

# PREFACE

Children have a very special place in every society because they are every society's future. The study of development gives those who care for children many tools for improving the lives of children throughout the world and, therefore, contributing to a better future for humankind. This is an ambitious goal, but not an impossible one. As research in child development has progressed and the information has been applied to family, education, health, child care, and a variety of other contexts, it has become clear that developmentalists can make a difference in children's lives.

In a broad sense, this text seeks to convey a clear understanding of what we know about child development, how we arrived at this level of understanding, and how research in child development can be applied in the various settings in which children develop. To achieve this goal, I have continued to emphasize and update *Children* in three main areas:

- Research and content
- Applications
- Accessibility and interest

First, I will generally describe the thrust of the changes in the tenth edition of *Children*. Then I will specify the key changes in each chapter.

## EXTENSIVE INCREASE IN COVERAGE OF BRAIN DEVELOPMENT

The creation of brain-imaging techniques, such as fMRI, have led to remarkable increases in our knowledge about brain development in recent years. I have substantially expanded the coverage of children's brain development in this new edition and where appropriate incorporated images of brains scans. Here are some of the main changes related to brain development:

- Chapter 3, Prenatal Development: new major section on the early formation of the brain and key neurological processes (Nelson, Thomas, & de Haan, 2006)
- Chapter 5, Physical Development in Infancy: expanded coverage of the function of myelination, as well as new graphics that highlight specific functions of brain regions (Haynes & others, 2006)
- Chapter 6, Cognitive Development in Infancy: new description of the main brain region involved in attention; new discussion of the connections between development of the brain and memory, including new Figure 6.6; and new coverage of the numerous brain

regions that are likely activated in imitation

- Chapter 8, Physical Development in Early Childhood: much expanded section on the brain, including more specific aspects of brain changes in early childhood (Lenroot & Giedd, 2006)
- Chapter 11, Physical Development in Middle and Late Childhood: new section on changes in the brain during middle and late childhood that focuses on brain regions involved in cognitive control and changes in cortical thickening (Durstun & others, 2007; Toga, Thompson, & Sowell, 2006); new discussion of brain pathways involved in learning disabilities (Shaywitz, Lyon, & Lyon, 2006)
- Chapter 14, Physical Development in Adolescence: expansion, revision, and updating of brain development in adolescence, including new Figure 14.6.

## RESEARCH AND CONTENT

Four ways I have attempted to provide students with an understanding of research and content on children development focus on (1) research coverage, (2) *Research in Child Development interludes*, (3) expert consultants, and (4) diversity.

### Research Coverage

Above all, a text on child development must include a solid research foundation. This edition of *Children* presents the latest, most contemporary research. *Children*, tenth edition, has more than 1,600 citations from 2000 through 2007. More than 1,000 of these are 2004 through 2007 citations, making *Children*, tenth edition, truly a twenty-first-century rendition of the field of child development.

Coverage has been updated and expanded throughout the book. Notably, I have incorporated information from the sixth edition of the *Handbook of Child Psychology* (Damon & Lerner, 2006).

### Research in Children's Development Interludes

New to this edition are *Research in Children's Development interludes* that appear once in each chapter and provide a more in-depth look at research related to a topic in the chapter. I call them interludes rather than boxes because they follow

directly in the text after they have been introduced. In most instances they consist of a description of a research study, including the identity of the participants, the methods used to obtain data, and the main results. In most cases, they are research studies that have been conducted in the twenty-first century. Because students often have more difficulty reading about research studies than other text material, I wrote these with an eye toward student understanding. The new *Research in Children's Development* interludes include Expectant Mothers' Cigarette Smoking and Cigarette Smoking by Their Adolescent Offspring (Porath & Fried, 2005) (Chapter 3); Physical Activity in Young Children Attending Preschools (Pate & others, 2004) (Chapter 8); Aggressive Victims, Passive Victims, and Bullies (Hanish & Guerera, 2004) (Chapter 13); and Evaluating a Service Learning Program Designed to Increase Civic Engagement (Metz & Youniss, 2005) (Chapter 15).

### Expert Research Consultants

Also new to this edition are expert research consultants. Children's development has become an enormous, complex field, and no single author, or even several authors, can possibly be an expert in many different areas of children's development. To solve this problem, I sought the input of leading experts in many different research and applied areas of children's development. The experts provided me with detailed evaluations and recommendations for a chapter(s) in their area(s) of expertise. The expert research consultants for *Children*, tenth edition, were:

<b>Expert</b>	<b>Topics</b>
Nel Noddings <i>Stanford University</i>	Education throughout the book
Ross Thompson <i>University of California–Davis</i>	Socioemotional development throughout the book
Algea Harrison <i>Oakland University</i>	Diversity throughout the book
Marylou Hyson <i>National Association for the Education of Young Children</i>	Early childhood
Campbell Leaper <i>University of California–Santa Cruz</i>	Gender throughout the book
Linda Pugh <i>Johns Hopkins University</i>	Nursing/health, prenatal development, birth, and infancy
James Marcia <i>Concordia University</i>	Adolescence
Jane Couperus <i>Hampshire College</i>	Neuroscience throughout the book

The photographs and biographies of the expert consultants appear on page xi.

### Diversity

In addition, this text has always emphasized diversity and culture, and this tradition continues in this edition. *Diversity in*

*Children's Development* interludes are new in this edition. They appear once in each chapter and focus on a topic related to the chapter's content. Among the topics of the *Diversity* interludes are Gender, Families, and Children's Development (Chapter 1); Language Environment, Poverty, and Language Development (Chapter 6); Early Childhood Education in Japan and Developing Countries (Chapter 9); Bilingual Education (Chapter 12); and Cross-Cultural Comparisons of Secondary Schools (Chapter 15).

## REDUCTION OF NUMBER OF CHAPTERS

At the request of adopters and reviewers, I have reduced and combined the material in Chapters 1 and 2 of the tenth edition into a single opening chapter.

## APPLICATIONS

It is important not only to present the scientific foundation of child development to students, but also to demonstrate that research has real-world applications, to include many applied examples of concepts, and to give students a sense that the field of child development has personal meaning for them. Here are some of the ways I incorporated applications in the text:

- Applications of research in child development to health, parenting, and education receive special attention throughout the text. Here are just a few of these many applications: a new main section in Chapter 1 titled "Why Is Caring for Children Important?"; new coverage of the Hip-Hop to Health Jr. program to reduce overweight and obesity in minority children attending Head Start programs (Fitzgibbon & others, 2005); recently developed school/family programs for preventing child obesity (Lindsay & others, 2006; Paxon & others, 2006; Story, Kaphingst, & French, 2006); and recent research on parenting styles and developmental outcomes (Steinberg, Blatt-Eisengart, & Cauffman, 2006);
- *Caring for Children* interludes in every chapter that outline important ways to improve the lives of children. These are new *Caring for Children* interludes for this edition: Exercise Guidelines for Expectant Mothers (Chapter 3); From Waterbirth to Music Therapy (Chapter 4); Tools of the Mind (Chapter 9); Strategies for Increasing Children's Creative Thinking (Chapter 12); Reducing Adolescent Pregnancy (Chapter 14); Strategies for Parenting Adolescents (Chapter 16).
- Every chapter also has at least one *Careers in Child Development* profile that describes an individual whose career relates to the chapter's content. Most of the *Careers* inserts include a photograph of the person at work. In addition, the *Careers in Child Development* Appendix that follows Chapter 1 describes a number of careers in the education/research, clinical/counseling, medical/nursing/physical, and family/relationship categories.

- At the end of each chapter, two features—*Making a Difference* and *Resources for Improving Children's Lives*—provide valuable information about ways to improve children's lives.
- On the book's Web site, students can hone their decision-making skills by completing exercises related to children's health and well-being, parenting, and education.

## ACCESSIBILITY AND INTEREST

Many students today juggle numerous responsibilities in addition to their coursework. To help them make the most of their study time, I have made this book as accessible as possible without watering down the content. The writing, organization, and learning system of *Children* will engage students and provide a clear foundation in child development.

### Writing and Organization

For *Children*, tenth edition, every sentence, every paragraph, and every section of every chapter was carefully considered and, if appropriate, moved, streamlined, expanded, or eliminated in order to integrate new research and to make the book more accessible.

### The Learning System

I strongly believe that students not only should be challenged to study hard and think more deeply and productively about child development, but also should be provided with an effective way to learn the content. Instructors and students continue to provide extremely positive feedback about the book's learning system and student-friendly presentation.

Students often struggle to find the main ideas in their courses, especially in child development, which includes so much material. This book's learning system centers on learning goals that, together with the main text headings, keep the key ideas in front of the reader from the beginning to the end of the chapter. Each chapter has no more than six main headings and corresponding learning goals, which are presented side-by-side in the chapter-opening spread. At the end of each main section of a chapter, the learning goal is repeated in a feature called Review and Reflect, which prompts students to review the key topics in the section and poses a question to encourage them to think critically about what they have read. At the end of the chapter, under the heading, Reach Your Learning Goals, the learning goals guide students through the chapter review.

