LAURA E. LEVINE
JOYCE MUNSCH

child DEVELOPMENT

AN ACTIVE LEARNING APPROACH

FOURTH EDITION

Child Development

Fourth Edition

This book is dedicated to all the children around the world who are growing up in a strange and difficult time in history. We hope that love from caring adults and their own resilience will help them not only survive, but thrive, as they move toward a brighter future.

—LL and JM

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Child Development

An Active Learning Approach

Fourth Edition

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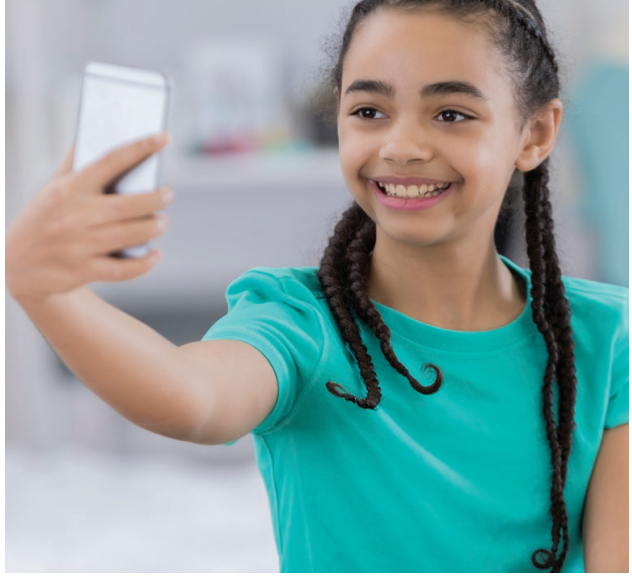

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PREFACE

This fourth edition of *Child Development: An Active Learning Approach* continues to reflect our primary goal of creating significant learning experiences for students who want to understand children. In this topically organized book we provide current, evidence-based knowledge about important issues in child development. A topical approach has the advantage of allowing students to better see the continuities and discontinuities within a domain of development without the necessity of reintroducing each topic area with each new age group studied.

Our intent in writing this book is not to provide an encyclopedia of facts about child development. Rather, we aim to create a narrative that connects ideas and research in meaningful ways. We believe that this narrative style is the best way to engage students in the learning process.

A distinguishing feature of this text is the learning activities embedded within each chapter. These activities take a variety of forms so that they stay fresh and interesting to the student and are integrated with the flow of information in the chapter rather than being stand-alone features that are easily skipped or ignored. We also provide opportunities throughout the book for students to learn about how our understanding of child development has evolved through the scientific process to reach our current state of knowledge.

The topical coverage and pedagogical features in this book have been conceived and carefully executed to help students discover the excitement of studying child development while equipping them with tools they can use long after they take this class.

Philosophical Approach

Beyond giving students a solid understanding of child development, we incorporate principles in this book that help build lifelong learning skills. They include:

Learning How to Learn

Long after they leave the classroom, students who interact with children and adolescents will need to find information to answer questions that arise. We want to encourage students' independent pursuit of knowledge about child development, so we provide tools that will help them do that. They are introduced to the use of databases such as PsycInfo and learn to evaluate Internet sources to identify legitimate, research-based sources of information.

Critical Thinking Skills

The media in all of its forms is filled with information about children and their development. When students look for answers to their questions about child development, they need to be able to critically evaluate the information they find. In Chapter 1, we talk about how to be a good consumer of information on development. The true/false questions that appear at the beginning of each subsequent chapter and again alongside the relevant material throughout the chapter continuously challenge students to reflect on what they believe about child development and to evaluate the sources of those beliefs. The ability to critically evaluate ideas about children and their development will be beneficial to students who plan to go on for graduate study, those who will work with children and families in professional careers, those who will advocate on behalf of children, and those who will use these ideas when caring for their own children.

A Focus on What Constitutes Evidence

We help students realize that although there is a place for "what I think" and for individual examples, the strength of a social science rests on marshalling convincing evidence within an agreed framework. Chapter 3 introduces students to basic concepts about research, and these ideas regarding what constitutes scientific evidence are also reinforced and developed throughout the book.

Pedagogical Features

Features intended to engage students are often included in textbooks as "add-ons," but our active learning philosophy is at the heart of the pedagogy provided throughout this book. To this end, Active Learning activities do not appear in "boxes," which we believe students often skip or ignore. Rather, they are an integral part of the text itself. The chapter narrative leads directly into the Active Learning feature, and the feature smoothly transitions back into the narrative at its end. As educators, we know that students must *act* on the material presented in a course to make it their own. We all try to do this in a number of ways in our classrooms, but for the student, reading a textbook is a solitary and often passive process. To help guard against this passivity, we use the key pedagogical features described in the following sections to capture students' interest and turn reading into an active process.

Challenging Misconceptions: Test Your Knowledge

One of the challenges in teaching a course in child development is to help students give up some of the intuitive ideas or simplistic thinking they have about child development. Many students enter courses on child and adolescent development confident that they already know most of what they need to know about development and that this is "all just common sense," but experienced instructors know that some of the most important information in their courses is, in fact, counterintuitive. Unfortunately, students' long-held ideas and beliefs are often quite difficult to change, and students can complete a course in child development with many of their misconceptions intact. To combat this tendency, we ask students to begin each chapter by testing their initial knowledge of topics contained in that chapter. Unexpected or surprising answers to these questions draw the students into the chapter to find information related to their misconceptions. In addition, the activities throughout the book encourage students to seek out further information and to learn to evaluate that information rather than accepting what they hear without question.

Active Learning

A variety of learning activities in the text complement and enhance the ideas presented in each chapter. Activities might involve asking students: (a) to reflect on their own experiences while growing up (and perhaps compare those experiences to the experiences of classmates); (b) to immediately test their understanding of a concept; (c) to conduct an observation or interview with a child, if possible, or to watch a SAGE-created video that illustrates the activity in the text; (d) to carry out a simple firsthand experience and reflect on what they've learned from it; or (e) to seek out information that goes beyond the text through the use of library resources or the Internet. Each of these activities is designed to consolidate student learning through personal experiences that illustrate the ideas presented in the book.

Journey of Research

It is not unusual for students of child and adolescent development to expect that by the end of the semester, they will have simple answers to a number of very complex questions. Of course, we can seldom provide these simple answers. Instead, we need to help students understand that the science of child development is an ongoing endeavor

and that we continue to build and add to our understanding each day. Although it is important that students learn about our current best knowledge, this information is more meaningful when students understand it in the context of our evolving ideas about a given topic. To help students better understand this material, we keep the focus of the text on the current state of knowledge and use the Journey of Research feature to provide the historical contextual information on the topic. This helps students understand that what they learn today in their class may be information that changes—sometimes substantially—in the future as our body of knowledge grows. This is, after all, how the scientific process works.

Learning Questions and Self-Testing Review

There is a growing body of evidence that the best way for students to retain information they are learning, and to transfer that knowledge to new situations, is by testing their understanding for themselves. Other study approaches such as re-reading, highlighting, and even summarizing have not been found to be as effective as self-testing. Therefore, we begin each chapter with a set of "Learning Questions" and have organized our review at the end of the chapter using these same questions to elicit brief answers. In addition, we provide two types of questions at the end of each section within the chapters in a feature called Check Your Understanding. Knowledge Questions help students review the information they are learning. Critical Thinking questions push students beyond the basic information to apply and integrate ideas. Answering these questions will promote greater understanding and retention of what they are learning and increase the likelihood that they will be able to apply this knowledge in useful ways.

Graphics, Artwork, and Videos

Because many individuals are visual learners and because child development is a field rich in imagery, each chapter contains photos and graphics that illustrate important concepts in a memorable way. Many of the photos in the text include questions embedded in their captions that prompt the student to think further about the topic. Important concepts are further illustrated through videos developed by SAGE that show children in natural and experimental settings, teacher commentary, and college students responding to some of the true/false questions with follow-up discussion by the authors.

Key Topics

Neuroscience

To reflect the burgeoning interest in the field of neuroscience and its implications for child development, we devote part of the chapter on physical development to recent research on brain development and behavior, and there is new or updated information on brain function where it is relevant throughout the book. This information is presented in a way that makes it appropriate for the student of child development who may not have a strong background in biology.

