

FIFTH EDITION

Childhood

VOYAGES IN DEVELOPMENT



SPENCER A. RATHUS



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VOYAGES IN DEVELOPMENT

FIFTH EDITION

Childhood

VOYAGES IN DEVELOPMENT



SPENCER A. RATHUS

THE COLLEGE OF NEW JERSEY



Australia • Brazil • Japan • Korea • Mexico • Singapore • Spain • United Kingdom • United States

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Courtesy of the author

For Lois

ABOUT THE AUTHOR

Spencer A. Rathus



Photos courtesy of the author

The author is shown at various stages of development in these four photos.

Numerous personal experiences enter into Rathus's textbooks. For example, he was the first member of his family to go to college, and he found college textbooks to be cold and intimidating. Therefore, when his opportunity came to write college textbooks, he wanted them to be different—warm and encouraging, especially to students who were also the first generation in their families to be entering college. Rathus's first professional experience was in teaching high school English. Part of the task of the high school teacher is to motivate students and make learning fun. Through this experience he learned the importance of using humor and personal stories, which later became part of his textbook approach. Rathus wrote poetry and novels while he was an English teacher, and some of the poetry was published in poetry journals. The novels never saw the light of day (which is just as well, Rathus now admits in mock horror).

Rathus earned his Ph.D. in psychology and he entered clinical practice and teaching. He went on to publish research articles in journals such as *Adolescence*, *Behavior Therapy*, *Journal of Clinical Psychology*, *Behaviour Research and Therapy*, *Journal of Behavior Therapy and Experimental Psychiatry*, and *Criminology*. His research interests lie in the areas of human growth and development, psychological disorders, methods of therapy, and psychological assessment. Foremost among his research publications is the Rathus Assertiveness Schedule, which remains widely used in research and clinical practice. Rathus has since poured his energies into writing his textbooks, while teaching at Northeastern University, New York University, and currently at The College of New Jersey. His introductory psychology textbook, *Psychology: Concepts and Connections*, is soon to be in its eleventh edition.

Rathus is proud of his family. His wife, Lois, is a successful author and a professor of art at The College of New Jersey. Their daughter, Allyn, obtained her M.A. from NYU's Steinhardt School, and is teaching in New York City. Their daughter, Jordan, completed her MFA in fine arts at Columbia University and is launching her career as a video artist. Their youngest daughter, Taylor, can dance the pants off both of them. Taylor completed her BFA at NYU's Tisch program in musical theatre and is lighting up the stage. Rathus's eldest daughter, Jill, has become a psychologist and teaches at C. W. Post College of Long Island University.

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PREFACE

*My heart leaps up when I behold
A rainbow in the sky:
So was it when my life began;
So is it now I am a man;
So be it when I shall grow old,
Or let me die!
The Child is father of the Man;
And I could wish my days to be
Bound each to each by natural piety.*

William Wordsworth, 1802

Yes, the child is father of the man and, no less certainly, the mother of the woman. In our children, we have the making of ourselves. In children, parents have the most impetuous, comical, ingratiating, delightful, and—at times—infuriating versions of themselves. It is hard to believe, but true, that the babies we hold in our hands at birth may someday be larger and stronger, more talented, and more insightful than we are.

Portraying the Fascination of Children: Personal and Scientific

My goal in writing this book has been to capture the wonder of child and adolescent development, while portraying the field of development as the rigorous science it is. My approach is designed to help motivate students by showing them the joy of observing children and adolescents. How can one hope to convey a true sense of development if one is blind to its marvels?


Childhood: Voyages in Development evolved from my scientific interest and research in human growth and development and also from my experiences with my own developing family. While my intention is to keep the tone of this text engaging and accessible, this book is rigorous in its reporting of research methods and science. On the other hand, the book is also “hands on”; it contains many applications, which range from preventing infant malnutrition and understanding what it is important to know about immunizations to helping children overcome enuresis and handling bullying in school.

Key Features

The fifth edition of *Childhood: Voyages in Development* contains the following key features:

- A thorough and rigorous update.
- **Observing Children, Understanding Ourselves:** a video feature that enables students to observe different stages of development. Twelve more *Observing Children, Understanding Ourselves* videos have been added for the fifth edition. As they read each chapter, students can go online to directly view the observational videos by scanning the QR codes in each *Observing Children, Understanding Ourselves* box. Students can quickly and freely download QR code scanners onto their smartphones or tablets by visiting their App stores.

OBSERVING CHILDREN, UNDERSTANDING OURSELVES
Puberty and Body Image
Learn about the physical changes of puberty, including differences between males and females and how these changes can impact body image.
Could age of onset of puberty affect social and emotional functioning?
Are such effects different for males and females? Do changes in body mass composition affect the body image of males and females differently?



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Scan the QR code to watch this video.

Use your smart phone to scan the QR code and play each video.

- **Concept Reviews:** visual presentations of complex developmental concepts.
- **A Closer Look—Diversity:** interesting and timely topics that show how culture—especially diverse cultural backgrounds—influences the many aspects of child development.
- **A Closer Look—Research:** features that offer expanded coverage of important research studies and also present research issues of great timeliness and interest.
- **A Closer Look—Real Life:** applications that enable readers to “take this book home with them,” to apply what they are learning with children and adults in their own lives.

A Thorough Update

This is an exciting time to be studying child development: Every day, new research and new insights help us to better understand the mysteries and marvels of many aspects of development. More than 400 new citations refer the reader to research studies and broader documents, such as the American Academy of Pediatrics’s latest recommendations on preventing sudden infant death syndrome (SIDS), the latest information on the use of C-sections, the federal government’s most recent recommendations on childhood nutrition, and the most recent “Recommended Immunization Schedule for Persons Aged 0–6.”

Chapter Previews

The fifth edition contains chapter preview sections that include *Major Topics*, *Features*, and *Truth or Fiction?* items. These previews help shape students’ expectations and enhance the effectiveness of their learning by helping them create mental templates, or “advance organizers,” into which they categorize the subject matter.