In addition to the learning tools just described, visual organizers, or maps, that link up with the learning goals are presented at the beginning of each major section in the chapter. The complete learning system, including many additional features not mentioned here, is illustrated in a section titled Visual Tour for Students, which follows this Preface on page xxviii.

## CHAPTER-BY-CHAPTER CHANGES

I made a number of changes in all 16 chapters of *Children*, tenth edition. Highlights of these changes follow.



### Chapter 1 INTRODUCTION

- Combined Chapters 1 and 2 from the ninth edition into a single opening chapter at the request of instructors
- New main first section: Why Is Caring for Children Important?
- Updated *Caring for Children* interlude: Improving Family Policy
- New *Diversity in Children's Development* interlude: Gender, Families, and Children's Development
- New discussion of research on poverty and children's development, including new research figure
- Moved coverage of Careers in Child Development to an Appendix that follows Chapter 1
- Expanded discussion of research on children from ethnic minority backgrounds (Parke & Buriel, 2006)
- New *Research in Children's Development* interlude: Research Journals



### Chapter 2 BIOLOGICAL BEGINNINGS

- Extensive line-by-line rewriting of chapter and inclusion of a number of new introductions to topics and transitions between topics for improved clarity and understanding.
- Description of recent search documenting how stress hormones can damage DNA (Flint & others, 2007)
- New material on the specification of the number of genes humans possess (21,774) (Ensembl Human, 2007)
- Expanded coverage of phenylketonuria and how its link with nutrition reflects the principle of heredity-environment interaction
- New coverage of the increasing use of fetal MRI for detecting fetal malformations (Laifer-Narin & others, 2007; Muhler & others, 2007)
- Description of recent large-scale study that found no difference in pregnancy loss between chronic villus sampling and amniocentesis (Caughey, Hopkins, & Norton, 2006).
- New *Research in Children's Development* interlude: In Vitro Fertilization and Developmental Outcomes in Adolescence
- New *Diversity in Children's Development* interlude: The Increased Diversity of Adopted Children and Adoptive Parents
- New coverage of recent large-scale study on adoption and learning disabilities (Altarc & Saroha, 2007)

- New description of two recent meta-analyses: one that focused on behavioral problems and mental health referrals in adopted and nonadopted children (Juffer & van IJendoorn, 2005) and one that examined the cognitive development on adopted and nonadopted children (van IJendoorn, Juffer, & Poelhuis, 2005)
- Coverage of recent study of the antisocial behavior of adopted and nonadopted young adults (Grotevant & others, 2006)
- Updated and expanded discussion of the epigenetic view, including criticisms of the heredity-environment correlation view (Gottlieb, 2007)



## Chapter 3 PRENATAL DEVELOPMENT

- Extensive rewriting of chapter on a line-by-line basis and rearrangement of some sections
- Important new section on the development of the brain in the prenatal period, including a photo of the tubular appearance of the human nervous system six weeks after conception (Nelson, Thomas, & de Haan, 2006)
- New coverage of the rapidly increasing program, CenteringPregnancy, that brings pregnant women into relationship-oriented groups (Massey, Rising, & Ickovics, 2006)
- New discussion of neural tube defects and what characterizes anencephaly and spina bifida
- Coverage of recent study on prescription drug use during pregnancy (Riley & others, 2005)
- Description of recent research on caffeine, pregnancy, and fetal death (Matijasevich & others, 2006)
- Description of recent research on the continuing negative outcomes of fetal alcohol syndrome in early adulthood (Spohr, Willms, & Steinhausen, 2007)
- Discussion of recent research on maternal use of cocaine during pregnancy and attention deficits in preschool children (Noland & others, 2005)
- Description of recent survey on methamphetamine use by pregnant women (Arria & others, 2006)
- Coverage of recent study on prenatal marijuana exposure and depression in 10-year-old children (Gray & others, 2005) and revised conclusions about the effects of marijuana by pregnant women on offspring (de Moares & others, 2006; Williams & Ross, 2007)
- New description of maternal diabetes as a risk factor for pregnant outcomes, including recent research (Rosenberg & others, 2005)
- Inclusion of two recent research studies on maternal obesity, central nervous birth defects in offspring, and neonatal death (Anderson & others, 2005; Kristensen & others, 2005)
- Coverage of recent study on maternal age and stillbirth (Bateman & Simpson, 2006)

- Description of two longitudinal studies linking high maternal anxiety and high maternal levels of cortisol during pregnancy with higher levels of cortisol in offspring during preschool and middle and late childhood (Gutteling, de Weerth, & Buitelaar, 2005; O'Connor & others, 2005).
- Discussion of recent research on pregnancy outcomes in women of very advanced maternal age (Callaway, Lust, & McIntyre, 2005)
- Description of research linking heavy paternal smoking to increased risk of early pregnancy loss (Venner & others, 2004)
- New *Research in Children's Development* interlude: Expectant Mothers' Cigarette Smoking and Cigarette Smoking by their Adolescent Offspring (Porath & Fried, 2005)
- New *Caring for Children* interlude: Exercise Guidelines for Expectant Mothers
- New *Diversity in Children's Development* interlude: Cultural Beliefs About Pregnancy
- Expanded and updated *Resources for Improving Children's Lives*



## Chapter 4 BIRTH

- Extensive rewriting of chapter on a line-by-line basis and rearrangement of some sections (placing material on assessing the newborn before low birth weight and preterm infants, for example) to improve clarity and understanding
- Updated figures on percentage of U.S. babies delivered in hospitals, delivered by physicians, and attended by a midwife (Martin & others, 2005)
- Coverage of recent study showing positive effects of doula support for low-income pregnant women and their newborns (Campbell & others, 2006)
- Description of recent study showing adverse outcomes on newborns when their mothers were given oxytocin during childbirth (Oscarsson & others, 2006)
- Expanded and updated coverage of why cesarean delivery has increased in the United States and recent data on trends in cesarean delivery (Hoyert & others, 2006)
- New *Caring for Children* interlude: From Waterbirth to Music Therapy (Field, 2007)
- Description of recent studies on the benefits of massage and acupuncture during labor (Beckmann & Garrett, 2006; Gaudernack, Forbord, & Hole, 2006)
- Discussion of trends in Apgar scale scores for U.S. newborns (Martin & others, 2005)
- Update on the percentage of African American infants born preterm (Ashton, 2006)
- Inclusion of recent research support for the use of progesterin in the second trimester of pregnancy in reducing the risk of preterm birth (Coomarasamy & others, 2006; Mackenzie & others, 2006)

- *New Diversity in Children's Development* interlude: Incidence and Causes of Low Birth Weight Around the World
- New coverage of a recent survey on techniques used in the NICU (Field & others, 2006)
- Discussion of recent study documenting the positive effects of exercise in the postpartum period on maternal well-being (Blum, Beaudoin, & Caton-Lemos, 2005)
- Description of recent national study on the incidence of depressive symptoms in mothers and fathers in the postpartum period (Paulson, Dauber, & Leiferman, 2006)
- Coverage of recent large-scale Danish study on the increase in psychological disorders in mothers, but not fathers, in the postpartum period (Munk-Olsen & others, 2006)
- Updated and revised *Resources for Improving Children's Lives*
- Recent research on breast feeding and a lower percentage of developmental delays in gross motor development (Sacker & others, 2006)
- *New Research in Children's Development* interlude: Studying the Infant's Perception
- *New Diversity in Children's Development* interlude: Cultural Variations in Guiding Infants' Motor Development
- Revised and updated discussion of color vision in infancy (Kellman & Arterberry, 2006)
- New section on perception of faces infancy, including recent research (Kelly & others, 2007a, b; Slater, Field, & Hernandez-Reif, 2007)
- New section: Nature, Nurture, and the Development of Infants' Visual Perception (Kellman & Arterberry, 2006)
- New coverage of developmental changes in stereoacuity during infancy (Birch & others, 2005; Takai & others, 2005)
- Updated *Resources for Improving Children's Lives* to include *The Amazing Infant*



## Chapter 5

### PHYSICAL DEVELOPMENT IN INFANCY

- Extensive rewriting and editing of chapter for improved student understanding
- Expanded graphics on the brain to emphasize specific functions of regions, such as the visual association cortex and somatosensory cortex (Figure 5.4)
- Updated coverage of the development of the brain (Nelson, 2007; Coch, Fischer, & Dawson, 2007)
- Expanded description of the function of myelination (Haynes & others, 2006)
- Expanded and updated discussion of links between spurts in brain growth and cognitive functioning (Immordino-Yang & Fischer, 2007)
- Expanded discussion of REM sleep in infancy and question raised about whether we can know for sure whether infants dream
- Updated and expanded discussion of the shared sleeping and SIDS controversy (Bajanowoski & others, 2007; Mitchell, 2007)
- Expanded and updated research on SIDS, including recent information about the role of the neurotransmitter serotonin in the brain stem (Shani, Fifer, & Myers, 2007)
- New coverage of recent research showing that babies who use a pacifier when they go to sleep are less likely to experience SIDS (Li & others, 2006; Mitchell, Blair, & L'Hoir, 2006)
- New discussion of a recent research on the percentage of overweight babies in the United States, including new Figure 5.11 (Kim & others, 2006)
- Coverage of recent information about breast feeding and type II diabetes (Das, 2007)



