

Our students often ask us at the beginning of the term why they should study child development and how it will be useful in their lives. As child development instructors for more than 25 years, we have tried our best to follow the example of great teachers who have come before us. We believe that *how* you teach is as important as *what* you teach. We teach to our students' interests and needs, and we resist the temptation to cover everything we *could* cover, and instead treat what we do cover in a scientific and intellectually honest way. How do we decide what to cover and what can be left out? We start by asking how much impact the material is likely to have on the lives of our students, whether they become parents, teachers, nurses, social workers, or child development researchers themselves. We then make sure that we cover both the current science and applications of the material to ensure that students have an accurate view of where the field is today.

As researchers and university professors we have witnessed exciting changes in the field of child development. From new research on brain development to behavior genetics to new theories of the intricacies of social interactions, developments in this area of psychology continue to provide great insights, challenges, and debates. We are continually inspired by the impact the field of child development has on real lives. Every day, health-care professionals, educators, social workers, day care workers, parents, and, yes, psychologists rely upon developmental science research to perform their professional and personal duties, as they nurture, educate, and otherwise care for the children in their lives. It is this connection between the science and **real people facing real issues** that that we try to convey to our students and to the reader of this textbook.

Our mission in writing this textbook was to ensure we answered the “why” and “how” clearly throughout. We also believe strongly in learning outcomes and in applying principles of educational psychology, learning, and cognitive science to help our students get more out of the course. After all, if we want them to leave the course with a strong appreciation of how developmental science can be a force for positive change in people's lives, we must ensure that they are truly learning, not merely memorizing, the concepts presented in this course. It is increasingly important that students are able to thoughtfully reflect on, critically evaluate, and make practical use of the information they are learning. We consistently prompt students to evaluate and apply the concepts they are learning so they can more effectively use the information in their careers and in their daily lives. Most of our text focuses on contemporary science and on what is happening in the field today—but in order to understand the present, we must reflect on the past. Included in the text are both the classic studies within their historical context and an overview of how these studies have influenced, and continue to influence, how psychologists think about the field of child development. This review helps explain how particular scientific approaches emerged or were adapted or rejected over time. We want to remind students that just as adults are influenced by childhood experiences, the science of child development has been shaped by its past.

Goals of the Text

The World of Children adopts three important goals for the text and the user:

- Focus on real people facing real issues;
- Teach students to think critically about the research;
- Help students make connections between science and practice.

Every feature in our text is thoughtfully designed as part of an integrated system to support active learning, and we hope you will agree that our textbook satisfies these goals.

GOAL 1 Focus on Real People Facing Real Issues

We want students to see an important purpose in studying child development. We are convinced that the science of child development can be very useful in helping real families and real children, and we want students to think about the research in the context of the real issues real families face. To that end, every chapter begins with a case about a real family or a child who is in a situation where more knowledge of child development can be helpful. Supporting the chapter opening cases are video interviews with these same families in MyPsychLab (www.mypsychlab.com). These real cases encourage students to take what they are learning in each chapter and apply it to creating advice for the profiled individuals.

GOAL 2 Teach Students to Think Critically about the Research

We want students to learn new facts and information, but more important, we want students to understand how these new facts and information are generated in our field and to develop skills to evaluate and analyze this information. Throughout the textbook, we take opportunities to show students how research methods work in our field, and we remind them of the important limitations in the methods. The chapter opening cases and the *Think About . . .* questions that appear throughout the chapter are designed to jumpstart the critical thinking process by putting students in the shoes of others and asking them to think about how the research might apply to those individuals' situations. Throughout the chapter we use *Thinking Critically* questions in the margins to provoke deeper, more analytical reflection on the content of the chapter.

The learning objectives at the beginning of each section and brief review quizzes at the end of each section encourage students to think about the material more thoroughly. In this edition, the learning objectives and review quizzes have been categorized by cognitive level (*Know, Understand, Apply, Think Critically*). As instructors, one challenge we frequently face is helping students realize that simply recognizing or being able to restate information in their own words is only one level of learning, and that deep understanding requires that they critically analyze information, apply it to realistic problems, and integrate across concepts to build the “bigger picture.” Providing specific learning objectives that are clearly labeled at different levels, supported by margin notes prompting application and critical thinking, help students think about the material at multiple levels.

GOAL 3 Help Students Make Connections between Science and Practice

The field of child development has much to offer students and society in terms of practical advice for parents and professionals as well as guidance on social policy issues, and this advice is based on a solid foundation of research.

Exploring Different Perspectives Professional Perspective

In each **Professional Perspective** box, a real professional discusses how he or she uses child development information. Using an interview format, each of these features introduces students to a different career; by

the end of the book, students have explored 15 different career paths (among them social work, genetic counseling, clinical and counseling psychology, school psychology, and marketing) that involve work with children, adolescents, and development.