Chapter-by-Chapter Updates

Every chapter has undergone updating in terms of the coverage of topics and pedagogy. Following is a sampling of what is new:

Chapter 1—History, Theories, and Methods

- New subsection: “The Survey” in the section on methods of observation
- New “A Closer Look—Research” feature: “Surveying High School Seniors’ Attitudes toward Living Together before Getting Married”
- New “Observing Children, Understanding Ourselves” video feature: “Zone of Proximal Development”
- General updating: 23 new references

Chapter 2—Heredity and Conception

- New coverage of genetic transmission of hair color
- New coverage of change in calcium ions as influencing movement of sperm
- New “A Closer Look—Diversity” feature: “LGBT Family Building”
- New “Observing Children, Understanding Ourselves” video feature: “Twins”
- General updating: 28 new references

Chapter 3—Prenatal Development

- New “A Closer Look—Real Life” feature: “Selecting an Obstetrician”
- Updated United Nations information on fertility rates around the world
- New “Observing Children, Understanding Ourselves” video feature: “Antidepressants in Utero”
- General updating: 23 new references

Chapter 4—Birth and the Newborn Baby: In the New World

- New “Observing Children, Understanding Ourselves” video feature: “Reflex Development in Infancy”
- New “Observing Children, Understanding Ourselves” video feature: “Early Learning”
- New coverage of hypnosis and biofeedback as methods to help women during childbirth
- Updated information on the use of the cesarean section and on vaginal birth after cesarean section (VBAC)
- Updated information from Save the Children on maternal and infant mortality around the world
- Expanded coverage of the kinds of maternal depression that may follow childbirth
- Updated information on sudden infant death syndrome (SIDS)
- General updating: 59 new references

Chapter 5—Infancy: Physical Development

- New coverage of infants living in poverty, how infant poverty varies with race and ethnicity, and the relationship of poverty to infant nutrition
- New “A Closer Look—Real Life” feature: “Food Timeline for the First Two Years”
- New “A Closer Look—Diversity” feature: “Wasting Away from Hunger,” containing information from the World Hunger Organization
- New “Observing Children, Understanding Ourselves” video feature: “Early Gross Motor Development”
- Updated information on the benefits and pitfalls of breast feeding
- General updating: 31 new references

Chapter 6—Infancy: Cognitive Development

- New “A Closer Look—Research” feature: “On Mirror Neurons and Really Early Childhood Imitation”
- General updating: 25 new references

Chapter 7—Infancy: Social and Emotional Development

- New “Observing Children, Understanding Ourselves” video feature: “Early Attachment and Anxiety”
- Thoroughly revised and updated section on child abuse and neglect
- Thoroughly revised and updated section on day care
- General updating: 42 new references

Chapter 8—Early Childhood: Physical Development

- New coverage of the relationship between prenatal testosterone and handedness
- New coverage of meal and snack patterns in the section on nutrition
- Updated coverage of major illnesses around the world
- Updated immunization schedule recommended by the U.S. government
- New coverage estimates for school-entry vaccinations
- Updated coverage of the leading causes of death in childhood
- New information on how much sleep is needed at various ages
- New coverage of risk factors for developing encopresis
- General updating: 24 new references

Chapter 9—Early Childhood: Cognitive Development

- New “A Closer Look—Diversity” feature: “The National Head Start Association”
- General updating: 25 new references

Chapter 10—Early Childhood: Social and Emotional Development

- New “Observing Children, Understanding Ourselves” video feature: “Early Childhood Play”
- New coverage of U.S. children aged 0–17 in terms of the presence of parents in the household
- Updated coverage of the effects of media violence
- Expanded coverage of cultural stereotypes of “masculine” and “feminine” traits
- Updated coverage of biological factors in the development of gender differences
- General updating: 40 new references

Chapter 11—Middle Childhood: Physical Development

- New “Observing Children, Understanding Ourselves” video feature: “Middle Childhood: Gross Motor Skills”
- Updating of the section on overweight children
- New coverage of the U.S. government “Choose My Plate” campaign, which has replaced “MyPyramid”
- General updating: 20 new references

Chapter 12—Middle Childhood: Cognitive Development

- New “A Closer Look—Research” feature: “The Long-Term Effects of Good Teaching”
- New “Observing Children, Understanding Ourselves” video feature: “Rehearsal Strategies”
- New “Observing Children, Understanding Ourselves” video feature: “Suggestibility”
- Expanded coverage of organization in long-term memory
- Updated section on theories of intelligence
- Updated discussion of intellectual disability
- Updated discussion of the determinants of intellectual development
- Updated discussion of languages other than English that are most often spoken in the home in the United States
- General updating: 34 new references

Chapter 13—Middle Childhood: Social and Emotional Development

- Revised “A Closer Look—Research” feature: “Is Bullying Murder?”
- New “Observing Children, Understanding Ourselves” video feature: “Self-Fulfilling Prophecies”
- General updating: 46 new references

What Carries through from Edition to Edition

The fifth edition of *Childhood: Voyages in Development* continues to present cutting-edge topic coverage, emphasizing the latest findings and research in key areas. The text is organized chronologically. It begins with introductory

theoretical material. Then it traces the physical, cognitive, and social and emotional sequences that characterize development from infancy through early and middle childhood.

“Observing Children, Understanding Ourselves” Video Features

One of the themes of this text is how children learn by observation. College students and other adults also learn by observation. One of the best ways to learn about child development is to observe the behavior of children. Unfortunately, many students do not have everyday access to children and therefore cannot observe for themselves how the many concepts and theories discussed in this textbook are embodied in the everyday lives of children.

All users of *Childhood: Voyages in Development* will find the *Observing Children, Understanding Ourselves* feature integrated throughout the book. This feature showcases a series of observational videos that illustrate a wide range of topics, and each video is accompanied by Critical Thinking Questions in the text. The fifth edition includes 12 new videos:

- Chapter 1: “Zone of Proximal Development”
- Chapter 2: “Twins”
- Chapter 3: “Antidepressants in Utero”
- Chapter 4: “Reflex Development in Infancy”
- Chapter 4: “Early Learning”
- Chapter 5: “Early Gross Motor Development”
- Chapter 7: “Early Attachment and Anxiety”
- Chapter 10: “Early Childhood Play”
- Chapter 11: “Middle Childhood: Gross Motor Skills”
- Chapter 12: “Rehearsal Strategies”
- Chapter 12: “Suggestibility”
- Chapter 13: “Self-Fulfilling Prophecies”

The *Observing Children, Understanding Ourselves* videos are available in two ways: (1) Students can go online to directly view the videos by scanning the QR codes with their smartphones or their tablets. (2) Students can key in www.cengagebrain.com to access Psychology CourseMate, where they will find an interactive eBook, flashcards, Pre-Lecture Quizzes, Section Quizzes, Exam Practice, videos, and more.

