

child development

Charlotte J. Patterson



CHILD DEVELOPMENT

Charlotte J. Patterson

University of Virginia



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ABOUT THE AUTHOR



Charlotte J. Patterson is a Professor of Psychology at the University of Virginia, where she teaches an introductory course in child development every year. She was born and attended school in California, receiving her B.A. at Pomona College and her M.A. and Ph.D. at Stanford University. Upon graduation from Stanford, Professor Patterson moved east to accept a position at the University of Virginia, where she has been actively pursuing research

and teaching in developmental psychology ever since.

Professor Patterson has published widely in the areas of social and personal development among children and adolescents. She has conducted research on children's self-regulation, on children's communication skills, on child maltreatment, and on the family, peer, and school contexts of child development. Recently, much of her research has focused on the role of sexual orientation in human development, especially on issues related to child development in lesbian- and gay-parented families. Reports of her research have appeared in *Child Development*, *Developmental Psychology*, *Journal of Family Psychology*, and other well-known journals. Her 2004 article on adolescents with same-sex parents has been recognized by *Child Development* as one of its "Top 10 Downloads"; it was the journal's second most-frequently downloaded paper for the years 2005, 2006, and 2007.

In addition to her empirical research, Professor Patterson has edited three books and served on many editorial boards, including those of *Child Development*, *Developmental Psychology*, *Merrill-Palmer Quarterly of Human Development*, *Journal of Marriage and the Family*, and the *Journal of Family Psychology*. She spent three years as Associate Editor of the *Merrill-Palmer Quarterly* and has twice served as guest editor for special sections of *Developmental Psychology*. Active in professional matters, Professor Patterson has served on numerous committees and task forces. For instance, she has been a member of grant review panels at the National Institutes of Health (NIH) and at the National Science Foundation (NSF), and she was a member of the Society for Research in Child Development (SRCD) task force on Cultural and Contextual Diversity.

Professor Patterson has also been an innovative teacher. She was a University of Virginia Teaching + Technology Fellow and an early adopter of technological tools such as presentation software and digitized video clips in lectures for her

child development course. When she first made a collection of digitized classic and contemporary video clips available to students and instructors in *Multimedia Courseware for Child Development*, it was considered so novel that it was reported in the *Chronicle of Higher Education*. Her contributions in teaching have been recognized by an award from the University of Virginia Faculty Senate Initiative on Excellent Teaching and by repeated invitations to speak at the Developmental Science Teaching Institutes at the biennial meetings of the Society for Research in Child Development (SRCD).

In recognition of her research, teaching, and service, Professor Patterson has received numerous awards. She won the Distinguished Scientific Contributions Award from APA's Division 44 (the Society for Psychological Study of Lesbian and Gay Issues), she was given an Outstanding Achievement Award from the APA Committee on Lesbian, Gay and Bisexual Concerns, and she was awarded the Carolyn Attneave Diversity Award from APA's Division 43 (Family Psychology) for contributions that advance the understanding and integration of diversity into family psychology. She has served as President of APA's Division 44 and is a fellow of both APA (Divisions 7, 9, 43, and 44) and the Association for Psychological Science (APS).

FROM THE AUTHOR

There has never been a better time to study child development. Thanks to continuing research efforts, our understanding of all aspects of development, from conception through adolescence, is growing rapidly. Important methodological advances, especially in brain scanning techniques, have literally opened up new vistas for developmental researchers. Moreover, the way children experience development is markedly different than it was even a few years ago. The increasing diversity of society, along with widespread exposure to the Internet, has greatly expanded the range of influences on children. At the same time, multimedia technology now allows students of development to see and hear what is happening in laboratories, homes, and schools around the world. Together these changes have made teaching and learning about child development more exciting than ever.