Diversity and Culture

Because an understanding of diversity and culture is essential for anyone working in the field of child development, these topics are integrated into each chapter to illustrate how each aspect of development is influenced by the many different circumstances that constitute children's lives around the world. Examples of topics concerning diversity and culture in this edition include

- Cultural differences in birthing practices and the transition to parenthood
- The effects of poverty and homelessness

- World-wide sex-trafficking of children
- Culture, identity, and bilingualism
- Cultural and religious differences in acceptance of gender-atypical adolescents
- International differences in attitudes and policies regarding adolescent sexuality

Developmental Psychopathology

Coverage of topics related to psychopathology or developmental differences gives students a better understanding of the continuum of human behavior. However, rather than confine information on psychopathology to a single chapter, we have integrated these topics where they give students a deeper understanding of how these differences relate to the spectrum of development of all children. Examples of topics in developmental psychopathology in this edition include

- Reactive attachment disorder
- Effects of child maltreatment and trauma
- Specific learning disorders
- Disruptive mood dysregulation disorder
- Depression and suicide
- Resilience

What's New in the Fourth Edition

- In the fourth edition, at the end of each section within the chapter, we have added Critical Thinking questions intended to stimulate higher-level learning, including integration and evaluation of topics, to the Test Your Knowledge questions which focus on factual information.
- New or revised True/False questions have been added throughout the text to better challenge students' misperceptions about development.
- Information relating to cultural concepts such as individualism and collectivism has been refined to reflect the most recent research in this area.
- The continuity between chapters and topics has been enhanced through call-outs to information from previous chapters or alerts for information in upcoming chapters.
- More tables are provided to give students a summary of information detailed in the text.
- Almost 1,400 new or updated references have been added.

The following list highlights some of the topics that have been added, updated, or expanded in this edition, but there are many others in each chapter.

Chapter 1

- Inclusion of epigenetics in the discussion of the nature/nurture debate
- Introduction to the concept of intersectionality
- Three new or substantially revised Active Learning features:
  - Social Policy Affecting Children and Adolescents
  - Parenting Behaviors Across Cultures
  - Evaluating Information on the Web

- Substantial revision of the material describing the cultural context of development
- New information about the web-based resources for this book that support student learning

Chapter 2

- New example of social cognitive theory and self-efficacy
- New topic: Embodied cognition
- Use of the ecological systems model to aid in understanding the experience of immigrant children
- Use of infant crawling and language learning to illustrate dynamic systems theory
- Updated information on
  - Applied behavior analysis
  - Dynamic assessment
  - Bonding in human infants
  - Evolutionary developmental psychology

Chapter 3

- Expanded information on possible bias in standardized tests
- New information on the College Board Environmental Context Dashboard for the SAT
- New examples illustrating longitudinal design, microgenetic research, and practical versus statistical significance
- New Active Learning: Developmental Research Designs
- New Journey of Research: The Immortal Life of Henrietta Lacks

Chapter 4

- New topics:
  - Genome editing
  - Personality characteristics
  - Genome-wide association studies
- New discussion of race versus ancestry in relation to genes
- New example of twin-based research on the genetic basis of callous-unemotional traits
- Updated information on the interaction of SES and genetic inheritance

Chapter 5

- Updated statistics on births, infertility, maternal death rate, preterm and low-birth-weight newborns, infant mortality, and caesarean sections
- New table summarizing assisted reproductive technologies
- New and updated information on
  - The use of opioids and marijuana during pregnancy
  - Neonatal abstinence syndrome
  - Hormonal changes following the birth of a baby
  - A father's role during pregnancy, delivery, and early childcare
- New information on cross-cultural differences in childbirth and the early experiences of the mother

Chapter 6

- New information on laterality and challenges to the notion of people being right-brained or left-brained
- Updated and expanded information on
  - Possible causes of autism
  - Childhood allergies and a possible new treatment
- New topic: Circumcision
- Updated information on pubertal timing and its consequences

Chapter 7

- New topic: The approximate number system
- New information about parents' role in helping infants develop sustained attention
- Updated information about
  - ADHD
  - Teens' distracted driving
  - Alcohol use and memory in adolescence, including blackouts
  - Executive function and both academic achievement and everyday tasks

Chapter 8

- New and expanded information on noncognitive factors related to academic achievement
- Updated information on high school dropout rates
- New information on the importance of sustaining environments following early educational experiences
- Updated and expanded information on grade retention
- New section on non-college-bound students

Chapter 9

- Two new Active Learning activities:
  - Statistical Learning Theory of Language Acquisition
  - Learning About Textisms
- Updates concerning critical/sensitive periods for language learning
- New topics:
  - Protoconversations between infants and adults
  - Teaching of composition skills
- New cross-cultural information on parents' speech to infants and similarities in first words
- Updated statistics on the number of bilingual children in the United States

Chapter 10

- New example of cultural differences in shame and guilt
- New Active Learning: Shame and Guilt
- New table describing age-related fears in children and adolescents
- Updated statistics on the prevalence of anxiety disorders, depression, suicide, and conduct disorders
- New information on genetic influences on the formation of attachment

Chapter 11

- New topics:
  - Person-based praise compared to process-based praise
  - Gender-neutral child-rearing
  - Impression management online
- Introduction of the term LGBTQIA+
- Updated statistics about LGBT children and teens
- New discussion of the concept of race as a social construct
- Expanded and updated information on racially based microaggressions

Chapter 12

- New topics:
  - Lying and theory of mind
  - Parasocial romantic relationships in adolescence
  - Education through play
  - The influence of social media on adolescent romantic relationships
- Updated statistics about bullying and school violence
- New data on gun violence in schools

Chapter 13

- Updated statistics on family living arrangements, including marriage, cohabitation, divorce, adoption, and foster care
- Reorganized information on the impact of divorce on children, focusing on a risk and resiliency perspective
- New topic: Custody arrangements with a new figure showing historical changes in custody arrangements
- Updated and revised information on gay and lesbian parents and children in foster care
- Updated and expanded information on parenting in different cultural contexts

Chapter 14

- Updated statistics about children's electronic media use, videogame use by boys and girls, and online platforms preferred by teens
- New information about the effects of green spaces on children's well-being
- New topics:
  - Outdoor, nature-based preschool programs
  - The link between aggressive lyrics in songs and aggression
  - The Mastery Approach to Coaching program and Return-to-Play laws
- Updated information about the effectiveness of mentoring programs

Chapter 15

- New topics:
  - Toxic stress
  - Vaping
  - Microaggressions

- Updated statistics on substance use by adolescents
- New Active Learning on microaggressions: Has This Ever Happened to You?
- Updated information on ways to reduce bias and prejudice in children and adolescents
- New information on the strategies that children use to cope

Teaching Resources

This text includes an array of instructor teaching materials designed to save you time and to help you keep students engaged. To learn more, visit **sagepub.com** or contact your SAGE representative at **sagepub.com/findmyrep**.

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Laura E. Levine received her PhD in developmental and clinical psychology from the University of Michigan. After working with children and families at the Children's Psychiatric Hospital and in private practice in Ann Arbor for 10 years, she moved to Connecticut and was a stay-at-home mother of her two children for 6 years. She returned to academia in 1994 and taught child psychology and life span development for 20 years at Central Connecticut State University, where she is currently an emeritus professor of the Department of Psychological Science. She has received three university teaching awards, and her research on the social development of young children and on the relation between media use and attention difficulties has appeared in journals such as *Developmental Psychology*; the *Journal of Applied Developmental Psychology*; *Infant Mental Health Journal*; *Infant and Child Development*; *Computers and Education*; *CyberPsychology, Behavior, and Social Networking;* and the *International Journal of Cyber Behavior, Psychology and Learning*; and as chapters in *The Wiley Handbook of Psychology, Technology and Society* and *The Encyclopedia of Cyberpsychology*.

Dr. Levine has been very active in promoting excellence in college teaching. She was involved in the creation of the Center for Teaching Excellence at Central Connecticut State University and served on the board of the Connecticut Consortium to Enhance Learning and Teaching. She created numerous programs for faculty both at her university and at regional and national conferences. Her work on the scholarship of teaching and learning can be found in *New Directions for Teaching and Learning, College Teaching,* and the *International Journal for the Scholarship of Teaching and Learning*.

Dr. Levine was honored to receive the Textbook Excellence Award in 2020 from the Textbook & Academic Authors Association for the book *Child Development From Infancy to Adolescence: An Active Learning Approach, 2e*.

Joyce Munsch received her PhD in human development and family studies from Cornell University. She was a faculty member in human development and family studies at Texas Tech University for 14 years, where she also served as associate dean for research in the College of Human Sciences for 2 years. In 2002, Dr. Munsch went to California State University at Northridge as the founding chair and professor in the Department of Child and Adolescent Development. She currently is an emeritus professor in the department.

Dr. Munsch's research focused on adolescent stress and coping and social networks. Her work has been published in the *Journal of School Psychology*, *Adolescence*, *The Journal of Early Adolescence*, the *Journal of Research on Adolescence*, and the *American Journal of Orthopsychiatry*. Throughout her career, Dr. Munsch administered grants that supported community-based programs. She was the co-director of the Early Head Start program at Texas Tech University and co–principal investigator for three Texas Youth Commission (Department of Juvenile Justice) grants. At Cal State Northridge, she administered the Jumpstart program for over 10 years. Her commitment to community service learning was recognized in 2005 when she was awarded the CSUN Visionary Community Service Learning Award. In 2012, her service to the County of Los Angeles was recognized by a commendation from the County Board of Supervisors. At Texas Tech, she was the College of Human Sciences nominee for the Hemphill-Wells New

Professor Excellence in Teaching Award, the Barnie E. Rushing Jr. Faculty Distinguished Research Award, the El Paso Energy Foundation Faculty Achievement Award, and the President's Excellence in Teaching Award; she also received the Kathryn Burleson Faculty Service Award and the College of Human Sciences Outstanding Researcher Award.

