

CHILD DEVELOPMENT

THIRD EDITION



Laura E. Berk

Child Development

T H I R D E D I T I O N

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Illinois State University

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*In loving memory of my parents
Sofie and Philip Eisenberg*

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Laura E. Berk is professor of psychology at Illinois State University, where she has taught child development to undergraduate and graduate students for over twenty years. She received her bachelor's degree in psychology from the University of California, Berkeley, and her master's and doctoral degrees in early childhood development and education from the University of Chicago. She was visiting scholar at Cornell University in 1975–1976, at the University of California, Los Angeles, in 1982–1983, and at Stanford University in 1990–1991. She has published extensively on the effects of school environments on children's development and, more recently, on the development of children's private speech. Her research has been funded by the U.S. Office of Education and the National Institute of Child Health and Human Development. It has appeared in many prominent journals, including *Child Development*, *Developmental Psychology*, *Merrill-Palmer Quarterly*, *Child and Youth Care Quarterly*, and *American Journal of Education*. Currently she serves as research editor of *Young Children* and consulting editor of *Early Childhood Research Quarterly*, journals of the National Association for the Education of Young Children. She is coeditor of *Private Speech: From Social Interaction to Self-Regulation* and author of the chronologically organized textbook, *Infants, Children, and Adolescents*, published by Allyn and Bacon.

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Preface

My more than twenty years of teaching child development have brought me in contact with thousands of students having diverse college majors, future goals, interests, and needs. Some are affiliated with my own department, psychology, but many come from other child-related fields—education, home economics, sociology, anthropology, and biology, to name just a few. Each semester, my students' aspirations have proved to be as varied as their fields of study. Many look toward careers in applied work with children—teaching, caregiving, nursing, counseling, social work, school psychology, and program administration. Some plan to teach child development, and a few want to do research. Most hope someday to have children, whereas others are already parents who come with a desire to better understand and rear their own youngsters. And almost all my students arrive with a deep curiosity about how they themselves developed from tiny infants into the complex human beings they are today.

My goal in preparing this third edition of *Child Development* is to provide a textbook that meets the instructional goals of the course as well as the varied needs of students. I aimed for a book that is intellectually stimulating, that provides depth as well as breadth of coverage, and that portrays the complexities of child development in a way that captures student interest while helping them learn. To achieve these objectives, I have grounded this text in a carefully selected body of classic and current theory and research, emphasized how the research process helps solve real-world problems, and paid special attention to policy issues that are critical to the overall condition of children in today's world. I have also used a clear, engaging writing style and provided a unique pedagogical program that assists students in mastering information, integrating the various aspects of development, and applying what they have learned.

TEXT PHILOSOPHY

The basic approach of this book has been shaped by my own professional and personal history as a teacher, researcher, and parent. It consists of six philosophical ingredients that I regard as essential for students to emerge from a course with a thorough understanding of child development. Each theme is woven into every chapter.

1. **An understanding of the diverse array of theories in the field and the strengths and shortcomings of each.** The first chapter begins by emphasizing that only knowledge of multiple theories can do justice to the richness of child development. In each topical domain, I present a variety of theoretical perspectives, indicate how each approach highlights previously overlooked aspects of development, and discuss research that has been used to evaluate them. If one or two theories have emerged as prominent in a particular area, I indicate why, in terms of the theory's broad explanatory power. Discussion of contrasting theories also

serves as the context for an evenhanded analysis of many controversial issues throughout the text.

2. An appreciation of basic research strategies to investigate child development. To evaluate theories, students need a firm grounding in basic research design and methodology. I devote an entire chapter to describing and critiquing research strategies. Throughout the book, numerous studies are discussed in sufficient detail for students to use what they have learned to critically assess the findings, conclusions, and implications of research.

3. Knowledge of both the sequence of child development and the processes that underlie it. Students are provided a description of the organized sequence of development along with a discussion of processes of change. An understanding of process—how complex combinations of biological and environmental events produce development—has been the focus of most recent research. Accordingly, the text reflects this emphasis. But new information about the timetable of change has also emerged in recent years. In many ways, children have proved to be far more competent beings than they were believed to be in decades past. Recent evidence on the timing and sequence of development, along with its implications for process, is presented in detail throughout the book.

4. An appreciation of the impact of context and culture on child development. A wealth of new research indicates more powerfully than ever before that children live in rich physical and social contexts that affect all aspects of their development. In each chapter, students travel to distant parts of the world through a growing body of cross-cultural evidence. The text narrative also discusses many findings on socioeconomically and ethnically diverse children within the United States. Besides highlighting the role of immediate settings, such as family, neighborhood, and school, I make a concerted effort to underscore the impact of larger social structures—societal values, laws, and government programs—on children's well-being.

