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JOHN W. SANTROCK

A TOPICAL APPROACH TO

LIFE-SPAN

DEVELOPMENT

Seventh Edition

JOHN W. SANTROCK

University of Texas at Dallas





A TOPICAL APPROACH TO LIFE-SPAN DEVELOPMENT, SEVENTH EDITION

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With special appreciation to my wife, Mary Jo

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 in the School of Behavioral and Brain Sciences at the University of Texas at Dallas, where he currently teaches a number of undergraduate courses.



John Santrock, teaching an undergraduate class

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), *Children* (12th edition), *Child Development* (14th edition), *Adolescence* (15th edition), *Life-Span Development* (14th edition), and *Educational Psychology* (5th edition).

For many years John was involved in tennis as a player, a teaching professional, and a coach of professional tennis players. As an undergraduate, he was a member of the University of Miami (FL) tennis team that still holds the

record for consecutive wins (137) in any NCAA Division I sport. John has been married for four decades to his wife, Mary Jo, who is a Realtor. He has two daughters—Tracy, who is also a Realtor, and Jennifer, who is a medical sales specialist. He has one granddaughter, Jordan, age 21, who is a senior at SMU, and two grandsons, the Belluci brothers—Alex, age 8, and Luke, age 7. In the last decade, John also has spent time painting expressionist art.

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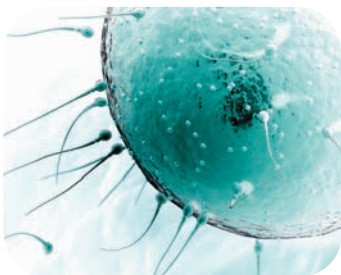
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expert consultants

Life-span development has become an enormous, complex field, and no single author, or even several authors, could possibly keep up with all of the rapidly changing content in the many different areas in this field. To solve this problem, author John Santrock has sought the input of leading experts about content in a number of areas of life-span development across each of the seven editions of this text. The experts provide detailed evaluations and recommendations in their area(s) of expertise.

The following individuals were among those who served as expert consultants for one or more of the first six editions of this text:

James Birren
Robert J. Sternberg
William Hoyer
Elena Grigorenko
Daniel Mroczek
Janet Shibley Hyde
Martha Ann Bell

Denise Park
Susanne Denham
Carolyn Saarni
Ross Parke
Linda George
Ross Thompson
Scott Hofer

Charles Nelson
Gilbert Gottlieb
Doug Wahlsten
James Marcia
Darcia Narváez
James Garbarino
Allan Wigfield

Rachel Keen
Linda Mayes
Crystal Park
Karen Adolph
David Almeida
Jay Belsky
Bert Hayslip

The biographies and photographs of the expert consultants for the seventh edition of this text, who (like the expert consultants for the first six editions) literally represent a Who's Who in the field of life-span development, follow:



Ross Thompson Dr. Ross Thompson is one of the world's leading experts on children's socioemotional development. He currently is Distinguished Professor of Psychology at the University of California–Davis, where he directs the Social and Emotional Development Lab. A developmental psychologist, Dr. Thompson studies early parent-child relationships, the development of emotion understanding and emotion regulation, early moral development, and the growth of self-understanding in young children. He also works on the applications of developmental research to public policy concerns, including school readiness and its development, early childhood investments, and early mental health.

Dr. Thompson is a founding member of the National Scientific Council on the Developing Child. Dr. Thompson has twice been Associate Editor of *Child Development*. He received the Boyd McCandless Young Scientist Award for Early Distinguished Achievement from the American Psychological Association, the Scholarship in Teaching Award, and the Outstanding Research and Creative Activity Award from the University of Nebraska, where he was also a lifetime member of the Academy of Distinguished Teachers. In 2011, he received the University of California Distinguished Service Award. Dr. Thompson has published five books and over 200 papers related to his work.

“Whenever I review topical coverage of child development, especially in a life-span context, I prepare myself either for concerns about coverage that lacks sufficient depth for student understanding, or for concerns about misunderstanding that arises from the birth-to-senescence developmental sweep of coverage. It remains a credit to John Santrock’s skills as a writer and a developmentalist that there were few such concerns in my reading of these two chapters (Chapter 10, “Emotional Development and Attachment,” and Chapter 11, “The Self, Identity, and Personality”). As always, the writing is clear and engaging, the coverage is current and forward-looking, and students are likely to be interested and well-served by these discussions.”

I came away from each chapter amazed at how much important information was conveyed in chapters that are also of manageable length for a textbook.”—Dr. Ross Thompson



Patricia Miller Dr. Patricia Miller is a leading expert in the cognitive development of children. She obtained her Ph.D. from the University of Minnesota and currently is Professor of Psychology at San Francisco State University, having previously been a professor at the University of Michigan, University of Georgia, and the University of Florida. Her research focuses on children's executive function, memory, attention, and learning strategies. Current projects include the development of executive function in preschoolers, the effects of exercise on children's executive function and academic achievement, and the development of strategies in French and U.S. children. Dr. Miller is a recent president of the developmental psychology division of the American Psychological Association and is a Fellow of that organization as well as the Association for Psychological Science. She also has been an associate editor of *Child Development* and is on the editorial board at *Cognitive Development*. Her book, *Theories of Developmental Psychology*, is in its fifth edition, and she is co-author or co-editor of three other volumes. Dr. Miller's work has been published in journals such as *Child Development*, *Developmental Psychology*, and *Cognitive Development*.

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“The main strengths, and the main reason I use this text in my class, is that it is clearly written . . . and is interesting to students because of good selection of topics and studies. The pedagogical tools through the chapter (reviews, connections, etc.) are good as well. I think that the applications to education are good too . . . I like the new material on mindfulness and on the effects of exercise on mental functioning . . . Excellent text, overall!”—Dr. Patricia Miller



Philip David Zelazo Dr. Philip Zelazo is one of the world's leading experts on developmental neuroscience and children's executive function. He obtained his undergraduate degree from McGill University and his Ph.D. with distinction from Yale University. Dr. Zelazo currently is the Nancy M. and John E. Lindahl Professor at the Institute of Child Development at the University of Minnesota. Previously, he was a professor at the University of

Toronto, where he held the Canada Research Chair in Developmental Neuroscience. His research on the development and neural bases of executive function (the control of thought, action, and emotion) has received numerous awards, including the Boyd McCandless Young Scientist Award from the American Psychological Association and Canada's Top 40 Under 40 Award. Dr. Zelazo is president of the Jean Piaget Society and a member of a number of editorial boards, including *Child Development* and *Developmental Cognitive Neuroscience*. He recently was the editor of the two-volume book, *Oxford Handbook of Developmental Psychology* (2013).

"I think this is an excellent overview of these topics (Chapter 3, "Physical Development and Biological Aging", and Chapter 7, "Information Processing") from a life-span perspective, and it highlights well a number of current foci of interest, including research on executive function."—Dr. Philip David Zelazo

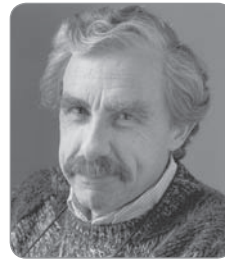


Karen Fingerman Dr. Karen Fingerman is a leading expert on aging, families, and socioemotional development. She currently is a Professor in the School of Human Ecology at the University of Texas at Austin. Prior to coming to UT-Austin, she was the Berner Hanley Professor of Gerontology at Purdue University. Dr. Fingerman obtained her Ph.D. from the University of Michigan and did postdoctoral work at Stanford

University. She has published numerous articles on the positive and negative aspects of relationships involving mothers and daughters, grandparents and grandchildren, friends and acquaintances, and peripheral social ties. The National Institute of Aging, the Brookdale Foundation, and the MacArthur Transitions to Adulthood group have funded her research. Dr. Fingerman has received the Springer Award for Early Career Achievement in Research on Adult Development and Aging from the American Psychological Association, as well as the Margaret Baltes Award for Early Career Achievement in Behavioral and Social Gerontology from the Gerontological Association of America.

"The section regarding divorce was well done . . . the transition to parenting seemed very good and up-to-date . . . the section on parenting styles was nicely done—I appreciated the attention to ethnic differences within the U.S. . . . the section on child abuse covered a lot of up-to-date research . . . the section on the mid-life generation is very good."

—Dr. Karen Fingerman



Ross Parke Dr. Ross Parke is one of the world's leading experts in family processes and socioemotional development. Dr. Parke's most recent position was Distinguished Professor of Psychology and Director of the Center for Family Studies at the University of California—Riverside. He previously held professor positions at the University of Illinois and the University of Wisconsin. Dr. Parke is past president of the Society for Research in Child Development, from which he received the Distinguished Scientific Contribution to Child Development Award. He also is past president of the Developmental Psychology Division of the American Psychological Association, who awarded him the G. Stanley Hall award for contributions to developmental psychology. Dr. Parke has served as editor of the *Journal of Family Psychology* and *Developmental Psychology*. He is the author of *Fatherhood* and co-author of *Throwaway Dads and Child Psychology*. His work has focused on early social relationships in infancy and childhood, the effects of punishment, the father's role in child development, links between family and peer social systems, ethnic variations in families, and the effects of the new reproductive technologies on families. His most recent book is *Future Families: Diverse Forms, Rich Possibilities* (2013).

"As usual, John Santrock has done a very fine job in his revision of the chapter on the family . . . Nice, well documented and interesting chapter."—Dr. Ross Parke



Kirby Deater-Deckard Dr. Kirby Deater-Deckard is a leading expert on biological foundations of development, heredity-environment interaction, and parenting. He obtained his Ph.D. from the University of Virginia and currently is a professor and the director of graduate programs in psychology at Virginia Polytechnic Institute and State University. Dr. Deater-Deckard's research focuses on the development of individual differences in childhood and adolescence, with emphasis on gene-environment processes. He has written papers and book chapters in the areas of developmental psychology and psychopathology. His current research on parenting and children's development is funded by the NICHD. Dr. Deater-Deckard has been joint editor of the *Journal of Child Psychology and Psychiatry*, and currently is on the editorial boards of *Infant and Child Development*, *Journal of Family Psychology*, and *Parenting: Science and Practice*.

"As has been the case with prior editions that I have read and reviewed, the most timely scientific contributions are included in these chapters (Chapter 2, "Biological Beginnings," and Chapter 14, "Families, Lifestyles, and Parenting") . . . The framework/foundation for the chapters is clearly and precisely laid out, and the depth/breadth "balance" of information is just right. . . . Both chapters were a pleasure to read . . . Students will be able to understand and make use of even complex ideas through the examples provided."—Dr. Kirby Deater-Deckard



Glenn Roisman Dr. Glenn Roisman is a leading expert on early interpersonal experiences and their connections to later development. He currently is a Professor of Child Psychology at the Institute of Child Development, University of Minnesota, where he also earned his Ph.D. Before returning to Minnesota, Dr. Roisman was a faculty member in the Department of Psychology at the University of Illinois at Urbana-Champaign. His research concerns the legacy of early interpersonal experience as an organizing force in social, cognitive, and biological development across the life span. Dr. Roisman has been honored for his work with the Society for Research in Child Development Award for Early Research Contributions and the Boyd R. McCandless Young Scientist Award from Division 7 (Developmental Psychology) of the American Psychological Association.

“This is a very strong survey of several important areas of research . . . John Santrock’s text is renowned for its clarity and excellent survey of the literature on child development.”—Dr. Glenn Roisman



Karlene Ball Dr. Karlene Ball is one of the world’s leading experts on aging, perception/cognition, and health. She currently is a Professor and Chair in the Department of Psychology at the University of Alabama at Birmingham. Dr. Ball is also the Director of the University of Alabama at Birmingham Roybal Center for Translational Research on Aging and Mobility, and Associate Director, Center for Aging at the University. She is especially recognized for her work with older drivers and cognitive interventions. Dr. Ball’s research is funded primarily through the National Institutes of Health, and she collaborates widely with automobile insurance companies, Departments of Motor Vehicles, industry partners, and

other organizations with interests in driving assessment and/or cognitive training to maintain driving competence. She also has served on numerous committees for the National Academy of Sciences and the National Research Council, and recently chaired the Committee for the Safe Mobility of Older Persons.

“I read Chapters 4 (“Health”), 5 (“Motor, Sensory, and Perceptual Development”), and 7 (“Information Processing”). John Santrock did a great job integrating the most recent research . . . I was impressed with the writing and topics covered . . . It is well written and very interesting. Students will get a lot out of it.”—Dr. Karlene Ball

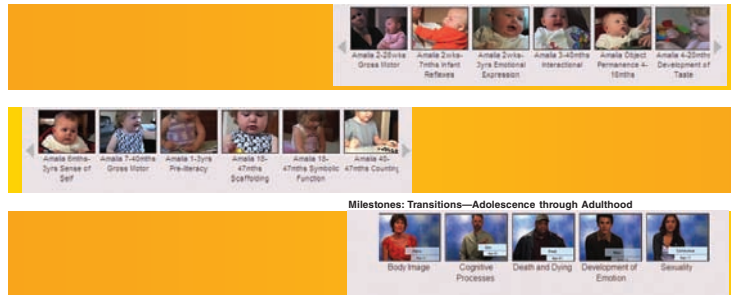


Liz Stine-Morrow Dr. Liz Stine-Morrow is a leading expert on cognitive aging. She obtained her Ph.D. in General-Experimental Psychology from Georgia Tech and did postdoctoral work on cognitive aging at Duke University and Brandeis University. Dr. Stine-Morrow was a psychology professor at the University of New Hampshire and is currently a Professor of Educational Psychology, Psychology, and the Beckman Institute at the University of Illinois.

Her NIH-funded research addresses topics in cognitive aging, pathways to cognitive optimization, discourse processing and memory, and reading. This research focuses on how self-regulated adaptations in adulthood (such as selective allocation of attentional resources, reliance on knowledge-based processes, and intellectual engagement) are linked to high levels of functioning through the life span. She is a Fellow of the American Psychological Association and the Gerontological Society of America. Dr. Stine-Morrow has served as President of Division 20 of the American Psychological Association, as a member of the National Research Council’s Committee on Adolescent and Adult Literacy, and as Associate Editor for *Memory & Cognition* and *Journal of Gerontology: Psychological Sciences*. She also is currently Associate Editor for *Psychology and Aging*.

topical life-span development—

real life, real development, better outcomes



Watch Amalia develop from her first years of life through age six.

Milestones—real life, real development

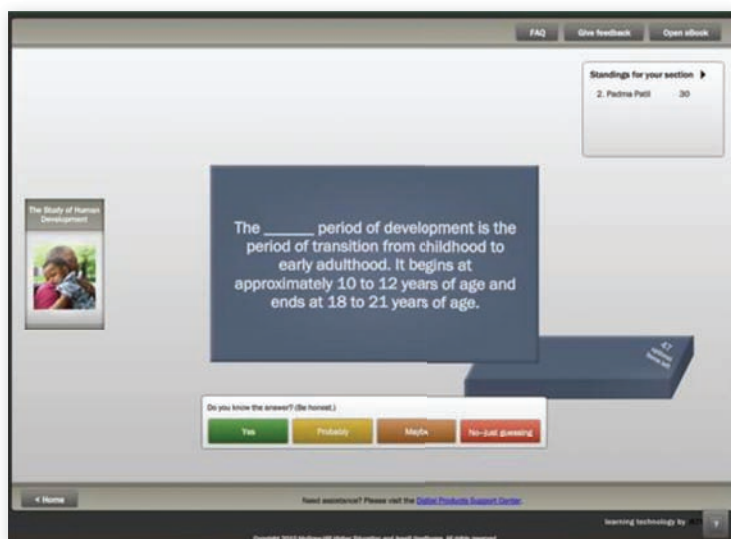
McGraw-Hill's Milestones is a powerful tool that allows students to experience life as it unfolds, from infancy through emerging adulthood. Milestones is **the only longitudinal video of its kind** and allows students to track the early stages of physical, social, and emotional development in real children. By watching one child over time or comparing various children, Milestones provides a unique, experiential learning environment that can only be achieved by watching real human development as it happens—all in pre-, transitional, and post-milestone segments.

In later years, students meet a series of people—from adolescents to individuals in late adulthood—and examine changes that occur throughout the life span. Students are given the opportunity to think critically while exploring the differences in attitudes on everything from body image to changes in emotion, sexuality, cognitive processes, and death and dying.



Adaptive Learning and Reading

New from McGraw-Hill Education, LearnSmart Advantage is a series of adaptive learning products fueled by LearnSmart, the most widely used and intelligent adaptive learning resource proven to improve learning since 2009.