Dr. Munsch was honored to receive the Textbook Excellence Award in 2020 from the Textbook & Academic Authors Association for the book *Child Development From Infancy to Adolescence: An Active Learning Approach, 2e*.

PART I

Understanding Development

Why and How We Study Children and Adolescents


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1 Issues and Themes in Child Development

Learning Questions

1.1 Who needs to have a good understanding of child development and why?

1.2 What are the domains of child development and some recurring issues in the field?

1.3 What are the contexts for child development?

1.4 How can you be a smart consumer of information about development?

Peathegee, Inc/Getty

Take a moment to think about why you want to learn about children, adolescents, and their development. You may enjoy the interactions you have with children and want to understand them better, or your career goal may involve working with children or adolescents. Perhaps you want to better understand yourself or those you know by exploring how childhood has affected who you have become. Your interest may be more scientific, with a focus on understanding the research that explains the processes of development. Your particular goal will influence how you approach the information in this book.

The information and activities in this book have been designed to stimulate your thinking in all these ways. We want to share with you the excitement we feel about the topic of child and adolescent development and to pique your curiosity so that you will want to learn even more about it. By the time you finish reading this book, you will have a solid foundation in a number of important topics related to development. It is our hope that this will motivate you to continue learning about children and their development long after you have completed this course.

In this first chapter, we introduce some of the basic concepts of child and adolescent development. We first look at why people study children and some ways they use knowledge about children to promote positive development. If you are curious about how you might use this knowledge in a future career, an Active Learning feature leads you through the process of researching careers that require a good understanding of child and adolescent development. We then discuss some basic themes related to how development occurs and introduce you to the different contexts that influence children's lives. Finally, we provide strategies and guidelines that will enable you to differentiate reliable information from other material about child development that you may encounter.

Why Study Child Development?

>> LQ 1.1 Who needs to have a good understanding of child development and why?

Many people are interested in studying child development because the topic itself is fascinating and important. Some want information they will be able to use when they become parents. Many students want to use the information in a future career as a professional who works with children or a policymaker who shapes social policy that affects children and families, and some students want to become researchers to further the scientific understanding of children and how they grow and develop. These are all good reasons to study child development, and we will explore them all in this chapter.

Understanding the Process of Development

One reason why students are interested in studying child development is to understand the roles that infancy, childhood, and adolescence play in shaping who we become as adults. From the earliest days in the field of psychology, the idea that early experience has a special, even unique, impact on development has been a persistent theme.

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Conscientiousness. What might you predict about what this girl will be like as an adult from her willingness to work hard and cooperate with an adult while she is young?

Researchers who study children as they develop over long periods of time have provided ample evidence that early traits, behaviors, and experiences are related to many adult outcomes. However, there is also a considerable body of research that documents the amount and type of change that we see. In this book, you will read several accounts of children who experienced extreme stress or deprivation while they were young but still emerged as healthy, happy, and well-functioning individuals later in their lives.

Saying that the earliest stages of development are important for later development and functioning is not the same thing as saying they are any more important than later periods of development. Instead, development is seen as a process in which each stage lays a foundation for the stages that follow. An example of this principle comes from the research on competent parenting. It is not surprising that receiving sensitive, competent parenting when you are an infant or young child is associated with being a sensitive, competent parent when you have your own children. However, the pathway to becoming a competent parent is also affected by social competence with peers during childhood and adolescence and later competence in romantic relationships during early adulthood (Raby et al., 2015). This research shows that experiences all along the path to adulthood contribute to an adult's psychological functioning. Understanding what characteristics or factors turn the trajectory of development toward a positive versus a negative outcome is one of the greatest challenges for people interested in child development.

Using Our Knowledge of Child Development

A second reason to study child development is to be able to use this information to improve the lives of children and adolescents. An understanding of how children think, feel, learn, and grow, as well as how they change and how they stay the same, is essential to fostering positive development. This understanding can help parents and family members, professionals who work with children and families, and people who create social policies and design programs that affect the well-being of children and their families.

Parents and Family Members

Having a good understanding of children's needs and abilities at each stage of development can help all parents provide the appropriate amount and type of support and stimulation to foster their children's growth and development. When parents have a good understanding of how their children are developing, they engage in higher-quality interactions with them, use more effective parenting strategies, and provide more developmentally appropriate activities. When their expectations for their children's behavior are realistic, they are more likely to use effective discipline strategies and to rely less on harsh, punitive ones (Bartlett, Guzman, & Ramos-Olazagasti, 2018).

However, parents can easily feel overwhelmed by the amount of information that is available from family, friends, and media sources such as the Internet. They also may find that the information they are receiving is contradictory or may not be accurate. In a study of a culturally and ethnically diverse group of first-time parents, researchers found that although parents wanted information, they also wanted to know how to use that information when interacting with their children (Bartlett et al., 2018).

Although all parents can benefit from knowing more about child development, this knowledge is even more crucial for particular segments of the parent population. A review of parenting programs for at-risk and disadvantaged parents, including teen mothers, unmarried mothers, and those living in poverty, found that a number of programs designed to help parents learn more about child development had positive impacts for both the child and the mother (Chrisler & Moore, 2012). For the children, these included a reduction in reported child behavior problems. For the mothers, they included a home environment that was more supportive of their children and parents who had more realistic maternal expectations for them. Other researchers who looked at long-term outcomes from programs designed to improve the quality of parenting among the weakest parents found that more of their children graduated from high school, fewer had a child themselves by age 19, and fewer had a criminal conviction by age 19 (Reeves & Howard, 2013).

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Teen parents. Teens who become parents may not be knowledgeable about child development. Participating in parenting programs can help them develop more realistic expectations for their child.

Child Development Professionals

You may be interested in studying child development because you see yourself in a future career that involves working with children and families. In different ways and at different levels, people in all the helping professions promote positive development for children and teens, engage in the identification and prevention of problems, and provide interventions when problems do occur.

Promoting the optimal development of children and adolescents is a primary goal of professionals who work in the field of education (especially classroom teachers, resource teachers, administrators, counselors, and early care and education professionals) and of mental health professionals, youth service workers, and representatives of community organizations who run programs for children. Community organizers, community psychologists, and outreach workers are a few of the professionals that focus on preventing problems before they emerge. Child therapists and family therapists are two types of professionals that help families address existing problems. Social workers, psychologists, marriage and family therapists, and child psychiatrists also provide various types of interventions to families. Knowledge of child development helps each of

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Careers in child development. Knowledge about child development is essential to people working in many different careers (including pediatricians, teachers, social workers, counselors, speech therapists, lawyers, and nurses). If you are interested in a career working with children, there are many opportunities available to you.

them find and use ways to support and encourage children and adolescents to reach their full potential.

We recognize that students today want to know where their education can eventually lead them and are hungry for information about future careers. If you are taking this course because you are considering working with children and families in the future, how much do you know about the career you are thinking about entering? You can assess your current knowledge about a career related to child development by completing **Active Learning: How Much Do You Know About Careers in Child Development?**

ACTIVE LEARNING

How Much Do You Know About Careers in Child Development?

If you are interested in a career that includes working with children, begin by completing the first column in the table below with what you currently know about the career you would like to enter when you finish your education. If you haven't settled on a career yet, simply choose one that currently holds some interest for you. Even if you feel you have very little information on a particular topic, take your best guess at every answer.

Next, use the *Occupational Outlook Handbook* (U.S. Bureau of Labor Statistics, 2019) to find current information on your career to complete the second column. You will find this information on the Bureau of Labor Statistics website, and there also is likely a copy in your campus library. Select the career you are interested in from the list on the A–Z Index or type the name of your career in the search box on the page. For each career, you will find this information:

- **What people in this career do**—duties and responsibilities.
- **Work environment**—where people in this career work and conditions affecting their employment.
- **How to become one**—the education and training required both for entry into the field and for advancement within this career. You will also find information about any certifications or licenses required to work in this profession, and the skills and personal qualities required for success on the job.
- **Pay**—average salaries earned in this career.
- **Job outlook**—how many people are currently employed in this career and whether demand for this profession is expected to increase or decrease over the next decade. The *Occupational Outlook Handbook* is updated every 2 years.
- **State and area data**—employment statistics and projections by state or area of the country.
- **Similar occupations**—additional information about careers related to the one you are researching. For instance, if you think you would like to be a child psychologist, here you will find that related careers include being a marriage and family therapist, special education teacher, substance abuse counselor, or social worker. If you click on any of these links, it will take you to the page in the *Occupational Outlook Handbook* that provides information about that alternative career.
- **More information**—links to professional organizations that support and advocate for people working in this career. The organization web pages you find here are rich sources of information about each career, and you should look at one or two of them before you finish exploring this page.