## Chapter 6

### COGNITIVE DEVELOPMENT IN INFANCY

- Extensive editing and rewriting of Piagetian material for improved student understanding
- New discussion of Elizabeth Spelke's research on infants' expectations and research photo of a 4-month-old in a perception study in Elizabeth Spelke's laboratory to illustrate perception researchers' conclusions that infants have a better understanding of how the world works at earlier ages than Piaget envisioned
- New description of the main region of the brain involved in infant attention
- New coverage of joint attention and its role in infants' language development
- Coverage of recent research on the emergence of gaze following in infants, including new Figure 6.5, showing the research setting and sequence involved in the study (Brooks & Meltzoff, 2005)
- Description of recent research on deferred imitation as a predictor of communicative gestures (Heimann & others, 2006)
- New discussion of connections between development of the brain and development of memory in infancy, including new Figure 6.6 (Nelson, Thomas, & de Haan, 2006)
- New description of the numerous areas of the brain likely involved in infant imitation, including the role that mirror neurons might play in infant imitation (Jackson, Meltzoff, & Decety, 2006; Nash, 2006; Nelson, Thomas, & de Haan, 2006)
- Important new section on concept formation and categorization in infancy (Mandler, 2004, 2006)

- New Figure 6.8 showing stimuli in research on concept formation in infancy
- Updated coverage of predicting IQ later in childhood from information-processing tasks in infancy (Kavsek, 2004)
- New coverage of Michael Tomasello's (2006) interactionist view of language that stresses the role of intentions
- New *Diversity in Children's Development* interlude, including recent research indicating that the type of maternal speech, vocabulary, and gestures are more important than the sheer amount of verbal input in predicting children's vocabulary development in low-income families (Pan & others, 2005)
- Updated and improved coverage of language development based on input from leading expert Jean Berko Gleason
- Coverage of a study on the importance of social interaction in advancing the language of infants including new research Figure 6.15 (Goldstein, King West, & West, 2003)
- Updated *Resources for Improving Children's Lives* to include two additional books: *How Babies Talk* and *Blackwell Handbook of Language Development*



## Chapter 7

### SOCIOEMOTIONAL DEVELOPMENT IN INFANCY

- Extensive rewriting of chapter for improved student understanding, including addition of numerous concrete examples of concepts and more descriptions of infants' behaviors and emotions
- Expanded and updated coverage of the controversy regarding the onset of early emotions (Campos, Anderson, & Babu-Roth, 2008; Lewis, 2007)
- New discussion of why studying the self in infancy is difficult based on the view of leading expert Ross Thompson (2007)
- Important new major section, Social Orientation/Understanding, that includes coverage of infants' developing social interest, locomotion, joint attention, and social referencing (Thompson, 2006)
- New discussion of recent research on becoming a social partner with a peer in 1- and 2-year-olds, including a photograph of the research setting and task (Figure 7.5) (Brownell, Ramani, & Zerwas, 2006)
- New description of Bowlby's internal working model of attachment based on expert consultant Ross Thompson's recommendation
- Expanded discussion of cultural variations in attachment (Saarni & others, 2006)
- Connection of turn-taking and games like peek-a-boo to the development of joint attention (Meltzoff & Brooks, 2006)

- Discussion of recent research on acculturation in Latino families and links to infant cognitive development (Cabrera & others, 2006)
- New *Research in Children's Development* interlude, A National Longitudinal Study of Child Care, including recent research discussed from the NICHD Child Care Research Network (2005, 2006) study
- *New Diversity in Children's Development* interlude: Child-Care Policies Around the World
- Description of recent research on quality of child care and children's vocabulary development (Belsky & others, 2007)
- Updated *Resources for Improving Children's Lives* to include *Touchpoints; Birth to 3*



## Chapter 8

### PHYSICAL DEVELOPMENT IN EARLY CHILDHOOD

- Significant expansion of material on short stature, growth hormone deficiency, and growth hormone treatment in children (Dunkel, 2006; Stanford University Medical Center, 2007)
- New Figure 8.3 that shows an electron microscope image of myelination
- Description of diffusion tensor imaging (DTI) and its improved ability to detect microstructural changes in the brains of infants and children (Mukherjee & McKinstry, 2006)
- Expanded and updated coverage of the brain and cognitive development, including more specific aspects of brain changes during early childhood (Craik, 2006; Lenroot & Giedd, 2006)
- New *Research in Children's Development* interlude: Physical Activity in Young Children Attending Preschools
- New description of the recent trend in reducing physical activity opportunities in preschool and kindergarten programs (American Academy of Pediatrics, 2006)
- New coverage of cultural variations in promoting right-handedness (Zverev, 2006)
- New description of recent recommendations by the World Health Organization that on average children 7 years and younger need to reduce their energy intake by about 20 percent for girls and 18 percent for boys (Butte, 2006)
- Added description of what body mass index is and how it is used to categorize a child as being overweight or at risk for being overweight (Centers for Disease Control and Prevention, 2007)
- Discussion of recent research linking being overweight at age 3 with being overweight at age 12 (Nader & others, 2006)
- New coverage of the Hip-Hop to Health Jr. program to reduce overweight and obesity in African American and Latino children attending Head Start programs (Fitzgibbon & others, 2005)

- Discussion of recent study on parents' misperceptions of their children's overweight (Eckstein & others, 2006)
- Coverage of recent study on parents' misperceptions of children's firearm access in the home (Baxley & Miller, 2006)
- Description of recent fMRI study linking extensive exposure to lead in infancy and early childhood to deficits in brain regions that are involved in language (Weihong & others, 2006)
- Recent research on iron deficiency anemia in children and their affective behavior (Lozoff & others, 2007)
- Expanded and updated coverage of young children's nutrition in low-income families (Darton-Hill & others, 2007; Sausenthaler & others, 2007)
- New *Diversity in Children's Development* interlude: The State of Illness and Health in the World's Children (2006, 2007)
- Updated resources for improving children's lives



## Chapter 9

### COGNITIVE DEVELOPMENT IN EARLY CHILDHOOD

- Extensively edited and rewritten for improved student understanding
- Updated and improved coverage of Vygotsky's concept of private speech (John-Steiner, 2007)
- New *Caring for Children* interlude: Tools of the Mind (Bodrova & Leong, 2001, 2007; Hyson, Copple, & Jones, 2006)
- Recent recommendations for three changes to improve interviewing techniques with children to reduce their suggestibility (Bruck, Ceci, & Principe, 2006)
- Expanded and updated description of the young child's theory of mind (Harris, 2006)
- Creation of new section: Theory of Mind and Autism
- Expanded and updated discussion of language development in early childhood, including increased emphasis on the regularities in which young children acquire their particular language (Berko Gleason, 2005)
- Description of recent data on the positive outcomes of the Perry Preschool program at age 40 (Schweinhart & others, 2005)
- Update on the number of states providing education for 3- and 4-year-old children and the percentage of 3- and 4-year-old children who attend center-based programs (NAEYC, 2005)
- New *Research in Children's Development* interlude: Suggesting False Events to Children
- Recent information about the surge of interest in Montessori schools in the United States (Whitescarver, 2006)
- Updated coverage of characteristics of developmentally appropriate and inappropriate early childhood education (Figure 9.13)



## Chapter 10

### SOCIOEMOTIONAL DEVELOPMENT IN EARLY CHILDHOOD

- New chapter-opening *Images of Children's Development*: Craig Lesley's Complicated Early Emotional and Social Life (Lesley, 2005)
- New description of young children's use of psychological traits in their self-descriptions at about 4 to 5 years of age (Thompson, 2006)
- Expansion of section on Self-Understanding to Self-Understanding and Understanding Others, including new introduction on how young children are more psychologically sophisticated than used to be thought (Thompson, 2006)
- Coverage of research on how even 4-year-olds understand that people will sometimes make statements that aren't true to get what they want or to avoid trouble (Gee & Heyman, 2007; Lee & others, 2002)
- Reorganization of emotion regulation coverage with a new introduction paragraph on its importance in children's development
- Important new section, Parenting and Young Children's Moral Development, that focuses on the quality of parent-child relationships, parents' use of proactive strategies, and conversational dialogue about moral issues (Thompson, 2006; Thompson, Meyer, & McGinley, 2006)
- Discussion of recent research on links between parenting styles and psychosocial maturity and academic achievement (Steinberg, Blatt-Eisengart, & Cauffman, 2006)
- New description of recent research review of mothers' and fathers' socialization strategies (Bronstein, 2006)
- Discussion of recent research studies on the negative developmental outcomes of punishment (Aucoin, Frick, & Bodin, 2006; Bender & others, 2007)
- New description of low-income families having less resources than higher-income families (Conger & Dogan, 2007; Patterson & Hastings, 2007)