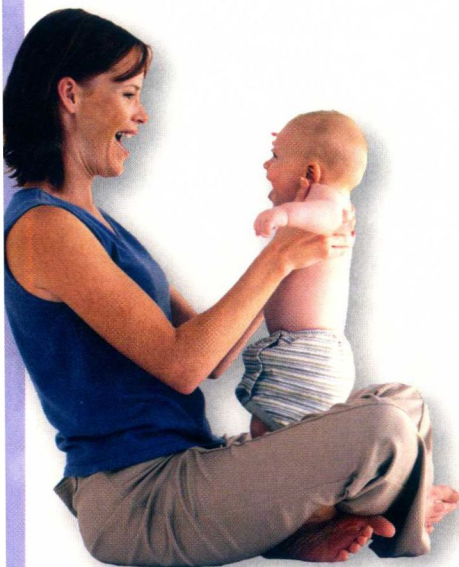
As anyone who has spent time with children knows, they are fascinating people. One of the reasons I like teaching child development is that students come to class wanting to learn about children. My goal in teaching the course, and in writing this book, has been to provide a chronological overview of child development within a scientific context, in other words, to explain why we know what we know about how children develop and grow.

Children the world over all reach certain developmental milestones, such as walking, talking, and entering puberty, at roughly the same ages. Why is this the case? What accounts for cultural and individual variations? Grappling with the questions raised by similarities and differences, while recognizing that researchers don't have all the answers, is a challenge. In this book, I have tried to encourage students to accept that challenge, by looking beyond the facts and discovering childhood through researchers' eyes.

A Storytelling Approach.

In the classroom, I have found storytelling to be an effective way to catch students' attention and convey the exciting developments in the field while providing the scientific foundation for studying child development. By taking the same approach in this book, I hope to help many more students understand developmental patterns and processes and appreciate the contributions of research on child development to everyday life.

To bring research on child development alive, each chapter begins with a story. Examples and stories are woven throughout the book. They present glimpses of real people, including researchers, research participants, parents, infants, children, and adolescents. Some stories describe how important research came to be done. Others tell how researchers first became intrigued by the problems that occupied their professional lives. Still others are anecdotes about infants, children, and adolescents and their parents that illustrate key concepts or raise significant questions. With these stories, I have found that it



is possible to capture student interest, sustain student attention, anchor research in human experience, and increase student comprehension.

Research on Brain Development.

Developmental neuroscience is a burgeoning area of research that has already produced a wealth of data about human brain development from infancy on. Before the development of noninvasive imaging technology, studying the developing brain, particularly in nonverbal infants and toddlers, required considerable ingenuity on the part of researchers. Now, with the help of fMRI, NIRS, and other imaging techniques, neuroscientists have provided new insights into how babies learn, when children begin to recognize emotions, why adolescents tend to take more risks than adults, and other intriguing questions. This research has a bearing on all domains of development, and therefore brain development is highlighted in every chapter of this book.

Although brain development is integrated in the text, a feature called *Visualizing the Developing Brain* also appears in each chapter. Intended to help students appreciate new data from brain research, this feature illustrates the methods of neuroscience and shows how current findings from brain research illuminate critical facets of human development. The highly visual presentation of this feature is designed to make technical details of brain science more accessible to readers even as it gives students a glimpse into neuroscience laboratories around the world.

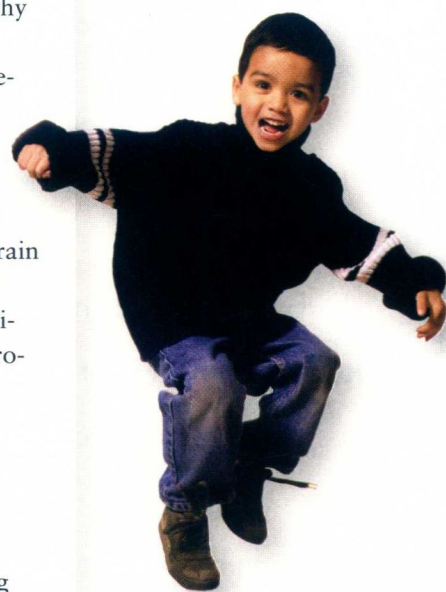
Awareness of Diversity.