Although the *Handbook* lists hundreds of occupations, you won't find every conceivable job title. For instance, *early interventionist* is not yet in the *Handbook*, but you can usually find information about a related career to begin your search. Early interventionists do work similar to what special education teachers do, although they work with infants and toddlers who are not yet school age and are likely to work with the parents and child in a home setting rather than in a classroom.

Name of the career you researched: _____

Does it appear in the *Occupational Outlook Handbook* (OOH)? _____Yes _____No

(If "no," name the related career you researched): _____

Topic	Your Current Knowledge	Information From the OOH
Educational level required for entry into this career (for example, high school diploma; associate's, bachelor's, or master's degree; PhD or other advanced degree)		
Educational level required for advancement in this career		
Important day-to-day work responsibilities (that is, what you will do each day in this career)		
Work setting (for example, office, school, hospital), and how much travel is required (if any)		
Median annual earnings		
Job outlook (projected increase or decrease in demand for this career over the next decade)		

How well informed were you about your potential future career? Another useful website if you are specifically interested in a career in the field of psychology is that of the American Psychological Association. There you can find information on what psychologists do, the subfields in psychology, and the job outlook for these careers.

Policymakers

Most often we apply our understanding of child development directly to the work we do with children, but the well-being of children and families is also affected by the laws and programs that make up **social policy**. Legislators want to promote the health and success of their future citizens but also want to manage the cost of programs and services. Well-conceived and executed legislative policies can help to do that. State legislatures fund many programs that support children's healthy emotional and physical development (National Conference of State Legislatures, 2019).

One example of how research on child development can guide and inform the people who make social policy comes from the work of Walter Gilliam (2008), director of the Edward Zigler Center in Child Development and Social Policy at Yale University. Dr. Gilliam found that preschool children in Connecticut were more than three times as likely to be expelled as children in Grades K–12, but he also showed that when a mental health consultant was available to help teachers develop ways to handle problem behaviors, far fewer children were expelled. Today, in large part due to Dr. Gilliam's advocacy, half of the states provide early childhood mental health consultation (Perry, 2014).

Another example of social policy in action is the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), which provides supplemental food and nutrition education for low-income, nutritionally at-risk women, infants, and children up to age 5. Good nutrition during a pregnancy helps to ensure the healthy development of the baby, and good nutrition during early childhood is associated with

Tracy A. Woodward/The Washington Post via Getty Images

The Women, Infants, and Children Program (WIC). This pregnant woman can use vouchers from the WIC program at a farmers' market to help ensure that she has the nutritious diet that is essential for healthy prenatal development. Research that shows the effectiveness of such programs helps to ensure their continued funding.

a number of positive outcomes throughout a child's life. Although these outcomes are important, the WIC program cost $5.3 billion in fiscal year 2018 (U.S. Department of Agriculture, 2019b). When an expensive program such as this one is up for renewal, lawmakers look to experts in the field for research that justifies the expenditure.

Research on WIC has found that participation in the program is associated with a reduced risk of having a low-birth-weight or premature baby (Rossin-Slater, 2015). Because both prematurity and low birth weight are associated with a number of negative developmental outcomes, the lifetime savings from the lower cost of medical care needed as a result of the increased birth weight of the children born to WIC participants means that the benefits of the program outweigh its cost (Rossin-Slater, 2015). Information such as this helps policymakers evaluate the effectiveness of social programs and make modifications to them, if necessary.

A number of organizations in the United States provide legislators and private citizens with information related to child development with the goal of helping to bring about changes in social policy based on solid research. Table 1.1 contains the names and missions of several of these organizations, as well as some of the policy initiatives or reports from them. There is a wealth of information at each site. You can use **Active Learning: Social Policy Affecting Children and Adolescents** to explore one such site to see how data relevant to social policy could be gathered on a topic that interests you.

ACTIVE LEARNING

Social Policy Affecting Children and Adolescents

The Annie E. Casey Foundation (2019; http://www.aecf.org) describes its mission as "strengthening families, building stronger communities and ensuring access to opportunity, because children need all three to succeed. We advance research and solutions to overcome the barriers to success, help communities demonstrate what works and influence decision makers to invest in strategies based on solid evidence."

The foundation publishes an annual Kids Count report that provides up-to-date statistics on children's health, education, and well-being. From the home page you can use the link to the Kids Count Data Center to create a report on a topic that interests you. Go to the "Create Custom Report" link at the bottom of that page. For this activity we suggest that you start by creating a report for your state. To do this, click on "State Data" and select your state from the dropdown menu. On the next page you will see the topics that are available. Clicking on any one of them will show you the list of indicators for that topic. Choose several that are of greatest interest to you. Although they may all look interesting, if you don't limit your report to just a few, you will receive an informative but very lengthy report. After you have made your selection, click "Build a Report" and the data you requested will appear in tables.

Were you surprised by any of the data you found? These data can be used in papers you write, but remember to cite the source you used.

As citizens we play an important role in shaping social policy. When we contact our legislators, sign petitions, and vote we are speaking out for the well-being of children and letting policymakers know what social policy we want to see enacted. The more we understand about children's needs, the more effective we can be in advocating on their behalf and promoting policies we believe will best serve them.

TABLE 1.1

Social policy organizations.

ORGANIZATION AND URL	MISSION	RECENT POLICY REPORTS/INITIATIVES
Future of Children (2019)	"[T]o translate the best social science research about children and youth into information that is useful to policymakers, practitioners, grant-makers, advocates, the media, and students of public policy."	• Children and Climate Change • Marriage and Child Well-Being Revisited • Policies to Promote Child Health • Starting Early: Education From PreK to Third Grade
Society for Research in Child Development (2019) Use dropdown menu under "Publications" to select "Social Policy Reports"	This is a professional organization that periodically produces policy briefs on topics related to child development.	• Changing Demographics of Dual Language Learners and English Learners: Implications for School Success • Supporting Parents: How Six Decades of Parenting Research Can Inform Policy and Best Practice • Corporal Punishment in U.S. Public Schools • Development of Boys and Young Men of Color
National Association for the Education of Young Children (n.d.)	To disseminate knowledge and establish competencies, qualifications, and standards for members of the profession; provide research-based resources for families; and advocate for children, families, and early childhood professionals through its initiatives and policy priorities.	• Creating opportunities to help all children and families succeed • Developing a highly qualified early education workforce

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Making social policy. Social policy that affects children and families is made from the highest levels of the federal government down to local school boards and neighborhood councils. Interested citizens also take part in making social policy when they write letters to elected officials, sign petitions, work for causes they support, and vote.

CHECK YOUR UNDERSTANDING

Knowledge Questions

1. What are some reasons for studying child development?
2. Who is likely to benefit from being knowledgeable about child development?
3. What is the relationship between research on child development and social policy?

Critical Thinking

What do you think is one of the most important issues facing children today? Is there a way that public policy could address this issue? How could you, as a student, have an impact?

Understanding How Development Happens

>> LQ 1.2 What are the domains of child development and some recurring issues in the field?

Understanding everything about children's development is certainly a daunting task. To make it more manageable, we organize the material in several ways. One way to do this is to divide information into the different domains of development: physical, cognitive, and social-emotional. Within each of these domains we want to keep our focus on the developmental process, so we can also organize information by the ages and stages of life. There have been a number of issues that have been debated in the field of child development over the years. We briefly introduce you to several of those ideas here, but we will revisit them in more detail at various points throughout the book.

Domains of Development

When studying development, we distinguish between three basic aspects or domains of development: physical, cognitive, and social-emotional. **Physical development** includes the biological changes that occur in the body, including changes in size and strength, as well as the integration of sensory and motor activities. Neurological, or brain, development has become a major area for research in the domain of physical development. **Cognitive development** includes changes in the way we think, understand, and reason about the world. It includes the accumulation of knowledge as well as the way we use that information for problem solving and decision making. **Social-emotional development** includes all the ways we learn to connect to other individuals and interact effectively with them; understand, express, and regulate our emotions; and understand the emotions of others.

Although it is useful to make distinctions between these domains, it is important to understand that they continually interact with each other. For instance, during puberty adolescents undergo dramatic physical changes over a short period of time, but these changes also affect social development. As adolescents grow to look more like adults and less like children, adults begin to treat them more like adults, giving them new responsibility and expecting greater maturity from them. These opportunities, in turn, contribute to the cognitive development of adolescents as they learn from their new experiences. In a similar way, when infants learn to walk and can get around on their own, their relationship with their caregivers changes. The word *no* is heard much more frequently, and infants need more careful supervision because they now can get themselves into dangerous situations. And, of course, infants' enhanced ability to explore their environment gives them many new opportunities to learn about the world in ways that advance their cognitive development.

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Domains of development. When we study development, we look at changes in the physical, cognitive, and social-emotional development of children and adolescents.

Ages and Stages

As we look at the domains of development, we examine how changes occur at different ages and stages. We use the terms *infancy, toddlerhood, early childhood, middle childhood,* and *adolescence* to identify broad periods of development that have behaviors or characteristics that set that stage apart from the other stages.

