussion of emerging adulthood, including personal and social aspects, and recent longitudinal research.
- Updated coverage of obesity, including strategies for losing weight, and new material on possible health risks of low-carbohydrate diets.
- New section on alcoholism, including recent research on links with heredity and environment, and strategies for reducing alcohol use.
- Change of labeling from sexually transmitted disease (STD) to sexually transmitted infection (STI) in keeping with current acceptance.
- Updated and expanded coverage of date or acquaintance rape, including strategies for reducing its incidence and new Research in Life-Span Development interlude on a major study of campus sexual assault.
- Expanded, updated coverage of positive and negative aspects of working during college.



CHAPTER 15

Socioemotional Development in Early Adulthood

- New Images of Life-Span Development—Gwenna & Greg: Her Pursuit and His Lack of Commitment.
- Expanded coverage of adult attachment and links between infant attachment and adult attachment.
- New section, Falling Out of Love.

- New Research in Life-Span Development interlude: Personal Growth Following a Romantic Relationship Breakup, including new figure 15.4, Examples of Positive Changes in the Aftermath of a Romantic Breakup.
- Updated coverage of marital trends, including new figure 15.7, Percent of Men and Women Never Married in the United States: 1970 and 2000.
- Inclusion of recent research on the health of women in happy and unhappy marriages.
- Updated coverage of cohabitation, including recent trends.
- New figure 15.10, Percent of Divorced Women and Men in the U.S.
- Updated discussion of gay and lesbian parents, including new figure 15.12.

CHAPTER 16



Physical and Cognitive Development in Middle Adulthood

- New discussion of baby boomers' views on health, disease, and interest in plastic surgery and Botox.
- New Research in Life-Span Development interlude on the first large-scale observational study to examine fitness in relation to risk factors for heart disease in middle age.
- Major new section on stress and disease, including the immune system, cardiovascular disease, and cancer.
- New introduction to work in midlife, emphasizing its diversity and change.
- Updated coverage of menopause and hormone replacement therapy, and new discussion of perimenopause.
- Updated, expanded discussion of erectile dysfunction, including new alternatives to Viagra.
- New comparison of causes of death in middle age and old age.
- Added concept of *sarcopenia*, an age-related loss of muscle mass and strength.



CHAPTER 17

Socioemotional Development in Middle Adulthood

- Expanded discussion of stress in midlife including recent research on daily hassles and education level.
- New discussion of George Vaillant's three longitudinal studies showing links between midlife characteristics and health and well-being at ages 75 and 80.
- Updated, expanded discussion of midlife crisis.
- New section on stress and midlife, including recent research on how middle-aged adults experience stress and on gender differences in types of stressors in middle age.
- New introduction and overview of the importance of middle-aged adults in the lives of the young and old.
- New section on grandparenting, previously in Late Adulthood section, added to this chapter based on adopter and

reviewer feedback; includes a new subsection on gender and grandparenting.

- New Research in Life-Span Development interlude: "We Had a Nice Little Chat": Mothers' and Daughters' Descriptions of Their Enjoyable Visits.
- Very recent research from the Midlife in the United States (MIDUS) survey.



CHAPTER 18

Physical Development in Late Adulthood

- Expanded, updated coverage of centenarians.
- New discussion of Baltes' view on problems and issues faced by the oldest old.
- New coverage of the mitochondrial theory of aging.
- Expansion of hormonal stress theory to include a decline in immune system functioning, and new section on immune system functioning in older adults.
- Revised, updated, expanded discussion of aging and the brain, including recent research on neurotransmitters and aging.
- New Research in Life-Span Development interlude on the Mankato Nuns.
- Much-expanded discussion of vision and aging, including new subsections on color vision, depth perception, and diseases of the eye.
- New section on substance use in older adults.
- New Careers in Life-Span Development insert: Sarah Kagan, Geriatric Nurse.
- Updated coverage of calorie restriction in older adults, including new figure 18.13 on calorie restriction in monkeys.
- Inclusion of recent longitudinal study on cardiovascular disease.
- Description of recent research on a link between Vitamin C blood levels and mortality in late adulthood.
- Expanded discussion of movement in older adults.
- New discussion of undernutrition without adequate vitamins and minerals, especially in women, in late adulthood.
- New coverage of recent research on a link between Vitamin E consumption and early death.



CHAPTER 19

Cognitive Development in Late Adulthood

- Expanded coverage of selective attention in late adulthood, including a recent observational study of selective attention and driving.
- Description of recent study by Baltes and others on cognitive mechanics/pragmatics distinction in older adults 70 to 100 years old.
- New section on source memory in older adults, including recent research.