- Coverage of Ann Crouter's (2006) recent research on how parents' poor conditions at work can be brought home to negatively influence parenting behavior and child outcomes
- Description of Kathleen McCartney's (2006) recent research on family factors being more important predictors of children's behavior and competence than child-care factors
- New *Research in Children's Development* interlude: Marital Conflict, Individual Hostility, and the Use of Physical Punishment (Kanoy & others, 2003)
- New coverage of research that examined the positive/negative aspects of sibling relationships and children's adjustment (Pike, Coldwell, & Dunn, 2005)
- New material included from Laurie Kramer's research on how frequently siblings have conflicts, how parents react when siblings have conflicts, and teaching siblings skills to improve their sibling interaction
- New section, Emotional Regulation and Peer Relations (Saarni & others, 2006)
- Description of Paul Amato's (2006) longitudinal research on adult outcomes of individuals who experienced their parents' divorce in childhood and adolescence
- New *Resources for Improving Children's Lives* to include *The Emotional Development of Young Children* and *A World of Difference*
- Recent commentary about overweight children more likely to come from low-income families (Longo-Mbenza & others, 2007)
- Description of recent study of parental monitoring of Latino children's eating habits (Arrendono & others, 2006)
- New coverage of recent school/family programs for preventing the likelihood that children will become overweight (Lindsay & others, 2006; Paxon & others, 2006; Story, Kaphingst, & French, 2006)
- New *Research in Children's Development* interlude: Heart Smart (Chen & others, 2007; Friedman & others, 2007)
- Coverage of recent study in four developing countries linking caregiver depression with child injuries (Howe, Hutley, & Abramsky, 2006)
- New discussion of the brain pathways that are involved in reading disabilities based on recent MRI brain scans (Shaywitz, Lyon, & Lyon, 2006)
- New figure of a 9-year-old boy with dyslexia going through an MRI scanner in a research study
- Recent national data on the percentage of U.S. children who have a learning disability or ADHD (National Health Survey, 2006)
- New description of the U.S. government's 2006 warning about the cardiovascular risks of ADHD stimulant medication
- New coverage of the possible role of exercise in reducing ADHD (Ferrando-Lucas, 2006; Rebollo & Montiel, 2006)
- New description of the effort to align IDEA with the government's No Child Left Behind legislation (Rosenberg, Westling, & McLeskey, 2008)
- New *Diversity in Children's Development* interlude: Disproportionate Representation of Minority Students in Special Education



## Chapter 11

### PHYSICAL DEVELOPMENT IN MIDDLE AND LATE CHILDHOOD

- Important new section, The Brain, including recent research on changes in the prefrontal cortex and diffuse/focused activation in the brain, as well as the connection of these changes to cognitive functioning in areas such as cognitive control (Durston & Casey, 2006; Durston & others, 2007)
- Discussion of cortical thickening in children 5 to 11 years of age (Toga, Thompson, & Sowell, 2006)
- Description of recent research on factors linked with whether children will be physically active when they have free time (Heitzler & others, 2006)
- Discussion of recent research linking TV viewing in childhood with exercising less and eating fewer servings per day (Salmon, Campbell, & Crawford, 2006)
- In keeping with the Centers for Disease Control and Prevention's (2007) policy, change in the description of children from obese to overweight or risk for being overweight and statement of how those categories are defined in terms of body mass index (BMI)
- Description of recent research that links being overweight in middle and late childhood with being overweight in adolescence (Nader & others, 2006; Thompson & others, 2007)



## Chapter 12

### COGNITIVE DEVELOPMENT IN MIDDLE AND LATE CHILDHOOD

- New *Images of Children's Development* opening: Marva Collins, Challenging Children to Achieve
- Extensive rewriting, updating, and reorganization of sections for improved student understanding
- Revised definition of creativity based on Robert Sternberg's (2007a) view
- Revised and updated material on culture-fair tests, which an increasing number of experts such as Robert Sternberg (2007a) now prefer to label as *culture-reduced tests*
- Moved the major section on achievement after language to fit with the sequence in earlier chapters of having the discussion of language follow cognition
- New *Caring for Children* interlude: Strategies for Increasing Children's Creative Thinking
- Revised and updated conclusion about the best strategy for teaching beginning readers to now emphasize

- direct instruction in phonics (Mayer, 2004; Rasinski & Padak, 2008)
- Coverage of recent study on gender differences in mastery and performance orientations (Kenney-Benson & others, 2006)
- New section in Achievement: Social Relationships and Contexts, including Nel Noddings' (2006) view on caring for students
- New *Research in Children's Development* interlude: Children's Math Achievement in the United States, China, Taiwan, and Japan
- New *Diversity in Children's Development* interlude: Bilingual Education
- New section, Mindset, that describes Carol Dweck's (2006) recent emphasis on the importance of children developing a growth rather than a fixed mindset



## Chapter 13

### SOCIOEMOTIONAL DEVELOPMENT IN MIDDLE AND LATE CHILDHOOD

- Expanded *Images of Children's Development* opening story that now includes vivid descriptions of elementary school children in the South Bronx
- Updated coverage of developmental changes in self-descriptions during middle and late childhood (Harter, 2006)
- New section, Understanding others, including information about perspective taking and recent research on children's increasing psychological sophistication in understanding others, especially showing more skepticism of others' self-reports of value-laden terms (Heyman, Fu, & Lee, 2007)
- New *Caring for Children* interlude: Increasing Children's Self-Esteem
- New section, Self-Regulation, that describes the increased capacity for self-regulation in middle and late childhood, including its link to advances in managing one's own behavior, emotions, and thoughts that lead to increased social competence and achievement (Laible & Thompson, 2007)
- Connection of increased self-regulation to the discussion of developmental advances in the brain's pre-frontal cortex in Chapter 11, "Physical Development in Middle and Late Childhood" (Durstun & others, 2007)
- New section on social conventional reasoning (Smetana, 2006; Turiel, 2006)
- New section on personality that emphasizes moral identity, moral character, and moral exemplars (Blasi, 2005; Lapsley & Narvaez, 2006)
- Description of recent research on an increase in gender stereotyping from preschool through the fifth grade (Martin & others, 2007)
- Updating of discussion of relational aggression (Young, Boye, & Nelson, 2006)
- Updated national assessment of the gender gap in reading (National Assessment of Educational Progress, 2005)
- New coverage of the importance of parenting in middle and late childhood as gatekeepers for children's behavior as children spend less time with parents (Huston & Ripke, 2006)
- New section, Parents as Managers, which describes the important roles that parents play as managers of children's opportunities, monitors of their behavior, and social initiators and arrangers (Eccles, 2007; Parke & Buriel, 2006)
- Discussion of Hetherington's (2006) recent conclusions about which type of stepfamily arrangement is linked to better adjustment in children and adolescents
- Updated coverage of children with gay male or lesbian parents (Patterson & Hastings, 2007)
- New discussion of longitudinal study linking peer competence in middle and late childhood with competence at work and in close relationships in early adulthood (Collins & van Dulmen, 2006)
- Coverage of recent research on links between bullying and negative developmental outcomes (Brunstein & others, 2007; Srabstein & others, 2006)
- New *Research in Children's Development* interlude, Aggressive Victims, Passive Victims, and Bullies (Hanish & Guerera, 2004)
- New coverage of recent conclusions by experts in educational psychology that the most effective teachers often use both constructivist and direct instruction approaches (Bransford & others, 2006)
- Updated discussion of accountability and the No Child Left Behind legislation (McMillan, 2007)
- Coverage of Jonathan Kozol's (2005) recent book *The Shame of the Nation*, that portrays the continuing educational segregation and inequities of many minority students living in low-income circumstances



## Chapter 14

### PHYSICAL DEVELOPMENT IN ADOLESCENCE

- Extensive editing and restructuring for improved student understanding
- Important new section on developmental transitions from childhood to adolescence and from adolescence to adulthood, with a new description of what characterizes emerging adulthood (Arnett, 2006, 2007)
- Considerable updating and revision of material on hormones and adolescent behavior (DeRose & Brooks-Gunn, 2006; DeRose, Wright, & Brooks-Gunn, 2006)
- Coverage of seven recent research studies on body image and body dissatisfaction during adolescence that focus on ethnicity, appearance, developmental changes,

