3rd Edition

# Life-Span Human Development



Carol K. Sigelman

THIRD EDITION

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CAROL K. SIGELMAN
THE GEORGE WASHINGTON UNIVERSITY



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To the students who have inspired me

## Preface

My purpose in writing this overview of life-span human development is to arouse students' curiosity about how and why human beings both change and remain the same from their beginnings as fertilized eggs to their last years of life. I share the best theories, research, and practical advice that developmentalists have to offer. I want students to understand that human development is an incredibly complex process that reflects transactions between a changing person and a changing world; I want them to appreciate that we do not stop developing at age 21. I hope to help them see that major theories of human development do not just guide researchers but can help anyone analyze the reallife issues we all face. I want them to believe as strongly as I do that the best advice about such matters as raising children, working with troubled adolescents, and easing the adjustment of new nursing home residents comes from research rather than from armchair speculation or the pronouncements of authorities.

Guided by these goals, I have included complex theoretical controversies such as the nature/nurture issue as well as the best classic and contemporary research from the several disciplines concerned with understanding developmental processes. But I also appreciate that solid scholarship is of little good to students unless they want to read it and can understand it. I have long believed that even the most complex issues in human development can be made clear through straightforward writing, apt use of examples and analogies, and highlighting the relevance of course concepts to students' lives and to the work of parents, teachers, psychologists, nurses, day-care workers, and other human service professionals. In short, I have aimed for a book that is both rigorous and readable, both research-oriented and "real."

## An Integrated Topical and Chronological Approach

The large majority of life-span development textbooks are organized chronologically, carving the life span

into age ranges and describing the prominent characteristic of individuals within each range. By contrast, I combine topical and chronological approaches within topics. Each chapter is focused on a domain of development such as physical growth, cognition, or personality, and developmental trends in the domain are traced from infancy to old age.

#### Why Topical?

Why have I bucked the tide? Like many other instructors, I have typically favored topically organized textbooks when teaching child, adolescent, or adult development courses. As a result, it seemed only natural to apply the same approach to the whole life span. Besides, chronological texts have to repeat themselves so we remember where development left off in an earlier period.

More important, a topical organization conveys the flow of development—the systematic and often truly dramatic transformations that take place in the course of human life, as well as the developmental continuities that maintain individual identity. The topical approach also lets us emphasize developmental *processes*; it helps us see how nature and nurture interact over the life span to bring about normal developmental changes as well as to create differences among individuals.

Finally, a predominantly topical approach is compatible with a *life-span perspective* on human development, which views events in the context of what comes before and what is yet to come. In chronologically organized textbooks, many topics are discussed only in terms of the age group to which they seem most relevant—for example, attachment in relation to infancy, play in relation to the preschool years, or sexuality in relation to adolescence and adulthood. Because this is a topical life-span text, I have repeatedly grappled with intriguing questions that I might otherwise not even have asked. Consider the topic of attachment: What do infants' attachments to their parents have in common with attachments between

childhood friends or adult romantic partners? Do securely attached infants later have a greater capacity to form and sustain friendship or romantic partnerships than infants who lacked a close attachment early in life? Attachments are important throughout the life span, and a topical organization helps me make that clear.

#### Why Chronological?

Although I adopted a topical approach because I consider it the best way to introduce the how and why of human development, I also appreciate the strengths of the chronological approach, particularly its ability to portray the whole person in each period of the life span. For this reason, I have incorporated the age/stage approach within the topical framework, hoping to have the best of both worlds.

Each topical chapter contains major sections on infancy, childhood, adolescence, and adulthood. (Of course, I emphasize a particular period more or less depending on its significance to the topic under consideration.) These age/stage sections call attention to the distinctive qualities of each phase of life and make it easy for students to find material on a period of particular interest. Moreover, they allow instructors who wish to move toward an age/stage approach to cover infancy, childhood, and adolescence in the first portion of the course and save the material on adulthood for the end.

Throughout the text, I have also highlighted the intimate relationships among physical, cognitive, and psychosocial development at any age. In an epilogue, I summarize major developments in each of seven periods of the life span, as well as the broad themes in life-span development emphasized throughout the book. This integrative conclusion will be a handy reference for students who want "the big picture"; some instructors use it as a prologue at the start of the course as well as an epilogue at the end.

#### Organization

The book begins with an introduction to the scientific study of life-span development (Chapter 1) and to the central issues and theoretical perspectives that have dominated the field (Chapter 2). It continues with an in-depth examination of genetic influences (Chapter 3) and early environmental influences (Chapter 4) on development. In these chapters we'll see how genes contribute to maturational changes and individual differences throughout the life span and how people are also the products of a prenatal environment and of postnatal experiences that vary as a function of cultural context. If students gain nothing else from their study of human development, I hope they appreciate how many forces interact to create the developing person.