LEARNSMART®

How many students *think* they are prepared but struggle on the first exam? *LearnSmart for Life-Span Development* helps students understand what they know and don't know about specific learning objectives—helping them to focus their time and attention on the most difficult concepts for their individual needs. Based on Bloom's Taxonomy, LearnSmart Advantage creates a customized study plan, unique to every student's demonstrated needs. With virtually no administrative overhead, instructors using LearnSmart Advantage are reporting an increase in student performance by one letter grade or more.

SmartBook is the first and only adaptive reading experience available for the higher education market. Powered by an intelligent diagnostic and adaptive engine, SmartBook facilitates and personalizes the reading process by identifying what content a student knows and doesn't know through adaptive assessments. As the student reads, SmartBook constantly adapts to ensure the student is focused on the content he or she needs the most to close any knowledge gaps.

McGraw-Hill Connect Life-Span Development engages students in the course content so they are better prepared, are more active in discussion, and achieve better results.

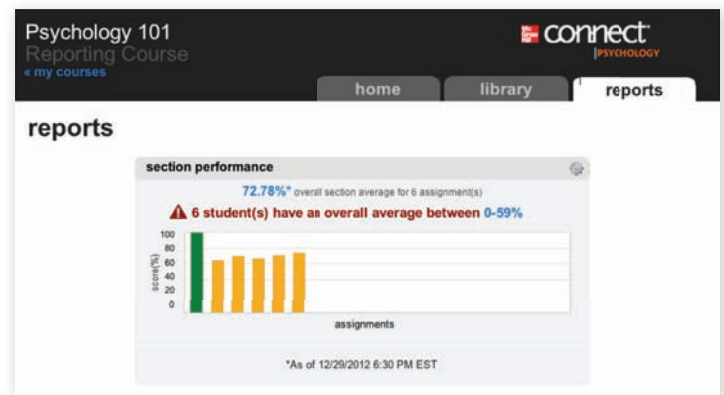
Assignable and Assessable Activities

Connect Life-Span Development offers a wealth of assignable and assessable course materials. Videos, interactivities, and self-assessments engage students in human development course concepts. Detailed reporting helps the students and instructors gauge comprehension and retention—without adding administrative load.

Streamlined Course Management and Powerful Reporting

Whether a class is face-to-face, hybrid, or entirely online, *Topical Life-Span Development* provides the tools needed to reduce the amount of time and energy that instructors must expend to administer their course. Easy-to-use course management allows instructors to spend less time administering and more time teaching.

- **At-Risk Student Reports:** The At-Risk report provides instructors with one-click access to a dashboard that identifies students who are at risk of dropping out of a course due to low engagement levels.
- **Category Analysis Reports:** The Category Analysis report is the place to go to and find out how your students are performing relative to specific learning objectives and goals.
- **Item Analysis Reports:** The Item Analysis report is the best way to get a bird's-eye view of a single assignment. You'll be able to tell if students are improving or if the concepts are something you want to spend additional time on in class.
- **Student Performance Reports:** The student performance report helps you search for a specific student in your class and focus on that student's progress across your assignments.
- **Assignment Results & Statistics Reports:** The Assignment Results report shows your entire class's performance across all of your assignments. Assignment Statistics reports will give you quick data on each assignment including the mean score, high score, and low scores, as well as the number of times it was submitted.



A Topical Approach

Examining life-span development topically allows developmental changes through the life span to be described in close proximity to one another so that students can make better connections between them. **Connections** play a key role in student learning and are a driving force behind *A Topical Approach to Life-Span Development*.

developmental **connection**

Brain Development

Might changes in the development of the adolescent brain be related to teens' mood swings and increased risk taking?
Chapter 3, pp. 106–107

Connecting Topical Processes Across the Life Span

- * **Developmental Connections** highlight links across topics of development and connections between biological, cognitive, and socioemotional processes.
- * **Connect** questions within chapters in end-of-section Review, Connect, and Reflect sections allow students to practice making connections among development topics.

Connecting Research to What We Know About Development

- * **Connecting with Research** describes a study or program to illustrate how research in development is conducted and how it influences our understanding of the discipline.
- * **Leading experts** in the field provided detailed input on the content and offered key insights on new research and findings in their fields of study.
- * **The most current coverage of research**—More than 1,200 citations from 2011, 2012, 2013, and 2014.



connecting with adolescents

Are Social Media an Amplification Tool for Adolescent Egocentrism?

Earlier generations of adolescents did not have social media for connecting with large numbers of people; instead, they connected with fewer people in person or via telephone. Might today's teens be drawn to social media and its virtually unlimited friend base to express their imaginary audience and sense of uniqueness? A recent analysis concluded that amassing a large number of friends (audience) may help to validate adolescents' perception that their life is on stage and everyone is watching them (Psychster Inc, 2010).

A look at a teen's home Twitter comments may suggest to many adults that what teens are reporting is often rather mundane and uninteresting. Typical tweets might include updates like the following: "Studying heavy. Not happy tonight." Or "At Starbucks with Jesse.

Lattes are great." Possibly for adolescents, though, such tweets are not trivial but rather an expression of the personal fable's sense of uniqueness.

Consider also the Web site *DoesThisLookStupid.com*, which has been very popular with adolescents. The teens don't visit the Web site to obtain fashion tips from others wearing clothes similar to theirs. Rather, they think their sense of style is so unique that they feel the need to post photos of what they are wearing that day to obtain feedback. As part of this process, the teens assume that everyone actually cares about what they are wearing.

What do you think? Are social media, such as Facebook and Twitter, amplifying the expression of adolescents' imaginary audience and personal fable sense of uniqueness?

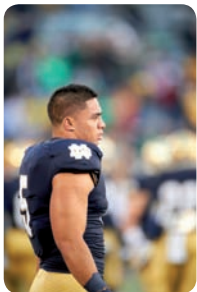
Connecting Development to the Real World

* **Connecting Development to Life** describes the influence of development in a real-world context of topics such as strategies for getting more exercise, living a more creative life, and making friends.

* **Connecting with Careers** and the **Careers Appendix** profile careers that require education and training in various areas of human development to show students where knowledge of human development could lead them.

* **Reflect: Your Own Personal Journey of Life** questions at the end of each section ask students to reflect on some aspect of the discussion in the section they have just read and to connect it to their own life.

* The **Milestones** program enables students to track the early age periods that involve physical, social, and emotional development in real children. This video program captures a handful of children as they reach developmental milestones in a longitudinal view of real development.



(Left) Manti Te'o; (Right) Michelle Przybylski and Andy Lalinde.

What do you think? Is searching online for romantic relationships a good idea? Might it work better for young adults, middle-aged adults, and older adults than adolescents and emerging adults? What are some cautions that need to be taken if you pursue an online romantic relationship?



Chapter-by-Chapter Changes

Numerous content changes were made in each of the 17 chapters in *A Topical Approach to Life-Span Development*, Seventh Edition. The major ones are described below.

Chapter 1: Introduction

- Extensive updating of research citations
- Update on life expectancy in the United States (U.S. Census Bureau, 2012)
- Expanded discussion of poverty and children, including updated statistics on the increasing percentage of U.S. children under 18 years of age living in poverty, especially in African American and Latino families (U.S. Census Bureau, 2012)
- New discussion of the increasing interest in the topic of resiliency, including research by Ann Masten and her colleagues (2011, 2013; Masten, Burt, & Coatsworth, 2006; Masten & Narayan, 2012) and new Figure 1.5
- New content on the increasing interest in emerging adulthood as a developmental transition between adolescence and adulthood (Arnett, 2006, 2012)
- Expanded coverage of physiological measures of development, including cortisol, electroencephalography (EEG), heart rate, and eye movement (Gunnar & Herrera, 2013; Reznick, 2013; Rueda & Posner, 2013)
- New Figure 1.18 showing neuroimages of the brains of two adolescents (one a non-drinker, the other a heavy drinker) while they are engaging in a memory task
- Inclusion of recent research and commentary on Millennials involving their ethnic diversity and use of technology, based on a recent national survey by the Pew Research Center (2010b)
- New Figure 1.21 describing various generations, their historical periods, and their characteristics
- on attention deficit hyperactivity disorder (Caylak, 2012), autism (O’Roak & others, 2012), depression (Cohen-Woods, Craig, & McGuffin, 2012), and Alzheimer disease (Bertram & Tanzi, 2012)
- New description of the recent interest in next-generation sequencing in determining genetic influences on disease and health (Hastie & others, 2013; Jia & others, 2013)
- New coverage of the Thousand Genomes Project, the most detailed study of human genetic variation to date (Shibata & others, 2012)
- Expanded and updated material on modifications in DNA expression as a result of stress, radiation, and temperature (Georgakilas, 2011)
- Updated discussion of gene-gene interaction to include recent studies of immune system functioning (Reijmerink & others, 2011), asthma (Su & others, 2012), cancer (Bushel & others, 2012), cardiovascular disease (Xiao & others, 2012), arthritis (Ronninger & others, 2012), and alcoholism (Yokoyama & others, 2013)
- Inclusion of information that only 10 percent of individuals with Klinefelter syndrome are diagnosed before puberty and the majority are not identified until adulthood (Aksglaede & others, 2013)
- New commentary about fragile X syndrome being linked to autism (Lipton & Sahin, 2013)
- New box on *Connecting with Children, Emerging Adults, and Adults*, “Am I an ‘I’ or ‘We’?” that highlights the difficulty of establishing a unique identity when you are a twin, especially an identical twin
- Addition of information about epigenetic mechanisms involving the actual molecular modification of the DNA strand as a result of environmental inputs in ways that alter gene functioning (Feil & Fraga, 2012; Meaney, 2010)
- Updated coverage of the concept of $G \times E$, which involves the interaction of a specific measured variation in the DNA sequence and a specific measured aspect of the environment (Bihagi & others, 2012; Petersen & others, 2012; Zannas & others, 2012)
- Discussion of a recent meta-analysis that found the short version of the 5-HTTLPR serotonin gene was linked to higher cortisol stress reactivity (Miller & others, 2013)
- Description of recent research indicating that variations in dopamine-related genes interact with supportive or unsupportive environments to influence children’s development (Bakermans-Kranenburg & van IJzendoorn, 2011)
- Expanded material on conclusions about heredity and environment interaction based on David Moore’s (2013) recent comments about the complexity of biological systems and how too often their connections with behavior have been oversimplified

- Coverage of a recent study confirming that ethanol crosses the human placenta and primarily reflects maternal alcohol use (Matlow & others, 2013)
- Description of recent research indicating that a high level of maternal stress is linked to neural tube defects (Li & others, 2013)
- Updated material on noninvasive prenatal diagnosis (NIPD) (Geaghan, 2012)
- New information about being able to determine the sex of the fetus at an earlier point in pregnancy through new noninvasive procedures (Kolialexi, 2012)
- Discussion of a recent meta-analysis indicating that a baby's sex can be determined as early as 7 weeks into pregnancy (Devaney & others, 2011)
- Added commentary that the recent increased consumption of energy drinks that have very high levels of caffeine has not yet been studied for its impact on the fetus
- Coverage of recent research that found deficiencies in the brain pathways involved in the working memory of children with FASD (Diwadkar & others, 2012)
- Information about a recent study that found environmental tobacco smoke exposure during pregnancy was linked to diminished ovarian functioning in female offspring (Kilic & others, 2012)
- Description of recent research that found deregulation of gene expression in offspring was linked to pregnant women's exposure to environmental smoke (Votavova & others, 2012)
- Coverage of a recent research review that concluded cocaine quickly crosses the placenta to reach the fetus (De Giovanni & Marchetti, 2012)
- Coverage of a recent study that found prenatal methamphetamine exposure was associated with smaller head circumference, neonatal intensive care unit (NICU) admission, and referral to child protective services (Shah & others, 2012)
- Expanded and updated material on maternal obesity and pregnancy, including the processes involved in maternal obesity that may cause negative outcomes for offspring (Nodine & Hastings-Tolsma, 2012)
- Coverage of recent research that linked maternal obesity to stillbirth (Gardosi & others, 2013) and an increased likelihood that the newborn will be placed in a Neonatal Intensive Care Unit (Minsart & others, 2013)
- Description of a recent study that revealed paternal smoking around the time of the child's conception was linked to an increased risk of the child developing leukemia (Milne & others, 2012)
- Coverage of a recent research review indicating an increased risk of spontaneous abortion, autism, and schizophrenic disorders in offspring when the father is 40 years of age and older (Reproductive Endocrinology and Infertility Committee & others, 2012)
- New content on how the father can promote positive outcomes for the fetus by contributing to a positive marital relationship, not engaging in spousal abuse, sharing more in household tasks, and attending childbirth classes
- Discussion of a recent research review on the effects of exercise during pregnancy for maternal health and newborn outcomes (Field, 2012)
- Coverage of a recent study that found engaging in a tai chi/ yoga group daily for 12 weeks produced a number of positive outcomes for depressed pregnant women (Field & others, 2013)
- New description of the percentage of births in the United States that are attended by midwives (Martin & others, 2012)
- New coverage of recent research indicating that for Medicaid recipients the odds of having a cesarean delivery were 41 percent lower for doula-supported births in the United States (Kozhimmanil & others, 2013)
- Update on the percentage of U.S. infants born preterm, which declined to 11.7 percent in 2011 (Lynch, Dezen, & Brown, 2012)
- Coverage of a recent meta-analysis on the success of progesterin in preventing preterm births (Likis & others, 2012)
- Description of a recent study that found very preterm, low birth weight infants had abnormal axon development in their brain and impaired cognitive development at 9 years of age (Iwata & others, 2012)
- New research that revealed preterm infants who experienced kangaroo care had more complex EEG patterns at 40 weeks, which is indicative of neurological maturation (Kaffashi & others, 2013)
- Inclusion of information from a recent survey indicating that mothers had a much more positive view of using kangaroo care in neonatal intensive care units than did nurses (Hendricks-Munoz & others, 2013) and noting a concern that too few intensive care nurses use kangaroo care (Stikes & Barbier, 2013)
- Discussion of a recent study that revealed yoga and massage therapy sessions resulted in decreased levels of depression, anxiety, and back and leg pain (Field & others, 2012)
- Coverage of two recent research reviews that indicated massage therapy reduced pain during labor (Jones & others, 2012; Smith & others, 2012)
- Updated description of the percentage of infants born preterm in the United States, including the overall rate and ethnic variations in 2009 (National Center for Health Statistics, 2011)
- Updated data about the percentage of infants born with low birth weight in the United States (U.S. Census Bureau, 2012)
- Description of recent research that found low birth weight was associated with childhood autism (Lampf & others, 2012)
- Coverage of a recent study that revealed the mechanisms responsible for weight gain in massaged preterm infants (Field, Diego, & Hernandez-Reif, 2011)

Chapter 3: Physical Development and Biological Aging

- Inclusion of changes in the coverage of the development of the brain based on input from leading expert consultant Martha Ann Bell

