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CHILD DEVELOPMENT



LAURA E. BERK

Child Development

Laura E. Berk
Illinois State University



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Boston London Sydney Toronto

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



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About the Author

Laura E. Berk is Professor of Psychology at Illinois State University, where she has taught child development to undergraduate and graduate students for nearly two decades. She received her Bachelor's degree from the University of California, Berkeley, and her Masters and Doctoral degrees from the University of Chicago. She was visiting scholar at Cornell University in 1975–1976 and at the University of California, Los Angeles, in 1982–1983. She has published extensively on effects of school environments on children's development, and more recently, on the relationship between children's language and thought. Her research on children's private speech is currently funded by the National Institute of Child Health and Human Development. She is consulting editor for *Young Children*, journal of the National Association for the Education of Young Children.

Preface

For many years, I have taught courses in child development to students with diverse college majors, future goals, interests, and needs. Some are students in my own academic department, psychology, while many others come from other child-related fields, such as education, home economics, sociology, anthropology, and biology, to name just a few. Each semester, the professional aspirations of my students 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. A few plan to teach child development at the college level, and some want to do research. Most hope someday to have children of their own, and a number are already parents who come with a desire to better understand the development of their own youngsters. And almost all my students arrive with a deep curiosity about how they themselves developed from tiny infants into the complex adults they are today.

Finding a textbook that meets the instructional needs of the course as well as the needs of students is a challenging task. I wanted a book that was intellectually stimulating; that provided depth as well as breadth of coverage; that did not oversimplify the complexities of child development; that captured the preciousness, beauty, and wonderment of childhood; and that did all this in a clear, approachable, and engaging writing style. It is my goal, in writing this book, to meet all of these needs.

PHILOSOPHICAL ORIENTATION

My own professional and personal history—as student, teacher, researcher, and parent—shaped the basic approach of this book. I believe that a text must communicate six essential ingredients for students to emerge from a course in child development with a thorough understanding of the field. Each is emphasized in every chapter of this book, and together they form the philosophical orientation of the text:

1. An appreciation of the diverse array of theoretical perspectives in the field and of the strengths and shortcomings of each. This text takes an eclectic approach to describing and explaining child development. In each topical domain, a variety of theoretical perspectives are presented and critiqued. If one or two have emerged as especially prominent in a particular area, I indicate why, in terms of the theory's broad explanatory power. Moreover, I show how each new theory highlights previously overlooked aspects of development, and I argue that only knowledge of

multiple theories can do justice to the complexities of childhood and the course of human development. Consideration of contrasting theories also serves as the context for an evenhanded analysis of many controversial issues throughout the text.

2. A sense of the history of child development as a field of study and of the impact of historical trends on current theories. Throughout this book, I emphasize that the modern field of child development is the culmination of a long history — of changes in cultural values, changes in philosophical thinking about children, and scientific progress. A thorough understanding of the current status of the field depends on an appreciation of this history. The first chapter presents an overview of child study, from its philosophical origins in earlier centuries to the current refinement of theories and empirical methods. In each succeeding topical chapter, I describe how theories build upon earlier contributions and are related to cultural belief systems of their times. Thus the text provides students with a broad perspective on the emergence of child study and with a sense of its progress.

3. An understanding of both the sequence of child development and the processes that underlie it. This book provides students with a description of the organized sequence of child development, along with a discussion of processes of change. An understanding of process — how multiple biological and environmental factors produce developmental change — has been the focus of most research during the last few decades. Accordingly, the text discussion reflects this emphasis. But new information about the timetable of development has also emerged in recent years. In virtually all developmental domains, the young child has proved to be a far more competent being than was believed to be the case in decades past. I give thorough attention to recent evidence on the timing and sequence of development, and its implications for developmental process, throughout the text.

4. An appreciation of basic research designs and methodologies used to investigate child development and of the strengths and weaknesses of each. The continued existence of child development theories depends on scientific verification. To rationally evaluate theories, students need a firm grounding in basic research design and methodology. I devote an entire chapter to a description and critique of research strategies. In each topical chapter, numerous research studies are discussed in sufficient detail for students to use what they have learned to critically evaluate the findings, conclusions, and theoretical implications of research.