During *infancy* (the first year of life), children are totally dependent on their caregivers for their physical care, but they already can use all their senses to begin exploring their world and later begin developing the motor skills they will need to explore it further. They also form a strong emotional attachment to their caregivers and lay the foundation for learning language. *Toddlers* (ages 1–3) continue developing their motor skills and can explore their physical world more actively. Language develops at an astonishing rate during this period, and toddlers begin showing independence and autonomy from their caregivers as they learn to do things for themselves. In *early childhood* (ages 3–6), children learn about the physical and social world through play. As peers become more important, young children learn the skills necessary to understand how other people think and feel. During *middle childhood* (ages 6–12), children develop the intellectual ability to think in a more ordered and structured way and school becomes a major context for development. At this stage, children begin developing a clearer understanding of who they are and what makes them unique. Play and peers are essential parts of their lives. The physical changes associated with puberty mark the transition from childhood into *adolescence* (ages 12–18). As their bodies undergo the physical changes that move them toward adulthood, adolescents can think and reason

at a more abstract level and develop a stronger sense of their identity and who they want to become. Family remains important to them, but peer relationships take on a greater importance than they had before.

Themes in the Field of Child Development

We all have our own ideas about children. You brought some with you when you entered this class. Stop for a few minutes and think of a couple of sentences or phrases that capture what you believe to be true about how child development occurs. Do you believe that if you spare the rod, you will spoil the child? Or that as the twig is bent, so grows the tree? Do you think that children are like little sponges? Or that they grow in leaps and bounds? Each of these bits of folk wisdom touches on an issue that has been debated within the field of child development. Here we introduce some of the reoccurring debates and controversies that we will revisit at various points in the book.

Nature and Nurture

Throughout history the question of whether our behavior, thoughts, and feelings result from **nature**, our genetic inheritance, or from **nurture**, the influence of the environment, has shaped our understanding of why we act in certain ways and how we can influence human behavior. The controversy was originally described as nature *versus* nurture. For example, let's say you are an aggressive (or shy, or outgoing . . .) person. Researchers wanted to find out whether you became aggressive because you were "born that way," with your genes determining the outcome, or whether you learned to be aggressive because of what you saw or experienced in your environment. People initially argued for one side or the other, but it became clear that any developmental outcome is an interaction of both.

Asking whether behavior is due to nature or to nurture is similar to asking whether your car needs an engine or wheels. You aren't going anywhere unless you have both, and they have to work together if you are ever going to reach your destination. The field of *epigenetics* has made us aware that what counts is not just what genes you *have,* but also what your genes are *doing*, and what they are doing is influenced by the environment you are in (Nesterak, 2015). We have left behind the era of "nature *versus* nurture" and entered the era of "nature *through* nurture," in which many genes, particularly those related to traits and behaviors, are expressed only through a process of constant interaction with their environment (Meaney, 2010; Stiles, 2009). We discuss these ideas further in Chapter 4.

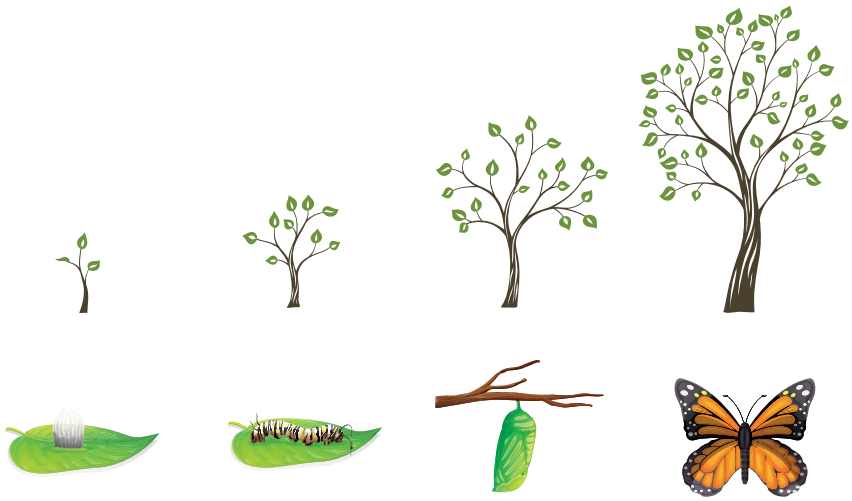
Continuous Versus Discontinuous Development

Is development a series of small steps that modify behavior bit by bit, or does it proceed in leaps and bounds? In Chapter 2 and throughout the rest of the book, you will learn about some theories in the field of child development that describe development as a series of stages children move through, similar to the "leaps" described above. In these theories, each stage has characteristics that distinguish it from the stages that come before and after. Other theories, however, describe processes that change development in small increments.

One way to describe these two views of development is that continuous development represents quantitative change and discontinuous change represents qualitative change (see Figure 1.1). **Quantitative changes** are changes in the amount or quantity of what you are measuring. For instance, as children grow they get taller (they add inches to their height), they learn more new words (the size of their vocabulary grows), and they acquire more factual knowledge (the amount of information in their knowledge base increases). However, some aspects of development are not just the accumulation of more inches or words. Instead, they are **qualitative changes** that alter the overall quality of a process or function, and the result is something altogether different. Walking is qualitatively different from crawling, and thinking about abstract concepts such as justice or fairness is qualitatively different from knowing something more concrete, such as the capitals of all 50 states. Typically, **stage theories** describe development in terms of qualitative or discontinuous change, while **incremental theories** describe development as occurring through quantitative or continuous changes.

FIGURE 1.1

Quantitative change and qualitative change. Some changes that occur as children grow are quantitative as illustrated by this tree, which just gets bigger as it gets older. Other changes in children's growth are qualitative as illustrated by this butterfly, which changes form at each stage of its development.



These two types of theories may look at the same aspect of development but describe the way it happens very differently.

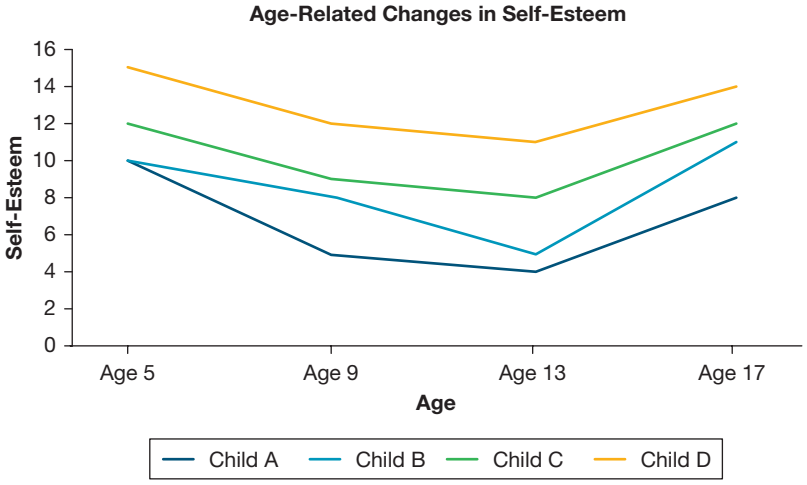
Stability Versus Change

How much do we change during the process of development? As we grow, develop, and mature, are we basically the same people we were at earlier ages, or do we reinvent ourselves along the way? We find evidence of both stability and change as we look at development. For instance, characteristics such as anxiety, depression (Lubke et al., 2016; Nivard et al., 2015), shyness (Karevold, Ystrom, Coplan, Sanson, & Mathiesen, 2012), and aggressiveness (Dennissen, Asendorpf, & Van Aken, 2008) tend to be relatively stable over time. However, what does change is the specific way in which these characteristics are expressed. For example, young children hit, kick, or throw things when they are angry, but school-age children are more likely to express their aggression through teasing, taunting, and name-calling (Lui, Lewis, & Evans, 2013), and adolescents attack each other through social means (for example, spreading rumors or excluding others from social activities; Wang, Iannotti, & Luk, 2012).

As an example of both stability and change in development, we can look at self-esteem as children move through childhood and adolescence. As you will learn in Chapter 11, young children often have a very high opinion of themselves and their abilities, but this high level of self-esteem typically drops as they enter school and their appraisal of their own abilities becomes more realistic. Early adolescence often brings another downturn, but self-esteem then typically rises steadily through the remainder of adolescence. If we focus on these age-related changes, we would conclude that self-esteem shows considerable change. If, however, we shift our focus to the individual, we find that children, adolescents, and adults often maintain their relative position on many personality characteristics, including self-esteem. From this perspective, we see considerable stability because children who score near the top on a childhood measure of self-esteem tend to become adolescents and, later, adults who will continue to score high on other measures of self-esteem (Trzesniewski, Donnellan, & Robins, 2013). Figure 1.2 illustrates how there can be both change and stability in a single characteristic.

FIGURE 1.2

Stability and change in self-esteem. This hypothetical example shows how four children might score on a measure of self-esteem at different ages. The pattern of their scores reflects typical changes in self-esteem: high in early childhood, declining in middle childhood and early adolescence, and rebounding in later adolescence. However, it also shows that the children tend to retain their relative rank compared to their peers. In other words, those with higher self-esteem early in development tend to be the children who have the highest self-esteem across these age-related changes.



iStock/ fstop123

Individual differences. Characteristics of individual children, such as their temperament, gender, and ethnic background, can affect the developmental process, so outcomes that apply to one child will not necessarily apply to another. This means that we must always be mindful of individual differences.