- New section, “The Neuroconstructivist View,” that describes an increasingly popular perspective on the brain’s development (Diamond, 2013; Westermann, Thomas, & Karmiloff-Smith, 2011)
- Description of a recent research review of sleep patterns in infancy (Galland & others, 2012)
- Inclusion of information about a recent study that revealed by 6 months of age, a majority of infants slept through the night, awakening their mothers only once or twice a week (Weinraub & others, 2012)
- Discussion of a recent study that revealed nighttime wakings at 12 months of age predicted a lower level of sleep efficiency at four years of age (Tikotzky & Shaashua, 2012)
- New coverage indicating that recent research has found that the onset of puberty is continuing to occur earlier for both girls and boys (Herman-Giddens & others, 2012; McBride, 2013)
- Inclusion of recent research indicating that early-maturing girls are shorter toward the end of adolescence while early-maturing boys are taller toward the end of adolescence (Yousefi & others, 2013)
- Description of a recent cross-cultural study in 29 countries that found childhood obesity was linked to early puberty in girls (Currie & others, 2012)
- Addition of information about recent research that indicated severity of childhood sexual abuse was associated with early onset of menarche (Boynton-Jarrett & others, 2013)
- Coverage of a recent study that found a linear increase in having a positive body image for both boys and girls as they moved from the beginning to the end of adolescence (Holsen, Carlson Jones, & Skogbrott Birkeland, 2012)
- New discussion of research that found a link between early maturation in boys and development of testicular cancer later in life, and an association between early menarche and breast cancer later in life for girls (Golub & others, 2008)
- New commentary that early-maturing adolescents, especially girls, require earlier risk education efforts related to sexual development, risky behaviors, relationships, and Internet safety than their on-time peers (Susman & Dorn, 2013)
- Discussion of a recent research review that found effective management of weight and resistance training were the best strategies for slowing down sarcopenia (Rolland & others, 2011)
- Added commentary about cholesterol-lowering and hypertension-lowering drugs being a major factor in improving the health of many middle-aged adults and increasing their life expectancy (de la Sierra & Barrios, 2012; Gadi & others, 2012)
- Coverage of a recent national study that found an increase in resistant hypertension in the United States in recent years, likely because of increases in obesity and the number of older adults (Roberie & Elliott, 2012)
- Discussion of a recent study that found several factors in adolescence were related to the development of metabolic syndrome in middle-aged women and men (Gustaffson, Persson, & Hammarstrom, 2011)
- Coverage of a recent study that found long-term aerobic exercise was linked to greater muscular strength in 65- to 86-year-olds (Crane, Macneil, & Tarnopolsky, 2013)
- Addition of Martha Ann Bell (Bell & Cuevas, 2012, 2013; Bell & Diaz, 2012; Morasch, Raj, & Bell, 2013) as among those making strides in learning more about the development of the brain in infancy
- New commentary about increased myelination in late adolescence and emerging adulthood allowing greater connectivity between brain regions, especially the important connection between the prefrontal cortex and the limbic system, which is linked to greater emotional control (Giedd, 2012)
- New discussion of a recent study of adolescents from Mexican backgrounds that found those with stronger family obligation values showed decreased activation in the brain’s regions involving reward sensitivity, which was linked to less real-life risk-taking behavior, and increased activation in the brain’s regions involving cognitive control, which was associated with better decision-making skills (Telzer & others, 2013)
- Discussion of a recent study that found a decrease in total brain volume and volume in key brain structures such as the frontal lobes and hippocampus from 22 to 88 years of age (Sherwood & others, 2011)
- Recent analysis suggesting that the decrease in brain volume in healthy aging is likely due to neuron shrinkage, lower numbers of synapses, and reduced length of axons and only to a minor extent reflects neuron loss (Fjell & Walhovd, 2010)
- New commentary about the increased interest in the role that neurogenesis might play in neurodegenerative diseases such as Alzheimer disease, Parkinson disease, and Huntington disease (Walton & others, 2012)
- Discussion of two recent research reviews linking breastfeeding to a lower incidence of SIDS (Hauck & others, 2011; Zotter & Pichler, 2012)
- New material on recent research indicating that as many as 10 to 15 percent of SIDS cases are linked to heart arrhythmias with gene mutations being involved in the arrhythmias (Brion & others, 2012; Van Norstrand & others, 2012)
- New discussion of Mona El-Sheikh’s (2013) recommendations for improving the child’s sleep environment
- Coverage of a longitudinal study that found regardless of how much students studied each day, when the students sacrificed sleep time to study more than usual, they had difficulty understanding what was taught in class and were more likely to struggle with class assignments the next day (Gillen-O’Neel, Huynh, & Fuligni, 2013)
- Description of a recent study that found middle-aged adults who slept less than six hours a night on average had an increased risk of developing stroke symptoms (Ruiter, 2012)
- Inclusion of information about a recent statement by the American Academy of Sleep Medicine and Sleep Research Society (Luyster & others, 2012), calling attention to the negative health, work, and cognitive outcomes of chronic sleep deprivation

- Coverage of a recent study that found regular exercise improves the sleep profiles of older adults (Lira & others, 2011)
- Description of a recent study that found daytime napping and getting 6½ hours of sleep or more per night were associated with a lower risk of cognitive decline over a 10-year period (Keage & others, 2012)
- New commentary about increased longevity being due not only to improvements in the health and well-being of adults but also to the substantial reduction in infant deaths in recent years
- Updated statistics on life expectancy around the world, with Monaco having the highest estimated life expectancy at birth in 2011 (90 years of age) (Central Intelligence Agency, 2012)
- Updated statistics on life expectancy at birth and at 65 and 100 years of age (U.S. Census Bureau, 2011a)
- New commentary noting that the sex difference in longevity favoring women is still present but less pronounced in late adulthood and is especially linked to the higher level of cardiovascular disease in men than women (Yang & Kozloski, 2011)
- Updated information about the number of centenarians in the United States (U.S. Census Bureau, 2011)
- Coverage of a recent study indicating that the older the age group of centenarians (110 to 119 compared with 100 to 104, for example), the later the onset of diseases such as cancer and cardiovascular disease, as well as functional decline (Andersen & others, 2012)
- Much expanded discussion of centenarians, including research results from two major studies of centenarians: (1) Georgia Centenarian study (Cho, Martin, & Poon, 2012; Poon & others, 2010, 2012) and (2) Chinese Longitudinal Healthy Longevity study (L. Feng & others, 2012; Z. Feng & others, 2012; Zeng & Shen, 2010)
- New *Connecting with Older Adults* box featuring comments by centenarians, including Jeanne Louise Calment, the longest living person, about their views on life and why they were able to live so long
- Inclusion of information about recent research interest in the role that restricted diet and exercise might play in reducing oxidative damage in cells (Muthusamy & others, 2012)
- Description of the recent interest in studying stress-buffering strategies, such as exercise, to attenuate some of the negative effects of stress on the aging process (Bauer & others, 2013)
- Expanded material on links between the ApoE4 gene and Alzheimer disease (Caselli, 2012)
- New discussion of K. Warner Schaie's (2012) recent research that found individuals who had the ApoE4 allele showed more cognitive decline beginning in middle age
- Coverage of a recent research study that found the ApoE4 gene creates a cascade of molecular signaling that causes blood vessels to become more porous and leak toxins into the brain and damage neurons (Bell & others, 2012)
- New discussion of the current research interest in the roles that amyloid and tau play in Alzheimer disease (Vromman & others, 2013)
- Description of recent research indicating that the presence of amyloid protein in the spinal fluid of individuals with mild cognitive impairment predicted whether they would develop Alzheimer disease within the next five years (De Meyer & others, 2010)
- New material indicating that one of the best prevention/intervention strategies for people who are at risk for Alzheimer disease is to improve their cardiac functioning (Hall & others, 2013; Vignini & others, 2013)
- Description of a recent research review that concluded cholinesterase inhibitors do not reverse progression to dementia (Masoodi, 2013)
- Coverage of a recent study that compared family caregivers' perceptions of caring for someone with Alzheimer disease, cancer, or schizophrenia, with the highest perceived burden being associated with Alzheimer disease (Papastavrou & others, 2012)
- Discussion of a recent research review that found that a higher level of screen time at 4 to 6 years of age was linked with a lower level of activity and being overweight from preschool to adolescence (te Velde & others, 2012)
- Expanded and updated coverage of links between children's exercise and their physical well-being (Ekelund & others, 2012)
- Inclusion of a recent experimental study that found positive effects for aerobic training on the insulin resistance and body fat levels of overweight/obese elementary school children (Davis & others, 2013)
- Updated content on exercise rates for U.S. adolescents with national data from 2011 (Eaton & others, 2012)
- Description of a recent study of young adolescents that found regular exercise was associated with higher academic achievement (Hashim, Freddy, & Rosmatunisah, 2012)
- Coverage of a recent research review that indicated peer/friend support was associated with adolescents' levels of physical activity (Fitzgerald, Fitzgerald, and Aherne, 2012)
- Description of a recent study that found a daily morning running program for three weeks improved adolescents' sleep quality, mood, and concentration (Kalak & others, 2012)
- Description of a recent study of gender differences in college students' motivation to exercise (Egli & others, 2011)
- Description of a recent study of older adults that found total daily activity was linked to increased longevity across a four-year period (Buchman & others, 2012)

Chapter 4: Health

- New section, "Stress and Disease" (Dougall & others, 2013)
- New description of the views of David Almeida and his colleagues (2011) regarding chronic stress and how it can be damaging to physiological functioning and increase disease
- Discussion of a recent study indicating that aerobic exercise was related to the presence of a lower level of senescent T cells (Spielmann & others, 2011)
- New section on having a sense of control, which peaks in middle age, and its links to health and disease (Lachman, Neupert, & Agrigoroaei, 2011)

- Description of two recent studies that revealed exercise training was linked to improvements in hippocampal functioning and memory in older adults (Erickson & others, 2011; Head, Singh, & Bugg, 2012)
- Description of recent research that found low maternal sensitivity when infants were 15 and 24 months of age was linked to a higher risk of obesity in adolescence (Anderson & others, 2012)
- Inclusion of the American Pediatrics Association's Section on Breastfeeding's (2012) reconfirmation of its recommendation of exclusive breast feeding in the first six months, followed by continued breast feeding as complementary foods are introduced, and further breast feeding for one year or longer as mutually desired by the mother and infant
- Updated data on the percentage of U.S. mothers who breast feed their infants in the hospital and for 6 months (Centers for Disease Control and Prevention, 2012)
- New discussion of a recent literacy intervention program with Spanish-speaking families in the Los Angeles WIC program that increased literacy resources and activities in homes, which in turn led to a higher level of school readiness in children (Whaley & others, 2011)
- Description of a recent study that found the most frequently consumed vegetable by 2- and 3-year-olds was French fries or other fried potatoes (Fox & others, 2010)
- Coverage of recent data on the increasing percentage of 2- to 5-year-old obese children in the United States, including trends from 1976–1980 through 2007–2010 (Ogden & others, 2012)
- Description of recent data on the percentage of U.S. 6- to 11-year-olds who are overweight or obese, which in 2009–2010 was significantly higher than the percentage of 2- to 5-year-olds who were overweight (Ogden & others, 2012)
- Coverage of recent intervention studies that indicate modifying parents' eating habits and increasing children's exercise can help overweight and obese children to lose weight (Brotman & others, 2012; Collins & others, 2011)
- Updated data on trends in adolescent obesity from 1999–2000 to 2009–2010 with increased obesity in boys but not in girls during this time frame (Ogden & others, 2012)
- New *Connecting with Adults and Children* box: "Helping Overweight Children Lose Weight" (DiLeonardo, 2013; Matthiessen, 2013; Moninger, 2013)
- Description of a recent study showing that among a number of activities, team sports participation was the best predictor of lowering the risk for being overweight or obese in adolescence (Drake & others, 2012)
- New commentary about links between anorexia nervosa and obsessive thinking about weight and compulsive exercise (Hildebrandt & others, 2012; Simpson & others, 2013)
- New description of the perfectionistic tendencies of anorexics and bulimics (Lampard & others, 2012)
- New discussion of the likely brain changes in adolescents who are anorexic (Kaye & others, 2013)
- Description of a recent study of adolescents and young adults that found dieters were two to three times more likely than non-dieters to develop binge eating problems over a five-year period (Goldschmidt & others, 2012)
- Updated statistics on the percentage of 20- to 39-year-olds who are obese in the United States (National Center for Health Statistics, 2011)
- Inclusion of a recent forecast that predicted 42 percent of U.S. adults will be obese in 2030 (Finkelstein & others, 2012)
- New material on the National Weight Control Registry, including research indicating that individuals who have lost at least 30 pounds and kept it off for one year engage in a high level of physical activity (Catenacci & others, 2008; Ogden & others, 2012)
- Coverage of a 25-year longitudinal study that found calorie restriction in monkeys did not lead to increased longevity (Mattison & others, 2012)
- Description of recent research reviews indicating that taking antioxidant vitamin supplements does not reduce the risk of cancer and cardiovascular disease (Bjelakovic & others, 2012; Chen & others, 2012; Dolara, Bigagli, & Collins, 2012; Moyer, 2013; Myung & others, 2013)
- Coverage of a recent meta-analysis that found dietary intake (not vitamin supplements) of antioxidants was associated with a reduced risk of Alzheimer disease (Li, Shen, & Ji, 2012)
- Updated coverage of the Monitoring the Future study's assessment of drug use by secondary school students with 2012 data on U.S. eighth-, tenth-, and twelfth-graders (Johnston & others, 2013)
- Description of research that found the onset of alcohol use before age 11 was linked to a higher risk of alcohol dependence in early adulthood (Guttmanova & others, 2012)
- Discussion of recent research that linked authoritative parenting with lower adolescent alcohol consumption (Piko & Balazs, 2012) and parent-adolescent conflict with higher consumption (Chaplin & others, 2012)
- Updated research on a confluence of peer factors that are linked to adolescence alcohol use (Cruz, Emery, & Turkheimer, 2012; Patrick & Schulenberg, 2010)
- Updated material on college students' drinking habits, including new data on extreme binge drinking and the recent decline in college drinking (Johnston & others, 2011)
- Updated Figure 4.22, "Binge Drinking Through the Life Span," that provides recent data on developmental changes in binge drinking through the adult years (Centers for Disease Control and Prevention, 2012)

Chapter 5: Motor, Sensory, and Perceptual Development

- A number of changes made in the material on motor development based on leading expert Karen Adolph's feedback
- Description of a recent study by Karen Adolph and her colleagues (2012) that found 12- to 19-month-olds took 2,368 steps and fell 17 times an hour during free play, documenting the extensiveness of locomotor experience

- New coverage of Rachel's Keen's (2011) finding that tool use is an excellent context for studying problem solving in children less than 3 years old because motor behavior can indicate how the infant plans to reach a goal
- Description of recent research on the motor origins of tool use from 6 to 15 months of age (Kahrs, Jung, & Lockman, 2013)
- Updated discussion of reflexes arguing that reflexes are not exclusively inborn, genetic mechanisms but rather that infants can deliberately control such movements (Adolph & Berger, 2013)
- New coverage of recent research indicating that alternating leg movements occur during the fetal period and at birth (Adolph & Robinson, 2013)
- New *Connecting with Older Adults* box on preventing falls in the elderly
- A number of changes in the discussion of perceptual development based on feedback from leading experts Scott Johnson and Rachel Keen
- Revised, updated coverage of high-amplitude sucking as a measure of infant perceptual development
- Greatly expanded and updated coverage of the dramatic increase in the use of sophisticated eye-tracking equipment in the study of infant perception (Aslin, 2012; Oakes, 2012)
- Description of a recent eye-tracking study in which 1-year-old infants showed less efficient looking at an educational video than their older counterparts (Kirkorian, Anderson, & Keen, 2012)
- Description of a recent study indicating that imagining the various paths that a dropped ball might take improves preschoolers' ability to predict where it would land (Joh & others, 2011)
- Coverage of a recent study indicating that instructions to follow the path of a ball to the bottom of a tube improved 3-year-olds' ability to not succumb to a gravity bias (Bascandzjev & Harris, 2011)
- Expanded coverage of factors involved in declining vision in elderly adults to include speed of visual processing and contrast sensitivity (Owsley, 2011; van Rijn & others, 2011)
- Coverage of a recent fMRI study that confirmed the fetus can hear at 33 to 34 weeks into the prenatal period by assessing fetal brain responses to auditory stimuli (Jardri & others, 2012)
- Updated description of continued changes in loudness, pitch, and location of sounds in the childhood years (Trainor & He, 2013)
- Discussion of a recent study that found 7-month-old infants can process simultaneous pitches when they hear voices, but they are more likely to encode the higher-pitched voice (Marie & Trainor, 2013)
- Coverage of a recent study that revealed the severity of age-related hearing loss was linked to impaired activities of daily living (Gopinath & others, 2012)
- Description of recent research that found hearing decline was associated with a reduction in cognitive functioning in older adults (Lin, 2011)
- Discussion of recent research that found the perceptual difficulties associated with hearing loss affects language comprehension and memory for spoken words in older adults (Tun & others, 2012)
- Inclusion of information from a 10-year study that found poor nutrition and a lifetime of smoking were linked to more rapid hearing loss over time in older adults (Heine & others, 2013)
- New coverage of the longitudinal research of Daphne Maurer and her colleagues (Lewis & Maurer, 2009; Maurer, Mondloch, & Leis, 2007) on infants whose cataracts were removed at different points in development that illustrates how deprivation and experience influence visual development
- New discussion of a recent research review that evaluated two types of interventions in terms of their effectiveness in improving older adults' driving: cognitive training and education (Ross, Schmidt, & Ball, 2012)
- Description of recent research by Karlene Ball and her colleagues (2010) that found training designed to enhance speed of processing produced more than a 40 percent reduction in at-fault crashes by older adults over a 6-year period

Chapter 6: Cognitive Developmental Approaches

- Updated and expanded discussion of Renee Baillargeon's (2008; Baillargeon & others, 2012) view of infant development that includes information that infants have a pre-adapted, innate bias called the principle of persistence
- Expanded conclusions about the themes of the current field of infant cognitive development emphasizing the substantially increased interest in cognitive developmental neuroscience and links between brain processes and cognitive processes (Diamond, 2013; Morasch, Raj, & Bell, 2013; Zelazo, 2013)
- Description of a recent fMRI study identifying brain locations that were linked to 9- and 10-year-olds' conservation success in comparison with non-conserving 5- and 6-year-olds (Houde & others, 2011)
- New *Connecting with Adolescents* box: "Are Social Media an Amplification Tool for Adolescent Egocentrism?"
- New discussion of benefits of the Tools of the Mind early education curriculum for children's executive function, including improved cognitive control (Diamond, 2013; Diamond & Lee, 2011)
- New main section, "Are There Cognitive Stages in Middle and Late Adulthood?," that examines possible candidates for stages in these periods of development