Concept Reviews

Concept Reviews are more than simple summaries. They take complex developmental concepts, such as theories of intelligence, and present them in dynamic layouts that readily communicate the key concepts and the relationships among concepts. Many of them include photographs and figures as well as text. Here is a sampling of the Concept Reviews found in *Childhood: Voyages in Development*:

- Concept Review 1.3: “Perspectives on Child Development”
- Concept Review 6.1: “The Six Substages of the Sensorimotor Stage, According to Piaget”
- Concept Review 13.1: “Social and Emotional Problems That May Emerge during Middle Childhood”

“A Closer Look—Diversity” Features

These features address the most challenging issues related to the way children are influenced by ethnic background, gender roles, socioeconomic status, and age in areas ranging from intellectual development to ethnic and racial identity. In many cases, cultural and ethnic factors affect the very survival of the child. This coverage helps students understand why parents of different backgrounds and genders rear their children in certain ways, why children from various backgrounds behave and think in different ways, and how the study of child development is enriched by addressing those differences. Here are some examples of such topics:

- New Chapter 2 feature: “LGBT Family Building”
- Chapter 3: “The Effects of Parents’ Age on Children—Do Men Really Have All the Time in the World?”
- Chapter 4: “Maternal and Child Mortality around the World” (the latest information from the Save the Children organization)
- Chapter 8: “Cross-Cultural Differences in Sleeping Arrangements”

“A Closer Look—Research” Features

This research-focused feature expands the book’s treatment of the ways in which researchers carry out their work. Examples of topics include

- Chapter 1: “Operant Conditioning of Vocalizations in Infants”
- Chapter 4: “Studying Visual Acuity in Neonates: How Well Can They See?”
- Chapter 5: “Strategies for Studying the Development of Shape Constancy”
- New Chapter 6: “A Closer Look—Research” feature: “On Mirror Neurons and Really Early Childhood Imitation”
- Chapter 9: “Effects of Scaffolding on Children’s Abilities to Recall and Retell Stories”

“A Closer Look—Real Life” Features

This feature enables readers to “take the book home with them”—that is, to apply what they are learning with children and adults in their own lives. Examples of topics include

- New Chapter 3: “Selecting an Obstetrician”
- Chapter 8: “Ten Things You Need to Know about Immunizations”
- Chapter 9: “Helping Children Use Television Wisely” (includes teaching children not to imitate the violence they observe in the media)

An Enhanced Pedagogical Package: PQ4R

PQ4R discourages students from believing that they are sponges who will automatically soak up the subject matter in the same way that sponges soak up water. The PQ4R method stimulates students to *actively* engage the subject matter. Students are encouraged to become *proactive* rather than *reactive*.

PQ4R is the abbreviation for *Preview, Question, Read, Review, Reflect, and Recite*, a method that is related to the work of educational psychologist Francis P. Robinson. PQ4R is more than the standard built-in study guide. It goes well beyond a few pages of questions and exercises that are found at the ends of

the chapters of many textbooks. It is an integral part of every chapter. It flows throughout every chapter. It begins and ends every chapter, and it accompanies the student page by page.

Preview

Revised chapter previews include *Major Topics*, *Features*, and *Truth or Fiction?* items to help shape students' expectations. The previews enable students to create mental templates, or "advance organizers," into which they categorize the subject matter. The *Truth or Fiction?* items stimulate students to examine their own assumptions and prepare to delve into the subject matter by challenging folklore and common sense (which is often common *nonsense*). *Truth or Fiction Revisited* sections in the chapter inform students whether or not they were correct in their assumptions. The *Major Topics* list outlines the material in the chapter, creating mental categories that guide students' reading.

Following is a sample of challenging *Truth or Fiction?* items from various chapters.

- T|F** You can carry the genes for a deadly illness and not become sick yourself.
- T|F** More children die from sudden infant death syndrome (SIDS) than from cancer, heart disease, pneumonia, child abuse, HIV/AIDS, cystic fibrosis, and muscular dystrophy combined.
- T|F** Infants need to have experience crawling before they develop fear of heights.
- T|F** It is dangerous to awaken a sleepwalker.
- T|F** Three-year-olds usually say, "Daddy goed away" instead of "Daddy went away" because they *do* understand rules of grammar.
- T|F** Children who watch 2 to 4 hours of TV a day will see 8,000 murders and another 100,000 acts of violence by the time they have finished elementary school.

Question

Devising questions about the subject matter, before reading it in detail, is another feature of the PQ4R method. Writing questions gives students goals: They attend class or read the text *in order to answer the questions*. Questions are strategically inserted in all primary sections of the text to help students use the PQ4R method most effectively. They are printed in **green**. When students come to such a question, they can read the following material in order to answer it. And if they wish, they can also write the questions and answers in their notebooks.

Read

The first R in the PQ4R method stands for Read. Although students will have to read for themselves, they are not alone. The text helps by providing

- A *Major Topics* list that helps students organize the material in each chapter
- *Truth or Fiction?* items that stimulate students by challenging common knowledge and folklore
- Presentation of the subject matter in clear, stimulating prose
- A running glossary that defines key terms in the margin of the text, near where the terms first appear in the text
- Development of concepts in an orderly fashion so that new concepts build on previously presented concepts

I have chosen a writing style that is “personal.” It speaks directly to the student and employs humor and personal anecdotes designed to motivate and stimulate students.

Review

The second R in PQ4R stands for Review. Regular reviews of the subject matter help students learn. Therefore, reviews are incorporated into *Active Review* sections that follow all major sections in the text.

Active Reviews contain two types of items that foster active learning, retention, and critical thinking. First come fill-in-the-blank questions. In some of these, the student indicates which of two words or phrases in parentheses accurately completes a given statement. Other questions offer no such prompt; these items challenge students to *produce*, not simply *recognize*, the answer. For example, an *Active Review* from Chapter 2, “Heredity and Conception,” has the following fill-in-the-blanks items:

13. The sets of traits that we inherit are referred to as our (genotypes or phenotypes?).
14. The actual traits that we display at any point in time are the product of genetic and environmental influences and are called our (genotypes or phenotypes?).
15. Parents and children have a _____% overlap in their genetic endowments.
16. _____ (MZ) twins share 100% of their genes.
17. _____ (DZ) twins have a 50% overlap, as do other siblings.

Items are numbered, and answers are found at the end of the book.

Because reviewing the subject matter is so important, and because of the value of visual cues in learning, *Concept Reviews* are also found throughout the text (see page xxviii of this Preface).

Reflect and Relate

Students learn more effectively when they *reflect* on (the third R in PQ4R is for Reflect), or *relate* to, the subject matter. Psychologists who study learning and memory refer to reflection on subject matter as *elaborative rehearsal*. One way for students to reflect on a subject is to *relate* it to things they already know about, whether the “subject” is academic material or events in their own lives. Reflecting on, or relating to, what they are learning makes it meaningful and easier to remember. It also makes it more likely that they will be able to *apply* the information to their own lives. Through effective reflection, students can embed material firmly in their memory so that rote repetition is unnecessary.