5. A sense of the interdependency of all aspects of development — physical, cognitive, emotional, and social. The basic organization of this text is topical — an approach that permits a continuous, more coherent, and deeper discussion of each aspect of development than is possible with the alternative age-period organization used in many other textbooks. At the same time, a wealth of current research reveals that the separate domains of development are interdependent; they mutually influence one another. In every chapter, an integrated approach to child development is emphasized. Students are shown how physical, cognitive, emotional, and social development are interwoven. In many instances, they are referred back to sections in earlier topical chapters that enhance their understanding of relationships among the various components of development.

6. An appreciation of the interrelatedness of theory, research, and applications. Throughout this book, I illustrate the vital connections that exist among theory, research, and applications. I show how major research methods have been stimulated by, and are intimately related to, dominant theories — for example, how the clinical (case study) method emerged from psychoanalysis; controlled laboratory investigations from behaviorism; naturalistic observation from ethology and ecology; and the clinical interview from Piagetian theory. In addition, I emphasize that theories of child development, and the research generated by them, provide an

essential foundation for sound, effective interventions aimed at improving the welfare and treatment of children. The linkage between theory, research, and applications is reinforced in every chapter by an organizational format that presents theoretical perspectives first, followed by an analysis of the research stimulated by them. Then practical applications and social policies are discussed in light of theories and research findings.

OVERVIEW OF CONTENT

This text is divided into 5 parts and 15 chapters, each of which develops the six themes described above. The salient features of each part and chapter are summarized below.

Part I. Theory and Research in Child Development. This section offers a unified overview of the history of the field, modern theories, and dominant research methods. **Chapter 1** introduces students to the importance of theories as organizing frameworks for understanding the child and traces the evolution of views of childhood from medieval to modern times. Separate sections on behaviorism and social learning theory, the ecology of human development, ethology, Piaget's cognitive-developmental theory, information processing, social cognition, the study of emotions, and cross-cultural research provide an overview of the current status of the field. Child development is depicted as an interdisciplinary endeavor that draws from psychology as well as from a variety of applied fields, including education, home economics, medicine, and social service. The chapter concludes with a consideration of the recent interest of child development specialists in the design of broad social policies to better the lives of children. **Chapter 2** is devoted to a consideration of strategies for conducting scientifically sound research. Common research methods, as well as general and developmental research designs, are explained and critiqued. The chapter closes with a discussion of special ethical concerns in doing research on children.

Part II. Developmental Foundations. 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 analysis of these earliest determinants of development. A special, concluding section discusses the various ways in which behavioral geneticists and child development specialists conceive of the relationship between heredity and environment, as a prelude to revisiting the nature-nurture controversy in subsequent chapters of the book. **Chapter 4** is devoted to a discussion of the burgeoning literature on infancy. Research on neonatal reflexes, states, and learning capacities is reviewed, followed by a consideration of motor and perceptual development during the first two years of life. The chapter closes with the question of whether infancy is a critical period in which certain experiences must occur to assure a healthy, normal course of child development. **Chapter 5** addresses physical growth. The orderly, asynchronous nature of physical development is described, followed by a special section on development of the brain. The intimate connection between physical and psychological development is emphasized. The chapter concludes with an in-depth consideration of factors affecting physical growth—heredity, nutrition, disease, climate and season, and affection and stimulation.