Chapter 7: Information Processing

- Edited and updated material based on feedback from leading experts Patricia Miller and Philip Zelazo
- New coverage of Robert Siegler's (Siegler, 2013; Siegler & others, 2013) microgenetic method for studying cognitive changes
- Discussion of a recent study indicating that processing speed was linked to oral reading fluency in children (Jacobson & others, 2011)
- Description of a recent study that revealed age-related slowing in processing speed was linked to a breakdown in myelin in the brain (Lu & others, 2013)

- Coverage of a recent study that found infants visually attend to events that are of intermediate complexity and are more likely to look away from events that are overly simple or complex (Kidd, Piantadosi, & Aslin, 2012)
- Discussion of a recent study that found responding to joint attention at 1 month of age was linked to self-regulation skills at 3 years of age (Van Hecke & others, 2012)
- Expanded coverage of attention in adolescence, including new material on the importance of controlling attention and being able to reduce distractions that can interfere with learning (Gillig & Sanders, 2011; Rueda & Posner, 2013)
- New section on children's autobiographical memories including how they change from early childhood through adolescence (Bauer, 2013)
- New content on cultural influences on children's autobiographical memories
- Discussion of a recent study that found a computerized working memory program improved 9- to 11-year-olds' reading performance (Loosli & others, 2012)
- Description of a recent study that found assessment of working memory in kindergarten was a key process in predicting math achievement at the end of the first grade (Monette, Bigras, & Guay, 2011)
- New description of how mothers' habit of reminiscing with their young children in elaborate and evaluative ways is linked to improved autobiographical memories in their children (Fivush, 2010)
- Updated and expanded discussion of the increasing interest in executive function, including the importance of its early development in the preschool years (Carlson & White, 2013; Carlson, Zelazo, & Faja, 2013)
- New description of Ann Masten and her colleagues' (Herbers & others, 2011; Masten, 2013; Masten & others, 2008) research that has found executive function and parenting skills are linked to school success in homeless children
- Expanded coverage of mindfulness and recent proposals for using mindfulness training, as well as other aspects of contemplative science such as yoga, to improve children's cognitive and socio-emotional skills (Roeser & Zelazo, 2012; Zelazo & Lyons, 2012)
- New section, "Executive Function," that highlights the increasing interest in children's executive function, including Adele Diamond's (2013; Diamond & Lee, 2011) view of the key dimensions of executive function in 4- to 11-year-old children and interventions that have been shown to improve executive function
- Coverage of a 30-year longitudinal study that found children who were better at inhibitory control showed a number of positive aspects of development as adults (Moffitt, 2012; Moffitt & others, 2011)
- Expanded and updated content on executive function in adolescence, including new Figure 7.16 that lets students evaluate how cognitively flexible they are (Galinsky, 2010)
- New discussion of a recent study of older adults that found the greater their variability in sustained attention, the more likely they were to experience falls (O'Halloran & others, 2011)
- New description of the tip of the tongue phenomena (TOT) and a recent study that found the most common memory errors reported by older adults in the last 24 hours involved TOT (Ossher, Flegal, & Lustig, 2012)
- Coverage of a recent study indicating that working memory continued to decline after 89 years of age (Elliott & others, 2011)
- New discussion of recent research indicating that adolescents make riskier decisions in stressful than nonstressful situations, but that the extent to which they make risky decisions in stressful contexts is associated with the type of risk taker they are (impulsive, calculated, or conservative) (Johnson, Dariosi, & Wang, 2012)
- Expanded coverage of the dual process model of decision making to include material on the importance of adolescents quickly getting the gist of a dangerous situation, which can cue personal values that will reduce the likelihood that adolescents engage in risky decision making (Chick & Reyna, 2012)
- Inclusion of information about how adolescents who have a higher trait level of inhibition (self-control) and find themselves in risky situations are less likely to engage in risky decision making (Chick & Reyna, 2012)
- New section on executive function and how it changes in older adults (Coxon & others, 2012; Luszcz, 2011)
- New discussion of the debate about how much benefit is derived from placing various cognitive processes under the broader concept of executive function
- Coverage of a recent study that found older adults who had a higher level of trans fat in their blood plasma showed a lower level of cognitive functioning (Bowman & others, 2012)
- New commentary about mental health problems, such as depression, being linked to lower cognitive functioning in older adults (van den Kommer & others, 2013)
- Description of a recent study that revealed 6 months of dance intervention improved the cognitive functioning of elderly adults (Kattenstroth & others, 2013)
- Discussion of recent research across a 12-year period that found older adults who reduced their participation in lifestyle cognitive activities (using a computer and playing bridge, for example) showed subsequent poorer cognitive functioning (semantic memory for example) (Small & others, 2012b). The poorer cognitive functioning was then linked to a lower level of engagement in social activities.
- Discussion of two recent neuroimaging studies that found older adults' memory was better the less lateralized their brain activity was (Angel & others, 2011; Manenti, Cotelli, & Miniussi, 2011)
- New coverage of Schaie's (2012) recent research regarding links between hippocampal and cognitive functioning from middle age to late adulthood
- New *Connecting with Older Adults* box on the remarkable Helen Small, who recently published her first book, *Why Not? My Seventy-Year Plan for a College Degree* (Small, 2011)
- Coverage of recent meta-examinations of four longitudinal studies of naturalistic cognitive functioning across two decades

indicating that when older adults increased their engagement in cognitive and physical activities, they were better able to maintain their cognitive functioning (Brown & others, 2013; Lindwall & others, 2013; Mitchell & others, 2013a)

- Expanded description of what metacognition involves (Dimmitt & McCormick, 2012)
- New commentary noting that whether infants have a theory of mind continues to be debated (Rakoczy, 2012)
- Expanded coverage of cognitive factors other than theory of mind that might be involved in autism, including eye gaze, face processing, memory, and language impairment (Boucher, Mays, & Bigham, 2012)

Chapter 8: Intelligence

- New commentary based on recent research indicating that individuals with higher IQs are more likely to be intrinsically satisfied with their jobs (Ganzach & Fried, 2012)
- Description of a recent research review concluding that more than 1,000 genes may influence an individual's intelligence (Davies & others, 2011)
- New information from a recent research review about the environment's role in intelligence that is reflected in the 12- to 18-point IQ gain children make when they are adopted from lower-SES to middle-SES homes (Nisbett & others, 2012)
- Coverage of a recent analysis of the Abecedarian early childhood intervention when the children had reached 30 years of age, which found benefits for years of education attained but no gains for social adjustment or criminal activity (Campbell & others, 2012)
- Updated information about the reduction in the IQ gap between African Americans and non-Latino Whites (Nisbett & others, 2012)
- Replacement of the label *mental retardation* with the currently used term *intellectual disability* (Hodapp & others, 2011)
- New estimate of the percentage of children who are categorized as being gifted (Ford, 2012)
- New commentary about the underrepresentation of African American, Latino, and Native American children in gifted programs and the reasons for this underrepresentation (Ford, 2012)
- Discussion of a recent study revealing that the frontoparietal network is responsible for cognitive control and connectivity to brain regions outside the network (Cole & others, 2012)
- Coverage of a longitudinal study indicating that information processing skills in infancy and early childhood were linked to general intelligence at 11 years of age (Rose & others, 2012)
- Recent update of Schaie's (2012) Seattle Longitudinal Study that includes data through the age of 95 and revised Figure 8.8.
- Expanded and updated coverage of the causes of the increase in intelligence during the middle adulthood years (Schaie, 2012)
- New discussion of the debate between K. Warner Schaie (2012) and Timothy Salthouse (2012) about when intellectual decline begins

Chapter 9: Language Development

- New description of the increasing emphasis on the development of pointing in infancy as a key aspect of joint attention and an important index of the social aspects of language (Begus & Southgate, 2012; Goldin-Meadow & Alibali, 2013)
- Description of a recent study that revealed 6-month-old infants comprehend names of parts of their body, such as "feet" and "hands" (Tincoff & Jusczyk, 2012)
- New material on Kathy Hirsh-Pasek, Roberta Golinkoff, and Justin Harris' (Harris, Golinkoff, & Hirsh-Pasek, 2011; Hirsh-Pasek & Golinkoff, 2013) six principles for optimal word learning in young children
- Expanded material on why children in low-income families may have difficulty in language development
- New coverage of the important role that metacognitive strategies—especially those involving planning, drafting, revising, and editing—play in improving writing during the elementary school years (Dimmitt & McCormick, 2012; Harris & others, 2009; McCormick, Dimmitt, & Sullivan, 2013)
- Updated and revised discussion of English language learners (ELLs), including recent research indicating that ELL children who are taught in a dual language approach (home language and English) have a higher level of achievement (Genesee & Lindholm-Leary, 2012)
- Description of a recent study that found older adults who were retelling a story were less likely than younger adults to compress discourse and less likely to improve the cohesiveness of their narratives (Saling, Laroo, & Saling, 2012)
- Updated and expanded discussion of language changes among many older adults with Alzheimer disease (Pakhomov, Hemmy, & Lim, 2012)
- New coverage of Michael Tomasello's (2011) emphasis on the importance of specific contexts in learning language, especially in contexts involving joint attention
- Increased emphasis on how important it is for children's optimal development that parents and teachers provide children with many opportunities to talk and be talked with (Hirsh-Pasek & Golinkoff, 2013)

Chapter 10: Emotional Development and Attachment

- New chapter title (changed from "Emotional Development" in previous edition) of "Emotional Development and Attachment" to emphasize some distinctions between the two concepts and provide an expanded discussion of attachment
- Expanded discussion of caregivers' influence on emotional development, including infants' biological recovery from stressors (Gunnar & Herrera, 2013; Hostinar & Gunnar, 2013)
- Coverage of a recent study that found fathers' emotion coaching was related to children's social competence (Baker, Fenning, & Crnic, 2011)
- Expanded coverage of emotion regulation and its links to a number of areas of development, including executive function,

- school success, moral development, coping with stress, and peer relations (Dennis, O'Toole, & DeCicco, 2013; Thompson, 2013e)
- Revision and updating of the functions of emotion in infancy to include its role in behavioral organization (social responding and adaptive behavior) (Easterbrooks & others, 2013; Thompson, 2013d, e)
 - Coverage of a recent study that found parents' elicitation of talk about emotion was linked to toddlers' sharing and helping (Brownell & others, 2013)
 - Discussion of a recent study that revealed the newborns of depressed mothers showed less vocal distress at the cries of another infant, reflecting emotional and physiological dysregulation (Jones, 2012)
 - Description of a recent study that found mothers' emotional reactions (anxiety and anger) increased the risk of subsequent attachment insecurity (Leerkes, Parade, & Gudmunson, 2011)
 - Inclusion of recent research indicating a link between problems in infant soothability at 6 months of age and insecure attachment at 12 months of age (Mills-Koonce, Propper, & Barnett, 2012)
 - Discussion of a recent study that revealed U.S. infants showed more temperamental fearfulness while Finnish infants engaged in more positive affect, especially effortful control (Gaias & others, 2012)
 - Discussion of a recent study that found parents' elicitation of talk about emotion with toddlers was associated with toddlers' sharing and helping (Brownell & others, 2013)
 - Coverage of a recent study exploring the importance of positive parenting in emotionally reactive infants' ability to engage in emotion regulation (Ursache & others, 2013)
 - New description of recent research by Cybelle Raver and her colleagues (Raver & others, 2012; Zhai, Raver, & Jones, 2012) on links between increased caregiver emotional expression, self-regulation, and reduced behavior problems in children growing up in poverty conditions
 - Coverage of a recent study on gender differences in depressive symptoms and the social contexts linked to those symptoms in middle-aged and older women (Lin, Hsu, & Chang, 2011)
 - New coverage of the newly emerging field of developmental social neuroscience that involves connecting changes in the aging brain and older adults' emotion (Kaszniak & Menchola, 2012; Samanez-Larkin & Carstensen, 2011)
 - New discussion of Shelley Taylor and her colleagues' (2011a, b, c; Taylor & others, 2000) concept that women are more likely to respond to stress with "tend and befriend" behavior than the "fight or flight" reaction that characterizes men
 - Expanded discussion of emotion and aging indicating that compared with younger adults, older adults react less strongly to negative circumstances, are better at ignoring irrelevant negative information, and remember more positive than negative information (Mather, 2012)
 - Description of a recent study that found positive emotion increased from 50 years of age through the mid-eighties while anger was highest in the early twenties (Stone & others, 2010)
 - Expanded coverage of factors involved in older adults showing lower levels of negative emotion and better coping with negative emotion, including recent research indicating that older adults have fewer regrets about missed opportunities in life than do younger adults (Brassen & others, 2012; Mather, 2012; Suri & Gross, 2012)
 - Discussion of a recent study with young children on links between effortful control and (1) delay in anger expression and (2) using distraction as a self-regulatory strategy (Tan, Armstrong, & Cole, 2013)
 - New commentary suggesting that too often the biological foundations of temperament are interpreted as meaning that temperament doesn't develop and change; however, key dimensions (such as adaptability and soothability) of the self-regulatory aspect of temperament do develop and change as neurobiological and experiential processes develop and change (Easterbrooks & others, 2013)
 - Addition of information about research indicating that decreases in infants' negative emotionality are related to higher levels of parents' sensitivity, involvement, and responsivity (Bates, 2012a, b)
 - Coverage of a longitudinal study that found changes in attachment security/insecurity from infancy to adulthood were linked to stressors and supports in socioemotional contexts (Van Ryzin, Carlson, & Sroufe, 2011)
 - New description of the developmental cascade model that is increasingly being used to study connections across domains over time that influence developmental pathways and outcomes (Cicchetti, 2013; Masten, 2013)
 - Coverage of a recent meta-analysis of 127 research reports of attachment from infancy to early adulthood that provides conclusions about the extent to which attachment is stable and changes in stability reflect at-risk circumstances (Pinquart, Feubner, & Ahnert, 2013)
 - Discussion of a recent meta-analysis that found strong links between levels or patterns of oxytocin and mother-infant attachment (Galbally & others, 2011)
 - Description of a recent study that found marital intimacy and partner support during prenatal development were linked to father-infant attachment following childbirth (Yu & others, 2012)
 - Coverage of a recent study that revealed infants who showed a higher level of externalizing, disruptive problems at 1 year of age had fathers who displayed a low level of engagement with their infants as early as the third month of life (Ramchandani & others, 2013)
 - Discussion of recent research indicating that fathers with a college-level education engaged in more stimulating physical activities with their infants and that fathers in a conflicting couple relationship participated in less caregiving and physical play with their infants (Cabrera, Hofferth, & Chae, 2011)
 - Description of a recent study that found depressed fathers focused more on their own needs than their infants' needs and used more negative and critical speech when interacting with their infants (Sethna, Murray, & Ramchandani, 2012)

- Coverage of a recent study that found infants who were insecurely attached to both their mother and father had more externalizing problems during the elementary school years than their counterparts who were securely attached to at least one parent (Kochanska & Kim, 2013)
- New commentary noting that some researchers have not found support for gene-environment interactions related to infant attachment (Luijk & others, 2011; Roisman & Fraley, 2012)
- Comparison of quality of child care in the United States and Norway based on UNICEF criteria, followed by research that explored links between quantity of U.S. and Norwegian child care and children's socioemotional problems (Zachrisson & others, 2013)
- Inclusion of recent research that found high-quality child care during the infant/toddler years was linked to better memory skills at the end of the preschool years (Li & others, 2013)
- New main section on attachment in middle and late childhood
- New discussion of research by Kathryn Kerns and her colleagues (Brumariu, Kerns, & Seibert, 2012; Kerns & Seibert, 2012; Kerns, Seiner, & Brumariu, 2011) that focuses on the role of secure attachment in internalizing symptoms, anxiety, depression, and emotion regulation
- Coverage of a recent study that found romantic activity was associated with depression in early adolescent girls (Starr & others, 2012)
- Coverage of a longitudinal study that found individuals who were securely attached to their caregivers during infancy were in more stable romantic relationships in adulthood (Salvatore & others, 2011)
- Discussion of a longitudinal study that explored early developmental precursors for adults' representations of early attachment to caregivers and for their representations of specific romantic partners (Haydon & others, 2012)
- Description of a recent study indicating that anxiously attached adults were more ambivalent about relationship commitment than their securely attached counterparts (Joel, MacDonald, & Shiomotomai, 2011)
- Inclusion of recent research indicating that insecurely attached adults had higher levels of depressive and anxious symptoms than securely attached adults (Jinyao & others, 2012)
- New research indicating that adults with an avoidant attachment style are less resistant to the temptations of infidelity, which is linked to their lower level of relationship commitment (Dewall & others, 2011)
- Description of recent research that found insecurely attached adults had a lower level of sexual satisfaction than securely attached adults (Brassard & others, 2012)
- Coverage of a recent meta-analysis confirming that adults who are securely attached have better close relationships than adults who are characterized by avoidant or anxious attachment (Li & Chan, 2012)
- New section on attachment from early adulthood to late adulthood, including a recent research review of changes in attachment across the adult years (Van Assche & others, 2013)
- Discussion of a recent large-scale study of developmental changes in anxious and avoidant attachment across early and late adulthood (Chopik, Edelstein, & Fraley, 2013)
- Inclusion of information from a recent meta-analysis in which males showed higher avoidance and lower anxiety about romantic love than females (Del Giudice, 2011)