- New coverage of research on optimistic and pessimistic accounts of memory in older adults.
- Recent research on the role of physical fitness in older adults' cognitive functioning.
- Discussion of recent research on lower depressive symptoms in older adults.
- New discussion of mild cognitive impairment (MCI) as a possible risk factor for Alzheimer disease.
- Change of terminology from Alzheimer's disease to Alzheimer disease and Parkinson's disease to Parkinson disease in keeping with current terminology in this field of research and care; expanded coverage of Alzheimer disease, including links with cardiovascular disease.
- New Research in Life-Span Development interlude that focuses on a longitudinal study by Janet Kiecolt-Glaser and her colleagues showing elevated stress and lower immune chemical levels in the caregivers of Alzheimer patients compared to a control group of non-caregivers; includes two graphs of data.
- Description of recent research on the role of religion in the lives of White and African American older adults.



CHAPTER 20 **Socioemotional Development** **in Late Adulthood**

- Coverage of recent longitudinal study on links between activities and happiness, functioning, and mortality in older adults.
- New Research in Life-Span Development interlude: Changes in Emotion across the Adulthood Years.
- Description of recent study on a decrease in negative interactions in close relationships as adults become older in both the United States and Japan.
- New section on lifestyle diversity in older adults.
- New section on divorced and remarried older adults.
- New section on older adult parents and their adult children.
- New section on great-grandparenting.
- New section on older adults' sibling relationships.
- New section on never married older adults, including an increase in cohabiting.
- New section on romance and sexuality in older adults' relationships.
- Discussion of recent study on gender differences in emotional support experienced by older adults.



CHAPTER 21 **Death and Grieving**

- New Images of Life-Span Development opening story: Paige Farley-Hackel & Ruth McCourt, who died in the terrorist attacks on 9/11/2001.

- Recent research on meaning and purpose in life, as well as spirituality, in helping dying individuals cope.
- New Research in Life-Span Development interlude: The Women's Health Initiative Study of Widowhood and Health.
- Coverage of recent study on cognitive factors involved in the severity of grief.
- Discussion of recent study on the effects of euthanasia on the grief of bereaved family members and friends.
- Much-expanded coverage of developmental aspects of death, including the impact of a parent's or sibling's death on children and adolescents, causes of death in early adulthood, and the impact of a young child's death on parents.
- Coverage of recent study comparing Mexican-American widows and widowers.
- New Careers in Life-Span Development insert: Kathy McLaughlin, Home Hospice Nurse.

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REVIEWERS

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Expert Consultants

I already listed the expert consultants earlier in the preface. Their photographs and biographies appear later on pages xxx–xxxiii. Life-span development has become an enormous, complex field and no single author can possibly be an expert in all areas of the field. To solve this problem, beginning with the sixth edition, I have sought the input of leading experts in many different areas of life-span development. This tradition continues in the tenth edition. The experts have provided me with detailed recommendations of new research to include in every period of the life span. The panel of experts is literally a who's who in the field of life-span development.

General Text Reviewers

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SUPPLEMENTS

The tenth edition of *Life-Span Development* is accompanied by a comprehensive and fully integrated array of supplemental materials, both print and electronic, written specifically for instructors and students of life-span development. In addition, a variety of generic supplements are available to further aid in the teaching and learning of life-span development.

For the Instructor

Once again, based on comprehensive and extensive feedback from instructors, we spent considerable time and effort in expanding and improving the ancillary materials.

Instructor's Manual *Gail Edmunds* This comprehensive manual provides a variety of useful tools for both seasoned instructors and those new to the life-span development course. The Instructor's Manual provides the following tools.

- Enhanced list of Learning Goals provides detailed components to support each of the chapter's Learning Goals listed in the text.
- Fully integrated chapter outlines to help instructors better use the many resources for the course. Most of the supplementary materials offered in conjunction with *Life-Span Development*, tenth edition, are represented in this outline and have been correlated to the main concepts in each chapter.
- Lecture suggestions, classroom activities, and research project ideas. As appropriate, these include critical thinking multiple-choice and essay exercises, all of which provide answers where appropriate.
- Classroom activities include logistics for required materials, such as accompanying handouts, varying group sizes, and time needed for completion.
- Personal Application projects guide students in applying life-span development topics to their own lives.
- Media resources for each chapter: Video segments (found on the LifeMap student CD) are listed; as well as Feature Film Suggestions, which provide a synopsis of movies pertaining to chapter topics; as well as updated URLs for useful Internet sites.