Chapters on the growth and aging of the body and nervous system (Chapter 5) and on the development of sensory and perceptual capacities (Chapter 6) launch our examination of basic human capacities. Chapter 7 covers Piaget's perspective on cognitive development, the quite different perspective offered by Lev Vygotsky, and how the development of language relates to the development of thought; in Chapter 8, learning, memory, and problem solving are examined from an information-processing perspective; and in Chapter 9 the psychometric approach to cognition is highlighted as we explore individual differences in intelligence and creativity.

The next three chapters are concerned with the development of the self—changes in self-conceptions and personality (Chapter 10), in gender roles and sexuality (Chapter 11), and in social cognition and morality (Chapter 12). The self is set more squarely in a social context as we trace life-span changes in attachments and other relationships (Chapter 13), in roles and relationships within the family (Chapter 14), and in life achievements in the context of play, school, and work (Chapter 15). Finally, I offer a life-span perspective on developmental problems and disorders (Chapter 16) and examine why people die and how we cope with death (Chapter 17).

Although links between chapters are noted throughout, instructors who teach short courses or who are otherwise pressed for time can omit a chapter here or there without disturbing the others. For example, a cognitively oriented course might omit one or more of Chapters 11, 14, 15, 16, and 17; a socially oriented course might omit some of the cognitive chapters (Chapters 6–9).

#### New Features

The basic structure of the book has not been changed. One goal of rewriting was to perfect the organization. For example, material on social cognition was moved from Chapter 13 to Chapter 12 to provide a context for the topic of moral development; meanwhile, material was exported from Chapter 12 to Chapter 15 to help create a new chapter on achievement motivation and achievement. Emotional development is integrated with material on attachment in Chapter 13, and sexuality is now covered at the end of Chapter 11, after the broader topic of gender-role development has been explored.

A second goal was to call even more attention to interactions of nature and nurture, giving serious attention to genes, hormones, and other biological forces while showing how development is affected by the individual's cultural and subcultural environment. The theme of goodness of fit between person and environment is now stronger. Finally, I have updated the book from start to finish with hundreds of

new research reports. In pursuing these goals, I have added some exciting new topics and greatly expanded and updated coverage of other subjects. A sampling:

- Expanded survey of historical changes in the life span (Chapter 1)
- Bronfenbrenner's ecological approach highlighted as an example of a contextual theory of human development (Chapter 2)
- Latest breakthroughs in research on genetic diseases and disorders (Chapter 3)
- New reproductive technologies, from artificial insemination to cloning, and their implications (Chapter 4)
- New section on the development and aging of the brain, and coverage of the dynamic systems approach to studying motor development (Chapter 5)
- Examination of the notion that infants come equipped with intuitive theories of the physical world that guide their perceptions (Chapter 6)
- More on Lev Vygotsky's influential thinking about social influences on cognitive development and language (Chapter 7)
- New evidence demonstrating impressive memory skills in young infants (Chapter 8)
- New work explaining racial and ethnic differences in intellectual test performance (Chapter 9)
- More on infant temperament and on continuity and discontinuity over the life span in the key dimensions of personality known as "the big five" (Chapter 10)
- New evidence concerning how biology and gender-role socialization influence whether a child identifies as male or female (Chapter 11)
- Expanded coverage of how 3- and 4-year-olds develop a theory of mind that lets them understand why people behave as they do (Chapter 12)
- Applications of attachment theory to the infant's emotional development, the college student's anxiety upon leaving home for college, the lover's jealousy, and the willingness of adult children to care for their aging parents (Chapter 13)
- New research on the developmental implications of being a "latchkey child" after school (Chapter 14)
- The influence of views of ability and effort on children's achievement in school and an analysis of why Asian students outperform American students (Chapter 15)
- Intriguing arguments, growing out of evolutionary theory, that psychological disorders may serve adaptive functions (Chapter 16)
- Challenges to the assumption that people must work through their grief and sever their attachment in order to recover from the death of a loved one (Chapter 17)

#### Chapter Organization

Although not all these features will be found in the first four chapters, most chapters have a standard format.