In acknowledgment of the growing diversity of our world, I have made a special effort in this book to consider variations in development. By reading about research and examples from different ethnic and racial groups, historical periods, socioeconomic groups, sexual orientations, and religious beliefs, students learn about conditions that may be encountered by children from varied backgrounds, including Hispanic and African American youngsters as well as those of Asian or European descent living in the United States, and about variations within as well as between ethnic groups. Although the main focus is on growing up in the contemporary United States, the text nevertheless includes many discussions of the ways in which culture and context influence child development around the globe.

Despite enormous diversity, child development also reveals certain universal characteristics, many aspects of which are intertwined. Children may learn Swahili or Spanish or Swedish, for example, but wherever they live, they begin to speak a native language at about the same age. Language development is clearly a cognitive achievement, but speech also depends on the development of motor skills, and it transforms social relationships. This book highlights the underlying unity as well as the visible diversity of human growth and development.

Themes in Child Development.

Along with diversity and universality, two other fundamental themes run through the text. They are nature and nurture, and continuity and discontinuity. Given the complexity of development, these themes are intended to



raise questions rather than to give answers. For example, children all over the world learn to walk at roughly the same time, but in some cultures, they start walking earlier than U.S. infants, and in other cultures, they walk later. What determines when babies take their first steps? Students are encouraged to avoid simple either/or responses, in favor of a more nuanced understanding of the interplay of nature and nurture, continuity and discontinuity, and universality and variation. These thematic questions emerge at many points during the story of child development and are revisited throughout the text.

Chronological Organization.

Following a brief introduction to the key concepts, ideas, and history of the field, the book begins with prenatal development and continues through infancy, early childhood, middle childhood, and adolescence. Within each period, there are chapters on physical development, cognitive development, and social and emotional development. Of course, some kinds of development affect all three areas, and so strands of physical, cognitive, and social development are interwoven through all chapters.

Applications.

Several features of *Child Development* are designed to strengthen and deepen students' encounters with research on child development. Critical thinking is emphasized throughout the book by explaining how studies were conducted, how one study grew from limitations of an earlier one, or how a single phenomenon can be viewed from many theoretical perspectives. In addition, at several key points in each chapter, *Questions to Consider* encourage students to review and analyze the information that they have just read, apply it to events in real-life settings, connect it with knowledge about other domains or periods of development, and discuss it in terms of personal interest or in light of contemporary social issues.

In each chapter, research applications are highlighted in three areas of special interest: diversity, education, and parenting. *Diversity in Development* sections discuss ways in which development may differ from the norm. *Parenting and Development* sections describe high-interest findings about parent-child relations. *Development and Education* sections focus on topics related to schooling. Subjects explored in these sections include teaching children with dyslexia to read, long-term effects of prenatal alcohol exposure, sudden infant death syndrome, spanking, and the impact of HIV/AIDS on adolescents in sub-Saharan Africa.

Overall, this book offers an integrative presentation of current and classic research, theory, and methods in the study of child development. I hope that it presents the field in a way that is simultaneously inviting, enlightening, and thought provoking. My goal is to provide a contemporary introduction to the field of child development that is stimulating as well as reliable, and one that will leave students wanting to learn more.