Because reflecting on the material is intertwined with relating to it, the second kind of item in each *Active Review* section is termed *Reflect & Relate*. Here is the *Reflect & Relate* item from an *Active Review* in Chapter 13 that follows a section on theories of social and emotional development in middle childhood:

Reflect & Relate: Are you “responsible” for your own self-esteem, or does your self-esteem pretty much vary with the opinion that others have of you? Why is this an important question?

Recite

The PQ4R method recommends that students recite the answers to the questions aloud. Reciting answers aloud helps students remember them by means of repetition, by stimulating students to produce concepts and ideas they have learned, and by associating these ideas with spoken words and gestures.

A *Recite* section is found at the end of each chapter. These sections help students summarize the material, but they are active summaries. For this reason, the sections are termed *Recite—An Active Summary*. They are written in question-and-answer format. To provide a sense of closure, the Active Summaries repeat the questions found within the chapters. The answers are concise but include most of the key terms found in the text.

Themes

Childhood: Voyages in Development continues to emphasize three themes:

- Human diversity in development
- Biology: neuroscience, evolution, genes, hormones, and behavior
- Applications

Coverage of these themes is summarized as follows:

Human Diversity in Development

- Ecological circumstances that affect development (pp. 22–24)
- Study of Mexican American students and their environments in relationship to their happiness (p. 23)
- The sociocultural perspective and human diversity (pp. 25–26)
- Naturalistic observations in children of different cultures (pp. 33–34)
- Ethnic differences in the incidence of bearing fraternal twins (p. 50)
- Ethnic differences in chromosomal and genetic disorders (p. 56)
- Birth rates around the world (pp. 90–91)
- Cross-cultural differences in using a doula during delivery (p. 118)
- Maternal and infant mortality around the world (pp. 124–125)
- Socioeconomic status and nutrition (pp. 155–156)
- Differences in preference for breast feeding (pp. 157–161)
- Ethnic differences in infant capacity to walk (pp. 168–169)
- Differences in babbling across cultures (p. 203)
- Two-word sentence development across different languages (p. 208)
- Low-income families and levels of child attachment (pp. 220–221)
- Attachment of Ugandan and Scottish infants (pp. 212–222)
- Social deprivation in a Guatemalan tribe (p. 229)
- Stranger anxiety across cultures (pp. 242–243)
- Gender differences in personality (pp. 248–249)
- Cultural differences in rough-and-tumble play (p. 258)
- Gender differences in motor activity (p. 259)
- Cultural differences in the perception of handedness (pp. 260–262)
- Ethnicity and immunization (pp. 266–267)
- Differences in accidental death rate (pp. 268–270)
- Cross-cultural differences in sleeping arrangements (p. 273)
- Development of concepts of ethnicity and race (p. 287)
- Cross-cultural differences in effects of parental styles (p. 313)
- Cultural and gender differences in authoritarian parenting and the effects on children (p. 315)
- Individualism, collectivism, and patterns of child rearing (pp. 318–319)

- Fathers in America (pp. 322–323)
- Ethnic differences in the presence of a father (p. 322)
- Gender differences in play (pp. 326–327)
- Cultural differences in empathy (pp. 327–328)
- Aggressiveness in sons of criminal and noncriminal fathers (pp. 330–331)
- Gender differences in effects of TV violence (pp. 332–333)
- Development of gender roles and gender differences (pp. 338–339)
- Possible gender differences in organization of the brain (pp. 340–341)
- Cross-cultural differences in gender identity, stability, and constancy (pp. 343–344)
- Sex hormones (pp. 341–342)
- Ethnicity and percent of children and adolescents who are overweight (pp. 352–354)
- Gender differences and motor skills (pp. 359–360)
- Education for disabled children (pp. 370–371)
- Discrimination in standardized testing (pp. 402–403)
- Testing bias and culture-free tests (p. 403)
- Intellectual disability and giftedness (pp. 405–406)
- Socioeconomic and ethnic differences in IQ (pp. 406–407)
- Gender differences in self-esteem (p. 424)
- Gender differences in learned helplessness (p. 425)
- Gender differences in self-concept (p. 423)
- Effects of divorce across cultures (p. 429)
- Gender differences in coping with divorce (p. 429)
- Japanese research on factors in life satisfaction among mothers in the workplace (p. 432)
- Gender differences in the development of friendships (p. 435)
- Differences in preparedness for school (p. 437)
- Sexism in the classroom (pp. 440–441)

Biology: Neuroscience, Evolution, Genes, Hormones, and Behavior

- Ethology (p. 21)
- The nature–nurture controversy (p. 30)
- Frequency of fraternal twins (p. 50)
- Chromosomal and genetic disorders (pp. 52–57)
- Ethnic differences in chromosomal and genetic disorders (p. 56)
- The possible evolution of reflexes (p. 132)
- Pain as adaptive (p. 138)
- Nature and nurture in the development of the brain (pp. 164–165)
- Nature and nurture in motor development (pp. 165–166)
- Are humans prewired to prefer human stimuli to other stimuli? (p. 171)
- Nature and nurture in perceptual development (pp. 179–180)
- Imitation as adaptive (pp. 194–196)
- Nature and nurture in language development (pp. 206–213)

- The nativist view of language development (p. 210)
- Nature and nurture in theories of attachment development (pp. 222–225)
- Genetic factors in handedness (p. 262)
- Evolutionary theory of aggression (p. 330)
- Genetic/hormonal factors in aggression (pp. 330–331)
- Possible genetic influences on self-esteem (p. 425)
- Organization of the brain (pp. 340–341)
- Genetic factors in obesity (p. 354)
- Genetic factors in dyslexia (pp. 368–369)
- Genetic influences on intelligence (pp. 409–410)
- Possible genetic factors in conduct disorder (p. 442)
- Depression and serotonin (p. 446)

Applications

- Problems associated with the use of punishment (pp. 14–16)
- Ways of reversing infertility (p. 71)
- Choosing the gender of one's child (p. 72)
- Maternal nutrition during pregnancy (p. 92)
- Effects of maternal health problems on the embryo and fetus (pp. 94–97)
- Effects of environmental hazards on the embryo and fetus (pp. 103–104)
- Using the Lamaze method to decrease fear and pain during delivery (p. 118)
- Using C-section to avoid disease transmission from mother to infant (p. 119)
- How interaction, talking, and stimulation can help preterm infants develop (pp. 123–124)
- How a woman can work to get beyond postpartum depression (pp. 126–128)
- Understanding visual accommodation (p. 135)
- How to soothe an infant and ease crying (pp. 142–143)
- Teaching sign language to infants (pp. 204–205)
- “Motherese” (pp. 209–210)
- Establishing attachment (pp. 219–220)
- How child abuse may lead to psychological disorders in adulthood (p. 234)
- Preventing sexual abuse of children (p. 232)
- Neurological differences in autistic children (pp. 237–238)
- Finding day care you and your child can live with (p. 240)
- How to comfort a child who doesn't know you (p. 255)
- Brain development and visual skills (p. 255)
- Right brain/left brain (pp. 255–256)
- Plasticity of the brain (p. 256)
- Teaching a child to enjoy healthful food (pp. 263–264)
- Ten things you need to know about immunizations (p. 266)