Individual Differences

Scientific research strives to identify general principles that describe average or typical patterns. We want to be able to make general statements about what usually happens. But you cannot spend much time observing children or adolescents without recognizing how different each one is from all the others. Our study of children needs to deal with both aspects of development—those aspects that are universal and shared by all or almost all individuals, and those in which individuals differ from each other.

Throughout this book you will learn about general conclusions that are drawn from research. Although these are true as general statements, there also are numerous exceptions that give us insights we would not have otherwise. For example, children who grow up in poverty are at risk for a number of developmental and mental health problems, but some of these children manage to thrive in the face of great difficulty. By looking at these children we can identify factors that help protect a child from some developmental risks.

While we can make some valid general statements about how development proceeds, the developmental pathway of any given individual is difficult to predict. *Different* pathways can result in the *same* outcome, a process known as **equifinality** (*equi* = equal, *finality* = ends). For example, depression may result from biological and genetic processes, but it also can result from early traumatic experiences. However, it is also true that the *same* pathway can lead to *different* outcomes, known as **multifinality** (Cicchetti & Toth, 2009). For example, children who are victims of abuse can have many different long-term outcomes that can include depression or anger, but also resiliency

and healing. Individual characteristics of a child or an adolescent, including the child's gender, temperament, and physical and intellectual ability, are just some of the characteristics that may influence the specific outcome in any given situation.

Although we frequently pay attention to how personal characteristics such as gender, race, ethnicity, age, socioeconomic status, and others impact an individual's developmental trajectory, the concept of **intersectionality** reminds us that these characteristics do not exist in isolation, but rather intersect with each other in complex ways that create unique developmental trajectories. Being a Black woman is a different experience from being a Black man, and being a Black woman is different from being a White woman. Each of these social identities—race and gender—can be a source of privilege or oppression. For example, while a Black woman may be harmed by both racism and sexism, a Black man may experience racism but also benefit from the gender inequity that exists (Rosenthal, 2016). One of the goals of this theoretical framework is to use research to inform social policy and promote social justice and equity.

This understanding of individual differences also has changed the way we view behavioral and emotional disorders. In the field of **developmental psychopathology**, psychological disorders are now seen as distortions of typical developmental pathways (Cicchetti, 2016). Accordingly, in this book we include these disorders in our discussions of different areas of development. For example, language disorders appear with the discussion of typical language development, and attention deficit disorder appears where we describe the typical development of attention. Thinking about atypical development this way helps us see it as an individual difference in development rather than as an illness, and this may help reduce the stigma associated with it.

The Role of the Child in Development

Are you the person you are today because you *chose* to be that person, or did someone else *make* you who you are? How you think about that question pretty much sums up the issue of an active child versus a passive one. Some theories presume that it is the environment that shapes the development of the child. The clearest example of this way of thinking is called *behaviorism*. As you will see in Chapter 2, this approach looks at the way that systematic use of rewards and punishment affects the likelihood that a child will—or won't—behave in certain ways. You may agree with this point of view if you think children are like lumps of clay that parents shape into the type of children they want. Other theories in child development give children a much more active role in shaping their own development. For example, Jean Piaget's theory of cognitive development, also discussed in Chapter 2, is based on the idea that children actively explore their environment and, in the process, construct their own ideas about how the world works.

As with some of the other issues we have already discussed, maybe the answer to this issue isn't one or the other, but rather some combination of both. The concept of **niche picking** (Scarr & McCartney, 1983) suggests that people actively seek out environments that are a good fit with their genetic makeup. In this way, children actively shape their experiences by choosing environments that, in turn, enhance or inhibit the characteristics that initially attracted the child to that environment. And, while children don't choose the family, neighborhood, or culture into which they are born, each of these environments offers the child many alternatives that significantly impact and shape their development. Later in this chapter, we describe in more detail the important roles specific contexts have on development.

Positive Psychology

For many years, research in the field of child development focused on understanding the cause of problems in people's lives and finding ways to restore their functioning and well-being, but beginning in the late 1990s, psychologists began to think more about people's strengths than their weaknesses and looked for ways to foster optimal outcomes for all individuals, not just those who were struggling. The goal of positive psychology is to focus on strength, not weakness; to build on the best things in life, rather than repair the worst; and to help people live fulfilling and meaningful lives (Park et al., 2016; Seligman, 2011). Using this approach, researchers have identified a number of human strengths including courage, optimism, interpersonal skills, perseverance, and insight that allow all people not only to survive, but to flourish.

The influence of positive psychology on the study of child development is clearly seen in the **positive youth development** movement. The framework for positive youth development is based on a set of developmental assets that support optimal development for all children, not just those who are at risk. These assets allow the child to cope with challenges, but also to take advantage of opportunities. You will learn more about the positive youth development movement in Chapters 14 and 15, but research guided by the positive youth development perspective appears in many topics throughout the book.

Integrating Themes and Issues

Each of these issues cuts across many of the specific topics that you will study. Each also has been the subject of discussion and debate for many years. For that reason, we are not searching for a single best way to understand the complex process of child development. Rather, each of these issues is a lens through which we can view the process. As you continue to read this book, think about the ways you conceptualize development. As your understanding grows, continue to ask yourself what you believe about development, but also think critically about *why* you hold these beliefs. You should expect your ideas to undergo some significant changes as your understanding of this process grows.

CHECK YOUR UNDERSTANDING

Knowledge Questions

1. What are the differences between physical, cognitive, and social-emotional development?
2. Contrast quantitative and qualitative changes that occur in development.
3. How does niche-picking relate to the nature–nurture controversy?
4. What is the positive youth development movement?

Critical Thinking

Compare how the belief that children play an active role in their own development versus the belief that children passively receive parental influences that shape their development affects the strategies parents use to raise their child.

Contexts of Development

>> LQ 1.3 What are the contexts for child development?

Children around the world are similar to one another in many ways, but the way development occurs varies widely, depending on the context in which they grow up. *Context* is a very broad term that includes all the settings in which development occurs. Children develop in multiple contexts that include family, schools, communities, and cultures. Throughout this book you will learn about these different contexts and the ways they influence various aspects of children's development.

Family

Families are the primary context for development for most children. Families today take many different forms, but whether they are nuclear families, single-parent families, multigenerational families, step- or adoptive families, they all serve one important function: They are responsible for the **socialization** of their children. They instill the norms, values, attitudes, and beliefs of their culture so that children grow up to be positive, contributing members of their society. We will discuss the effect of different

family forms on child development in later chapters, and also examine the ways that families link children and adolescents to the other contexts that influence their development.

School

In most countries, school is another important context for development. During the school year, American children spend on average about 6.5 hours a day in school (Nisen, 2013). Within this context children learn academic skills, such as reading, writing, and arithmetic, and older children and adolescents are prepared for higher education or entry into the workforce, but schools also play a role in socializing children to become good citizens. In recent years, schools have increasingly taken on other functions besides educating children. Today, schools provide nutritious meals, some health care, and a range of social services for their students. School also is where most children and adolescents make friends, and sometimes become the victims of bullies. You can see from this description why school is a context that impacts children's physical, cognitive, and social-emotional development.

Community

The characteristics of the community in which children live impact many aspects of development. The nature of that community affects the range and quality of support services available to children and their families. The quality of neighborhood schools affects the educational opportunities and out-of-school activities that are available. Whether a neighborhood is safe or not and whether there are public recreational spaces such as parks in the area affect the amount of time children might spend outside their homes and what they do with this time (Kurka et al., 2015). You will learn more about the effects of children's involvement in the natural world in Chapter 14. Community environments can promote healthy development or expose children to risks caused by environmental pollutants, described in Chapter 15.

Socioeconomic Status

Some families have more resources than others and some have less, and these differences affect children's development. **Socioeconomic status (SES)** is an indication of the social standing of an individual or group based upon a combined measure of

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Block party. When neighbors get together for something like this block party, it helps to build a sense of community. The kind of neighborhood children live in makes a big difference in their lives.

income, education, and occupation (American Psychological Association [APA], 2019b). Differences in socioeconomic status are often associated with inequities in access to resources in a society, and these inequities, in turn, can have a negative impact on the lives of children and families (APA, 2019b). This process begins even before a child is born, when low SES parents have less access to good nutrition and prenatal care. Consequently, their babies are more likely to be born prematurely or at low birth weight, leaving the child more vulnerable to long-term health problems and possibly limiting the child's ability to learn. Families with fewer financial resources often live in neighborhoods that are both unhealthy and unsafe and have schools that offer students fewer opportunities to learn and achieve. Finally, families with fewer resources are more likely to experience highly stressful life events, such as loss of income, relocation, divorce and separation, and violence (APA, 2019b). Despite these economic disadvantages, we point out to you throughout the book that many children are able to overcome these challenges and lead healthy, happy, and productive lives (see, for example, Ellis, Bianchi, Griskevicius, & Frankenhuis, 2017; Luthar & Eisenberg, 2017; Mayo & Siraj, 2015; Ratcliffe & Kalish, 2017; Wadsworth, Ahlkvist, McDonald, & Tilghman-Osborne, 2018), but as a society we have an essential stake in making sure that every child has the chance to reach their full potential.