5. A sense of the interdependency of all domains of development—physical, cognitive, emotional, and social. In every chapter, an integrated approach to child development is emphasized. I show how physical, cognitive, emotional, and social development are interwoven. Within the text narrative and in Connections tables at the end of each chapter, students are referred to other sections of the book in order to deepen their understanding of relationships among various aspects of change.

6. An appreciation of the interrelatedness of theory, research, and applications. Throughout this book, I stress that theories of child development and the research stimulated by them provide the foundation for sound, effective practices with children. The link between theory, research, and applications is reinforced by an organizational format in which theory and research are presented first, followed by implications for practice. In addition, a new focus in the field—harnessing child development knowledge to shape social policies that support children's needs—is reflected in every chapter. The text addresses the current condition of children in the United States and around the world and shows how theory and research have sparked successful interventions. Many important applied topics are considered—prenatal transmission of AIDS, infant mortality, maternal employment and day care, early intervention for at-risk children, teenage pregnancy and childbearing, information processing and academic learning, bilingual education, effective parenting techniques, children's gender stereotyping, child maltreatment, vocational education in adolescence, and more.

TEXT ORGANIZATION

This text is organized topically, a manner best suited to a comprehensive discussion of theory, research, and applications and an uninterrupted view of development within each domain. The book retains the same basic structure that was

praised by users of its previous two editions. It is divided into 5 parts and 15 chapters, each of which develops the six philosophical themes just described.

PART I. THEORY AND RESEARCH IN CHILD DEVELOPMENT. This section provides an overview of the history of the field, twentieth-century theories, and research strategies. **Chapter 1** stresses the importance of theories as organizing frameworks for understanding child development and traces changes in views of childhood from medieval to modern times. The study of child development is depicted as an interdisciplinary endeavor that aims to both understand children and improve their life condition. **Chapter 2** covers strategies for conducting scientifically sound research. Commonly used research methods and both general and developmental research designs are explained and critiqued. The chapter concludes with a consideration of ethics in research on children.

PART II. FOUNDATIONS OF DEVELOPMENT. A trio of chapters introduces students to the foundations of development. **Chapter 3** combines a discussion of genetic mechanisms and prenatal and perinatal environmental influences into a single, integrated discussion of these earliest determinants of development. A concluding section takes up the various ways in which investigators conceive of the relationship between heredity and environment as a prelude to revisiting the nature–nurture controversy in later chapters. **Chapter 4** is devoted to an overview of the rapidly expanding literature on infant capacities. Research on newborn reflexes, states, and learning capacities is reviewed, and early motor and perceptual development is considered. The chapter closes with the question of whether infancy is a sensitive period in which certain experiences must occur to ensure healthy development. **Chapter 5** addresses physical growth, including development of the brain. The close connection between physical and psychological development is emphasized. A variety of hereditary and environmental influences on physical growth are also considered.

PART III. COGNITIVE AND LANGUAGE DEVELOPMENT. Four chapters treat the diverse array of theories and wealth of research on cognitive and language development. **Chapter 6** discusses Piaget’s cognitive-developmental theory and Vygotsky’s sociocultural theory. Even though questions have been raised about Piaget’s stages in recent years, no other individual has contributed more to our understanding of child development. Students are given a thorough grounding in Piagetian theory as a prerequisite for studying language, emotional, and social-cognitive development in later chapters. With its strong emphasis on the social context of cognition, Vygotsky’s theory has recently risen to the forefront of the field, stands as a major competing approach to Piaget’s, and therefore shares the title of Chapter 6 in this edition. **Chapter 7** introduces information processing, another leading alternative to the Piagetian perspective. General and developmental models of information processing are reviewed along with research on each major facet of the information-processing system. The chapter also discusses recent applications of information processing to children’s academic learning and concludes with an analysis of the strengths and weaknesses of the information-processing perspective. **Chapter 8** presents the psychometric approach to children’s intelligence. It provides an overview of the intelligence testing movement and addresses a variety of controversial issues and research findings, including racial, ethnic, and social-class differences in IQ, heritability of intelligence, and cultural bias in tests. The concluding section moves beyond IQ to a discussion of creativity and talent. **Chapter 9** provides a comprehensive introduction to language development, including behaviorist, nativist, and interactionist theories. The body of the chapter is organized around the four components of language: phonology, semantics, grammar, and pragmatics. The chapter also addresses such questions as: Can nonhuman primates acquire language? Is there a sensitive period for language learning? How does bilingualism affect children’s development?