Charlotte J. Patterson



The Story of *CHILD DEVELOPMENT*

A Visual Introduction

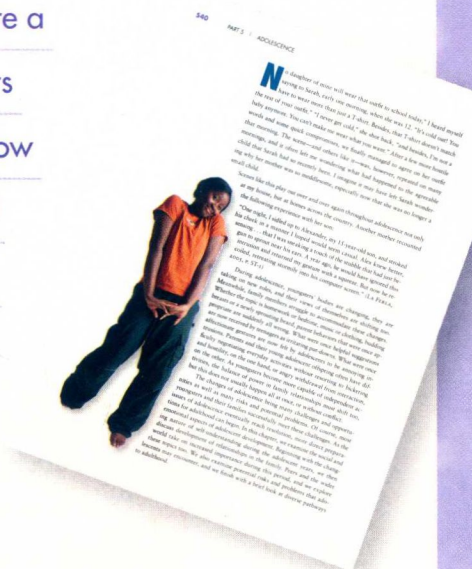
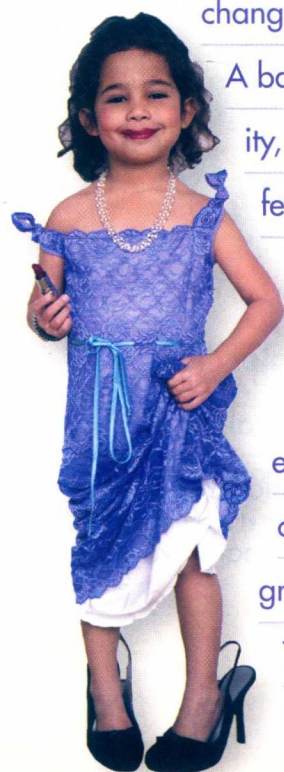
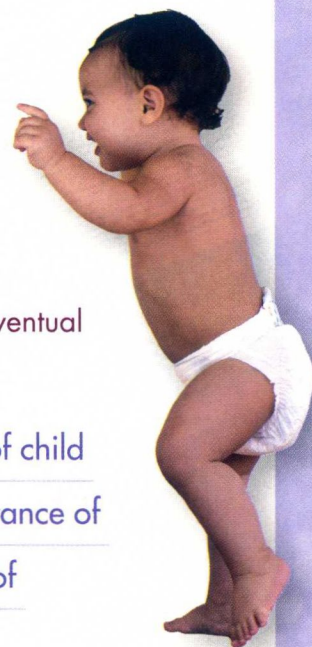
- **Jean Piaget's** theory of cognitive development grew in part from his careful observations of his own children.
- **Virginia Apgar** spontaneously created the Apgar scale in response to a medical student's question about how to quickly assess the physical condition of newborns.
- **Robert Sternberg's** early experiences with intelligence tests influenced his eventual development of his own theory of intelligence.

Stories like these put a human face on the research that has defined the field of child development. They capture our attention and interest, and they illustrate the relevance of theory and research to real life. Equally important, stories also make the details of research studies memorable.

Similarly, stories and examples of children's accomplishments, however ordinary they may seem, when seen in the broader context of development, illustrate the remarkable changes that occur between the time of conception and the end of adolescence.

A baby's babbling, a toddler's clinginess, a preschooler's curiosity, and an adolescent's tendencies to push boundaries are a few of the phenomena that parents and casual observers often take for granted. Yet researchers have shown how these typical behaviors figure into the developmental process. Through anecdotes and the stories that open each chapter of this book, we glimpse daily events in children's lives that also characterize the patterns of growth and development described in the chapter.

These examples also give us a new appreciation for the everyday activities of infants, children, and adolescents.



Focus on Research

Like all sciences, child development is a **research endeavor**. This book highlights research in a number of ways:

Stories behind the research integrated in each chapter make the science more accessible and more memorable.

Visualizing the Developing Brain features in each chapter contextualize and make concrete the results obtained with advanced brain imaging techniques, linking specific areas of the brain to specific types of behavior.

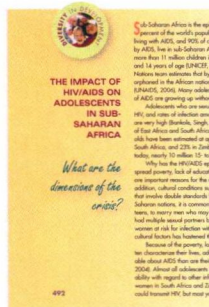
Parenting and Development, Development and Education, and Diversity in Development

sections in each chapter present high-interest findings that speak to parent-child relations, schooling, and developmental variations within the United States and around the world.

Text discussion of classic and contemporary research, including the latest findings on brain development, establish the scientific foundation for learning about child development.

Focus on Diversity

Drawing on **research and examples** from different cultures, racial groups, historical periods, socioeconomic groups, sexual orientations, and religious traditions, this book explores many ways in which development varies.