Personal Perspective

Also presented as an interview, **Personal Perspective** boxes allow students to connect with the personal feelings of an actual parent, child, or adolescent who is experiencing an issue discussed in the chapter. This feature allows students to see how real people of all backgrounds relate to child development issues.

Social Policy Perspective

We designed **Social Policy Perspective** boxes to give students an understanding of how work in the field of child development can inform government officials, community service agencies, and others who have wide-ranging effects on the lives of children. This feature focuses on many of the controversial issues in society, examining the perspectives of both sides of each debate. It highlights the ways in which programs, laws, regulations, and other factors can affect children and asks students to think about the impact of social policies.

Taken together, these different *perspective* features help students see how child development information is useful in a wide variety of professional, personal, and social situations. They also help students understand the real-life challenges faced by professionals, parents, volunteers, and policy makers whose work relates to the field of child development.

Changes Made to the Third Edition

In addition to the new features mentioned previously, we are pleased to list the following chapter-by-chapter changes made to this edition:

Chapter 1:

- Added discussion of the biopsychosocial approach to understanding development.
- Added info on connectomics, a new technology to visualize all the neural connections within an intact brain.
- Updated the recurring themes (repeated throughout the text) of nature and nurture, the role of neuroscience, diversity and multiculturalism, and positive development and resilience
- Updated the “Revisiting Themes” section at the end of the chapter—this section will occur at the end of every chapter to review connections for that chapter to the recurring themes.
- Updated example of experimental study to describe influence of a reading intervention on children’s reading skills.
- Updated statistics in **Social Policy Perspective** box: Every Day in America.

Chapter 2:

- Included separate section on how twins are formed, including formation of half-identical twins.
- Clarified description of dominant and recessive gene diseases.
- Added concepts of polygenic inheritance patterns and of pleiotropic genes.
- Added information on maternal blood analysis approach to prenatal testing.
- Added information about three-dimensional ultrasonography.

- Updated data in Table 2.4 on heritabilities.
- Added key term *polygenic traits*.

Chapter 3:

- Updated data on survival rates for very preterm and preterm infants.
- Added discussion of direct vs. indirect effects of teratogens and the fetal origins of adult disease concept.
- Updated information on the statistics and use of alcohol, cocaine, cigarette smoking, and other teratogens during pregnancy.
- Added discussion of fetal alcohol spectrum disorder.
- Added research on amount of alcohol that can be harmful (small amounts cause brain damage) and neuroscience findings regarding long-term effects of prenatal cocaine exposure.
- Updated statistics on prenatal exposure to infectious diseases herpes, syphilis, and AIDS/HIV.
- Updated statistics on rate of regular and binge drinking by women and men in the United States, relating this to the question of responsibility for healthy pregnancies.
- Added section on Cesarean section delivery, including rates, reasons for it, and potential complications.

Chapter 4:

- Reordered subsections in *Growth of Brain and Body* section to improve flow of text.
- Updated statistics on infant prematurity and mortality.
- Added definition of intrauterine growth restriction, sometimes called small for gestational age, and long-term problems associated with this condition.
- Updated statistics on percentage of women receiving prenatal care early in pregnancy.
- Updated statistics on the “back to sleep” campaign to reduce SIDS.
- Updated statistics on rates of breastfeeding worldwide.
- Updated information on perception of smell and taste.
- Added key term *intrauterine growth restriction*.

Chapter 5:

- Updated research on infant perception of faces.
- Added information on neuroscience use of fetal magnetoencephalography (fMEG) to assess fetal habituation.
- Updated neuroscience research comparing adult and infant patterns of brain activation in object permanence tasks.
- Added concept of embodied cognition.
- Updated research on nonhuman use of language, and on criticisms of nativist theory of language development.
- Added neuroscience research on infant response to child-directed speech.
- Updated information on language skills of newborn infants.

Chapter 6:

- Added information about the attachment Q-sort (AQS) method.
- Updated cross-cultural results on caregiver sensitivity as related to attachment.
- Added mention of the interaction between genetic susceptibility and caregiving in the development of attachment.
- Added discussion of assessing father–infant attachment.
- Updated longitudinal research on attachment, including a discussion of secure attachment as a protective factor for children with genetic risks.

Updated information on parental leave policies.
 Added discussion of relation between temperament and prenatal exposure to stress.
 Updated neuroscience studies on emotion processing in infancy.
 Updated research on young children's sensitivity to other children's reactions to toys.
 Updated research on infants' recognition of conflict and social dominance.