- mental health problems, health, and the best and worst aspects of being a boy or a girl (Bearman & others, 2006; Dyl & others, 2006; Gillen & others, 2006; Grabe & Hyde, 2006; Neumark-Sztainer & others, 2006; Schooler & others, 2004; Zittleman, 2006)
- New section, Body Art, that describes the increase use of tattooing and body piercing by adolescents and college students (Armstrong, Caliendo, & Roberts, 2006; Armstrong & others, 2004)
  - Extensive expansion, revision, and updating of brain development in adolescence with an emphasis on brain structure, cognition, and emotion
  - New discussion of the implications of the recent research on brain development in adolescence for the legal system, including whether this research can be used to decide whether an adolescent should be given the death penalty (Ash, 2006)
  - Description of recent research on patterns of TV viewing by high school students and links to their sexual stereotyping and sexual experience (Ward & Friedman, 2006)
  - Updated data on developmental changes in adolescents' sexual activities (MMWR, 2006)
  - New discussion of the dramatic increase in oral sex by U.S. adolescents (Bersamin & others, 2006)
  - Description of longitudinal study from 10 to 12 years of age to 25 years of age involving early sexual intercourse and problems in emerging adulthood (Cornelius & others, 2007)
  - Discussion of recent longitudinal study on adolescent contraceptive use (Anderson, Santelli, & Morrow, 2006)
  - Updated statistics on the number of U.S. adolescents and emerging adults who have AIDS (Centers for Disease Control and Prevention, 2007)
  - Inclusion of recent research on factors involved in inconsistent contraceptive use by African American female adolescents living in low-income circumstances (Davies & others, 2006)
  - New *Caring for Children* interlude, Reducing Adolescent Pregnancy, that includes information from a recent review of research on whether schools should have an abstinence-only or contraceptive-knowledge approach to sex education (Bennett & Assefi, 2005)
  - New *Diversity in Children's Development* interlude: Cross-Cultural Comparisons of Adolescent Pregnancy
  - Updated description of the reduction in U.S. adolescent pregnancy rates (Child Trends, 2006)
  - Recent research on the increasing recognition of the importance of family functioning in anorexia nervosa and its treatment (Benninghoven & others, 2007; Bulik & others, 2007)
  - Inclusion of recent research on a link between adolescent girls who hang out together and weight problems (Hutchinson & others, 2007)
  - Inclusion of recent data from the National Youth Risk Survey (2005) on high school students decreased intake of fruits and vegetables, including new Figure 14.9 (MMWR, 2006)
  - Description of recent data on the increase in the percentage of adolescents who are overweight (Eaton & others, 2006)
  - Discussion of recent data from the National Youth Risk Survey (2005) on adolescents' exercise patterns with a special focus on gender and ethnic variations (MMWR, 2006)
  - Coverage of recent data on ethnic variations in U.S. adolescents' exercise patterns, including new Figure 14.10
  - Description of results from the recent National Sleep Foundation (2006) survey on adolescent sleep patterns and new research photo of adolescent being assessed in Mary Carskadon's sleep laboratory
  - Coverage of two recent research studies that linked sleep deprivation in adolescence to health-compromising behaviors (Chen, Wang, & Jeng, 2006; Fuligni & Hardway, 2006)
  - New *Research in Children's Development* interlude: Evaluation of a Family Program Designed to Reduce Drinking and Smoking in Young Adolescents
  - Discussion of recent research review of school-based obesity interventions in adolescence (Sharma, 2006)
  - Description of recent information about including obesity prevention/intervention in after-school programs and healthier eating at school (Paxson & others, 2006; Story, Kaphingst, & French, 2006)
  - Updated results from the Monitoring the Future Study regarding adolescent substance use and abuse (Johnston & others, 2007)



## Chapter 15

### COGNITIVE DEVELOPMENT IN ADOLESCENCE

- Updated statistics that reveal the continuing decline in school dropout rates across ethnic groups (National Center for Education Statistics, 2007)
- New material on two conditions that improve the likelihood that service learning will generate positive outcomes (Nucci, 2006)
- Updated and expanded coverage of service learning outcomes (Hart, Atkins, & Donnelly, 2006)
- New *Research in Children's Development* interlude: Evaluating a Service Learning Program Designed to Increase Civic Engagement
- Description of recent research on outcomes of character education programs and the most common strategies used in effective programs (Berkowitz & Bier, 2006; Berkowitz & others, 2006)
- New coverage of Darcia Narvaez' integrative moral education approach
- New *Diversity in Children's Development* interlude: Cross-Cultural Comparisons of Secondary Schools

- Expanded and updated coverage of the positive role of religion in adolescent development (Cotton & others, 2006)
- Description of a recent large-scale study connecting religiosity in adolescence to a lower level of problem behaviors (Sinha, Cnaan, & Gelles, 2007)
- Expanded description of the link between identity development and spirituality (Templeton & Eccles, 2006)
- Updated discussion of the importance of various aspects of values in first-year college students' lives and their participation in religious activities and discussion of religion (Pryor & others, 2005)
- New section, Extracurricular Activities, reflecting increased interest in this aspect of school experiences (Fredricks & Eccles, 2006)
- Updated description of school dropout rates (Figure 15.3)
- Updated of The *Caring for Children* interlude: "I Have a Dream" Program to prevent school dropout (2007)
- New description of early- and late-onset antisocial behavior and their links with outcome in emerging adulthood (Schulenberg & Zarrett, 2006)
- New coverage of gangs in adolescence, including recent research (Dishion, Nelson, & Yasui, 2005; Lauber, Marshall, & Meyers, 2005)
- Updated trends on the incidence of various aspects of school violence in a national study (Eaton & others, 2006)
- New discussion of the onset of depression in early versus late adolescence and links with developmental outcomes (Schulenberg & Zarrett, 2006)
- Coverage of recent study linking adolescent depression to parent-adolescent conflict and low parental support (Sheeber & others, 2007)
- Updated coverage of suicide rates in adolescence and emerging adulthood (Minino, Heron, & Smith, 2006; Park & others, 2006)
- Description of recent research on suicidal thoughts in adolescence and a link with physical or sexual abuse (Evans, Hawton, & Rodham, 2005)
- Coverage of recent research linking suicidal thoughts to eating disorders in adolescence (Whetstone, Morrissey, & Cummings, 2007)
- Updated coverage of Joy Dryfoos' view on at-risk youth and successful programs to prevent or intervene in adolescent problems (Dryfoos & Barkin, 2006)
- Updated description of recent research involving the Fast Track intervention program (Dodge & the Conduct Problems Prevention Research Group, 2007)



## Chapter 16

### SOCIOEMOTIONAL DEVELOPMENT IN ADOLESCENCE

- New chapter-opening *Images of Children's Development*: Jewel Cash, Teen Dynamo
- New *Research in Children's Development* interlude: Adolescents' Self-Images
- Coverage of recent research studies on self-esteem in adolescence and emerging adulthood (Galambos, Barker, & Krahn, 2006; Trzesniewski & others, 2006)
- New discussion of James Cote's (2006) view on identity development in emerging adulthood
- New description of the importance of emotion regulation in adolescence and research linking emotional control to higher grades (Gumora & Arsanio, 2002)
- Inclusion of information about early-maturing adolescents experiencing more conflict with parents than those who mature on time or late (Collins & Steinberg, 2006)
- Discussion of recent longitudinal study on a number of dimensions of parenting linked with competent or deviant outcomes in adolescents (Goldstein & others, 2005)
- New *Caring for Children* interlude, Strategies for Parenting Adolescents
- Description of three recent studies linking affiliation with deviant, antisocial peers in adolescence to drug use, delinquency, and depression (Connell & Dishion, 2006; Laird & others, 2006; Nation & Heflinger, 2006)
- Commentary about developmental changes in reputation-based crowds in adolescence (Collins & Steinberg, 2006)
- New section on immigration in the discussion of ethnicity and culture (Parke & Buriel, 2006)
- New discussion of recent research on discrimination of ethnic minority adolescents, including new Figure 16.7 (DeGarmo & Martinez, 2006; Sellers & others, 2006)

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## SUPPLEMENTS

### For The Instructor

The instructor side of the Online Learning Center at <http://www.mhhe.com/santrockc10e> contains the Instructor's Manual, Test Bank files, PowerPoint slides, Image Gallery, and other valuable material to help you design and enhance your course. Ask your local McGraw-Hill representative for your password.

### Instructor's Manual

by **Andrea Rosati**, *Elmira College*

Each chapter of the *Instructor's Manual* is introduced by a Total Teaching Package Outline. This fully integrated tool helps instructors more easily locate and choose among the many resources available for the course by linking each element of the Instructor's Manual to a particular teaching topic within the chapter. These elements include chapter outline, suggested lecture topics, classroom activities and demonstrations, suggested student research projects, essay questions, critical thinking questions, and implications for guidance.

### Test Bank and Computerized Test Bank

by **John Addleman**, *Messiah College*

This comprehensive Test Bank includes more than 2,000 multiple-choice and approximately 75 essay questions. Organized by chapter, the questions are designed to test factual, applied, and conceptual understanding. All test questions are compatible with EZ Test, McGraw-Hill's Computerized Test Bank program.

### Powerpoint Slides

by **L. Ann Butzin**, *Owens Community College*

These presentations cover the key points of each chapter and include charts and graphs from the text. They can be used as is, or you may modify them to meet your specific needs.