Focus on Critical Thinking

Child Development both models critical thinking skills and encourages students to apply them. By explaining how scholars have conducted their studies, how one study grew out of the limitations of an earlier one, and how theorists have examined a single phenomenon from many different theoretical perspectives, this book models critical thinking.

Questions to Consider By providing opportunities to review and analyze the content, apply it to events in real-life settings, and connect and discuss the relationship between concepts, "Questions to Consider" support the development of critical thinking abilities. These questions ask readers to look beyond simple answers and examine contemporary social issues with a critical eye.

Putting It All Together Instead of summarizing the content point by point, "Putting It All Together" recaps the chapter with a descriptive "snapshot" of the whole child to give readers a clear sense of a child's growth from the beginning of one stage to the start of the next.

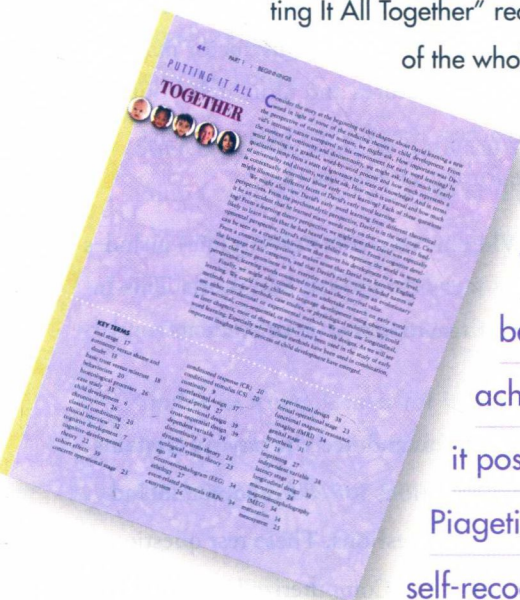
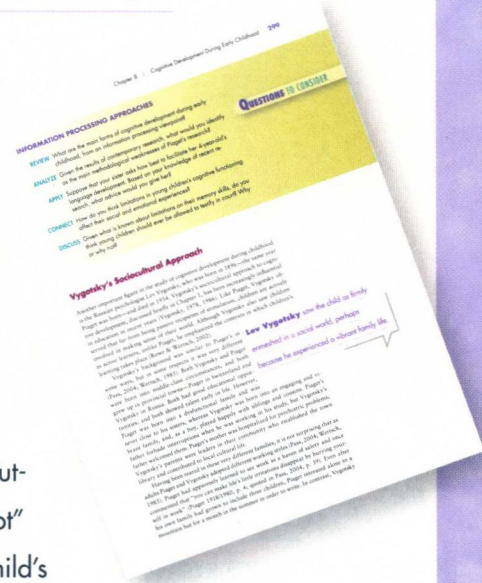
Visual Assets Database (VAD) 2.0

Imagine being able to view typical developmental behaviors and achievements in the classroom. McGraw-Hill's VAD 2.0 makes it possible to download short video clips of the rooting reflex,

Piagetian conservation, toddler self-recognition, and many other phenomena and incorporate them

into lectures and PowerPoint presentations.

More information about this invaluable online database of multimedia resources is available from your McGraw-Hill representative.



SUPPLEMENTS PACKAGE

A broad range of supplements is available for instructors and students using *Child Development*. Supplements include Charlotte Patterson's own *Multimedia Courseware for Child Development*, described below.

For Instructors.

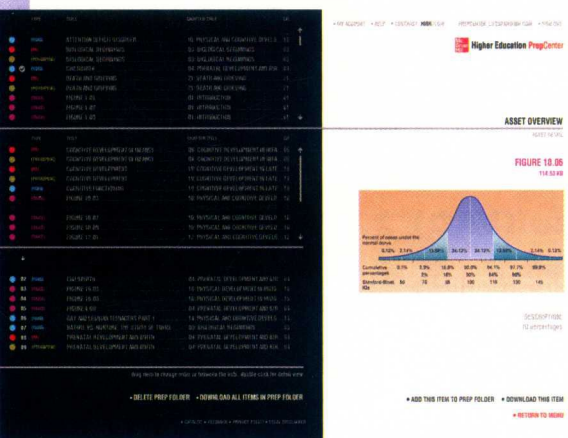
All instructor's materials can be found online, via the secure Instructor's Center on the Online Learning Center (www.mhhe.com/pattersoncd1e). Contact your McGraw-Hill representative for access information.