Chapter 11: The Self, Identity, and Personality

- Expanded and updated discussion of young children's optimistic self-conception to consider some young children's negative self-evaluations, especially when they experience stress and adverse family conditions (Goodvin & others, 2008; Thompson, 2011)
- Expanded and updated coverage of research indicating that young children are more socially sensitive than was previously envisioned and suggestions that parents and teachers can help young children to better understand people's internal cognitive and emotional states (Thompson, 2013c, d)
- Description of the current debate about Ross Thompson's (2012, 2013c, d) view that young children are socially sensitive and Susan Harter's (2012) view that they tend to be egocentric
- Expanded coverage of the importance of interactions with caregivers, siblings, and others in the development of the self and understanding of others in infants, toddlers, and children (Thompson, 2013b)
- New *Connecting with Adolescents* box: "A 15-Year-Old Girl's Self-Portrait"
- New section on understanding others in adolescence
- New discussion of developmental changes in perceiving others' traits in adolescence
- New section on perspective taking in adolescence, including recent research on gender differences (Smith & Rose, 2011) and relational aggression (Batanova & Loukas, 2011)
- New section on social cognitive monitoring in adolescence
- New information indicating that the foundations of self-esteem in middle and late childhood occur through the quality of relationships with parents in infancy and early childhood (Thompson, 2011, 2013a, b, c, d)
- Description of a recent study that found preexisting gender differences in self-esteem (higher for males) narrowed between the ninth and twelfth grades (Falci, 2012). In this study, adolescents from higher-SES backgrounds had higher self-esteem than their lower-SES counterparts
- Coverage of a recent study that found adolescents with low self-esteem had lower life-satisfaction at 30 years of age (Birkeland & others, 2012)
- Discussion of a recent study that found individuals in their late teens were more likely to be identity achieved than those in their early teens, and that girls were on more advanced developmental trajectories for identity achievement than were boys (Meeus & others, 2012)
- New section: "Identity and Peer/Romantic Relationships" (Galliher & Kerpelman, 2012)

- Description of recent research that found an open, active exploration of identity when comfortable with close friends was linked to the positive quality of the friendship (Doumen & others, 2012)
- Inclusion of recent research indicating that friends were often a safe haven for exploring identity in adolescence, providing a potential testing ground for trying out self-disclosures with others (McLean & Jennings, 2012)
- New material on how adolescents and emerging adults in a romantic relationship are both in the process of constructing their identities and each providing the other with a context for identity exploration (Pittman & others, 2011)
- Extensive updating and expansion of the discussion of cultural and ethnic identity, including recent cross-cultural comparisons of identity development between North American and East Asian countries (Cheng & Berman, 2012; Schwartz & others, 2012)
- New discussion of how identity development takes longer in Italy, likely because many Italian youth live at home with their family until 30 years of age and older (Crocetti, Rabaglietti, & Sica, 2012)
- New coverage of the view expressed recently by Seth Schwarz and his colleagues (2012) suggesting that individuals who have grown up as a member of an ethnic minority group or immigrated into the United States from another country are more likely to include cultural dimensions in their identity than non-Latino Whites who have grown up in the majority culture
- Discussion of recent research indicating that Latino high school and college students were more likely to say that cultural identity was an important dimension of their overall self-concept than were non-Latino White students (Urduan, 2012)
- Revised and updated information about diversity, especially ethnic identity and immigration, based on feedback from leading expert Diane Hughes
- Description of a recent study that found Asian American adolescents' ethnic identity was associated with high self-esteem, positive relationships, academic motivation, and lower levels of depression over time (Kiang, Witkow, & Champaigne, 2013)
- Coverage of a recent study that found a positive ethnic identity helped to buffer the negative effects of discrimination experienced by Mexican American adolescents (Umana-Taylor & others, 2012)
- Inclusion of a recent meta-analysis that found conscientiousness (but none of the other Big Five personality factors) was linked to college students' grade point averages (McAbee & Oswald, 2013)
- Description of a recent study of emerging adults that found conscientiousness was linked to fewer delays in studying (Klimstra & others, 2012)
- New coverage of research on how the Big Five factors of personality are linked to important aspects of a person's life, such as health (Turiano & others, 2012), intelligence (Sharp & others, 2010), achievement and work (Zhao, Seibert, & Lumpkin, 2010), and relationships (Donnellan, Larsen-Rife, & Conger, 2005)
- New discussion of research on how the Big Five personality factors are related to historical changes (George, Helson, & John, 2011)
- Description of a recent meta-analysis that found higher levels of openness were linked to living longer (Ferguson & Bibby, 2012)
- Inclusion of a recent research study on stability and change in the Big Five personality factors indicating that the positive aspects of four of the five factors (such as emotional stability) peaked between 40 and 60 years of age, while conscientiousness continued to increase from early through late adulthood (Specht, Egloff, & Shukle, 2011)
- Updated research indicating that the greatest adult changes in personality occur in early adulthood (Lucas & Donnellan, 2011)
- Expanded coverage of regrets in older adults indicating the importance of not dwelling on them, especially because opportunities to undo earlier actions decline with age (Suri & Gross, 2012)
- Inclusion of recent research that revealed an important factor in older adults who showed a higher level of emotion regulation and successful aging was reduced responsiveness to regrets (Brassen & others, 2012)
- Discussion of a recent meta-analysis of 128 studies of reminiscence interventions in older adults that found positive effects on a number of dimensions (Pinquart & Forstmeier, 2012)
- Inclusion of information about a recent study that found conscientiousness predicted greater longevity in older adults (Hill & others, 2011)
- Coverage of a recent study that found older adults had higher self-esteem when they had a youthful identity and more positive personal experiences (Westerhof, Whitbourne, & Freeman, 2012)
- Description of a recent study indicating that older adults with higher self-esteem were characterized by positive aging factors (Cha, Seo, & Sok, 2012)

Chapter 12: Gender and Sexuality

- New coverage of a recent study of preschool children's selection of a playmate indicating that both the sex of the playmate and the playmate's level of gender-typed activity are important in the selection, but sex of the playmate is more important (Martin & others, 2013)
- New section on school and teacher influences on gender development
- New discussion of same-sex education, including its dramatic increase in recent years (NASSPE, 2012)
- Coverage of two recent research reviews that concluded there have been no benefits of same-sex education for low-income youth of color (Goodkind, 2013; Halpern & others, 2011)
- New discussion of possible benefits of same-sex education exclusively for African American males and discussion of the successful Urban Prep Academy for Young Men in Chicago that opened in 2010, in which 100 percent of its first graduates enrolled in college (Mitchell & Stewart, 2013)

- Updated description of gender differences in the brain (Giedd, 2012)
- Coverage of a recent research review that found having a stronger masculine gender role was linked to better spatial ability for males and females (Reilly & Neumann, 2013)
- Description of a recent research review that focused on girls' negative attitudes about math and the negative expectations that parents and teachers have for girls' math competence (Gunderson & others, 2012)
- New discussion of the continuing gender gap in reading and writing for U.S. students (National Assessment of Educational Progress, 2012)
- Description of recent research that found male teachers perceived boys more positively and viewed them as more educationally competent than did female teachers (Mullola & others, 2012)
- Discussion of a recent meta-analysis of children's emotional expression that found a small overall gender difference with girls showing more positive and internalizing emotions; however, this gender difference became more pronounced with age, increasing during middle and late childhood and adolescence (Chaplin & Aldao, 2013)
- New description of the gender difference in girls and boys suggesting that girls emphasize affiliation and collaboration more than do boys (Leaper, 2013)
- Discussion of a recent study that revealed a link between neighborhood poverty concentration and 15- to 17-year-old boys' and girls' sexual initiation (Cubbin & others, 2010)
- Inclusion of recent research on Korean boys that found those at high risk for Internet addiction were more likely to have experienced sexual intercourse (Sung & others, 2013)
- Updated data on the sexual activity of U.S. adolescents through 2011, including gender and grade level percentages of ever having had intercourse, being currently sexually active, having had sexual intercourse before age 13, and having had sexual intercourse with four or more persons (Eaton & others, 2012)
- Updated data (2011) on the percentage of African American, Latino, and non-Latino White male and female adolescents who have ever experienced sexual intercourse (Eaton & others, 2012)
- Description of a recent study that found the following results: Of adolescent girls who initiated vaginal sex first, 31 percent reported having a teen pregnancy, whereas of those who initiated oral-genital sex first, only 8 percent reported having a teen pregnancy (Reese & others, 2013)
- Discussion of a recent study that confirmed early engagement in sexual intercourse is associated with high-risk sexual factors (becoming pregnant or causing a pregnancy, for example) as well as dating violence (Kaplan & others, 2013)
- Coverage of recent research in low-income neighborhoods that found caregiver hostility was linked to early sexual activity and sex with multiple partners, while caregiver warmth was related to later sexual initiation and a lower incidence of sex with multiple partners (Gardner, Martin, & Brooks-Gunn, 2012)
- Coverage of a recent study that found a high level of impulsiveness was linked to early adolescent sexual risk-taking (Khurana & others, 2012)
- Description of a recent intervention study, including its components, with adolescent girls living in a high-risk, low-income setting that was effective in reducing their at-risk sexual behavior (Morrison-Beedy & others, 2013)
- Discussion of recent research on U.S. 15- to 19-year-olds with unintended pregnancies resulting in live births: 50 percent of these adolescent girls were not using any type of birth control when they got pregnant and 34 percent believed they could not get pregnant at the time (Centers for Disease Control and Prevention, 2012)
- Description of a recent study that found emerging adults who were enrolled in college or who had graduated from college reported having fewer casual sex partners than those without a high school degree (Lyons & others, 2013)
- Coverage of a recent study that found sexual risk factors increase in emerging adulthood, with males engaging in more of these risk factors than females (Mahalik & others, 2013)
- Coverage of the recent decline in births to adolescent girls to a record low in 2010, including new Figure 12.6 (Hamilton & Ventura, 2012)
- Inclusion of recent data from a study of sexual activity in by 25- to 44-year-olds in the United States (Chandra, Mosher, Copen, & Sionean, 2011)
- Coverage of a recent study of 15-year-olds that found sexual minority status was associated with depression, mainly via peer harassment (Martin-Storey & Crosnoe, 2012)
- Discussion of a recent survey of sex education teachers in Minnesota regarding structural barriers, concerns about parents, students, and administrators, and restrictions on what they could teach (Eisenberg & others, 2013)
- Coverage of a recent study of the abstinence-plus approach that found sex education about abstinence and birth control was associated with healthier sexual behaviors than no instruction at all (Lindberg & Maddow-Zimet, 2012)
- Updated figures on the number of people in the United States who are living with an HIV infection (National Center for Health Statistics, 2011)
- Inclusion of information about the recent significant drop in the rate of new HIV infections globally (UNAIDS, 2011)
- Inclusion of recent data from a study of sexual activity by 25- to 44-year-olds in the United States (Chandra, Mosher, Copen, & Sionean, 2011)
- Updated figures on the number of people in the United States who are living with an HIV infection (National Center for Health Statistics, 2011)
- Inclusion of information about the recent significant drop in the rate of new HIV infections globally (UNAIDS, 2011)
- Inclusion of a recent survey on knowledge regarding contraception and HIV infection in low- and middle-income countries (UNAIDS, 2011)

- New commentary about the increase in “hooking up” during college (Holman & Sillars, 2012)
- Description of a recent study on the significant underreporting of rape in college women (Wolitzky-Taylor & others, 2011)
- New discussion of whether menopause is occurring earlier than in the past
- Coverage of recent research indicating that early-onset menopause is linked to cardiovascular disease and stroke (Kaur, Singh, & Ahula, 2012; Lubiszewska & others, 2012)
- Discussion of a recent research review indicating that there is no clear evidence that depressive disorders occur more frequently during menopause than at other times in a woman’s reproductive life (Judd, Hickey, & Bryant, 2012)
- Description of the recent conclusion that reduction of cardiovascular disease occurs when HRT is initiated before 60 years of age and/or within 10 years of menopause and continued for six years or more (Hodis & others, 2012)
- Updated coverage of recent research studies in a number of countries indicating that coinciding with the decreased use of HRT in recent years, research is mixed regarding effects on the incidence of breast cancer (Baber, 2011; Chlebowski & others, 2011; Gompel & Santen, 2012; Howell & Evans, 2011)
- Description of recent research that found how often middle-aged adults engaged in sexual intercourse, the quality of their sexual life, and their interest in sex was linked to how healthy they were (Lindau & Gavriloiva, 2010)
- New commentary about reductions in the number of older adults, especially the young old, who have problems with erectile dysfunction because of the recent development of drugs such as Viagra (Lowe & Costabile, 2012; Rubio-Aurioles & others, 2012)
- Updated coverage of the views of Nancy Eisenberg and her colleagues (2013) regarding parenting strategies that are likely to be linked to children behaving morally
- Description of a recent study that found parents’ elicitation of toddlers’ emotion talk was linked to the toddlers’ engagement in prosocial behavior (Brownell & others, 2013)
- New discussion of a recent study that found adolescents’ volunteering activity in the community was linked to higher levels of identity achievement (Crocetti, Jahromi, & Meeus, 2012)
- Description of a recent study that revealed adolescents’ volunteer activities provided opportunities to explore and reason about moral issues (van Goethem, 2012)
- New discussion of the important role that sympathy plays in motivating children’s prosocial behavior (Eisenberg, Spinrad, & Morris, 2013)
- Discussion of a recent study that found mothers’, but not fathers’, authoritative parenting was associated with adolescents’ engagement in prosocial behavior one year later (Padilla-Walker & others, 2012). However, in this study, there was a stronger link in the other direction: Adolescents who engaged in prosocial behavior initially had mothers who showed an increase in authoritative parenting one year later.
- Inclusion of a recent research study revealing that forgiveness varied when encountering a transgressing peer based on whether the peer was liked or disliked (Peets, Hodges, & Salmivalli, 2013)
- Description of a recent study that found expressing gratitude was linked to a lower level of depressive symptoms in adolescents (Lambert, Fincham, & Stillman, 2012)
- Coverage of a recent study of Chinese adolescents that found those who had a higher level of gratitude were less likely to engage in suicide ideation and suicide attempts (Li & others, 2012)
- Discussion of a four-year longitudinal study that found the most grateful adolescents had a stronger sense of meaning of life, were more satisfied with their life, were happier and more helpful, and had a lower level of negative emotions and were less depressed than the least grateful adolescents (Bono, 2012)
- New commentary about how there is still inadequate research information about how youth perceive prosocial norms and the influence of school policies and peers on adolescents’ prosocial behavior (Siu, Shek, & Law, 2012)
- Coverage of a recent study that found for both African American and non-Latino White adolescents, low parental control predicted delinquency, indirectly through its link to deviant peer affiliation (Deutsch & others, 2012)
- Description of recent research that revealed authoritative parenting increased youths’ perception of the legitimacy of parental authority, and that youths’ perception of parental legitimacy was associated with a lower level of future delinquency (Trinkner & others, 2012)
- Discussion of a recent meta-analysis of five programs for reducing the recidivism of juvenile offenders, concluding that family treatment was the only one that was effective (Schwalbe & others, 2012)

Chapter 13: Moral Development, Values, and Religion

- Updated and expanded coverage of criticisms of Piaget’s view of young children’s moral development based on research indicating that young children often show a non-egocentric awareness of others’ intentions and know when someone violates a moral prohibition (Thompson, 2012)
- New coverage of Darcia Narváez and Tracy Gleason’s (2013) analysis of recent research on cohort effects that shows a decline in moral reasoning in college students
- Discussion of a recent study that demonstrated toddlers can learn to engage in prosocial behavior after watching a model respond to another person’s distress (Williamson, Donohue, & Tully, 2013)
- New description of research by Daniel Hart and his colleagues (Hart, 2005; Hart & others, 2011) regarding the difficulties poor urban youth have in developing a moral identity because of the contexts in which they live
- Inclusion of recent research showing that 3-year-olds were less likely to offer assistance to an adult they previously had observed being harmful to another person (Vaish, Carpenter, & Tomasello, 2010)