PART IV. PERSONALITY AND SOCIAL DEVELOPMENT. Coverage of personality and social development is divided into four chapters. **Chapter 10** contains an overview of theory and research on children's expression and understanding of emotion, the origins of temperament and its implications for cognitive and social development, and infant-caregiver attachment. The impact of caregiving and temperament on the attachment bond, fathers as attachment figures, and effects of maternal employment and day care on attachment security are among the issues discussed. **Chapter 11** considers the development of social cognition. The discussion is divided into three sections: children's understanding of self, other people, and relations between people. Among the topics included are self-concept and self-esteem, achievement-related attributions, identity, perspective taking, friendship, and social problem solving. **Chapter 12**, which addresses moral development, includes a review of psychoanalytic, social learning, and cognitive-developmental theories and related research. Child-rearing practices that foster moral internalization, cross-cultural research on moral reasoning, the controversial issue of whether males and females differ in moral understanding, and the development of self-control and aggression are among the topics featured in this chapter. **Chapter 13** focuses on sex-related differences and gender roles. Biological and environmental influences on gender stereotyping and gender-role adoption, diverse theories and research on the development of gender-role identity, and sex-related differences in mental abilities and personality traits are discussed. The chapter also includes an applied section on raising non-gender-stereotyped children.

PART V. CONTEXTS FOR DEVELOPMENT. The final two chapters examine four highly influential contexts for development—family, peers, media, and schooling. **Chapter 14** considers the family from a social systems perspective. The bidirectional nature of parent-child interaction, the importance of links between the family and community for children's optimal development, and styles of child rearing are highlighted. The central portion of this chapter discusses the impact of family transitions in Western industrialized nations on children's development—the trend toward a smaller family size and the high rates of divorce, remarriage, maternal employment, day care, and self-care by school-age children. The chapter concludes with a discussion of child maltreatment. In **Chapter 15**, the social systems perspective is extended to extrafamilial contexts for development. In the section on peer relations, research on the development of peer sociability, peer acceptance, peer groups, and peers as socialization agents is discussed. The middle portion of the chapter addresses the impact of television and computers on social and cognitive development. A concluding section on schooling considers such topics as educational philosophies, school transitions, teacher-pupil interaction, ability grouping, and cross-national research on academic achievement.

NEW COVERAGE IN THE THIRD EDITION

In this edition, I continue to represent a burgeoning contemporary literature, with theory and research drawn from over 900 new citations. To make room for new coverage, I have condensed and reorganized some topics and eliminated others that are no longer as crucial in view of new evidence. The text content includes many major changes:

- Social policy brought to the forefront of the text through a special section in Chapter 1 that provides an overview of the current condition of children in the United States and the social-policy process. A wide variety of social-policy topics are integrated into succeeding chapters.
- A reorganized discussion of history and theory in Chapter 1, in which basic themes and issues are introduced early and used as the basis for comparing and contrasting major perspectives. New coverage of James Baldwin as a historical force in the field, the impact of theories on child-rearing advice to parents, and the role of culture in development.

- Expanded treatment of research strategies in Chapter 2, including new sections on ethnography and the microgenetic design. Many new illustrations of research.
- Updated coverage of prenatal teratogens, preterm and low-birth-weight infants, and cross-national findings on infant mortality in Chapter 3.
- New evidence on cultural variations in infant sleeping arrangements, changes in crying over the first year, sudden infant death syndrome, newborn imitation, development of hearing and vision, linkages between motor skills and perceptual capacities, and long-term consequences of early deprived rearing experiences in Chapter 4.
- Expanded treatment of the psychological impact of pubertal events, teenage sexual activity and childbearing, development of the brain, nutrition and physical growth, and sex-related differences in motor skills; and a new section on sexual orientation in Chapter 5.
- More evaluative commentary on Piaget's stages, new findings on the development of representation and categorization and cultural influences on operational thought; and an expanded section on Vygotsky's sociocultural theory and its educational applications in Chapter 6.
- New work on the development of processing capacity, the controversy over whether the mind is a general or modular device, infantile amnesia, children's eyewitness memory, Siegler's model of strategy choice, cultural differences in mathematical understanding, and development of scientific reasoning in Chapter 7.
- A new section on Gardner's theory of multiple intelligences along with added coverage of componential analyses of intelligence test performance, effects of cultural background and schooling on IQ, the impact of early intervention on intellectual development, and creativity and talent in Chapter 8.
- Expanded discussion of research relevant to nativist theory of language development and new evidence on babbling, children's strategies for acquiring word meaning and grammatical forms, adult support for early language learning, and language development of later-born children in Chapter 9.
- Recent findings on young infants' expression of emotion, development of emotional understanding in childhood, assessment of temperament through physiological reactions, the relative contributions of quality of caregiving and infant temperament to attachment security, and the internal working model concept in Chapter 10.
- A new section on young children's theory of mind and updated evidence on the origins and consequences of achievement-related attributions; cultural influences on self-concept, self-esteem, and adolescent identity; and the development of perspective taking and friendship in Chapter 11.
- A new section on recent psychoanalytic ideas about conscience development and current research on children's reasoning about authority, the relationship of child-rearing practices to moral understanding, the importance of higher education for advanced moral reasoning, cultural influences on moral development, and individual differences in self-control in Chapter 12. Evidence on the development of aggression, including new information on juvenile delinquency, has been moved to this chapter.
- Updated research on the development of gender stereotyping, biological and cultural influences on gender-role adoption, parents' and teachers' encouragement of gender typing, and the development of gender-role identity in Chapter 13. New material on cognitive interventions to reduce gender stereotyping and sex-related differences in vocational development.
- Expanded discussion of the family as a social system, social-class and ethnic variations in child rearing, sibling influences, and development of only children in Chapter 14. Also, new evidence on how parents adapt child rearing to children's growing competence and updated information on divorce,