- Assessing and minimizing the risk of lead poisoning (p. 269)
- What to do about bed-wetting (p. 276)
- Watching how children show (or don't show) conservation (pp. 284–285)
- Memory strategies (p. 302)
- Techniques for restricting children's behavior (pp. 313–314)
- Techniques parents can use to help control their children's behavior (p. 316)
- Helping children cope with fears (pp. 336–337)
- Piaget's theory applied to education (pp. 379–380)
- Rehearsal strategies for memory (pp. 388–392)
- How to ask children questions that elicit truthful answers (p. 393)
- How teachers can help motivate students (pp. 439–440)
- How to help children with conduct disorders (p. 443)
- How parents and teachers can help children with mild depression (p. 446)
- How parents and teachers can help children with school phobia (pp. 449–450)

The Package

Childhood: Voyages in Development is accompanied by a wide array of supplements prepared for both the instructor and the student.

Instructor's Manual with Test Bank for Rathus's *Childhood: Voyages in Development*, 5th edition (ISBN 978-1-285-19891-0)

By Debra Schwiesow of Creighton University (IM) and Kimberly Dechman of George Mason University (TB) This comprehensive manual, available to adopters of Rathus' text, offers learning objectives, chapter outlines, chapter summaries, lecture topics, student exercises (such as Internet activities), film and video suggestions, and activities for the *Observing Children* video series. For each chapter of the text, the Test Bank includes 130–140 multiple-choice questions, 20 matching, 15 true/false, and 5 essay questions with model answers.

Psychology CourseMate

Cengage Learning's Psychology CourseMate brings course concepts to life with interactive learning, study, and exam preparation tools that support the printed textbook. CourseMate includes an integrated eBook, glossaries, flashcards, quizzes, the *Observing Children*, *Understanding Ourselves* video features, and more—as well as EngagementTracker, a first-of-its-kind tool that monitors student engagement in the course. The accompanying instructor website, available through login.cengage.com, offers access to password-protected resources such as an electronic version of the instructor's manual, test bank files, and PowerPoint® slides. CourseMate can be bundled with the student text. Contact your Cengage sales representative for information on gaining access to CourseMate.

PowerLecture with ExamView DVD for Rathus’s *Childhood: Voyages in Development*, 5th edition (ISBN 978-1-285-19890-3)

This one-stop digital library and presentation tool includes preassembled Microsoft® PowerPoint® lecture slides by Robin Musselman of Lehigh Carbon Community College. In addition to the full Instructor’s Manual and Test Bank, the PowerLecture includes ExamView® testing software with all the test items from the printed Test Bank in electronic format, enabling you to create customized tests in print or online. With PowerLecture, you’ll find all of your video and media resources in one place, including an image library with graphics from the book itself.

***Careers in Developmental Psychology Module* (ISBN 0-495-59488-1)**

By Gwynn Morris of North Carolina State University. The “Careers in Developmental Psychology Module” can be ordered with any Cengage/Wadsworth psychology textbook. From education to jobs shaping public policy, developmental psychology offers many opportunities for career advancement. This helpful resource provides students with practical information about the range of careers informed by the field of developmental psychology, addressing questions such as What is developmental psychology? What does a developmental psychologist do? and How does one become a developmental psychologist? The module also includes information about professional organizations and additional resources.

WebTutor for Blackboard® and WebCT® for Rathus’s *Childhood: Voyages in Development*, 5th edition

Jumpstart your course with customizable, rich, text-specific content within your Course Management System. Whether you want to Web-enable your class or put an entire course online, WebTutor™ delivers. WebTutor™ offers a wide array of resources, including access to the eBook, glossaries, flashcards, quizzes, videos, the *Observing Children, Understanding Ourselves* video features, and more.

Acknowledgments

This book is about human development. This section is about the development of this book. The book may have a single author, but its existence reflects the input and aid of a significant cast of characters.

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With a group like this looking over your shoulder, it's difficult to make mistakes. But if any remain, I am solely responsible.

I said that the book you hold in your hands would not have been what it is without the insights and suggestions of my academic colleagues. It also owes much to the fine editorial and production team at Cengage and assembled by Cengage: Jaime Perkins, executive editor; Kristin Makarewycz, senior development editor; Rita Jaramillo, senior content project manager; Aaron Downey, production service; Mary Noel, senior media editor; Jessica Alderman, assistant editor; Audrey Espey, editorial assistant; Liz Rhoden and Chris Sosa in marketing; and Vernon Boes, senior art director.

Finally, I acknowledge the loving assistance of my family. My wife, Lois Fichner-Rathus, continues in her joint roles as supporter and critical reviewer. As shown in experiments with the visual cliff, infants will not usually go off the deep end. As a textbook author herself, and as an academic, Lois often prevents me from going off the deep end. My children I thank as the sources of stories—and stories and more stories. But mostly I thank them for being what they are: well-springs of delight and fancy, occasional annoyances, and perpetual goads.

Childhood



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Major Topics

- 1.1 What Is Child Development?
Coming to Terms with Terms
- 1.2 Theories of Child Development
- 1.3 Controversies in Child
Development
- 1.4 How Do We Study Child
Development?
- 1.5 Ethical Considerations

Features

- Concept Review 1.1:** Comparison of Freud's and Erikson's Stages of Development
A CLOSER LOOK—**Research:** The Bell-and-Pad Method for Treating Bed-Wetting
- A CLOSER LOOK—**Research:** Operant Conditioning of Vocalizations in Infants
- Concept Review 1.2:** Jean Piaget's Stages of Cognitive Development
- OBSERVING CHILDREN, Understanding Ourselves:** Zone of Proximal
Development
- Concept Review 1.3:** Perspectives on Child Development
A CLOSER LOOK—**Research:** Surveying High School Seniors' Attitudes toward
Living Together before Getting Married
- Concept Review 1.4:** Comparison of Cross-Sectional, Longitudinal,
and Cross-Sequential Research
- A CLOSER LOOK—**Research:** The Conditioning of "Little Albert":
A Case Study in Ethics

HISTORY, THEORIES, AND METHODS

Truth or Fiction?