PrepCenter for *Child Development* is a comprehensive online media library that lets you search for individual media assets the way you want to search—by chapter, concept, or media type. This site features instructor materials, videos, and images to enhance your lectures and ultimately your students' learning experiences. To access PrepCenter, please contact your McGraw-Hill representative for log-in information.

Instructors Manual by Kathleen Whitten (University of Virginia) includes lecture outlines, classroom activity ideas, handouts, and more. This Instructor's Manual will enhance your teaching and your students' understanding of the text.

Test Bank by Megan Fulcher (Washington and Lee University) contains 100 or more conceptual and factual questions for each chapter, including multiple choice, true/false, and essay questions. These test questions are also compatible with EZTest, McGraw-Hill's Computerized Test Bank program. Any instructor who uses EZTest Online can now create and deliver multiple-choice and true/false quiz questions to iPods™ using the new iQuiz™ application. Once students have downloaded a quiz into their iPod, they can take the interactive iQuiz, self-assess, and receive quiz scores instantly. Instructors can learn more about EZTest Online by visiting www.eztestonline.com.

PowerPoint Presentations by Kathleen Kleissler (Kutztown University) cover the key points of each chapter and include charts and graphs from the text. The slides can be used as is or modified to meet course needs.



Classroom Performance System (CPS) by Alisha Janowsky (University of Central Florida) brings ultimate interactivity to the lecture hall or classroom.

A wireless electronic response system that gives the instructor and student immediate feedback from the entire class. CPS is a great way to give interactive quizzes, maximize student participation in class discussions, and take attendance.

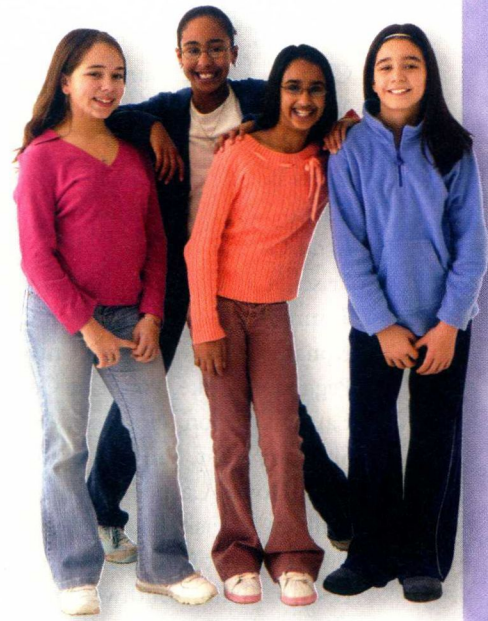
Image Gallery includes all of the figures and tables from the book. These images are available for download and can be easily embedded into PowerPoint slides.

For Students.

Multimedia Courseware for Child Development by Charlotte J. Patterson (University of Virginia) is a video-based 2 CD set that includes classic and contemporary experiments in child development. Professor Patterson selected the videos and wrote the accompanying homework modules, which also include suggestions for additional projects as well as a testing component. At the instructor's request, *Multimedia Courseware for Child Development* can be packaged with this book.

Student Study Guide by Kathleen Whitten (University of Virginia) contains a comprehensive review of the text material, including learning objectives and chapter outlines. The practice tests in each chapter allow students to gauge their understanding of the material, and an answer key provides answers to all of the chapter's exercises.

Online Learning Center for students (www.mhhe.com/pattersoncd1e), with quiz questions by Gail Richardson (University of Georgia); also includes practice tests, chapter summaries, key terms, and key people.