Culture

The general findings from research on development are modified not only by individual differences but also by group differences, such as those between different cultures. **Culture** includes the behaviors, norms, beliefs, and traditions that are shared by a group and that are transmitted from one generation to the next (Matsumoto & Juang, 2017). It emerges from a group's environmental niche (or their place in a particular environment) and promotes the survival of the group by improving the group's ability to meet the demands of that environment. It also helps group members pursue happiness and find meaning in life.

Much of what you will read about child development is based on research carried out in Western, industrialized countries, but increasingly the field has sought to understand children within the context of their own cultures. To this end, we draw on cross-cultural studies throughout the book to illustrate both research that finds similarities across cultures, which suggests there is a universal process at work, and research that illustrates important differences between cultures that impact children as they develop. For example, in Chapter 9 we look at cross-cultural similarities and differences in whether and how adults talk to their infants. In Chapter 10 we look at how adaptive styles of attachment differ from one cultural context to another, as well as how emotions are displayed across cultures. We also look at cultural similarities and differences in children's play (Chapter 12) and self-concept (Chapter 11), in addition to a number of other topics.

Although the field of child development has shown a deeper, richer appreciation of this diversity in recent years, it is still easy to slip into the assumption that the way *we* do things is the right way and that other ways are wrong. **Parental ethnotheories** are a framework for understanding how a particular cultural context impacts a child's development (Harkness, Super, & Mavridis, 2011). Within any given culture, the ideas parents have about the best way to raise a child reflect the values, beliefs, and traditions of that culture. While there may be a few things that are universal and shared across all or most cultures (for instance, that parents love and want what is best for their child), what they think is best with regard to food, sleep, play, and many other aspects of development can vary greatly from one cultural setting to another. To guard against labeling culturally based parenting practices as deficient rather than simply different, we must understand that parenting practices reflect the particular set of cultural values held by the parents. If we do that, we will see that there are different ways to raise children, each of which is responsive to the realities of a particular environment and that promote the well-being of the children in that culture.

For examples of how we may misinterpret the actions and intentions of people whose culture is different from our own, see **Active Learning: Parenting Behaviors Across Cultures.**

ACTIVE LEARNING

Parenting Behaviors Across Cultures

For each of these descriptions, circle "Yes" if you agree that it is a good way to raise a child and circle "No" if you disagree.

1. A good parent would allow a young infant to nap outside in below freezing weather.[2]	Yes	No
2. A good parent does not begin toilet training a toddler until the child is 2 to 2-1/2 years old and has shown an interest in it.[3]	Yes	No
3. A good parent puts a young child to bed by 7:30 or 8:00 p.m. each night.[1, 2]	Yes	No
4. A good parent lets infants, toddlers, and even young children sleep in the parents' bed.[1, 3]	Yes	No
5. A good parent doesn't prepare special food for young children; they simply eat what their parents eat.[3]	Yes	No

Sources: [1]American Academy of Pediatrics (2016a).

[2]Morin (2018).

[3]Ward (2018).

Do you know any parents who have beliefs or behave in other ways that were contrary to typical Western behaviors in raising their children? If so, describe how those behaviors reflect beliefs or values held in their culture.

1. Yes, if you live in Norway, Sweden, or Finland, where parents believe that sleeping in the fresh air helps to prevent colds or the flu.
   No, if you live in most other countries.
2. Yes, if you are in a Westernized country.
   No, if you are in China or Vietnam, where parents begin watching an infant in the first days of life for signs that the infant is urinating or defecating and make a low whistle at those times so the infant learns to associate the sound with the need to relieve themselves. In one study, by using this method, all infants were potty trained by 9 months of age (Duong, Jansson, & Hellström, 2013).
3. Yes, if you live in the United States. The American Academy of Pediatrics (2016a) recommends that infants get 12 to 16 hours of sleep (including naps) each day, toddlers get 11 to 14 hours, and preschoolers get 10 to 13 hours.
   No, if you live in Hong Kong, India, or Taiwan, where parents usually put their children to bed around 10:00 p.m. so they have time to be around family while they socialize with each other.
4. No, if you are in a Western country. The American Academy of Pediatrics recommends that infants sleep in the same room as parents, but in a nearby crib or bassinette (but never a soft surface like a couch or chair) (Moon, 2016).
   Yes, if you are in Japan, where children may continue to sleep in their parents' bed until they are old enough to go to school.
5. No, if you are in many Westernized countries, where many parents prepare "child-friendly" foods for their children.
   Yes, if you are in France or South Korea. In these cultures, eating is an important social experience and children join adults at the table and eat the same food as they eat from a very early age.

Cultures are often described as varying along a continuum from *individualism* to *collectivism*. In individualistic cultures, heroes typically are those who are self-made and who manage to rise from deprived circumstances to become successful. The emphasis is on being independent, competitive, and unique. In collectivist cultures, the emphasis is more on an obligation to your family or your group, however you define it, and identity is derived primarily from the individual's social affiliations. The child is raised to be aware of how his or her behavior affects others and is encouraged to share resources, with an emphasis on maintaining harmony in social relationships (Thies & Travers, 2006). Table 1.2 summarizes other ways in which these cultures differ (Hofstede, 2011).

In the past, Western industrialized societies have been the prototype of individualistic cultures, while Asian cultures have been the prototype of collectivist cultures. However, researchers have begun to question whether this "east–west" dichotomy adequately describes cultural differences. Research conducted around the world has found that there is not one, unitary way to be independent or interdependent (Vignoles et al., 2016). These researchers argue that thinking of cultures as appearing somewhere on a continuum from collectivist to individualistic does not adequately reflect

TABLE 1.2

Characteristics of individualistic and collectivistic cultures.

INDIVIDUALISM	COLLECTIVISM
Everyone is supposed to take care of him- or herself and his or her immediate family only	People are born into extended families or clans which protect them in exchange for loyalty
"I" – consciousness	"We" – consciousness
Right of privacy	Stress on belonging
Speaking one's mind is healthy	Harmony should always be maintained
Others classified as individuals	Others classified as in-group or out-group
Personal opinion expected: one person one vote	Opinions and votes predetermined by in-group
Transgression of norms leads to guilt feelings	Transgression of norms leads to shame feelings
Languages in which the word "I" is indispensable	Languages in which the word "I" is avoided
Purpose of education is learning how to learn	Purpose of education is learning how to do
Task prevails over relationship	Relationship prevails over task

Source: Hofstede (2011), p. 11.

the mix of characteristics that describes them. For example, Latin American cultures are often identified as collectivist because of a cultural focus on interdependence, but the Latino samples in their study emphasized independence on six of the seven cultural dimensions they identified. Similarly, Middle Eastern samples emphasized self-reliance, toughness, and self-enhancement (which are individualistic characteristics) as well as attention to others and the social consequences of one's behavior (which are collectivistic characteristics). These researchers call for future research that looks at the ways that individuals within different cultural groups are both independent and interdependent.

Some cultural expectations are taught explicitly to children. For example, a parent in one culture might say to a child, "Look at me when I'm speaking to you," whereas a parent in another culture might tell a child that *not* looking directly at an adult is a sign of respect. However, much cultural information is conveyed in more subtle ways through a number of parenting practices, including how parents deal with issues as basic as how to feed infants and toddlers (Bornstein, 2012). Think about what you would expect to see when a mother in the United States feeds her 1-year-old baby. Most likely you have an image of the baby sitting in a high chair. The mother spoon-feeds the baby but often lets the baby take the spoon to begin learning to feed herself (usually with messy and somewhat hilarious results, as shown in the photo on the left on the next page). She may also put some "finger food," like dry cereal, on the tray for the baby to take on her own to encourage independence. By contrast, in cultures that emphasize interdependence rather than independence, feeding remains under the control of the parent, as shown in the photo on the right. In the process, the child learns to be patient and cooperate with another person. Mealtime becomes an expression of family love and expectations for proper behavior.

Despite cultural differences in parenting, infants and toddlers around the world all learn to eat, sleep, and go to the bathroom in accordance with the expectations of their cultures. This is an example of *equifinality,* as described earlier in this chapter. There may be multiple pathways, but they all get the child to the same place.

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Cultural differences in feeding. Babies in cultures that emphasize independence are often encouraged to try to feed themselves, but babies in cultures that emphasize interdependence are more likely to be fed in a way that emphasizes family closeness. Do you see how these different cultural values are reflected in these pictures?

CHECK YOUR UNDERSTANDING

Knowledge Questions

1. What is the primary context for most children's development?
2. How does socioeconomic status affect a child's development?
3. How does culture affect childrearing practices?