- New description of a recent study that found poor academic performance and reduced attachment to school at age 15 predicted a higher level of criminal activity at 17 to 19 years of age (Savolainen & others, 2012)
- Discussion of recent research on the role of parental monitoring and support during adolescence in reducing criminal behavior in emerging adulthood (Johnson & others, 2011)
- Updated coverage of outcomes for the Fast Track delinquency intervention study through age 19 that found the program was successful in reducing juvenile arrest rates (Conduct Problems Prevention Research Group, 2011; Miller & others, 2011)
- Updated information about the goals of first-year college students in relation to the relative importance they place on developing a meaningful philosophy of life or becoming well off financially (Pryor & others, 2012)
- Update on Nina Vassan's career and inclusion of her profile in *Connecting with Adolescents and Adults*
- Coverage of a recent meta-analysis that found adolescents' spirituality/religiosity was positively linked to their well-being, self-esteem, and three of the Big Five factors of personality (conscientiousness, openness, and agreeableness); in this meta-analysis, spirituality/religion was negatively associated with risk behavior and depression (Yonker, Schnabelrauch, & DeHaan, 2012)
- Description of a recent study of religious identity and religious participation of adolescents from different ethnic groups (Lopez, Huynh, & Fuligni, 2011)
- Coverage of a recent study that found parents' religiousness during youths' adolescence was positively linked to youths' own religiousness during adolescence (Spilman & others, 2013)
- New discussion of an analysis of research studies indicating a strong link between spirituality/religion and mortality (Lucchetti, Lucchetti, & Koenig, 2011)
- Inclusion of recent research that found a higher level of spirituality was linked to resilience in older women (Vahia & others, 2011)
- New discussion of links between having a higher level of meaning in life and clearer guidelines for living one's life, enhanced motivation to take care of oneself and reach goals, a higher level of psychological well-being, and better health (Park, 2012b)
- Discussion of a recent study that found the marriages of couples who were cohabiting but not engaged were less likely to survive to the 10- and 15-year mark than the marriages of their counterparts who were engaged when they cohabited (Copen, Daniels, & Mosher, 2013)
- Inclusion of information from a recent study on the motivation for cohabiting, including gender differences regarding drawbacks in cohabiting (Huang & others, 2011)
- New commentary on recent research indicating that the link between premarital cohabitation and marital instability in first marriages has weakened in recent cohorts (Copen, Daniels, & Mosher, 2013; Manning & Cohen, 2012; Reinhold, 2010)
- Coverage of a recent study that found cohabiting older adults were less likely to receive partner care than married older adults (Noel-Miller, 2011)
- Updated information about the percentage of individuals in the United States who have ever been married by age 40 (Pew Research Center, 2011)
- New *Connecting with Middle-Aged Adults* box: "Variations in Lives"
- Updated statistics on the percentages of older adults who are married and divorced (U.S. Census Bureau, 2011)
- Description of a recent large-scale analysis of a number of studies that concluded married individuals have a survival advantage over unmarried individuals, and that marriage gives men more of a longevity boost than it does women (Rendall & others, 2011)
- New material on how in late adulthood married individuals are more likely to find themselves having to care for a sick spouse with a limiting health condition (Blieszner & Roberto, 2012)
- New description of gender differences in the process and outcomes of divorce for adults, including better emotional adjustment by women (Braver & Lamb, 2013)
- Revised discussion of remarried families in terms of some of these families being more adult-focused, while others are more child-focused (Anderson & Greene, 2011)
- Description of a recent study of stigma and same-sex relationships (Frost, 2011)
- Expanded coverage of reciprocal socialization and the bidirectional effects of parents and adolescents on adolescent outcomes, including recent interest in the roles of genetic and epigenetic factors in such outcomes (Beach & Whisman, 2013; Brody & others, 2013; Deater-Deckard, 2013; Harold & others, 2013)
- Discussion of recent research indicating that a positive family climate when the adolescent was in the seventh grade was linked to the adolescent's degree of positive engagement with a marital partner almost 20 years later (Ackerman & others, 2013)
- Description of the increasing number of transnational families, who move back and forth between the United States and Mexico or the United States and China (Dreby, 2010; Mazzucato & Schans, 2011)

Chapter 14: Families, Lifestyles, and Parenting

- Coverage of a large-scale survey that found many singles reported that they were looking for love but either were ambivalent about getting married or did not want to get married (Match.com, 2012)
- New information about Americans being less likely to adopt a single adult lifestyle than people in many other countries (Klinenberg, 2012, 2013)
- Description of a recent study that found cohabiting relationships were characterized by more commitment, lower satisfaction, more negative communication, and more physical aggression than dating (noncohabiting) relationships (Rhoades, Stanley, & Markman, 2012)

- Coverage of a recent study that found parents were more satisfied with their lives than were nonparents, felt relatively better on a daily basis than did nonparents, and had more positive feelings related to caring for children than to performing other daily activities (Nelson & others, 2013)
- Updated statistics on the age at which U.S. women give birth to a child for the first time (U.S. Census Bureau, 2011)
- Inclusion of information from recent research studies on the transition to parenthood that involve negative changes in relationships for both married and cohabiting women with their partners, and violated expectations (Biehle & Mickelson, 2012; Mortensen & others, 2012)
- New section, “Managing and Guiding Infants’ Behavior” (Holden, Vittrup, & Rosen, 2011)
- New material on the percentage of parents who use various management and corrective methods in dealing with infants’ undesirable behaviors, including new Figure 14.6 (Vittrup, Holden, & Buck, 2006)
- Description of a recent meta-analysis of longitudinal studies that found the negative effects of punishment on children’s internalizing and externalizing problems were minimal (Ferguson, 2013a)
- Updated and revised section that includes a new heading: “Parental Monitoring and Adolescents’ Information Management”; this title reflects the recent research emphasis in studying adolescents’ management of their parents’ access to information (Rote & others, 2012; Smetana, 2011a, b)
- Description of a recent study that revealed a high level of parental monitoring within the context of parental warmth was linked to positive academic outcomes for ethnic minority adolescents (Lowe & Dotterer, 2013)
- Discussion of a recent study that found a higher level of parental monitoring in the twelfth grade was linked to lower alcohol dependence in the first year of college (Kaynak & others, 2013)
- New research involving U.S. and Chinese young adolescents that found adolescents’ disclosure to parents was linked to a higher level of academic competence (better learning strategies, autonomous motivation, and better grades) over time (Cheung, Pomerantz, & Dong, 2012)
- Discussion of a recent study of Chinese adolescents that found authoritative parenting was positively associated with parent-adolescent attachment, which in turn was associated with higher levels of adolescent self-esteem, autonomy, and peer attachment (Cai & others, 2013)
- Expanded and updated discussion of the effects of punishment on children’s development, including longitudinal studies that have linked early physical punishment to later aggression (Gershoff & others, 2012; Lansford & others, 2011), and cross-cultural studies that have found in countries in which physical punishment is considered normal and necessary for handling children’s transgressions, the effects of punishment are less harmful (Lansford & others, 2005, 2012)
- Updated statistics on child maltreatment (U.S. Department of Health and Human Services, 2010)
- Expanded and updated coverage of family-related factors that can contribute to child maltreatment (Cicchetti, 2013; Laslett & others, 2012; Turner & others, 2012)
- Discussion of recent research indicating that child maltreatment at 3 to 5 years of age was more strongly associated with depression in early adulthood than maltreatment in other age periods (Dunn & others, 2013)
- Coverage of a recent study that revealed a significant increase in suicide attempts before age 18 when repeated child maltreatment occurred (Jonson-Reid, Kohl, & Drake, 2012)
- Description of recent research studies that linked child maltreatment to risk for various diseases and physical health problems, sexual problems, and depression in adulthood (Lacelle & others, 2012; Nanni, Uher, & Danese, 2012)
- Discussion of a 30-year study that found middle-aged adults who had experienced child maltreatment had an increased risk of diabetes, lung disease, malnutrition, and visual problems (Widom & others, 2012)
- Description of a recent study revealing that joint parental involvement predicted a lower level of adolescent risk taking, along with a bidirectional relationship in which a lower level of adolescent risk taking predicted higher joint parental involvement (Riina & McHale, 2013)
- New commentary about variations in outcomes for adolescent autonomy and control depending on contexts and cultural groups (McElhaney & Allen, 2012)
- New material on parent-adolescent conflict in immigrant families, such as Latinos and Asian Americans, that focuses on core cultural values with the conflict not always appearing in open rebellion but in underlying internal feelings (Fulgini, 2012; Juang & Umana-Taylor, 2012)
- Discussion of a recent study that found regardless of where they were born, Mexican-origin adolescent girls living in the United States expected to be given autonomy at an earlier age than their parents preferred (Bamaca-Colbert & others, 2012)
- Description of a recent study of emerging adults that found helicopter parenting was positively linked to parental involvement and other aspects of positive parenting, such as guidance and disclosure, and negatively related to parental granting of autonomy and school engagement (Padilla-Walker & Nelson, 2012)
- Discussion of a recent study of the frequency of coparenting in adoptive heterosexual, lesbian, and couples (Farr & Patterson, 2013)
- Expanded discussion of sibling relationships, including the importance of perceptions of equality and fairness (Campione-Barr, Greer, & Kruse, 2013; Campione-Barr & Smetana, 2010)
- Inclusion of information from a recent meta-analysis that indicated less sibling conflict and greater sibling warmth were associated with fewer internalizing and externalizing problems (Buist, Dekovic, & Prinzie, 2013)
- New material indicating that many U.S. adoptions now involve other family members (aunts/uncles/grandparents): 30 percent of U.S. adoptions are made by relatives and slightly more than 50 percent of U.S. adoptions involve the foster care system (Ledesma, 2012)

- New description of research that found adopted adolescent girls were more likely to engage in earlier sexual initiation and had more conduct disorder symptoms than did non-adopted girls (Brooker & others, 2012)
- New discussion of “open adoption” and “closed adoption,” including recent research indicating positive outcomes for open adoption (Siegel, 2013)
- Coverage of recent research indicating that parents and their emerging adult/young adult children have more contact with their parents than in earlier generations, with the changes especially accelerating in the first decade of the twenty-first century (Fingerman & others, 2012)
- Updated data on the dramatic increase in the number of grandchildren who live with at least one grandparent (U.S. Census Bureau, 2011)
- Expanded coverage of intergenerational relationships, including a new discussion of the empty nest and its refilling
- Description of two recent studies that found middle-aged parents provided more support for their children than for their aging parents (Fingerman & others, 2011, 2012)
- Coverage of recent research that indicated affection and support, reflecting solidarity, were more prevalent in intergenerational relationships than ambivalence was (Hogerbrugge & Komter, 2012)
- New discussion of how more than 40 percent of middle-aged children (mainly daughters) provide care for their aging parents or parents-in-law (Blieszner & Roberto, 2012)
- Description of a recent study that revealed peer rejection was linked to depression in adolescence (Platt, Kadosh, & Lau, 2013)
- Discussion of recent meta-analyses that found being a victim of bullying in middle school was linked to having depression later in adolescence and emerging adulthood, and that bullying in middle school was associated with later engagement in antisocial and criminal behavior (Kim & others, 2011; Losel & Bender, 2011; Ttofi & others, 2011a, b)
- Discussion of recent research revealing a higher level of depression and suicide in children who are the victims of bullying (Fisher & others, 2012; Lemstra & others, 2012)
- Coverage of a recent study that found having supportive friends was linked to lower levels of bullying and victimization (Kendrick, Jutengren, & Stattin, 2012)
- Description of a recent longitudinal study of more than 6,000 children that found a link between bullying/victimization and suicide ideation (Winsper & others, 2012)
- Coverage of a recent study that found victims of peer bullying were more likely to develop symptoms of borderline personality disorder (Wolke & others, 2012)
- New discussion of cyberbullying (Wright & Li, 2013)
- Inclusion of recent research indicating that cyberbullying contributed to depression above and beyond the effects of traditional types of bullying (Bonanno & Hymel, 2013)
- Description of a recent study linking bullying and moral disengagement (Obermann, 2011)
- Updated and expanded coverage of the benefits of positive friendship relationships in adolescence (Harris, Qualter, & Robinson, 2013; Kendrick, Jutengren, & Stattin, 2012; Lopez, Gabbard, & Rodrigues, 2013; Tucker & others, 2012; Waller & Rose, 2013; Way & Silverman, 2012)
- Coverage of a recent meta-analysis that found a number of gender differences in adolescent girls’ and boys’ friendships (Gorrese & Ruggieri, 2012)
- New *Connecting with Adolescents* box about adolescent girls’ friendships: “We Defined Each Other with Adjectives”
- Coverage of a recent study that found students who engaged in aggressive-disruptive classroom behavior were more likely to have aggressive friends (Powers & Bierman, 2012)
- Description of a recent study that found some adolescents who identified with certain crowds had more internalizing behavior problems, while others who identified with other crowds had more externalizing problems (Doornwaard & others, 2012)
- New description of how play can provide an important context for the development of language and communication skills (Hirsh-Pasek & Golinkoff, 2013)
- New discussion of concerns expressed by Kathy Hirsh-Pasek, Roberta Golinkoff, and Dorothy Singer (Hirsh-Pasek & others, 2009; Singer, Golinkoff, & Hirsh-Pasek, 2006) about the declining amount of play in young children’s lives, and descriptions of the many positive cognitive and socioemotional outcomes that result from play

Chapter 15: Peers and the Sociocultural World

- Description of a recent study that found autonomy from peers in adolescence produces mixed outcomes in emerging adulthood: (1) avoidance of problem behavior but (2) greater difficulty in establishing strong friendships (Allen, Chango, & Swedo, 2013)
- Coverage of a recent study linking association with peers who engaged in prosocial or deviant behavior at age 9 to self-control at age 10 (Meldrum & Hay, 2012)
- Expanded discussion of negative influences of peers to include sexual activity and self-injury outcomes (Coley & others, 2013; You & others, 2013)
- New research that revealed in countries where family values are more important (India, for example), peer acceptance was less important for adolescents’ life satisfaction than in countries that place more importance on independence from the family (United States and Germany, for example) (Schwartz & others, 2012)
- Inclusion of recent research with young adolescent Latinas that found a peer-resistance skill-building involving avatar-based reality technology was effective in strengthening the girls’ peer-resistance skills and increasing their resistance to pressure into risky situations (Norris & others, 2013)
- New discussion of a recent study that found parent-adolescent attachment was associated with peer attachment (Cai & others, 2013)