- T | F** During the Middle Ages in Europe, children were often treated as miniature adults. **p. 6**
- T | F** Children come into the world as “blank tablets”—without inborn differences in intelligence and talents. **p. 6**
- T | F** Nail biting and smoking cigarettes are signs of conflict experienced during early childhood. **p. 9**
- T | F** Children should not be punished. **p. 16**
- T | F** Research with monkeys has helped psychologists understand the formation of attachment in humans. **p. 37**
- T | F** To learn how a person develops over a lifetime, researchers have tracked some individuals for more than 50 years. **p. 38**

This book has a story to tell. An important story. A remarkable story. It is your story. It is about the remarkable journey you have already taken through childhood. It is about the unfolding of your adult life. Billions have made this journey before. You have much in common with them. Yet you are unique, and things will happen to you, and because of you, that have never happened before.

Development of children is what this book is about. In a very real sense, we cannot hope to understand ourselves as adults—we cannot catch a glimpse of the remarkable journeys we have taken—without understanding children.

In this chapter, we explore some of the reasons for studying child development. We then take a brief tour of the history of child development. It may surprise you that until relatively recent times, people were not particularly sensitive to the ways in which children differ from adults. Next, we examine some controversies in child development, such as whether there are distinct stages of development. We see how theories help illuminate our observations and how theories help point the way toward new observations. Then we consider methods for the study of child development. Scientists have devised sophisticated methods for studying children, and ethics helps to determine what types of research are deemed proper and what types are deemed improper.



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1.1 What Is Child Development? Coming to Terms with Terms

QUESTION » What is child development? You have heard the word *child* all your life, so why bother to define it? We do so because words in common usage are frequently used inexactly. A **child** is a person experiencing the period of development from *infancy* to *puberty*—two other familiar words that are frequently used inexactly. The term **infancy** derives from Latin roots meaning “not speaking,” and infancy is usually defined as the first 2 years of life, or the period of life before the development of *complex* speech. We stress the word *complex* because many children have a large vocabulary and use simple sentences before their second birthday.

Researchers commonly speak of two other periods of development that lie between infancy and adolescence: early childhood and middle childhood. Early childhood encompasses the ages from 2 to 5 years. Middle childhood generally is defined as the years from 6 to 12. In Western society, the beginning of this period usually is marked by the child’s entry into first grade. To study development, we must also look further back to the origin of sperm and ova (egg cells), the process of conception, and the prenatal period. Yet this is not far enough to satisfy scientists. We also describe the mechanisms of heredity that give rise to traits in humans and other animals.

Development is the orderly appearance, over time, of physical structures, psychological traits, behaviors, and ways of adapting to the demands of life. The changes brought on by development are both *qualitative* and *quantitative*. Qualitative changes are changes in type or kind. Consider motor development. As we develop, we gain the abilities to lift our heads, sit up, crawl, stand, and walk. These changes are qualitative. However, within each of these qualitative changes are quantitative developments, or changes in *amount*. After babies begin to lift their heads, they lift them higher and higher. Soon after children walk, they begin to run. Then they gain the capacity to run faster.

Development occurs across many dimensions—biological, cognitive, social, emotional, and behavioral. Development is spurred by internal factors, such as genetics, and it is shaped by external factors, such as nutrition and culture.

The terms *growth* and *development* are not synonymous, although many people use them interchangeably. **Growth** is generally used to refer to changes in size or quantity, whereas development also refers to changes in quality. During the early days following conception, the fertilized egg cell develops rapidly. It divides repeatedly, and cells begin to take on specialized forms. However, it does not “grow” in that there is no gain in mass. Why? It has not yet become implanted in the uterus and therefore is without any external source of nourishment. Language development is the process by which the child’s use of language becomes progressively more sophisticated and complex during the first few years of life. Vocabulary growth, by contrast, consists of the accumulation of new words and their meanings.

Child development, then, is a field of study that tries to understand the processes that govern the appearance and growth of children’s biological structures, psychological traits, behavior, understanding, and ways of adapting to the demands of life.

Professionals from many fields are interested in child development. They include psychologists, educators, anthropologists, sociologists, nurses, and



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Motor Development

This infant has just mastered the ability to pull herself up to a standing position. Soon she will be able to stand alone, and then she will begin to walk.

child A person undergoing the period of development from infancy through puberty.

infancy The period of very early childhood, characterized by lack of complex speech; the first 2 years after birth.

development The processes by which organisms unfold features and traits, grow, and become more complex and specialized in structure and function.

growth The processes by which organisms increase in size, weight, strength, and other traits as they develop.

medical researchers. Each brings his or her own brand of expertise to the quest for knowledge. Intellectual cross-fertilization enhances the skills of developmentalists and enriches the lives of children.

Why Do We Study Child Development?

QUESTION » Why do researchers study child development? An important motive for studying child development is curiosity—the desire to learn about children. Curiosity may be driven by the desire to answer questions about development that remain unresolved. It may also be driven by the desire to have fun. (Yes, children and the study of children can be fun.) There are other motives as well:

To Gain Insight into Human Nature

For centuries, philosophers, scientists, and educators have argued over whether children are aggressive or loving, whether children are conscious and self-aware, whether they have a natural curiosity that demands to unravel the mysteries of the universe, or whether they merely react mechanically to environmental stimulation. The quest for answers has an impact on the lives of children, parents, educators, and others who interact with children.

To Gain Insight into the Origins of Adult Behavior

How do we explain the origins of empathy in adults? Of antisocial behavior? How do we explain the assumption of “feminine” and “masculine” behavior patterns? The origins of special talents in writing, music, athletics, and math?

To Gain Insight into the Origins of Sex Differences and Gender Roles, and into the Effects of Culture on Development

How do gender roles—that is, culturally induced expectations for stereotypical feminine and masculine behavior—develop? Are there sex differences in cognition and behavior? If so, how do they develop?

To Gain Insight into the Origins, Prevention, and Treatment of Developmental Problems

Fetal alcohol syndrome, PKU (see Chapter 2), SIDS (see Chapter 5), Down syndrome, autism, hyperactivity, dyslexia, child abuse—these are but a few of the buzzwords that strike fear into parents and parents-to-be. A major focus in child development research is the search for the causes of such problems so that they can be prevented and/or treated.