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It is a pleasure also to offer warm thanks to the wonderful team of people at McGraw-Hill who helped to turn my initial idea for a book into this actual text. Mickey Cox, Jane Karpacs, and Thalia Dorwick convinced me that the book could and should be written; I am grateful for their confidence in this project and for the sage advice they offered me in its early stages. Subsequently, Rebecca Hope nurtured the project during critical moments, and I appreciate her contributions. I am particularly grateful to Mike Sugarman, Executive Editor, who joined this enterprise after it was already under way, but who managed, with tact, good humor, and unerring good judgment, to bring the project to completion.

The text has benefited enormously from the multiple efforts of Judith Kromm, Senior Developmental Editor, as editorial collaborator and creative consultant; I am enormously appreciative of all she has done. My thanks also go to Marilyn Freedman, Developmental Editor, and to Judith Brown, Copy Editor, for their careful readings of the manuscript and valuable editorial suggestions. I also very much appreciate the ideas and encouragement offered by Dawn Groundwater, Director of Development; Sheryl Adams, Executive Manager for Market Development; James Headley, Marketing Manager; and Beth Mejia, Publisher. Thanks also to Art Editor Ayelet Arbel, Photo Research Coordinator Alex Ambrose, Photo Researcher Jennifer Blankenship, and Production Editor Leslie LaDow for their outstanding work in producing the book. Their excellent efforts transformed the manuscript into the appealing book that it is, and I very much appreciate their contributions.

Writing this book has made me more aware than ever of the enormous debt I owe to teachers and

senior colleagues who introduced me to the study of child development. Of these, I want especially to thank Albert Bandura, Sandra Bem, Mark Lepper, and Eleanor Maccoby, who were my professors in graduate school. As a student, I found their ideas to be stimulating, and their excitement about research to be inspiring; as a professor now, I still do. Learning about research with my graduate advisor, Walter Mischel, was a wonderful experience, and I am grateful for the rich introduction he gave me both to psychological research and to academic life. I have also had the remarkable good fortune to count Mary Ainsworth and Mavis Hetherington among my senior colleagues at the University of Virginia. When I was a young faculty member, auditing their seminars and attending their parties were memorable highlights of my years. Somewhat later, Sandra Scarr joined us at Virginia, bringing with her important insights about genetic contributors to development. The work of these and others of my colleagues has shaped my understanding of human development, and I appreciate their many contributions.

Finally, I want to thank my partner and our children for their unfailing love and support throughout this project. My partner Deborah Cohn undertook many extra duties so that I could work on this project, and also—as always—made it all seem worthwhile. Our children, Sarah, Eliza, and David have also contributed in a number of ways. For instance, they have taught me a great deal about the subject of this text—including that the development of children is one of the great topics of all time. To them all, I am deeply grateful.

Charlotte J. Patterson

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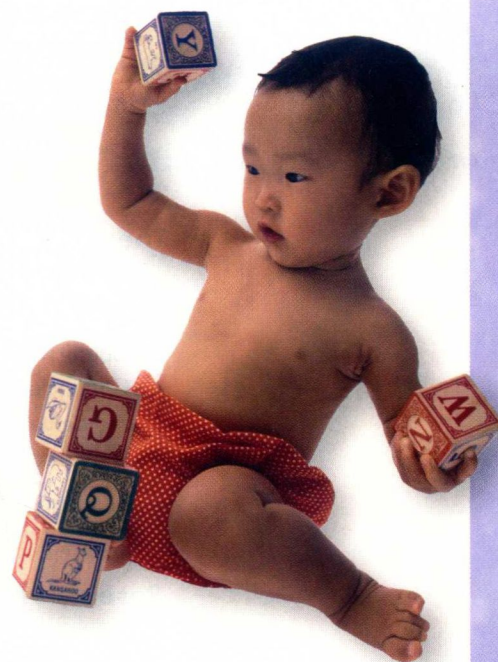
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