Part III. Cognitive and Language Development. Four chapters summarize the diverse theoretical perspectives and wealth of research on cognitive and language

development. The first, **Chapter 6**, is devoted to a comprehensive description and critique of Piaget's theory. Although Piaget's work has recently been questioned, no other single individual has contributed more to our understanding of child development. Students are offered a thorough grounding in Piagetian theory as a prerequisite for understanding areas of child study addressed in subsequent chapters, such as language development, social cognition, emotional development, and moral reasoning. **Chapter 7** provides an introduction to information processing, the leading current approach to the study of children's thinking. Major general as well as developmental models of the information processing system are reviewed, along with research on sensory and attentional processing, memory strategies, reconstructive processing, metacognition, and problem solving. Special attention is given to new evidence on very young children, in addition to the more extensive literature on middle childhood and adolescence. Educational applications of research are discussed throughout the chapter, which concludes with a critique of the information processing approach to cognitive development. **Chapter 8** presents the psychometric perspective on children's intellectual growth, which serves as the basis for the wide variety of mental tests available for the assessment of children. The chapter provides an overview of the intelligence testing movement and discusses a variety of controversial issues and research findings, including the stability and predictability of IQ, the origins of racial/ethnic and socioeconomic differences in IQ, the extent to which individual differences in intelligence are heritable, and cultural bias in the tests. A concluding section moves beyond IQ to a discussion of creativity. **Chapter 9** offers a comprehensive introduction to language development, including a review of nativist, environmentalist, and interactionist theories. The development of four basic components of language — phonology, semantics, grammar, and pragmatics — is described, along with a consideration of the more controversial question of how children master their native tongue with such rapidity during the preschool years. The chapter also addresses such controversial questions as, Can apes learn language? Is there a critical period for language learning? Does early bilingualism interfere with or enhance cognitive development?

Part IV. Personality and Social Development. Coverage of personality and social development is divided into four chapters. **Chapter 10**, covering emotional development, provides an overview of current theory and research on children's expression and recognition of discrete emotions. Special attention is given to new findings on complex emotions (shame, guilt, envy, and pride), empathy, and emotional development beyond the period of infancy. The second section of the chapter is devoted to temperament and development. It includes current research on the stability and heritability of temperamental traits and the implications of temperament for cognitive and social development. The chapter concludes with a review of theory and research on infant-mother attachment. The impact of infant temperament on the attachment bond, fathers as attachment figures, and effects of maternal employment and day care on attachment security are among the special issues discussed. **Chapter 11** offers an overview of the development of social cognition. The discussion is organized into three sections: children's understanding of self, other people, and relationships between people. Among the topics included are the development of self-esteem, achievement-related attributions, person perception, friendship, and social problem solving. **Chapter 12** addresses moral development and self-control. It includes a review and critique of psychoanalytic, behaviorist, and cognitive-developmental approaches to children's morality. Child-rearing practices that foster moral internalization, cross-cultural research on moral reasoning, and the controversial issue of whether sex differences exist in moral understanding are among the special features of this chapter. **Chapter 13** focuses on the development of sex differences and sex roles. Biological and environmental influences on sex-role adoption, the

development of sex-role identity, and sex differences in cognitive abilities and personality attributes are reviewed. The chapter also includes an applied section on raising non-sex-stereotyped children.

Part V. Contexts for Development. A major current emphasis in child development research concerns the importance of environmental contexts for children's development. A final pair of chapters examines four highly influential developmental contexts—family, peers, media, and schooling. **Chapter 14** considers the family from both ethological and social systems perspectives. The reciprocal, bidirectional nature of parent-child interaction, as well as the significance of linkages between family and community for optimal family functioning and child development, is discussed. The impact of current changes in the American family is covered in the central portion of the chapter, which concludes with a discussion of the need for strong national social policies to support the American family in its child-rearing role. In **Chapter 15**, the social systems approach is carried over to other salient contexts for development. In the section on peer relations, the development of peer sociability, peer popularity, peer groups, and peers as socialization agents are the major topics. The second major section addresses the impact of television and computers on various aspects of social and cognitive development. A concluding section on schooling discusses a variety of research findings and controversial issues, such as teacher expectations for children's academic performance, mainstreaming, school desegregation, the current crisis in the quality of American education, and cross-national research on school achievement.

SPECIAL FEATURES

Writing Style. In writing this book, I made a concerted effort to adopt a prose style that is both engaging and scholarly. I aimed for clear, precise exposition that facilitates student interest and understanding. Throughout the text, to encourage critical thinking about the material, I use an interactive approach that poses student-directed questions. My intent is to offer students a model of good writing and, at the same time, prepare them for reading more advanced, original source material.