To Optimize Conditions of Development

Most parents want to provide the best in nutrition and medical care so that their children will develop strong and healthy bodies. Parents want their infants to feel secure with them. They want to ensure that major transitions, such as the transition from the home to the school, will be as stress-free as possible. Developmentalists therefore undertake research to learn about issues such as the following:

- The effects of various foods and chemicals on the development of the embryo
- The effects of parent–infant interaction immediately following birth on bonds of attachment

- The effects of bottle feeding versus breast feeding on mother–infant attachment and the baby’s health
- The effects of day-care programs on parent–child bonds of attachment and on children’s social and intellectual development
- The effects of various patterns of child rearing on the development of independence, competence, and social adjustment

The Development of Child Development

QUESTION » What views of children do we find throughout history? In ancient times and in the Middle Ages, children often were viewed as innately evil, and discipline was harsh. Legally, medieval children were treated as property and servants. They could be sent to the monastery, married without consultation, or convicted of crimes. Children were nurtured until they were 7 years old, which was considered the “age of reason.” Then they were expected to work alongside adults in the home and in the field. They ate, drank, and dressed as miniature adults. **TRUTH OR FICTION REVISITED:** Children were also treated as miniature adults throughout most of the Middle Ages. (For much of the Middle Ages, artists depicted children as small adults.) However, this means only that more was expected of them, not that they were given more privileges.

The transition to the study of development in modern times is marked by the thinking of philosophers such as John Locke and Jean-Jacques Rousseau. **TRUTH OR FICTION REVISITED:** The Englishman John Locke (1632–1704) believed that the child came into the world as a *tabula rasa*—a “blank tablet” or clean slate—that was written on by experience. Locke did not believe that inborn predispositions toward good or evil played an important role in the conduct of the child. Instead, he focused on the role of the environment or of experience. Locke believed that social approval and disapproval are powerful shapers of behavior. Jean-Jacques Rousseau (1712–1778), a Swiss–French philosopher, reversed Locke’s stance. Rousseau argued that children are inherently good and that, if allowed to express their natural impulses, they will develop into generous and moral individuals.

During the Industrial Revolution, family life came to be defined in terms of the nuclear unit of mother, father, and children, rather than the extended family. Children became more visible, fostering awareness of childhood as a special time of life. Still, children often labored in factories from dawn to dusk through the early years of the 20th century.

In the 20th century, laws were passed to protect children from strenuous labor, to require that they attend school until a certain age, and to prevent them from getting married or being sexually exploited. Whereas children were once considered the property of parents to do with as they wished, laws now protect children from the abuse and neglect of parents and other caretakers. Juvenile courts see that children who break the law receive fair and appropriate treatment in the criminal justice system.



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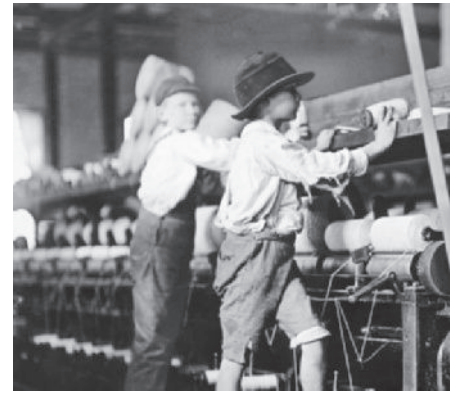
A View of Children as Perceived in the 1600s

Centuries ago, children were viewed as miniature adults. In this 17th-century painting, notice how the body proportions of the young princess (in the middle) are similar to those of her adult attendants.

Pioneers in the Study of Child Development

Various thoughts about child development coalesced into a field of scientific study in the 19th and early 20th centuries. Many individuals, including Charles Darwin, G. Stanley Hall, and Alfred Binet, contributed to the emerging field.

Charles Darwin (1809–1882) is perhaps best known as the originator of the theory of evolution. But he also was one of the first observers to keep a *baby biography*, in which he described his infant son's behaviors in great detail. G. Stanley Hall (1844–1924) is credited with founding child development as an academic discipline. He adapted the questionnaire method for use with large groups of children so that he could study the “contents of children's minds.” The Frenchman Alfred Binet (1857–1911), along with Theodore Simon, developed the first standardized intelligence test near the turn of the 20th century. Binet's purpose was to identify public-school children who were at risk of falling behind their peers in academic achievement. By the beginning of the 20th century, child development had emerged as a scientific field of study. Within a short time, major theoretical views of the developing child had begun to emerge, proposed by such developmentalists as Arnold Gesell, Sigmund Freud, John B. Watson, and Jean Piaget. We next describe their theories of child development and those of others.



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A Young Child Laborer

Children often worked long days in factories up through the early years of the 20th century. A number of cultures in the world today still use child labor.

Go to Psychology CourseMate at www.cengagebrain.com to take this Section Quiz.

Active Review ✨

1. A child is a person experiencing the period of development from infancy to _____.
2. _____ is the orderly appearance, over time, of structures, traits, and behaviors.
3. The word *growth* is generally used to refer to changes in size or quantity, whereas the term _____ also refers to changes in quality.

Reflect & Relate: Do you believe that children are “wild”? That children must be “tamed”? Do you see dangers (to children) in answering yes to either question? Explain.

1.2 Theories of Child Development

“Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in, and I'll guarantee to train them to become any type of specialist I might suggest—doctor, lawyer, merchant, chief, and, yes, even beggar and thief, regardless of their talents, penchants, tendencies, abilities, vocations, and the race of their ancestors” (Watson, 1924, p. 82).

John B. Watson, the founder of American **behaviorism**, viewed development in terms of learning. He generally agreed with Locke's idea that children's ideas, preferences, and skills are shaped by experience. There has been a long-standing nature–nurture debate in the study of children. In his theoretical approach to understanding children, Watson came down on the side of nurture—the importance of the physical and social environments—as found, for example, in parental training and approval. Watson's view turned upside down the history of approaches to understanding children. Nature, or the inherited, genetic characteristics of the child, had long been the more popular explanation of how children get to be what they are.

Four years after Watson sounded his call for the behavioral view, Arnold Gesell expressed the opposing idea that biological maturation was the main principle of development: “All things considered, the inevitability and surety of maturation are the most impressive characteristics of early development. It is the hereditary ballast which conserves and stabilizes growth of each individual

behaviorism John B. Watson's view that a science or theory of development must study observable behavior only and investigate relationships between stimuli and responses.

infant” (Gesell, 1928, p. 378). Watson was talking largely about the behavior patterns that children develop, whereas Gesell was focusing mainly on physical aspects of growth and development. Still, the behavioral and maturational perspectives lie at opposite ends of the continuum of theories of development. Many scientists fall into the trap of overemphasizing the importance of either nature or nurture at the risk of overlooking the ways in which nature and nurture interact. Just as a child’s environments and experiences influence the development of his or her biological endowment, children often place themselves in environments that are harmonious with their personal characteristics. Children, for example, are influenced by teachers and other students. Nevertheless, because of the traits they bring to school with them, some children may prefer to socialize with other children and others with teachers. Still other children may prefer solitude.