Computerized Test Bank on Instructor's Resource CD-ROM

Kristina D. Allen, Ozark Technical Community College; Shirley Cas-sara, Bunker Hill Community College This comprehensive Test Bank has once again been extensively revised to include over 2,400 multiple-choice and short answer/brief essay questions for the text's 21 chapters. Each multiple-choice item is classified as factual, conceptual, or applied, as defined by Benjamin Bloom's taxonomy of educational objectives. New to this edition, each test question is now keyed to a chapter Learning Goal, and the Test Bank notes which learning goal each item addresses. In response to customer feedback, this Test Bank also provides page references that indicate where in the text the answer to each item can be found.

Available on the Instructor's Resource CD-ROM, the Test Bank is compatible with both Windows and Macintosh platforms. The CD-ROM provides an editing feature that enables instructors to integrate their own questions, scramble items, and modify questions.

PowerPoint Slide Presentations *Linda Ann Butzin, Owens Community College* The chapter-by-chapter PowerPoint lectures for this edition integrate the text's learning goals and provide key text material and illustrations. These presentations are designed to be useful in both small- and large-lecture settings, and are easily tailored to suit an individual instructor's lectures.

The McGraw-Hill Developmental Psychology Image Bank

This set of 200 full-color images was developed using the best selection of our human development art and tables, and is available online for instructors on the text's Online Learning Center.

Online Learning Center The extensive website designed especially to accompany Santrock, *Life-Span Development*, tenth edition, offers an array of resources for both instructor and student. For instructors, the website includes a full set of PowerPoint Presentations, and hotlinks for the text's topical Web links that appear in the margins and for the Taking It to the Net exercises that appear at the end of each chapter. These resources and more can be found by logging on to the website at www.mhhe.com/santrock1d10.

Annual Editions—Developmental Psychology Published by Dushkin/McGraw-Hill, this is a collection of articles on topics related to the latest research and thinking in human development. These editions are updated annually and contain helpful features including a topic guide, an annotated table of contents, unit overviews, and a topical index. An Instructor's Guide containing testing materials is also available.

Sources: Notable Selections in Human Development This volume presents a collection of more than 40 articles, book excerpts, and research studies that have shaped the study of human development and our contemporary understanding of it. The selections are organized topically around major areas of study within human development. Each selection is preceded by a headnote that establishes the relevance of the article or study and provides biographical information about the author.

Taking Sides This debate-style reader is designed to introduce students to controversial viewpoints on the field's most crucial issues. Each issue is carefully framed for the student, and the pro and con essays represent the arguments of leading scholars and commentators in their fields. An Instructor's Guide containing testing material is available.

For the Student

Student Study Guide *Tasha R. Howe, Humboldt State University* The revised Study Guide provides a complete introduction for students on how best to use each of the various study aids plus invaluable strategies on setting goals, benefiting from class, reading for learning, taking tests, and memory techniques in the section "Being an Excellent Student." Each study guide chapter begins with a list of Learning Goals from the text and an outline of the chapter. The self-test sections contain short-answer Checking Your Understanding questions, multiple-choice and true-false questions, and comprehensive essays with suggested answers. The Study Guide also includes out-of-class research projects, personal application projects, Internet projects, and Web links that complement the revised student research projects and allow for more effective student learning.

LifeMap Interactive CD-ROM for Students The LifeMap CD is especially designed to accompany Santrock, *Life-Span Development*, tenth edition. Each of the book's 21 chapters features one

or more video segments, accompanied by pretest and posttest questions and Web links to further explore issues raised in the video. In addition, each chapter features a multiple-choice quiz with feedback to encourage active learning. The LifeMap CD also features an interactive time line covering the stages of development through the life span.

Online Learning Center www.mhhe.com/santrockld10

The extensive website designed especially to accompany Santrock, *Life-Span Development*, tenth edition, offers an array of resources for instructors and students. For students, the website offers interactive quizzing with feedback, flashcards, and matching exercises. It also offers hotlinks for the text's topical Web links that appear in the margins and for the *Taking It to the Net* exercises that appear at the end of each chapter. Self-assessments related to chapter topics encourage students to examine their personal feelings and experiences in relation to life-span development. These resources and more can be

found on the Online Learning Center at www.mhhe.com/santrockld10.

Guide to Life-Span Development for Future Educators and Guide to Life-Span Development for Future Nurses

These course supplements help students apply the concepts of human development to careers in education and nursing respectively. They contain information, exercises, and sample tests designed to help students prepare for certification and understand human development from a professional perspective.

Resources for Improving Human Development This useful booklet provides descriptions and contact information for organizations and agencies that can provide helpful information, advice, and support related to particular problems or issues in life-span development. Organized in chronological order by periods of the life span, the booklet also describes recommended books and journals.