- Discussion of a recent study that linked social isolation in late adulthood to a greater risk of being inactive, smoking, and engaging in other health-risk behaviors (Shankar & others, 2011)
- Description of recent longitudinal studies that found feelings of loneliness were linked with an earlier death (Luo & others, 2012; Perissinotto, Stijacic, Cenzer, & Covinsky, 2012)
- New description of a research study that revealed maximizing one's psychological resources (self-efficacy and optimism) was linked to a higher quality of life in late adulthood (Bowling & Illiffe, 2011)
- Expanded discussion of successful aging, including information about the important agenda of continuing to improve our understanding of how people can live longer, healthier, more productive and satisfying lives (Beard & others, 2012; Freund, Nitikin, & Riediger, 2013)
- Discussion of a recent study across 62 countries that found reported aggressive behavior was higher in individualistic than in collectivistic countries (Bergmuller, 2013)
- Description of a new study of 8- to 12-year-old girls that found a higher level of media multitasking was linked to negative social well-being while a higher level of face-to-face communication was associated with a higher level of social well-being, such as social success, feeling normal, and having fewer friends whom parents perceived as a bad influence (Pea & others, 2012)
- Description of a recent study that found heavy media multitaskers were more likely to be depressed and to have social anxiety than their counterparts who engaged in a lower level of media multitasking (Becker, Alzahabi, & Hopwood, 2013)
- Inclusion of recent research indicating that individuals often engaged in media multitasking because they were less capable of blocking out distractions and focusing on a single task (Sanbonmatsu & others, 2013)
- Updated and expanded discussion that focuses on the increasing concern about the number of hours young children spend in media and screen time (De Decker & others, 2012; Zimmerman & others, 2012)
- Greatly expanded coverage of the influence of video games, including research that substantiates the negative effects of playing violent video games (DeWall, Anderson, & Bushman, 2013) but that also indicates positive child outcomes for prosocial skills after playing prosocial video games (Gentile & others, 2009), improved visuospatial skills (Schmidt & Vandewater, 2008), and weight loss for overweight adolescents following video game playing that requires exercise (Bond, Richards, & Calvert, 2013)
- New commentary noting that some critics conclude that the negative effects of video game violence have been overstated (Ferguson, 2013b), while other critics emphasize that too much attention has been given to the negative effects of video games and inadequate attention to research on possible positive outcomes for some types of video games (Adachi & Willoughby, 2013)
- Coverage of a recent study that found the more young adolescents engaged in screen time, the lower their academic achievement (Syvaaja & others, 2013)
- Discussion of recent research indicating that greater screen time was associated with adolescent obesity (Mitchell & others, 2013)
- Description of a recent experimental research study that found overweight adolescents lost more weight following a 10-week competitive condition that involved playing the Nintendo Wii EA Sports Active video (Staiano, Abraham, & Calvert, 2012).
- New commentary about the average number (60) of text messages sent daily by 12- to 17-year-olds and a special concern about sexting (Lenhart, 2012)
- Coverage of a recent study that revealed when older adults played a brain training game about 15 minutes a day for 4 weeks, the experience improved their executive function and speed of processing information (Nouchi & others, 2012)
- New coverage of a research review on children's TV viewing and creativity that concluded that overall there is a negative association between TV viewing and creativity, but that there is an exception when children watch educational TV content designed to teach creativity through the use of imaginative characters (Calvert & Valkenberg, 2011)
- Inclusion of recent research linking higher levels of screen time at 4 to 6 years of age with increased obesity and low physical activity from preschool through adolescence (te Velde & others, 2012)
- Description of recent research indicating that 22 percent of 5- to 8-year-olds use computers daily (Common Sense Media, 2011)
- Updated data on the percentage of U.S. children living in poverty (U.S. Census Bureau, 2012)
- Discussion of a recent study linking early and persistent poverty to lower cognitive functioning in 5-year-old children (Schoon & others, 2012)
- Description of recent research indicating that poverty-related adversity in family and school contexts in early childhood was linked to less effective executive function in the second and third grades (Raver & others, 2013)
- Updated data on the percentage of older adults living in poverty (Administration on Aging, 2011)
- Expanded and updated coverage of the stressful and difficult experiences that children in many immigrant families face, including children in undocumented families (Yoshikawa, 2012)
- Coverage of a recent study that found following their immigration, Mexican American adolescents spent less time with their family and identified less with family values (Updegraff & others, 2012)
- Description of how ethnic/immigrant families often focus on issues associated with promoting children's ethnic pride, knowledge of their ethnic group, and awareness of discrimination (Rogers & others, 2012; Simpkins & others, 2013)
- Revised and updated information about diversity, especially ethnic identity and immigration, based on feedback from leading expert Diane Hughes

Chapter 16: Schools, Achievement, and Work

- Description of recent research studies that found Early Head Start had a protective effect on the risks children might experience in parenting, language development, and self-control (Ayoub, Vallotton, & Mastergeorge, 2011; Love & others, 2013)

- New discussion of Robert Crosnoe's (2011) recent book, *Fitting In, Standing Out*, which explores how the conformity demands of complex peer cultures in high school undermine students' academic achievement
- Updated and expanded discussion of high school dropout rates, including recent data for 2011 and revised Figure 16.1 (National Center for Education Statistics, 2012)
- New discussion of the controversy in determining accurate school dropout rates
- Discussion of a recent study that found the more adolescents participated in organized out-of-school activities the more they were characterized by positive outcomes in emerging adulthood (Mahoney & Vest, 2012)
- New *Connecting with Adolescents* box featuring the comments of students with low-income backgrounds about how an outstanding teacher is making a difference in their lives
- Updated data on the percentage of students who receive special education services and the areas in which they receive those services (Condition of Education, 2012)
- Expanded discussion of the possible misdiagnosis of ADHD, including details of a recent experimental study that found clinicians overdiagnosed ADHD symptoms, especially in boys (Bruchmiller, Margraf, & Schenider, 2012)
- New content on the percent of children diagnosed with ADHD who still show ADHD symptoms in adolescence (Sibley & others, 2012) and adulthood (Buitelaar, Karr, & Asherton, 2010)
- New description of some developmental outcomes of children with ADHD, including increased risks for dropping out of school, adolescent pregnancy, substance abuse problems, and engaging in antisocial behavior (Chang, Lichtenstein, & Larsson, 2012; Von Polier, Vioet, & Herpertz-Dahlmann, 2012)
- Coverage of a recent study indicating delayed development in the frontal lobes of children with ADHD, likely due to a delay or a decrease in myelination (Nagel & others, 2011)
- Description of a recent study that linked cigarette smoking during pregnancy to ADHD in 6- to 7-year-old children (Sciberras, Ukoumunne, & Efron, 2011)
- New coverage of executive function deficits in children with ADHD and their links to brain functioning (Dunn & Kronenberger, 2013; Langberg, Dvorsky, & Evans, 2013)
- New discussion of the increasing concern that children who are given stimulant drugs such as Ritalin or Adderall may be at risk for later substance abuse, although current evidence is mixed regarding this possibility (Groenman & others, 2013; Molina & others, 2013)
- New material on deficits in theory of mind in children with ADHD (Buhler & others, 2011; Shuai, Chan, & Wang, 2011)
- Discussion of recent research indicating that mindfulness training can be effective in improving the attention of adolescents who have ADHD, at least in the short term (van de Weijer-Bergsma & others, 2012)
- Inclusion of recent estimates indicating that in 2008, 1 in 88 children had an autism spectrum disorder, a dramatic increase since 2002 estimates (Centers for Disease Control & Prevention, 2012)
- New coverage of the proposed change in the DSM-V psychiatric classification system that involves having an overarching single category called autism spectrum disorder (Autism Research Institute, 2013)
- New discussion of the role that connectivity between different brain regions might play in the development of autism (Just & others, 2012; Philip & others, 2012)
- New discussion of the importance of parental involvement in children's learning, including the research of Eva Pomerantz and her colleagues (Cheung & Pomerantz, 2012; Pomerantz, Cheung, & Qin, 2012; Pomerantz, Kim, & Cheung, 2012) that especially focuses on comparisons of U.S. and Chinese children and their parents
- Coverage of recent research indicating that Chinese mothers exert more psychological control over their children than do U.S. mothers (Ng, Pomerantz, & Deng, 2013)
- Updated data on the continuing increase in the percentage of college students (especially females) who feel overwhelmed with all they have to do (Pryor & others, 2012)
- Updated information about recent research by Carol Dweck and her colleagues (Dweck, 2012; Good, Rattan, & Dweck, 2012; Job, Dweck, & Walton, 2010; Miller & others, 2012) on how a growth mindset can prevent negative stereotypes from undermining achievement and how willpower is a virtually unlimited mindset that predicts how long people will work and resist temptations during stressful circumstances
- New coverage of Barry Zimmerman and his colleagues' (Zimmerman, 2012; Zimmerman & Kitsantas, 1997; Zimmerman & Labuhn, 2012) three-phase model of self-regulation in achievement
- New discussion of the importance of delaying gratification in reaching goals, especially long-term goals (Cheng, Shein, & Chiou, 2012; Schlam & others, 2013)
- New commentary about how many individuals are working at a series of jobs and how many work in short-term jobs (Greenhaus & Callanan, 2013)
- Coverage of a recent study of individuals from 18 to 31 years of age that found maintaining high aspirations and certainty over career goals better insulated individuals from unemployment during the severe economic recession that began in 2007 (Vuolo & others, 2012)
- Description of a recent study of unemployment and mortality risk at different points in an individual's career (Roelfs & others, 2011)
- New discussion of whether there are differences in the job performance of young adults and middle-aged adults (Salthouse, 2012)
- Description of a recent study in which task persistence in early adolescence predicted career success in middle age (Andersson & Bergman, 2011)
- New commentary about the premature retirement of some middle-aged adults because of the recent economic downturn and recession (Lusardi, Mitchell, & Curto, 2012)
- Expanded commentary about older adults increasingly seeking a type of bridge employment that permits a gradual rather than a sudden movement out of the work context (Bowen, Noack, & Staudinger, 2011)

- New data on the average age of retirement for men (64 years) and women (62 years) in 2011 in the United States (Munnell, 2011)
- Discussion of a 2012 survey that indicated confidence in having enough money to live comfortably in retirement had dropped to 14 percent (Helman, Copeland, & VanDerhei, 2012)
- New commentary about the two main retirement income concerns as individuals approach retirement: (1) drawing retirement income from savings, and (2) paying for health care expenses (Yakoboski, 2011)
- Coverage of a recent study that found increased family support, peer support, and community connectedness were linked to a lower risk of suicidal tendencies (Matlin, Molock, & Tebes, 2011)
- Description of a recent study that found that the most common link between adolescent suicide attempts and drug use was any lifetime use of tranquilizers or sedatives (Kokkevi & others, 2012)
- Discussion of a recent study linking sexual victimization to suicide attempts in adolescence (Plener, Singer, & Goldbeck, 2011)

Chapter 17: Death, Dying, and Grieving

- New coverage of the concept of advance care planning (Abel & others, 2013; Silvester & others, 2013)
- Inclusion of information from a recent study of older adults that found advance care planning was associated with improved quality of care at the end of life (Bischoff & others, 2013)
- New discussion of Physician Orders for Life-Sustaining Treatment (POLST), a document that is more specific than other advance directives in translating treatment preferences into medical orders (Fromme & others, 2012)
- New description of the countries and states in which assisted suicide is legal, the methods by which assisted suicide usually is performed, and the type of crime involved in states where assisted suicide is illegal
- Coverage of a Dutch study indicating that only 7 percent of 7,000 dying individuals requested passive or active euthanasia, and of those who requested it, about one-third were granted their request (Onwuteaka-Philipsen & others, 2010)
- Discussion of a recent Belgian study that found approximately 50 percent of the requests for euthanasia were granted (Van Wesemael & others, 2011)
- Description of a recent study in the Netherlands indicating that approximately 75 percent of the euthanasia requests came from cancer patients and the main reason for the requests was pain (van Alphen, Donker, & Marquet, 2010)
- Inclusion of information that U.S. hospitals are rapidly expanding their provision of palliative care, with 85 percent of mid- and large-size U.S. hospitals having a palliative care team (Morrison, 2013)
- Updated national data through 2011 on the percentage of adolescents who seriously think about committing suicide, attempt suicide, and require medical attention for suicide attempts (Youth Risk Behavior Survey, 2011)
- Coverage of recent data indicating that the suicide rate for U.S. adults 35 to 64 years of age increased 28.4 percent from 1999 to 2010 (Centers for Disease Control and Prevention, 2013)
- Expanded and updated coverage of complicated grief or prolonged grief disorder, including a recent proposal for its inclusion in DSM-V (Shear, 2012a, b)
- Description of recent research on aspects of death most likely to be linked to prolonged grief (Fujisawa & others, 2010)
- Discussion of a recent study that found individuals who were depressed were more likely to have complicated grief (Sung & others, 2011)
- Coverage of research that found complicated grief was more likely to be present in older adults when the grief occurred in response to the death of a child or spouse (Newsom & others, 2011)
- New *Connecting with Adults* box: “Friend Support in Grieving”
- Description of a recent Canadian study that found 71 percent of adults preferred to be at home if they were near death, 15 percent preferred to be in a hospice/palliative care facility, 7 percent preferred to be in a hospital, and only 2 percent preferred to be in a nursing home (Wilson & others, 2013)
- New information about the percentage of women and men 65 years of age and older who are widowed in the United States (U.S. Census Bureau, 2012)
- Description of a recent study that revealed widowed individuals who reported higher marital quality subsequently had more symptoms of depression after their spouse died (Schaan, 2013)

Supplements

The Online Learning Center

The Instructor side of the Online Learning Center can be found at <http://www.mhhe.com/santrockldt7e>. This valuable instructor resource contains materials to help you design and enhance your course. Ask your local McGraw-Hill representative for your password.

Instructor's Manual

Edited by Khia Thomas, Broward College. The fully equipped Instructor's Manual includes chapter-by-chapter lecture suggestions, classroom activities, personal applications, research project ideas, and handouts. Each chapter's manual begins with an extensive chapter outline, learning goals, and key terms.

PowerPoint Slides

Edited by Khia Thomas, Broward College. The presentations cover key points of each chapter with figures and tables from the text. The slides can be used as is or modified to meet your specific needs.

Test Bank and Computerized Test Bank

Edited by ANSR, a dedicated educational supplements development company. By constantly revising and improving the Test Bank development process, McGraw-Hill aims to raise the bar for student assessment with each new edition. The Test Bank contains over 3,000 multiple-choice and short-answer questions and five to ten essay questions per chapter. Each question and set of possible answers has been methodically edited for accuracy, clarity, effectiveness, and accessibility. Organized by chapter, the questions are designed to test factual, applied, and conceptual understanding and are keyed to Bloom's taxonomy. The test bank is compatible with McGraw-Hill's computerized testing program, EZ Test, and most Course Management systems.

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Expert Consultants

Life-span development has become an enormous, complex field, and no single author can possibly be an expert in all aspects of it. To solve this problem, in the fourth, fifth, sixth, and now in this seventh edition, I have sought the input of leading experts in many different areas of life-span development. These experts have provided me with detailed recommendations of new research to include. The panel of experts is literally a *Who's Who* in the field of life-span development. The following leading experts in a number of fields in life-span development provided me with exceptional feedback about what to add, delete, and change in the seventh edition of this book:

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A TOPICAL APPROACH TO

LIFE-SPAN

DEVELOPMENT

Seventh Edition

section one

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

—**WILLIAM SHAKESPEARE**
English Playwright, 17th Century

The Life-Span Perspective

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





INTRODUCTION

chapter outline

1 The Life-Span Perspective

Learning Goal 1 Discuss the distinctive features of a life-span perspective on development

The Importance of Studying Life-Span Development
Characteristics of the Life-Span Perspective
Some Contemporary Concerns

2 The Nature of Development

Learning Goal 2 Identify the most important processes, periods, and issues in development

Biological, Cognitive, and Socioemotional Processes
Periods of Development
The Significance of Age
Developmental Issues

3 Theories of Development

Learning Goal 3 Describe the main theories of human development

Psychoanalytic Theories
Cognitive Theories
Behavioral and Social Cognitive Theories
Ethological Theory
Ecological Theory
An Eclectic Theoretical Orientation

4 Research on Life-Span Development

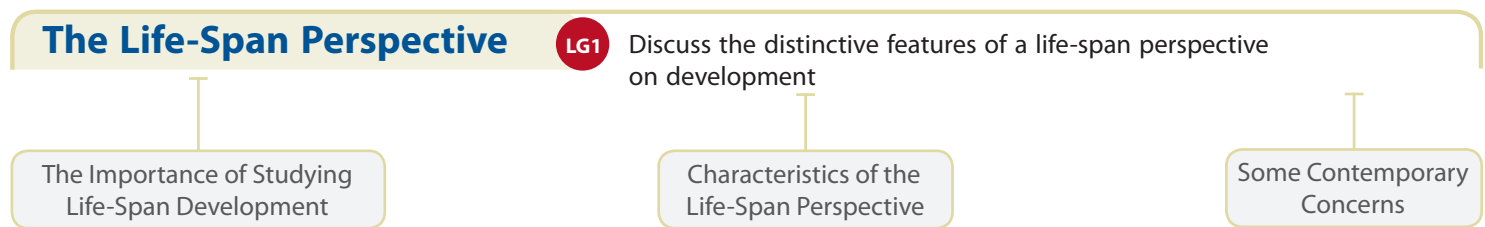
Learning Goal 4 Explain how research on life-span development is conducted

Methods for Collecting Data
Research Designs
Time Span of Research
Conducting Ethical Research
Minimizing Bias



preview

This book is a window into the journey of human development—your own and that of every other member of the human species. Every life is distinct, a new biography in the world. Examining the shape of life-span development helps us to understand it better. In this first chapter, we explore what it means to take a life-span perspective on development, examine the nature of development, discuss theories of development, and outline how science helps us to understand it.



Each of us develops partly like all other individuals, partly like some other individuals, and partly like no other individuals. Most of the time, our attention is directed to an individual's uniqueness. But as humans, we have all traveled some common paths. Each of us—Leonardo da Vinci, Joan of Arc, George Washington, Martin Luther King, Jr., and you—walked at about 1 year, engaged in fantasy play as a young child, and became more independent as a youth. Each of us, if we live long enough, will experience hearing problems and the death of family members and friends. This is the general course of our **development**—the pattern of movement or change that begins at conception and continues through the human life span.

In this section, we explore what is meant by the concept of development and why the study of life-span development is important. We outline the main characteristics of the life-span perspective and discuss various sources of contextual influences. In addition, we examine some contemporary concerns in life-span development.