### CPS Questions

by **Alisha Janowsky**, *University  
 of Central Florida*

These questions, formatted for use with the interactive Classroom Performance System, are organized by chapter and designed to test factual, applied, and conceptual understanding. These test questions are also compatible with EZTest, McGraw-Hill's Computerized Test Bank program.

## McGraw-Hill's Visual Asset Database for Lifespan Development ("VAD")

McGraw-Hill's Visual Assets Database for Lifespan Development (VAD 2.0) [www.mhhe.com/vad](http://www.mhhe.com/vad) is an on-line database of videos for use in the developmental psychology classroom, created specifically for instructors. You can customize classroom presentations by downloading the videos to your computer and showing the videos on their own or insert them into your course cartridge or PowerPoint presentations. All of the videos are available with or without captions. Ask your McGraw-Hill representative for access information.

## Multimedia Courseware For Child Development

**Charlotte J. Patterson, University of Virginia**

This video-based set of two CD-ROMS covers classic and contemporary experiments in child development. Respected researcher Charlotte J. Patterson selected the content and wrote accompanying modules that can be assigned to students. These modules include suggestions for additional projects as well as a testing component. Multimedia Courseware can be packaged with the text at a discount.

## Annual Editions: Child Growth and Development 08/09

This reader is a collection of articles on topics related to the latest research and thinking in human development. Annual Editions are updated regularly and include useful features such as a topic guide, an annotated table of contents, unit overviews, and a topical index.

## Taking Sides: Clashing Views in Childhood and Society

Current controversial issues are presented in a debate-style format designed to stimulate student interest and develop critical thinking skills. Each issue is thoughtfully framed with an issue summary, an issue introduction, and a postscript.

## Cases in Child and Adolescent Development for Teachers

Containing more than 40 cases, *Case Studies in Child and Adolescent Development for Teachers* brings developmental issues to life. The reality-based cases address a variety of developmental issues, giving students an opportunity to think critically about the way development influences children everyday.

## FOR THE STUDENT:

### Online Learning Center (OLC)

This companion website, at [www.mhhe.com/santrockc10e](http://www.mhhe.com/santrockc10e) offers a wide variety of student resources. Multiple Choice, True/False, and Matching Tests for each chapter reinforce key principles, terms, and ideas, and cover all the major concepts discussed throughout the text. Entirely different from the test items in the Test Bank, the questions have been written to quiz students but also to help them learn. Key terms from the text are reproduced in a Glossary of Key Terms where they can be accessed in alphabetical order for easy reference and review. Decision Making Scenarios present students with the opportunity to apply the information in the chapter to realistic situations, and see what effects their decisions have.

# VISUAL TOUR FOR STUDENTS

This book provides you with important study tools to help you more effectively learn about child development. Especially important is the learning goals system that is integrated throughout each chapter. In the visual walk-through of features, pay special attention to how the learning goals system works.

## THE LEARNING GOALS SYSTEM

Using the learning goals system will help you to learn the material more easily. Key aspects of the learning goals system are the learning goals, chapter maps, Review and Reflect, and Reach Your Learning Goals sections, which are all linked together. At the beginning of each chapter, you will see a page that includes both a chapter outline and three to six learning goals that preview the chapter's main themes and underscore the most important ideas in the chapter. Then, at the beginning of each major section of a chapter, you will see a mini-chapter map that provides you with a visual organization of the key topics you are about to read in the section. At the end of each section is Review and Reflect, in which the learning goal for the section is restated, a series of review questions related to the mini-chapter map are asked, and a question that encourages you to think critically about a topic related to the section appears. At the end of the chapter, you will come to a section titled Reach Your Learning Goals. This includes a restatement of the chapter's learning goals and a summary of the chapter's content that is directly linked to the chapter outline at the beginning of the chapter and the questions asked in the Review part of Review and Reflect within the chapter. The summary essentially answers the questions asked in the within-chapter Review sections.

## THE LEARNING GOALS SYSTEM

**1** Introduction

*We reach backward to our parents and forward to our children and through their children to a future we will never see, but about which we need to care.*

—CARL JUNG  
Swiss Psychoanalyst, 20th Century

CHAPTER OUTLINE	LEARNING GOALS
<b>WHY IS CARING FOR CHILDREN IMPORTANT?</b> The Importance of Studying Children's Development Improving the Lives of Children	<b>1</b> Explain why it is important to study children's development, and identify five areas in which children's lives need to be improved.
<b>WHAT ARE SOME HISTORICAL VIEWS OF CHILD DEVELOPMENT?</b> Early Views of Childhood The Modern Study of Child Development	<b>2</b> Characterize historical views of children.
<b>WHAT CHARACTERIZES DEVELOPMENT?</b> Biological, Cognitive, and Socioemotional Processes Periods of Development Issues in Development	<b>3</b> Discuss the most important processes, periods, and issues in development.
<b>HOW IS CHILD DEVELOPMENT A SCIENCE?</b> The Importance of Research Theories of Child Development Research Methods for Collecting Data Research Designs Research Challenges	<b>4</b> Summarize why research is important in child development, the main theories of child development, and research methods, designs, and challenges.

## CHAPTER- OPENING OUTLINE AND LEARNING GOALS

## MINI-CHAPTER MAP

Why Is Caring for Children Important? 7

**1 WHY IS CARING FOR CHILDREN IMPORTANT?**

The Importance of Studying Children's Development      Improving the Lives of Children

Caring for children is an important theme of this text. To think about why caring for children is such an important theme, we explore why it is beneficial to study children's development and some areas in which children's lives need to be improved. Just what do we mean when we speak of an individual's development? **Development** is the pattern of change that begins at conception and continues through the life span. Most development involves growth, although it also includes decay.

**The Importance of Studying Children's Development**

How might you benefit from examining children's development? Perhaps you are, or will be, a parent or teacher and you want to learn about children so that you can become a better parent or educator. Perhaps you hope to gain some insight about your own history—as an infant, a child, and an adolescent. Or perhaps you think that the study of children's development might raise some provocative issues. Whatever your reasons for reading this book, you will discover that the study of children's development is intriguing and filled with information about who we are and how we came to be this way.

## REVIEW AND REFLECT

**REVIEW AND REFLECT**      **LEARNING GOAL 1**

**1 Explain why it is important to study children's development, and identify five areas in which children's lives need to be improved.**

**Review**

- Why is it important to study children's development?
- What are five aspects of children's development that need to be improved?

**Reflect**

- Imagine what your development as a child would have been like in a culture that offered fewer or distinctly different choices than your own? How might your development have been different if your family was significantly richer or poorer than it was?

## REACH YOUR LEARNING GOALS

**REACH YOUR LEARNING GOALS**

**1 WHY IS CARING FOR CHILDREN IMPORTANT?** *Explain why it is important to study children's development, and identify five areas in which children's lives need to be improved.*

The Importance of Studying Children's Development

Improving the Lives of Children

- Studying children's development is important because it will help you to better understand your own childhood and provide you with strategies for being a competent parent or educator.
- Health and well-being is an important area in which children's lives can be improved. Today, many children in the United States and around the world need improved health care. We now recognize the importance of lifestyles and psychological states in promoting health and well-being. Parenting is an important influence on children's development. One-parent families, working parents, and child care are among the family issues that influence children's well-being. Education can also contribute to children's health and well-being. There is widespread concern that the education of children needs to be more effective, and there are many views in contemporary education about ways to improve schools. Sociocultural contexts are important influences on children's development. Contexts, culture, ethnicity, socioeconomic status, and gender are four key aspects of sociocultural contexts. Social policy is a national government's course of action designed to influence the welfare of its citizens. Researchers increasingly are conducting studies that are related to social policy.

**2 WHAT ARE SOME HISTORICAL VIEWS OF CHILD DEVELOPMENT?** *Characterize historical views of children.*

Early Views of Childhood

The Modern Study of Child Development

- The history of interest in children is long and rich. Prior to the nineteenth century, philosophical views of childhood were prominent, including the notions of original sin (children are basically bad, born into the world as evil beings), *tabula rasa* (children are not innately bad or good but rather like a "blank tablet"), and innate goodness (children are inherently good). Today, we conceive of childhood as an important time of development.
- The modern era of studying children spans a little more than a century, an era in which the study of child development has become a sophisticated science. During the late 1800s, a major shift took place—from a strictly philosophical perspective to one that focuses on direct observation and experimentation. During the 1920s, a number of child development research centers were created. Early modern theorists included Arnold Gesell, who argued that certain characteristics of children simply "bloom" with age because of a biological, maturational blueprint; G. Stanley Hall, who theorized that child development follows an evolutionary course; Sigmund Freud, who thought that children were rarely aware of the motives and reasons for their behaviors; John Watson, who argued that children can be shaped into whatever society wishes by examining and changing the environment; James Mark Baldwin, who was a pioneer in the study of children's thought; and Jean Piaget, who proposed a sequence of cognitive stages that children pass through.

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## OTHER LEARNING SYSTEM FEATURES

### RESEARCH IN CHILDREN'S DEVELOPMENT INTERLUDE

One *Research in Children's Development* interlude appears in every chapter. The *Research* interludes describe a research study or program and are designed to acquaint you with how research on child development is conducted.