remarriage, maternal employment, and day-care policies in the United States and other Western nations.

- Greater emphasis on the importance of peer relations, including new primate research on peer-only rearing, new evidence on parental influences on peer sociability, family origins of peer acceptance, subtypes of rejected children, and adolescent peer groups; expanded discussion of policy issues related to improving children's television; and updated research on school transitions, cross-cultural comparisons of academic achievement, and vocational preparation of non-college-bound adolescents in Chapter 15.

PEDAGOGICAL FEATURES

The pedagogical features of the text have been revised and greatly expanded. A highly accessible writing style—one that is lucid and engaging without being simplistic—continues to be one of the text's strong points. In this edition, I frequently converse with students, ask questions, and encourage them to relate what they read to their own lives. In doing so, I hope to make the study of child development even more involving and pleasurable.

CHAPTER INTRODUCTIONS AND END-OF-CHAPTER SUMMARIES. To provide students with a helpful preview of what they are about to read, I begin each chapter with an outline and overview of its content. Chapter introductions have been rewritten to present lively, involving examples of children's development and introduce controversial issues as a means of stimulating student interest. Comprehensive end-of-chapter summaries, organized according to the major divisions of each chapter and highlighting key terms, remind students of important points in the text discussion.

BRIEF REVIEWS. Interim summaries of text content appear at the end of most major sections in each chapter. They enhance retention by encouraging students to reflect on information they have just read before moving on to a new section.

BOXES. Three types of boxes accentuate the philosophical themes of this book. Cultural Influences boxes highlight the impact of context and culture on all aspects of development. Social Issues boxes discuss the condition of children in the United States and around the world and emphasize the need for sensitive social policies to ensure their well-being. From Research to Practice boxes integrate theory, research, and applications. Twenty-five new boxes appear in this edition.

MARGINAL GLOSSARY, END-OF-CHAPTER TERM LIST, AND END-OF-BOOK GLOSSARY. Mastery of terms that make up the central vocabulary of the field is promoted through a new marginal glossary, an end-of-chapter term list, and an end-of-book glossary. Important terms and concepts also appear in boldface type in the text narrative.

MILESTONES TABLES. Milestones tables that provide an overview of the sequence and timing of achievements in each domain of development appear throughout the text. These tables are designed to help students keep track of major developments as they consider a wealth of theory and research. At the same time, each Milestones table reminds students that individual differences exist in the precise age at which milestones are attained, a point made repeatedly throughout the text discussion.

CONNECTIONS TABLES. Each chapter concludes with a Connections table, which encourages students to explore high-interest topics and integrate domains of development by turning to relevant information in other sections of the book. The Connections tables are designed to foster a coherent, unified picture of child development.

ADDITIONAL TABLES, ILLUSTRATIONS, AND PHOTOGRAPHS. New tables are liberally included to help students grasp essential points in the text discussion, extend

information on a topic, and consider applications. The many color illustrations depict important theories, methods, and research findings. Photos have been carefully selected to portray text content and represent the diversity of children around the world.

ACKNOWLEDGMENTS

The dedicated contributions of many individuals helped make this book a reality and contributed to refinements and improvements in each of its editions. An impressive cast of reviewers provided many helpful suggestions, constructive criticisms, and encouragement and enthusiasm for the organization and content of the book. I am grateful to each one of them.

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Laura E. Berk

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