THE IMPORTANCE OF STUDYING LIFE-SPAN DEVELOPMENT

How might people benefit from examining life-span development? Perhaps you are, or will be, a parent or a teacher. If so, responsibility for children is, or will be, a part of your everyday life. The more you learn about them, the better you can deal with them. Perhaps you hope to gain some insight about your own history—as an infant, a child, an adolescent, or an adult. Perhaps you want to know more about what your life will be like as you move through the adult years—as a middle-aged adult or as an adult in old age, for example. Or perhaps you have just stumbled upon this course, thinking that it sounded intriguing and that the study of the human life span might raise some provocative issues. Whatever your reasons, you will discover that the study of life-span development is filled with intriguing information about who we are, how we came to be this way, and where our future will take us.

Most development involves growth, but it also includes decline and dying. In exploring development, we examine the life span from the point of conception until the time when life—at least, life as we know it—ends. You will see yourself as an infant, as a child, and as an adolescent, and be stimulated to think about how those years influenced the kind of individual you are today. And you will see yourself as a young adult, as a middle-aged adult, and as an adult in old age, and be motivated to think about how your

development The pattern of movement or change that begins at conception and continues through the human life span.

experiences today will influence your development through the remainder of your adult years.

CHARACTERISTICS OF THE LIFE-SPAN PERSPECTIVE

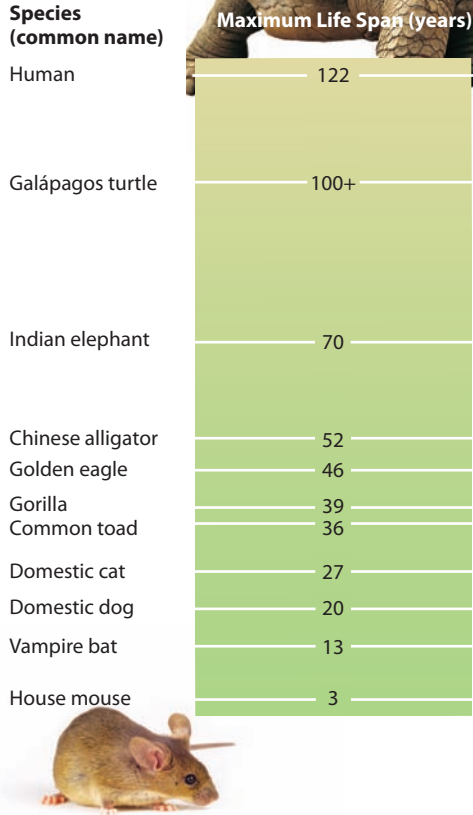


FIGURE 1.1

MAXIMUM RECORDED LIFE SPAN FOR DIFFERENT SPECIES. Our only competitor for the maximum recorded life span is the Galápagos turtle.



What characterizes the life-span perspective on development?

Although growth and development are dramatic during the first two decades of life, development is not something that happens only to children and adolescents (Bowen & Staudinger, 2013). The traditional approach to the study of development emphasizes extensive change from birth to adolescence (especially during infancy), little or no change during adulthood, and decline in old age. But a great deal of change does occur in the five or six decades after adolescence. The life-span perspective emphasizes developmental change throughout adulthood as well as during childhood (Freund & others, 2013; Lerner & others, 2013).

The recent increase in human life expectancy has contributed to the popularity of the life-span approach to development. The upper boundary of the human life span (based on the oldest age documented) is 122 years, as indicated in Figure 1.1; this maximum life span of humans has not changed since the beginning of recorded history. What has changed is *life expectancy*: the average number of years that a person born in a particular year can expect to live (Martin, 2011). During the twentieth century alone, life expectancy in the United States increased by 30 years, thanks to improvements in sanitation, nutrition, and medicine (see Figure 1.2). For individuals born in the United States in the second decade of the twenty-first century, the life expectancy is 78 years of age (U.S. Census Bureau, 2012). Today, for most individuals in developed countries, childhood and adolescence represent only about one-fourth of their lives.

The belief that development occurs throughout life is central to the **life-span perspective** on human development, but this perspective has other characteristics as well. According to life-span development expert Paul Baltes (1939–2006), the life-span perspective views development as lifelong, multidimensional, multidirectional, plastic, multidisciplinary, and contextual, and as a process that involves growth, maintenance, and regulation of loss (Baltes, 1987, 2003; Baltes, Lindenberger, & Staudinger, 2006). In Baltes' view, it is important to understand that development is constructed through biological, sociocultural, and individual factors working together. Let's look at each of these characteristics.

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

Development Is Multidimensional At every age, your body, your mind, your emotions, and your relationships change and affect each other. Development has biological, cognitive, and socioemotional dimensions. Within each of these dimensions are many components—for example, attention, memory, abstract thinking, speed of processing information, and social intelligence are just a few of the components of the cognitive dimension.

Development Is Multidirectional Throughout life, some dimensions or components of a dimension expand and others shrink. For example, when one language (such as English) is acquired early in development, the capacity for acquiring second and third languages (such as Spanish and Chinese) decreases later in development, especially after early childhood (Levitt, 1989). During adolescence, as individuals establish romantic relationships, their time spent with friends may decrease. During late adulthood, older adults might become wiser by calling on past experience to guide their intellectual decision making, but

they perform more poorly on tasks that require speed in processing information (Dirk & Schmiedek, 2012; Salthouse, 2012).

Development Is Plastic Developmentalists debate how much *plasticity* people have in various dimensions at different points in their development. Plasticity means the capacity for change. For example, can you still improve your intellectual skills when you are in your seventies or eighties? Or might these intellectual skills be fixed by the time you are in your thirties, so that further improvement is impossible? Researchers have found that the cognitive skills of older adults can be improved through training and development of better strategies (Dixon & others, 2013; Schaie, 2012; Katzel & Steinbrenner, 2012). However, possibly we possess less capacity for change when we become old (Salthouse, 2012, 2013). The search for plasticity and its constraints is a key element on the contemporary agenda for developmental research (Depp, Vahia, & Jeste, 2012; Masten, 2013; Zelazo, 2013).

Developmental Science Is Multidisciplinary Psychologists, sociologists, anthropologists, neuroscientists, and medical researchers all share an interest in unlocking the mysteries of development through the life span. How do your heredity and health limit your intelligence? Do intelligence and social relationships change with age in the same way around the world? How do families and schools influence intellectual development? These are examples of research questions that cut across disciplines.

Development Is Contextual All development occurs within a context, or setting. Contexts include families, neighborhoods, schools, peer groups, work settings, churches, university laboratories, cities, countries, and so on. Each of these settings is influenced by historical, economic, social, and cultural factors (Bowen & Staudinger, 2013; Gollnick & Chinn, 2013; Mistry, Contreras, & Dutta, 2013).

Contexts, like individuals, change (Antonucci, Birditt, & Ajrouch, 2013; Gerstoft & Ram, 2012). Thus, individuals are changing beings in a changing world. As a result of these changes, contexts exert three types of influences (Baltes, 2003): (1) normative age-graded influences, (2) normative history-graded influences, and (3) nonnormative or highly individualized life events. Each type of influence can have a biological or an environmental impact on development. **Normative age-graded influences** are similar for individuals in a particular age group. These influences include biological processes such as puberty and menopause. They also include sociocultural or environmental processes such as beginning formal education (usually at about age 6 in most cultures) and retirement (which takes place during the fifties and sixties in most cultures).

Normative history-graded influences are common to people of a particular generation because of historical circumstances. For example, in their youth, American baby boomers shared experiences that included the Cuban missile crisis, the assassination of John F. Kennedy, and the Beatles invasion. Other examples of normative history-graded influences include economic, political, and social upheavals such as the Great Depression of the 1930s, World War II during the 1940s, the civil rights and women's rights movements of the 1960s and 1970s, the terrorist attacks of 9/11/2001, as well as the integration of computers, cell phones, and iPods into everyday life in recent decades (Schaie, 2012; Schaie & Zanjani, 2012). Long-term changes in the genetic and cultural makeup of a population (due to immigration or changes in fertility rates) are also part of normative historical change.

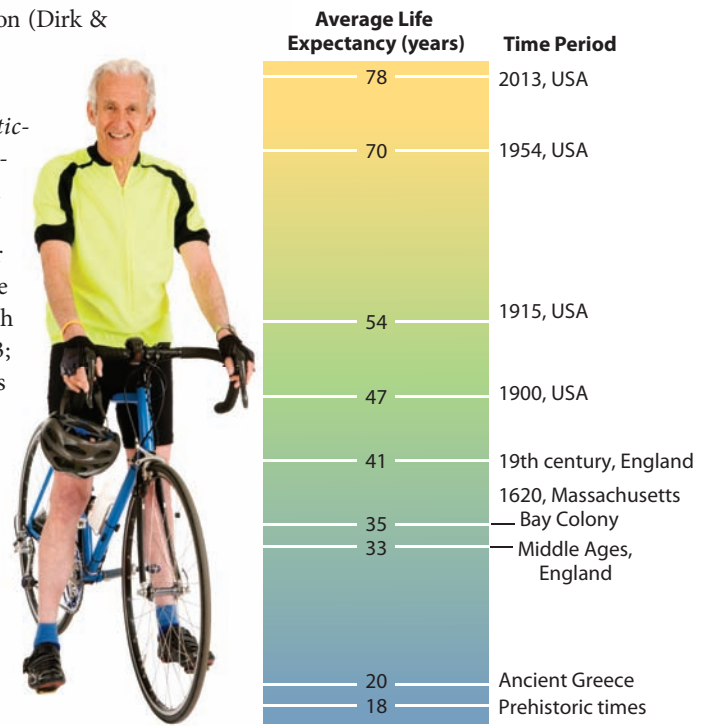


FIGURE 1.2
HUMAN LIFE EXPECTANCY AT BIRTH FROM PREHISTORIC TO CONTEMPORARY TIMES. It took 5,000 years to extend human life expectancy from 18 to 41 years of age.



Paul Baltes, a leading architect of the life-span perspective of development, conversing with one of the long-time research participants in the Berlin Aging Study that he directs. She joined the study in the early 1990s and has participated six times in extensive physical, medical, psychological, and social assessments. In her professional life, she was a practicing physician.

life-span perspective View of development as being lifelong, multidimensional, multidirectional, plastic, multidisciplinary, and contextual; involving growth, maintenance, and regulation of loss; and constructed through biological, sociocultural, and individual factors working together.

normative age-graded influences Influences that are similar for individuals in a particular age group.

normative history-graded influences Influences that are common to people of a particular generation because of historical circumstances.



Nonnormative life events, such as Hurricane Sandy in October, 2012, are unusual circumstances that have a major impact on a person's life.



developmental connection

Parenting

Which parenting style is most often linked with positive child outcomes? Chapter 14, p. 489

nonnormative life events Unusual occurrences that have a major impact on an individual's life.

Nonnormative life events are unusual occurrences that have a major impact on an individual's life. These events do not happen to all people, and when they do occur they can influence people in different ways. Examples include experiencing the death of a parent when one is still a child, becoming pregnant in early adolescence, surviving a fire that destroys one's home, winning the lottery, or getting an unexpected career opportunity.

Development Involves Growth, Maintenance, and Regulation of Loss

Baltes and his colleagues (2006) assert that achieving mastery of life often involves conflicts and competition among three goals of human development: growth, maintenance, and regulation of loss. As individuals age into middle and late adulthood, the maintenance and regulation of loss in their capacities shift their attention away from growth. Thus, a 75-year-old man might aim not to improve his memory or his golf swing but to maintain his independence and merely to continue playing golf.

Development Is a Co-construction of Biology, Culture, and the Individual

Development is a co-construction of biological, cultural, and individual factors working together (Baltes, Reuter-Lorenz, & Rösler, 2012). For example, the brain shapes culture, but it is also shaped by culture and the experiences that individuals have or pursue. In terms of individual factors, we can go beyond what our genetic inheritance and environment have given us. We can author a unique developmental path by actively choosing from the environment the things that optimize our lives (Rathunde & Csikszentmihalyi, 2006).

SOME CONTEMPORARY CONCERNS

Pick up a newspaper or magazine and you might see headlines like these: "Political Leanings May Be Written in the Genes," "Mother Accused of Tossing Children into Bay," "Gender Gap Widens," "FDA Warns About ADHD Drug," "Heart Attack Deaths Higher in Black Patients," "Test May Predict Alzheimer Disease." Researchers using the life-span perspective are examining these and many other topics of contemporary concern. The roles that health and well-being, parenting, education, and sociocultural contexts play in life-span development, as well as how social policy is related to these issues, are a particular focus of this textbook.

Health and Well-Being Health professionals today recognize the power of lifestyles and psychological states in health and well-being (Hahn, Payne, & Lucas, 2013; Marks, 2013). Does a pregnant woman endanger her fetus if she drinks a few beers per week? How does a poor diet affect a child's ability to learn? Are children getting less exercise today than in the past? What roles do parents and peers play in whether adolescents abuse drugs? What health-enhancing and health-compromising behaviors do college students engage in? What factors are causing the obesity epidemic in the United States and around the world? How can older adults cope with declining health? Throughout this text, we will discuss many questions like these regarding health and well-being. In every chapter of this book, issues of health and well-being are integrated into our discussion.

Parenting and Education Can two gay men raise a healthy family? Are children harmed if both parents work outside the home? Are U.S. schools failing to teach children how to read and write and calculate adequately? We hear many questions like these related to pressures on the contemporary family and the problems of U.S. schools (Grusec & others, 2013; McCombs, 2013). In later chapters, we analyze child care, the effects of divorce, parenting styles, intergenerational relationships, early childhood education, relationships between childhood poverty and education, bilingual education, new educational efforts to improve lifelong learning, and many other issues related to parenting and education (Squires & others, 2013).

Sociocultural Contexts and Diversity Health, parenting, and education—like development itself—are shaped by their sociocultural context. In analyzing this context, four concepts are especially useful: culture, ethnicity, socioeconomic status, and gender.



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



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



Doly Akter, age 17, lives in a slum in Dhaka, Bangladesh, where sewers overflow, garbage rots in the streets, and children are undernourished. Nearly two-thirds of young women in Bangladesh get married before they are 18. Doly organized a club supported by UNICEF in which girls go door-to-door to monitor the hygiene habits of households in their neighborhood. The monitoring has led to improved hygiene and health in the families. Also, her group has managed to stop several child marriages by meeting with parents and convincing them that it is not in their daughters' best interests. When talking with parents in their neighborhoods, the girls in the club emphasize the importance of staying in school and how this will improve their daughters' future. Doly says that the girls in her UNICEF group are far more aware of their rights than their mothers ever were (UNICEF, 2007).

Culture encompasses the behavior patterns, beliefs, and all other products of a particular group of people that are passed on from generation to generation. Culture results from the interaction of people over many years. A cultural group can be as large as the United States or as small as an isolated Appalachian town. Whatever its size, the group's culture influences the behavior of its members (Matsumoto & Juang, 2012). **Cross-cultural studies** compare aspects of two or more cultures. The comparison provides information about the degree to which development is similar, or universal, across cultures, or instead is culture-specific (Mistry, Contreras, & Dutta, 2013; Zhang & Sternberg, 2013).

Ethnicity (the word *ethnic* comes from the Greek word for "nation") is rooted in cultural heritage, nationality, race, religion, and language. African Americans, Latinos, Asian Americans, Native Americans, European Americans, and Arab Americans are examples of broad ethnic groups in the United States. Diversity exists within each ethnic group (Gollnick & Chinn, 2013).

The sociocultural context of the United States has become increasingly diverse in recent years. Its population includes a greater variety of cultures and ethnic groups than ever before. This changing demographic tapestry promises not only the richness that diversity produces but also difficult challenges in extending the American dream to all individuals (Leong & others, 2013; Spring, 2013; Trejos-Castillo, Bedore, & Trevino Schafer, 2013; Tobler & others, 2013).

Socioeconomic status (SES) refers to a person's position within society based on occupational, educational, and economic characteristics. Socioeconomic status implies certain inequalities. Differences in the ability to control resources and to participate in society's rewards produce unequal opportunities (Hurst, 2013).

Gender refers to the characteristics of people as males and females. Few aspects of our development are more central to our identity and social relationships than gender (Hyde & Else-Quest, 2013; Leaper, 2013).

Social Policy **Social policy** is a government's course of action designed to promote the welfare of its citizens. Values, economics, and politics all shape a nation's social policy. Out of concern that policy makers are doing too little to protect the well-being of children

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

cross-cultural studies Comparison of one culture with one or more other cultures. These provide information about the degree to which development is similar, or universal, across cultures, and the degree to which it is culture-specific.

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

socioeconomic status (SES) Classification of a person's position in society based on occupational, educational, and economic characteristics.

gender The characteristics of people as females or males.

social policy A government's course of action designed to promote the welfare of its citizens.