**Research in Children's Development**

**RESEARCH JOURNALS**

Regardless of whether you pursue a career in child development, psychology, or some related scientific field, you can benefit by learning about the journal process. As a student you might be required to look up original research in journals. As a parent, teacher, or nurse you might want to consult journals to obtain information that will help you understand and work more effectively with people. And as an inquiring person, you might look up information in journals after you have heard or read something that piqued your curiosity.

A journal publishes scholarly and academic information, usually in a specific domain—like physics, math, sociology, or, our current interest, child development. Scholars in these fields publish most of their research in journals, which are the source of core information in virtually every academic discipline.

An increasing number of journals publish information about child development. Among the leading journals in child development are *Developmental Psychology*, *Child Development*, *Developmental Psychopathology*, *Pediatrics*, *Pediatric Nursing*, *Infant Behavior and Development*, *Journal of Research on Adolescence*, *Human Development*, and many others. Also, a number of journals that do not focus solely on development include articles on various aspects of human development. These journals include *Journal of Educational Psychology*, *Sex Roles*, *Journal of Cross-Cultural Research*, *Journal of Marriage and the Family*, *Exceptional Children*, and *Journal of Consulting and Clinical Psychology*.

Every journal has a board of experts who evaluate articles submitted for publication. Each submitted paper is accepted or rejected on the basis of such factors as its contribution to the field, methodological excellence, and clarity of writing. Some of the most prestigious journals reject as many as 80 to 90 percent of the articles submitted.

Journal articles are usually written for other professionals in the specialized field of the journal's focus; therefore, they often contain technical language and terms specific to the discipline that are difficult for nonprofessionals to understand. Their organization often takes this course: abstract, introduction, method, results, discussion, and references.

The *abstract* is a brief summary that appears at the beginning of the article. The abstract lets readers quickly determine whether the article is relevant to their interests. The *introduction* introduces the problem or issue that is being studied. It includes a concise review of research relevant to the topic, theoretical ties, and one or more hypotheses to be tested. The *method* section consists of a clear description of the subjects evaluated in the study, the measures used, and the procedures that were followed. The method section should be sufficiently clear and detailed so that by reading it another researcher could repeat or replicate the study. The *results* section reports the analysis of the data collected. In most cases, the results section includes statistical analyses that are difficult for nonprofessionals to understand. The *discussion* section describes the author's conclusions, inferences, and interpretation of what was found. Statements are usually made about whether the hypotheses presented in the introduction were supported, limitations of the study, and suggestions for future research. The last part of the journal article, called *references*, includes bibliographic information for each source cited in the article. The references section is often a good source for finding other articles relevant to the topic that interests you.

Where do you find journals such as those we have described? Your college or university library likely has some of them, and some public libraries also carry journals. Online resources such as PsycINFO, which can facilitate the search for journal articles, are available to students on many campuses.

### CARING FOR CHILDREN INTERLUDE

Every chapter has one *Caring for Children* interlude, which provides applied information about parenting, education, or health and well-being related to a topic in the chapter.

**Caring for Children**

**IMPROVING FAMILY POLICY**

In the United States, the national government, state governments, and city governments all play a role in influencing the well-being of children (Children's Defense Fund, 2007; Corbett, 2007). When families fail, or seriously endanger a child's well-being, governments often step in to help (Ross & Kirby, 2006). At the national and state levels, policy makers for decades have debated whether helping poor parents ends up helping their children as well. Researchers are providing some answers by examining the effects of specific policies (Adams & Snyder, 2006; Sandefur & Meier, 2007).

For example, the Minnesota Family Investment Program (MFIP) was designed in the 1990s primarily to affect the behavior of adults—specifically, to move adults off the welfare rolls and into paid employment. A key element of the program was that it guaranteed that adults who participated in the program would receive more money if they worked than if they did not. When the adults' income rose, how did that affect their children? A study of the effects of MFIP found that increases in the incomes of working poor parents were linked with benefits for their children (Genetian & Miller, 2002). The children's achievement in school improved, and their behavior problems decreased.

Developmental psychologists and other researchers have examined the effects of many other government policies. They are seeking ways to help families living in poverty improve their well-being, and they have offered many suggestions for improving government policies (Coley, Li-Grining, & Chase-Lansdale, 2006; Genetian, Crosby, & Houston, 2006).

## DIVERSITY IN CHILDREN'S DEVELOPMENT INTERLUDE

Once each chapter, a *Diversity in Children's Development* interlude appears to provide information about diversity related to a chapter topic.



**Diversity in Children's Development**


**GENDER, FAMILIES, AND CHILDREN'S DEVELOPMENT**

Around the world, the experiences of male and female children and adolescents continue to be quite different (Brown & Larson, 2002; Kagitcibasi, 2007; UNICEF, 2007). Except in a few areas, such as Japan, the Philippines, and Western countries, males have far greater access to educational opportunities than females. In many countries, adolescent females have less freedom to pursue a variety of careers and engage in various leisure acts than males. Gender differences in sexual expression are widespread, especially in India, Southeast Asia, Latin America, and Arab countries—where there are far more restrictions on the sexual activity of adolescent females than males. In certain areas around the world, these gender differences do appear to be narrowing over time. In some countries, educational and career opportunities for women are expanding, and in some parts of the world control over adolescent girls' romantic and sexual relationships is weakening. However, in many countries females still experience considerable discrimination, and much work is needed to bridge the gap between the rights of males and females.

In certain parts of the world, children grow up in closely knit families with extensive extended kin networks "that provide a web of connections and reinforce a traditional way of life" (Brown & Larson, 2002, p. 6). For example, in Arab countries, adolescents are required to adopt strict codes of conduct and loyalty. However, in Western countries such as the United States, children and adolescents are growing up in much larger numbers in divorced families and stepfamilies. Parenting in Western countries is less authoritarian than in the past.

## QUOTATIONS

These appear occasionally in the margins to stimulate further thought about a topic.



*What would the world be to us if the children were no more? We should dread the desert behind us Worse than the dark before.*

—HENRY WADSWORTH LONGFELLOW  
*American Poet, 19th Century*

of examples to follow in studying children. In addition, philosophers of the time debated, on both intellectual and ethical grounds, whether the methods of science were appropriate for studying people.

The deadlock was broken when some daring thinkers began to try new methods of studying infants, children, and adolescents. For example, near the turn of the century, French psychologist Alfred Binet invented many tasks to study attention and memory. He used them to study his own daughters, other normal children, children with mental retardation, extremely gifted children, and adults. Eventually, he collaborated in the development of the first modern test of intelligence (the Binet test). At about the same time, G. Stanley Hall pioneered the use of questionnaires with large groups of children. In one investigation, Hall tested 400 children in the

## CRITICAL-ThINKING AND CONTENT QUESTIONS IN PHOTOGRAPH CAPTIONS

Most photographs have a caption that ends with a critical-thinking or knowledge question in italics to stimulate further thought about a topic.



## KEY TERMS AND GLOSSARY

Key terms appear in boldface. Their definitions appear in the margin near where they are introduced.

The **prenatal period** is the time from conception to birth, roughly a nine-month period. During this amazing time, a single cell grows into an organism, complete with a brain and behavioral capabilities.

**Infancy** is the developmental period that extends from birth to about 18 to 24 months of age. Infancy is a time of extreme dependence on adults. Many psychological activities are just beginning—the ability to speak, to coordinate sensations and physical actions, to think with symbols, and to imitate and learn from others.

**Early childhood** is the developmental period that extends from the end of infancy to about 5 to 6 years of age; sometimes this period is called the preschool years. During this time, young children learn to become more self-sufficient and to care for themselves, they develop school readiness skills (following instructions, identifying letters), and they spend many hours in play and with peers. First grade typically marks the end of this period.

**Middle and late childhood** is the developmental period that extends from about 6 to 11 years of age; sometimes this period is referred to as the elementary school years. Children master the fundamental skills of reading, writing, and arithmetic, and they are formally exposed to the larger world and its culture. Achievement becomes a more central theme of the child's world, and self-control increases.

**Adolescence** is the developmental period of transition from childhood to early adulthood, entered at approximately 10 to 12 years of age and ending at 18 to 22 years of age. Adolescence begins with rapid physical changes—dramatic gains in height and weight; changes in body contour; and the development of sexual

**cognitive processes** Changes in an individual's thought, intelligence, and language.

**socioemotional processes** Changes in an individual's relationships with other people, changes in emotions, and changes in personality.

**prenatal period** The time from conception to birth.

**infancy** The developmental period that extends from birth to 18 to 24 months of age.

**early childhood** The developmental period that extends from the end of infancy to about 5 to 6 years of age; sometimes called the preschool years.

**middle and late childhood** The developmental period that extends from about 6 to 11 years of age, sometimes called the elementary school years.