What Are Theories of Child Development?

QUESTION » Why do we have theories? Child development is a scientific enterprise. Like other scientists, developmentalists seek to describe, explain, predict, and influence the events they study. When possible, descriptive terms and concepts are interwoven into **theories**. Theories are based on assumptions about behavior, such as Watson’s assumption that training outweighs talents and abilities or Gesell’s assumption that the unfolding of maturational tendencies holds sway.

Theories enable us to derive explanations and predictions. For instance, a theory concerning the development of gender roles should allow us to predict how—and whether—children will acquire stereotypical feminine or masculine gender-typed behavior patterns. A broad theory of the development of gender roles might apply to children from different cultural and racial backgrounds and, perhaps, to children with gay male and lesbian sexual orientations as well as to children with a heterosexual orientation. If observations cannot be explained by or predicted from a theory, we may need to revise or replace the theory.

Theories also enable researchers to influence events, as in working better with parents, teachers, nurses, and children themselves to promote the welfare of children. Psychologists may summarize and interpret theory and research on the effects of day care to help day-care workers provide an optimal child-care environment. Teachers may use learning theory to help children learn to read and write. Let us consider various theoretical perspectives on child development.

theory A formulation of relationships underlying observed events. A theory involves assumptions and logically derived explanations and predictions.

psychosexual development Freud’s view that as children develop, they find sexual gratification through stimulating different parts of their bodies.

stage theory A theory of development characterized by hypothesizing the existence of distinct periods of life. Stages follow one another in an orderly sequence.

The Psychoanalytic Perspective

QUESTION » What is the psychoanalytic perspective on child development? A number of theories fall within the psychoanalytic perspective. Each one owes its origin to Sigmund Freud and views children—and adults—as caught in conflict. Early in development, the conflict is between the child and the world outside. The expression of basic drives, such as sex and aggression, conflicts with parental expectations, social rules, moral codes, even laws. However, the external limits—parental demands and social rules—are *internalized*; that is, they are brought inside. Once this happens, the conflict takes place between opposing *inner* forces. The child’s observable behavior, thoughts, and feelings reflect the outcomes of these hidden battles.

In this section, we explore Freud’s theory of **psychosexual development** and Erik Erikson’s theory of psychosocial development. Each is a **stage theory** that sees children as developing through distinct periods of life. Each suggests

that the child's experiences during early stages affect the child's emotional and social life at the time and later on.

Sigmund Freud's Theory of Psychosexual Development

Sigmund Freud (1856–1939) was a mass of contradictions. He has been praised as the greatest thinker of the 20th century and criticized as overrated. He preached liberal views on sexuality but was himself a model of sexual restraint. He invented a popular form of psychotherapy but experienced life-long emotional problems, including migraine headaches, fainting under stress, hatred of the telephone, and an addiction to cigars. He smoked 20 cigars a day and could not or would not break the habit, even after he developed cancer of the jaw.

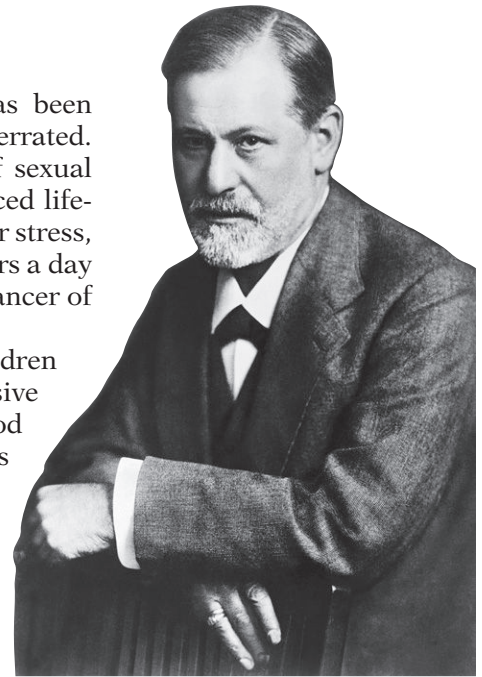
Freud focused on the emotional and social development of children and on the origins of psychological traits such as dependence, obsessive neatness, and vanity. Let us dive into Freud's theory. *Diving* is a good metaphor because Freud believed that most of the human mind lies beneath consciousness, like an iceberg. The children you observe do and say many things—cry, crawl, run, talk, build, play—but all this is the tip of the iceberg. And the tip of an iceberg is the smaller part of the iceberg. Freud theorized that people, because of their childhood experiences, are only vaguely aware of the ideas and impulses that occupy the greater depths of their minds.

Freud theorized three parts of the personality: the *id*, *ego*, and *superego*. The *id* is present at birth and is unconscious. It represents biological drives and demands instant gratification, as suggested by a baby's wailing. The *ego*, or the conscious sense of self, begins to develop when children learn to obtain gratification for themselves, without screaming or crying. The *ego* curbs the appetites of the *id* and makes plans that are in keeping with social conventions so that a person can find gratification yet avoid the disapproval of others. The *superego* develops throughout infancy and early childhood and brings inward the norms and morals of the child's caregivers and other members of the community. If the child misbehaves, the *superego* will flood him or her with guilt and shame.

According to Freud, childhood has five stages of psychosexual development: *oral*, *anal*, *phallic*, *latency*, and *genital*. If a child receives too little or too much gratification during a stage, the child can become *fixated* in that stage. For example, if the child is weaned early or breast-fed too long, the child may become fixated on *oral* activities such as nail biting or smoking, or even show a "sharp tongue" or "biting wit." **TRUTH OR FICTION REVISITED:** However, there is actually no research evidence that nail biting and smoking cigarettes are signs of conflict experienced during early childhood.

In the second stage, the *anal stage*, gratification is obtained through control and elimination of waste products. Excessively strict or permissive toilet training can lead to the development of anal-retentive traits, such as perfectionism and neatness, or anal-expulsive traits such as sloppiness and carelessness. In the third stage, the *phallic stage*, parent-child conflict may develop over masturbation, which many parents treat with punishment and threats. It is normal for children to develop strong sexual attachments to the parent of the other sex during the phallic stage and to begin to view the parent of the same sex as a rival.

By age 5 or 6, Freud believed, children enter a *latency stage* during which sexual feelings remain unconscious, children turn to schoolwork, and they typically prefer playmates of their own sex. The final stage of psychosexual development, the *genital stage*, begins with the biological changes that usher in adolescence. Adolescents generally desire sexual gratification through



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Sigmund Freud

Sigmund Freud is the originator of psychoanalytic theory. He proposed five stages of psychosexual development and emphasized the importance of biological factors in the development of personality.