Boxes. Boxed presentations reflect two major themes. *Theory, research, and applications* boxes (which are set off with a blue rule) illustrate the interrelatedness of these three basic elements of child study. *Contemporary issues* boxes (which are set off with a purple rule) focus on current controversies and summarize cutting-edge research. The content of each box has been carefully selected to expand on important points in the text discussion and is clearly tied to the chapter narrative.

Part Opening Outlines and Chapter Introductions. Outlines of the major divisions in each chapter, along with an overview of chapter content in each introduction, provide students with helpful previews of what they are about to read.

Tables and Illustrations. Tables distributed throughout the book succinctly summarize and elaborate on text discussion, and colorful, easy-to-interpret graphs and illustrations depict research methods and findings.

Photos. Four-color and black-and-white photographs distributed throughout the text have been carefully selected to illustrate important points in text discussion. The photos and accompanying captions teach students about development, rather than serving as mere adornments on the page.

Chapter Summaries. Especially comprehensive, well-organized summaries appear at the end of each chapter, reminding students of the major discussion points and reinforcing their learning.

Footnotes. Footnotes help students understand the interdependencies among domains of development by reminding them of earlier presented text material and encouraging them to turn back for review.

Important Terms and Concepts. Terms and concepts that make up the basic vocabulary of the field appear in boldface type. They are also listed at the end of each chapter, to assist students with reviewing chapter content. A secondary set of important terms is italicized throughout the text discussion.

Glossary. A glossary of 450 terms is provided at the end of the book. It includes items appearing in boldface type, as well as a large selection of italicized terms. Students can access the text page on which each glossary item is introduced by looking it up in the index.

Reference List. The text contains an extensive list of reference citations, including historically important as well as current sources. The up-to-date nature of the text is reflected in the inclusion of over 1,300 references published during the 1980s, including more than 200 that appeared since 1986. The citation list is comprehensive enough for students to use as a primary basis for research papers and projects.

TEXT SUPPLEMENTS

A set of carefully prepared supplements accompanies this text. In collaboration with Ellen Potter of the University of South Carolina at Columbia, I have written an instructor's manual that includes chapter overviews, learning objectives, lecture topics, classroom activities, suggestions for supplementary readings, and a comprehensive listing of available media materials. In addition, a set of transparencies is available. Amye Warren-Leubecker of the University of Tennessee at Chattanooga has prepared a test bank of 2,000 well-written multiple choice questions, each of which is page-referenced to chapter content and classified according to type (factual, applied, or conceptual). The test bank is available in both hard copy and computerized formats. Toni Campbell of San Jose State University has written a student guide that offers learning objectives, chapter reviews, self-tests, and critical thinking exercises that enhance student mastery of material.

As part of Allyn and Bacon's Inside Psych series, a media presentation entitled Children's Private Speech is available as a supplement to the book. It comes in a choice of two formats: a series of 80 slides, accompanied by an audiocassette, or a VHS videotape. The presentation describes the contrasting theories of Piaget and Vygotsky on the significance of children's private speech, summarizes recent research on the topic (including my own), and discusses educational implications of current findings. An instructor's guide that contains discussion questions and multiple choice test questions is enclosed.

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A final word of gratitude goes to my husband and children, whose love, patience, and understanding enabled me to be wife, mother, teacher, researcher, and text writer at the same time. My sons, David and Peter, have provided me with many valuable lessons in child development over the past decade and a half. During the years in which I wrote, both crossed the dividing line between childhood and adolescence and were an important impetus for the attention I have given to adolescent development throughout the text. David and Peter eagerly tracked my progress ("Are you *still* on that chapter?"), and I thank them for their expressions of pride in having a mom who wrote a book. My husband, Ken, willingly helped make room for this project in our family life and communicated his belief in its importance in a great many unspoken, caring ways.

Laura E. Berk

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