- A chapter outline that orients students to what lies ahead
- Introductory material that stimulates interest, previews the chapter, and introduces key concepts and relevant theories and issues
- Developmental sections that describe important changes and continuities and the mechanisms underlying them during infancy, childhood, adolescence, and adulthood
- Applications that show how knowledge has optimized development in the given domain; for example, genetic counseling; innovations in care for premature babies; programs for improving health, intellectual functioning, self-esteem, and social relationships; and efforts to reduce youth violence and abusive family relationships
- Summary points to help students review the main themes
- Food for Thought questions that challenge students to apply the chapter material in new ways
- On the Web, a short list of sites on the World Wide Web that can provide further information on chapter topics and serve as the basis for student projects
- Key Terms, a list of the new terms introduced in the chapter, in order of appearance. (The terms are printed in boldface and defined when they are first presented and reappear alphabetically in the glossary at the end of the book.)

In addition, each chapter contains photographs, tables, and figures. Although some of these are intended to interest or to entertain, they have a serious educational purpose as well: summarizing stage theories, presenting revealing research data, or illustrating concepts discussed in the chapter.

Similarly, the boxes are integral to the text. They offer a closer look at selected topics, including ways of combating the infant's fear of strange babysitters, language acquisition among deaf children, misconceptions about hyperactivity, implications of early and late puberty, cultural differences in the experience of menopause, and interventions to increase the wellbeing of nursing home residents.

Finally, a word on referencing. In each chapter I cite the authors and dates of publication for a large number of books and articles, which are listed in full in the chapter-by-chapter bibliography at the end of the book. Although some students may find these citations distracting, they are included for good reasons: because I am committed to the value of systematic research, because I must give credit where credit is

due, and because I want students and their professors to have the resources they need to pursue their interests in human development.

#### Supplementary Aids

The *Instructor's Manual* contains chapter outlines, learning objectives, graphics that can be converted to transparencies for use in class, and suggestions for class discussion, projects, films, videos, and additional readings. The test bank (available in print and on disk) offers multiple-choice, true-false, and essay questions for each chapter. Acetate transparencies and videotapes are also available.

The Student Study Guide is designed to promote active learning through a guided review of the important principles and concepts in the text. The study materials for each chapter include a comprehensive multiple-choice self-test and a number of applications, exercises that challenge students to think about and to apply what they have learned.

Brooks/Cole now has a *Web site* that supports this book in its on-line Psychology Study Center. As a leader in psychology publishing, Brooks/Cole is committed to bringing you the tools you need to teach or study psychology in new media. Study centers provide added instructional material in selected areas for both instructors and students. Features include chapter quizzes, discussion forums, links to related Internet resources, downloadable images, and more:

http://psychstudy.brookscole.com

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For all that she did, so quietly and competently, to assist me during all phases of this project, from lugging books from the library and researching new topics to checking for missing references, Leokadia (Lodi) Lipien cannot be thanked enough; I truly could not have completed this edition without her, and I look forward to the time when she writes her own books on human development. Julie Relyea did a fine job of stepping in for Lodi when needed. Cathey Weir of Colorado College played a critical role in this edition, devoting many hours of her sabbatical leave to finding just the reference material I needed to respond to a reviewer's point or to update a section. I hope that she will enjoy teaching with this book more than ever.

Credit for excellent supplementary materials goes to Elizabeth Rider of Elizabethtown College, who is unrivaled in her ability to write thought-provoking material for study guides and instructor's manuals, and to Jennifer Kofkin, who joined Betty in preparing the instructor's manual this time around. I am delighted that Betty has chosen to stay with this book through all three of its editions.

Producing this book required the joint efforts of Brooks/Cole Publishing and The Cooper Company. I thank Jim Brace-Thompson and Penelope Sky of Brooks/Cole for overseeing the process; Cecile Joyner for her meticulous management of the book's production; Kevin Gleason for his capable copy editing; and Terri Wright for her creative work on the graphic design. These pros were a joy to work with, and the book is much better because of them.

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Carol K. Sigelman

### About the Author

Carol K. Sigelman is associate vice president for research and graduate studies and professor of psychology at The George Washington University. She has also taught at Texas Tech University, Eastern Kentucky University (where she won the Outstanding Teacher Award), and the University of Arizona. She has taught courses in child, adolescent, adult, and lifespan development for 25 years and has published extensively on such topics as the communication skills of individuals with developmental disabilities, peer reactions to children and adolescents who are different,

and children's developing understanding of diseases and psychological disorders. Recently, through a grant from the National Institute of Child Health and Human Development, she studied children's intuitive theories of AIDS and developed and evaluated a curriculum to correct their misconceptions and teach them the basic facts of HIV infection. Now, through a grant from the National Institute on Drug Abuse, she and her colleagues are doing similar research on how well children of different ages understand the effects of alcohol and drugs on body, brain, and behavior.

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