**adolescence** The developmental period of transition from childhood to early adulthood, entered at approximately 10 to 12 years of age and ending at 18 to 22 years of age.

## CAREERS IN CHILD DEVELOPMENT PROFILES

Throughout the book, *Careers in Child Development* profiles feature a person working in a child development field related to the chapter's content.

Key terms also are listed and page-referenced at the end of each chapter.

**KEY TERMS**

cephalocaudal pattern 143	dynamic systems theory 158	fine motor skills 163	habituation 167
proximodistal pattern 144	reflexes 159	sensation 165	dishabituation 167
lateralization 146	rooting reflex 159	perception 165	size constancy 170
sudden infant death syndrome (SIDS) 151	sucking reflex 159	ecological view 165	shape constancy 170
marasmus 155	Moro reflex 159	affordances 166	intermodal perception 173
kwashiorkor 155	grasping reflex 159	visual preference method 167	
	gross motor skills 160		

Key terms are alphabetically listed, defined, and page-referenced in a Glossary at the end of the book.

**GLOSSARY**

**A**

**accommodation** Piagetian concept of adjusting schemes to fit new information and experiences.

**acculturation** Cultural changes that occur when one culture comes into contact with another.

**active (niche-picking) genotype-environment correlations** Correlations that exist when children seek out environments they find compatible and stimulating.

**anesthesia** Drugs used in late first-stage labor and during expulsion of the baby to block sensation in an area of the body or to block consciousness.

**anger cry** A variation of the basic cry, with more excess air forced through the vocal cords.

**animism** The belief that inanimate objects have lifelike qualities and are capable of action.

**anorexia nervosa** An eating disorder that involves the relentless pursuit of thinness through starvation.

**A-not-B error** Also called AB error, this

terly show one or more of the following characteristics: (1) inattention, (2) hyperactivity, and (3) impulsivity.

**authoritarian parenting** A restrictive punitive style in which parents exhort the child to follow their directions and to respect work and effort. The authoritarian parent places firm limits and controls on the child and allows little verbal exchange. Authoritarian parenting is associated with children's social incompetence.

**authoritative parenting** A parenting style in

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**Careers in CHILD DEVELOPMENT**

**Pam Reid**  
Educational and Development Psychologist

When she was a child, Pam Reid liked to play with chemistry sets. She majored in chemistry during college and wanted to become a doctor. However, when some of her friends signed up for a psychology class as an elective, she also decided to take the course. She was intrigued by learning about how people think, behave, and develop—so much so that she changed her major to psychology. Reid went on to obtain her Ph.D. in psychology (American Psychological Association, 2003, p. 16).

For a number of years, Reid was professor of education and psychology at the University of Michigan, where she also was a research scientist at the Institute for Research on Women and Gender. Her main focus has been on how children and adolescents develop social skills with a special interest in the development of African American girls (Reid & Zalk, 2001). In 2004, Reid became Provost and Executive Vice-President at Roosevelt University in Chicago.

must ensure that the deception will not harm the participants and that the participants will be told the complete nature of the study (debriefed) as soon as possible after the study is completed.

**Minimizing Bias** Studies of life-span development are most useful when they are conducted without bias or prejudice toward any particular group of people. Of special concern is bias based on gender and bias based on culture or ethnicity.

**Gender Bias** For most of its existence, our society has had a strong gender bias, a preconceived notion about the abilities of males and females that prevented individuals from pursuing their own interests and achieving their potential (Matlin, 2008; Worell & Goodheart, 2006). Gender bias also has had a less obvious effect within the field of child development. For example, it is not unusual for conclusions to be drawn about females' attitudes and behaviors from research conducted with males as the only participants.

Furthermore, when researchers find gender differences, their reports sometimes magnify those differences (Denmark & others, 1988). For example, a researcher might report that 74 percent of the boys in a study had high achievement expectations versus only 67 percent of the girls and go on to talk about the differences in some detail. In reality, this might be a rather small difference. It also might disappear if the study were repeated, or the study might have methodological problems that don't allow such strong interpretations.

Pam Reid is a leading researcher who studies gender and ethnic bias in development. To read about Pam's interests, see the *Careers in Child Development* profile.

**Cultural and Ethnic Bias** The realization that research on children's development needs to include more children from diverse ethnic groups has also been building (Graham, 1992, 2006). Historically, children from ethnic minority groups (African American, Latino, Asian American, and Native American) were excluded from most research in the United States and simply thought of as variations from the norm or average. If minority children were included in samples and their scores



Pam Reid (center, back row) with some of the graduate students she mentored at the University of Michigan.

## KEY PEOPLE

The most important theorists and researchers in each chapter are listed and page-referenced at the end of each chapter.

### KEY PEOPLE

Mark Rosenzweig \*\*\*  
Ernesto Pollitt \*\*\*  
T. Berry Brazelton \*\*\*  
Esther Thelen \*\*\*

Karen Adolph \*\*\*  
Eleanor and James  
J. Gibson \*\*\*

Robert Fantz \*\*\*  
William James \*\*\*  
Richard Walk \*\*\*

## MAKING A DIFFERENCE

At the end of each chapter, this feature provides practical information that individuals can use to improve the lives of children.

### MAKING A DIFFERENCE

#### Supporting the Infant's Physical Development

What are some good strategies for helping the infant develop in physically competent ways?

- *Be flexible about the infant's sleep patterns.* Don't try to put the infant on a rigid sleep schedule. By about 4 months of age, most infants have moved closer to adultlike sleep patterns.
- *Provide the infant with good nutrition.* Make sure the infant has adequate energy and nutrient intake. Provide this in a loving and supportive environment. Don't put an infant on a diet. Weaning should be gradual, not abrupt.
- *Breast feed the infant, if possible.* Breast feeding provides more ideal nutrition than bottle feeding. If because of work demands the mother cannot breast feed the infant, she should consider "pumping."
- *Toilet train the infant in a warm, relaxed, supportive manner.* Twenty months to 2 years of age is a recommended time to begin toilet training, so that it is accomplished before

the "terrible twos." Like good strategies for the infant's sleep and nutrition, toilet training should not be done in a harsh, rigid way.

- *Give the infant extensive opportunities to explore safe environments.* Infants don't need exercise classes. What they should be provided are many opportunities to actively explore safe environments. Infants should not be constricted to small, confined environments for any length of time.
- *Don't push the infant's physical development or get uptight about physical norms.* In American culture, we tend to want our child to grow faster than other children. Remember that there is wide individual variation in normal physical development. Just because an infant is not at the top of a physical chart doesn't mean parents should start pushing the infant's physical skills. Infants develop at different paces. Respect and nurture the infant's individuality.

## RESOURCES FOR IMPROVING CHILDREN'S LIVES

At the end of each chapter, resources provide information about books, Web sites, and organizations relevant to the chapter's topics.

### RESOURCES FOR IMPROVING CHILDREN'S LIVES

#### Child Art in Context

by Claire Golomb (2002)  
Washington, DC: American Psychological Association

One of the world's leading experts on children's art reviews the latest research and presents her contextual theory of children's art. Includes many children's drawings to illustrate points related to the theory.

#### American Academy of Pediatrics

www.aap.org

This Web site provides extensive information about strategies for improving children's health.

#### How Children Learn to Be Healthy

by Barbara Tinsley (2003)  
New York: Cambridge University Press

A leading expert explores the ways in which health behavior develops in children, especially focusing on the roles of parents, schools, and the media in influencing children's health.

## E-LEARNING TOOLS

This feature appears at the end of each chapter and consists of three parts: *Taking It to the Net* Internet problem-solving exercises; *Video Clips*, which provide interesting visual material related to the chapter's content, and *Health and Well-Being, Parenting, and Education* exercises, which provide an opportunity to practice decision-making skills related to real-world applications. By going to the Online Learning Center for this book, you can complete these valuable and enjoyable exercises, and you will find many learning activities to improve your knowledge and understanding of the chapter.

### E-LEARNING TOOLS

Connect to [www.mhhe.com/santrock10](http://www.mhhe.com/santrock10) to research the answers and complete these exercises. In addition, you'll find a number of other resources and valuable study tools for Chapter 4, "Birth," on this Web site.

#### Taking It to the Net

1. Jessica and Eric have just given birth to their first child. Eric has noticed that since the birth three months ago, Jessica has seemed a bit withdrawn and sad. He remembers from their Lamaze classes that there is a condition called postpartum depression. What can Eric do to help Jessica through this difficult time period?
2. The author of your text provides a summary of the most widely used birthing methods in the United States. What other birthing methods might a woman consider?

3. You have just given birth, and the nurse has informed you that tomorrow your baby will be assessed using the Brazelton Neonatal Behavioral Assessment Scale. What will your baby's experience be like during this assessment?

#### Health and Well-Being, Parenting, and Education

Build your decision-making skills by trying your hand at the health and well-being, parenting, and education exercises.

#### Video Clips

The Online Learning Center includes the following video for this chapter:

1. *Midwifery—1524*  
A certified midwife discusses midwives and how they differ from obstetricians.