Chapter 7:

Updated statistics on malnutrition in the United States and worldwide.
 Updated information on childhood activity levels in several countries, along with suggestions for increasing children's physical activity in school settings.
 Updated statistics on childhood deaths and child maltreatment.
 Updated information on neural effects of stress.

Chapter 8:

Updated sections on the following:
 development of attention
 development of theory of mind
 bilingual children's skills in attention
 early childhood education, including addition of Chicago Longitudinal Study and updated research on long-term effects of early childhood education programs
 Added key term *Chicago Longitudinal Study*.

Chapter 9:

Updated neuroscience research on the following:
 genetic involvement and brain activation related to self-concepts and self-esteem
 neural processing related to self-regulation, including Von Economo neurons
 processing of emotions
 Updated research on cross-cultural views of discipline.

Chapter 10:

Updated statistics on the percentages of children who are overweight, including ethnic differences, and percentage of children with abnormal levels of cholesterol or triglycerides.
 New figure showing rise-and-fall pattern of brain development in different brain areas.
 Updated statistics on physical activity levels of children and school requirements for physical education.
 Updated information on sports-related injuries, including concussions.
 Updated statistics on childhood injuries.
 New neuroscience research on the effects of timing of child abuse on brain development and brain functioning.
 Updated information on genetic contribution to ADHD, communication disorders, and learning disorders.
 Research on brain activity in children with communication or learning disorders.

Updated information on Autism Spectrum Disorders, including prevalence rates, genetic contribution, and patterns of brain development and activation.

Chapter 11:

Updated information on the following:
 limitations of WM capacity and the episodic buffer
 reconstructed memory and emotion
 the expertise reversal effect in solving problems
 theory and probabilistic learning
 neural processes in reading

Chapter 12:

Added information on patterns of brain activity related to depression.
 Added new section on bullying, including types such as cyber bullying, characteristics of bullies and victims, outcomes, and intervention strategies.
 Updated information on family structures, including divorce, never married, and stepfamilies
 Updated statistics on children's use of media.
 Added key term *bullying*.

Chapter 13:

Updated information on brain development and risk-taking behavior.
 Updated statistics on patterns of the following:
 adolescent sexual activity
 contraceptive use
 STDs
 teen pregnancy
 teen nutrition and exercise
 teen substance use, including binge drinking
 teen motor vehicle accident rate in relation to graduated driver licensing laws
 Updated research on patterns of brain activation and eating disorders.

Chapter 14:

Condensed section on intelligence testing.
 Added section on curriculum-based assessment and curriculum-based measurement, and responsiveness to instruction approaches to school-based assessment.
 Added Native American English to section on linguistic dialects.

Chapter 15:

Updated statistics on the following:
 bullying of sexual minority youth
 leisure time activities, including time spend text messaging
 academic achievement differences (international, ethnic)
 poverty (overall, urban vs. rural)
 Added discussion of youth involvement in gangs.

Our Own Personal Perspective

In addition to our training and research in child development, we call on our practical experience from raising our own four children. As this book is going to press, our oldest son, Andy, is 22 and is completing a bachelor's degree. He is a psychology and sociology double major and works as a therapist for children with autism. Our second son, Will, is 18. He loves sports, excels in most school topics, and is active in many school and community activities. He's a senior in high school, busy with college and scholarship applications and looking forward to a college major in some aspect of health and/or computer sciences. Our twin daughters, Rachel and Lily, are 17. They are fraternal twins and couldn't be more different from each other. Rachel is quiet and shy at first, very coordinated and graceful in athletic activities, and enjoys running cross-country and track. Rachel volunteers at our local Humane Society and is interested in becoming a veterinarian. Lily is more rambunctious and outgoing, and she is the first one to volunteer for a new challenge or experience. She is an avid swimmer, coordinates the Spanish tutoring

program at her school, and enjoys math and chemistry. Our girls are best friends in many ways, but they are also learning to be their own separate selves. We have thoroughly enjoyed watching our children's first steps, first words, first days of school, first dates, and all the many joys of living with children and (at one point, four!) teenagers. Like most families, we have also struggled as we try to balance home life with work, and we have dealt with premature infants, speech and physical therapy, minor school problems, sibling rivalry, and many of the other challenges that can appear in family life.

Through our children we have learned the practical side of child development. We know that even the grandest theories fail to capture the challenges, complexities, practicalities, joys, and fulfillment of real life with children. We have used these experiences to inform our writing—they helped us focus on the practical applications of what we teach and what we write. We encourage students to bring their personal perspective to the study of child development; and we do the same thing, including our personal perspective at times throughout the book. We hope that our own experiences will offer students another perspective to consider.