Critical Thinking

Why is it so easy for us to slip into thinking that the way we have been raised is the best way to raise children? What can be done to overcome this tendency?

Be a Smart Consumer of Information About Development

>> LQ 1.4 How can you be a smart consumer of information about development?

Information about children and child development is everywhere—in books, magazines, and television programs; at home; and online. To be able to judge the quality of all this information on development, you will need to become an informed consumer. When you are planning to make a large purchase, you often make a better choice if you gather information from a variety of sources and evaluate how trustworthy they are. You can use a similar process when learning about child development.

Know Your Sources

Knowing the source of the information you are using is the first step in becoming an informed consumer. You should ask yourself if you are getting information from someone who is knowledgeable about the topic and is providing objective and unbiased information, or if you are getting information from someone who is not credible or is presenting personal opinion as though it were fact.

Your campus library owns many journals, books, and professional publications in the field of child development, and you can trust these to be reliable sources of information. Many of them are available through your library's electronic databases. For students of child and adolescent development, the PsycINFO and ERIC (Education Resources Information Center) databases are probably of greatest interest. PsycINFO contains over 4 million records that include peer-reviewed journal articles, books, and dissertations from the 1880s to the present (American Psychological Association, 2019a). It contains publications from more than 50 countries and journals in 29 languages. ERIC is sponsored by the U.S. Department of Education and contains journals and other education-related materials, including conference papers and reports, from 1966 to the present (Institute of Education Sciences, n.d.). In these databases, you can find abstracts of articles (brief summaries of the research done and the conclusions drawn from it), and in many cases information on how to locate the complete articles.

The reason you can have confidence in the information you find in professional journals is that many of them use a **peer review** process to determine which articles they will publish. Articles that are submitted to a journal are reviewed by professionals who are knowledgeable about the topic of the research before they are accepted for publication. This process ensures that the information in peer-reviewed journals has passed professional scrutiny before it gets into print.

When you turn to the Internet to find information, you need to provide your own scrutiny and use good judgment. Remember that anyone can post information on the web, so the author of a web page does not necessarily have any particular expertise. Their information may simply be wrong, or it may be no more than their personal opinion. This is especially a risk when you are researching a controversial topic. Two domain names that can generally be trusted are .edu, used by educational institutions, and .gov, associated with government agencies. While commercial sites may provide some legitimate information, their real intent often is to sell you a product.

Although the Wikipedia website is popular with college students, most know that it should only be used as a starting point for their research (Head & Eisenberg, 2010). Because anyone can write an article or edit an existing post on the site, Wikipedia is *not* considered a reliable source of information for most purposes. However, many Wikipedia entries include a bibliography of professional books and articles that can point you to scientific information on the topic you are researching.

In **Active Learning: Evaluating Information on the Web,** you will get some ideas about how you can evaluate the accuracy of information that you find on the web.

ACTIVE LEARNING

Evaluating Information on the Web

As we rely more and more on web-based sources for our information it has become increasingly difficult to distinguish fact from fiction on the Internet, so it is important that we develop the digital literacy needed to identify sites that provide accurate and unbiased information. Checklists for evaluating websites have been popular in classrooms, libraries, and even earlier editions of our books. However, some sites that intend to trick the viewer are now designed to meet all of the criteria in those checklists.

Checklists suggest that you evaluate a website using criteria such as these:

- Relevancy (Is the information relevant to your question?)
- Appropriateness (Is the information appropriate for the reader's age and values?)
- Detail (Is there adequate depth of coverage of the topic?)

- Currency (When was the information published or last updated?)
- Authority (What are the qualifications of the author of the site?)
- Bias (Was the information designed to inform, persuade, entertain, or sell something to the reader?) (RADCAB, 2005–2019)

However, if you were to use these criteria to evaluate a site such as the one supposedly devoted to preserving the habitat of the Pacific Northwest tree octopus, the site would pass your scrutiny. It is filled with facts and figures, appears to be from an authoritative source, has links to reference articles (which are as phony as the site itself), and is current. We hope you will *not* be making any donations to the Wild Haggis Conservation Society based on what you read there.

Rather than simple checklists, fact-checkers for news organizations usually take a different approach. They begin evaluating a site by opening a new browser window and looking for information on the source of the original site. This is called a *lateral search.* Once they establish that the source is legitimate and reliable, they can continue to check the accuracy of the information on the site against other sites (Breakstone, McGrew, Smith, Ortega, & Wineburg, 2018). Currently there are efforts to develop curricula for use at the middle school and high school level to teach students media literacy skills that can be applied not only to websites but also to blogs and social media (The Canadian Press, 2017; The Poynter Institute, 2019).

These are essential skills for students today. Choose a topic you are interested in that involves some degree of controversy (for example, vaccinating children, children co-sleeping with parents, or prescribing medication for children with ADHD). Find a website on that topic and do a lateral search. What do you conclude about the credibility of the site you initially found?

Become a Critical Thinker

In addition to learning a great deal about child development, we want you to be able to think critically about the information. To do this you will need to be actively engaged with the material so that you can reflect on it. We expect you to ask questions and examine the assumptions that underlie research rather than just accepting information at face value. No single book can contain all the information you need on any topic, so don't hesitate to look for answers to your own questions and seek out divergent opinions on topics that intrigue you. Expose yourself to a wide range of ideas. Some will make sense to you and some will be harder to accept, but keep an open mind. As you learn more about research methods in Chapter 3, you will become better able to examine the evidence behind the ideas you find rather than just relying on what someone else has said.

Science is an organized body of knowledge that accumulates over time, so it is always changing and growing. Throughout the book you will find features called the **Journey of Research** that present a brief historical sketch of how some important ideas in the field have developed over the years. Our current understanding of a topic will make more sense to you when you understand the origin of those ideas. The fact that an idea has been around for a long time—or that many people endorse it—does not necessarily mean it is true. Remember that for a very long time, everyone believed that the Earth was flat and no one believed that germs caused disease. Likewise, just because an idea is new doesn't necessarily mean it is better than what we had thought before. New research findings need to be tested and replicated (that is, produced again by others) before we can gain confidence that they are accurate and reliable. The best suggestion here is to be open to new ideas but to be cautious about jumping on a bandwagon until there is good evidence that the bandwagon is going in the right direction.

Guard Against Generalizations

As you learn about child development, it is easy to assume others have had the same or similar experiences to yours with the same or similar consequences. Your own experiences are meaningful and real. They are part of what has made you the person you are today and help shape the person you will be tomorrow. That fact is never in question, but trying to generalize from your particular experience to general statements about everyone else's experience is always dangerous. Likewise, when we conduct research we cannot necessarily generalize findings based on one population to another population that might have different characteristics.

The opposite of this is also true. The conclusions drawn from research may not describe what your personal experiences were, but this does not mean the research is invalid. Rather, it reminds us that research describes the outcome for groups, not for every individual within a group. When we say men are more physically aggressive than women, for instance, it does not mean every man is more aggressive than any woman; it only means that on average there is a difference between the groups, and within the groups there is a good deal of individual variability.

Avoid Perceptual Bias

Sometimes students think that child development is just common sense and that they already know everything they need to know. As you read through this book you will find that it isn't that simple. We can't rely on folk wisdom, or ideas that are widely accepted but have not been scientifically tested, to tell us what we need to know about development. One problem with having such preconceived ideas is they can affect how you process new information. As you read this book, it will be easier for you to remember the facts you encounter that fit well with what you already believe to be true, and to forget or ignore those that don't. This tendency to see and understand something based on the way you expected it to be is called a **perceptual bias**, and it can affect your learning. That is one reason we will use what might be common misconceptions to begin each of the rest of the chapters in this book. Testing your knowledge about the topics in the chapter *before* you begin reading will make you more aware of information in the chapter that will challenge your initial ideas. You will want to spend a little more time and effort making sure you understand this information.

To get a preview of the types of misconceptions that you may have about child development, try to answer the questions in **Active Learning: Test Your Knowledge of Child Development.** Each of these questions appears later in the book. Pay special attention to information that challenges ideas that you bring with you to this class.

ACTIVE LEARNING

Test Your Knowledge of Child Development

1	True	False	Each human being has hundreds of thousands of genes that make him or her a unique individual.
2	True	False	Research has shown that exposing a fetus to extra stimulation (for example, playing music near the pregnant woman's stomach) can stimulate advanced cognitive development.
3	True	False	Humans use only 10% of their brain.
4	True	False	It is perfectly fine to use baby talk with infants.
5	True	False	Overweight and obese children are likely to slim down as they enter adolescence.
6	True	False	Most adults who were abused as children do not become abusive parents.
7	True	False	Children who are gifted or talented often pay a price for their giftedness because they are likely to be socially or emotionally maladjusted.
8	True	False	Programs that build students' self-esteem not only improve their grades but also help reduce delinquency, drug use, and adolescent pregnancy.
9	True	False	Many gay, lesbian, or bisexual adolescents say their school is one of the most accepting parts of their community.
10	True	False	Adolescents today are much less likely to be victims of violence while in school than they were 20 years ago.