

HUMAN DEVELOPMENT

Across the Lifespan

John S. Dacey • John E. T.

UPDATED FIFTH EDITION

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Human Development

A C R O S S T H E L I F E S P A N

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HUMAN DEVELOPMENT ACROSS THE LIFESPAN, UPDATED FIFTH EDITION

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*This book is dedicated with deep affection
to the two people who have helped us the most—
Linda Dacey and Barbara Travers,
our wives.*

Preface

In this first decade of the twenty-first century, American society has clearly adopted the goal that greater opportunities should be available for all its members to develop their potential more fully. To achieve this goal, it will be essential that we know as much as possible about human development—how we change from the helplessness of infancy to the competence of adulthood to the wisdom of old age.

Perhaps the human *saga* is not written as clearly as we would like. As Thomas Jefferson once noted, although the human condition is not open to complete scrutiny, it is, nevertheless, susceptible to considerable improvement. Clues providing insights into the riddle of human development are beginning to multiply. Genetic discoveries are occurring at a rate that can only be described as breathtaking.

As the population of our nation continues to change, we have become more sensitive to the influence that culture exerts on development. We recognize that children learn in many different ways; we see how different cultures view developmental stages such as adolescence and old age from different perspectives; we understand more about how society changes us, but also how we can influence society.

Basic Themes of Human Development across the Lifespan

Reflecting the exciting changes that are taking place in our knowledge of human development, we have woven our narrative around several integrating themes: the biopsychosocial model, the cultural context of development, the roles of age and gender, and applications to daily living. We return to these themes in each chapter as a means of making more meaningful the basic knowledge of human development.

The Biopsychosocial Approach

The *biopsychosocial approach* will help you to integrate the wealth of information that you will find in the pages to come. By thinking of lifespan development as the product of the interaction of biological, psychological, and social forces, you will better appreciate the complexity of development. For example, biological influences on development range from the role of genes in

development to adult health concerns; psychological influences include all aspects of cognitive and personality development; social influences refer to such powerful forces as family, school, peers, and the media. The biopsychosocial approach helps to explain how the interaction of these forces is the key to understanding human development.

Contextual Influences on Development

Our goal in urging you to adopt a sociocultural perspective is to help you develop a greater understanding of those who seem “different.” If you adopt this perspective, you will come to realize that different people have different worldviews that decisively influence their thinking. People from different cultures do not always think like each other and, as we will stress, these differences are assets. Recognizing how diverse people are in their thinking and behavior will help you to identify and comprehend variations in how individuals are raised, how they think, and how they become functioning members of their culture.

In various places throughout the book, we will be discussing the four major tenets of the contextual model: the relative plasticity of life; the historical embeddedness of all development; the diversity of development; and the bidirectionality of the causes of all human behavior. Since we feel so strongly about the importance of these factors, you will find a discussion of sociocultural issues in each chapter. We also open several sections of the book with a sociocultural perspective on the issues to be discussed.

The Roles of Age and Gender

Inasmuch as this book is organized chronologically, we will be explaining the influence of age in every chapter. In some ways, the effects of age are quite apparent and in other ways its effects are subtle and complex. As concerns about gender equity have received more publicity, the stereotypes about males and females have slowly eroded. If people are treated according to stereotypic characteristics, then their potential is immediately limited. Although gender stereotyping is only one part of the gender story, it illustrates the importance of the relationship between gender and development. For example, children at an early age construct social categories from the world around them, attach certain characteristics to

these categories, and label the categories. This process may be positive because it helps to organize the world; it may also be negative if the characteristics associated with the category are limiting—"girls just can't do math." We'll examine how this theme plays out, both positively and negatively, throughout the lifespan.

Applications to Daily Living

The study of lifespan development is an exciting, rapidly changing, and highly relevant subject that can shed light on the developmental changes that you witness in yourself and see in your friends and family members of all ages. To help you put the theories and research of this book into a meaningful framework, we have written several **An Applied View** boxes for each chapter. These range from the appeal of street gangs for some children, to the role of television in a child's life, to an adolescent's search for identity, to problems that the adult children of alcoholics encounter.

We have also included boxes that ask you to interact with the text's material. Called **An Informed View**, these boxes are intended to help you think about and act on topics we have just discussed in the chapter. In these activities, you are invited to reflect on what your knowledge and your experience tell you about these matters. We do not present answers in these boxes. Rather, we hope you apply your best judgment to the issues we raise.

Major Changes in the Fifth Edition

Thanks to suggestions from students who used the fourth edition of our text and the insightful comments of reviewers, we have made the following substantial changes in the fifth edition:

- An innovation from the previous edition is the changing of **What's Your View** boxes to **An Informed View**. These new boxes, which appear once or more in each chapter, not only ask students to take a side on a "hot" developmental issue but also suggest further readings that should help to provide a better basis for the formation of that stance. In some cases, these boxes will contain a World Wide Web icon that will prompt you to visit the text's web site for additional information. As a result, students are encouraged to think more critically about the major issues in the field today, and not just jump to a snap judgment.
- In addition to appearing at the end of the text in the glossary, definitions of key terms now appear within the margins of the text. This enhancement makes it easier for students to identify important terms and study them in preparation for exams.
- We have continued to add new examples of the biopsychosocial approach in this edition.

- Because we believe that the quotations that appear in each chapter in our book set the tone for that chapter, we have provided one as an opening, along with a vignette about human development, in each chapter.
- Earlier in this preface we mentioned that development is a lifelong process, which implies that lifespan psychology books must constantly change to accommodate fresh insights into the developmental process. To meet this challenge, we have made the following key changes in our chapters:

Chapter 1. Lifespan Psychology: An Introduction

We have reshaped major sections of chapter 1: new approaches to the meaning and characteristics of lifespan psychology, completely changed our analysis of the views of lifespan psychology, and refocused the importance of biopsychosocial interactions.

Chapter 2. Theories of Development: Interpreting the Lifespan

We have changed chapter 2 to reflect the latest direction in the field. For example, we have used developmental contextualism as an illustration of the growing importance of systems analysis to understand development. How the various human systems interact is now recognized as a most promising technique to unlock developmental secrets.

Chapter 3. The Biological Basis of Development

The ART section (Assisted Reproductive Techniques) was completely redone to reflect current research. Also, cloning was discussed. The Human Genome Project was almost totally rewritten to keep up with the startling news about the mapping of the human genome. This section received highly favorable reviews.

Chapter 4. Pregnancy and Birth

The major changes in this chapter are a reorganization of topics, a much-expanded version of maternal influences on prenatal development, and a new approach to prematurity (identification of categories, etc.).

Chapter 5. Physical and Cognitive Development in Infancy

We rewrote major sections of this chapter. For example, we expanded our discussion of brain development in infancy. We also reworked the section on perceptual development—visual and auditory. Although we maintained a strong position in Piagetian thought, we noticeably enlarged our treatment of information processing in infancy.

Chapter 6. Psychosocial Development in Infancy

We continued our emphasis on the importance of interactions and relationships on development and extended the notion of “ghosts in the nursery” with regard to parental expectations. We also increased our analysis of father attachment. We completely rewrote the section on emotions and emotional development, which received excellent reviews.

Chapter 7. Physical and Cognitive Development in Early Childhood

Once again, we expanded our discussion of brain development in the early childhood period. We reorganized the discussion of the importance of drawing in a child's life. We introduced the latest research concerning children's theory of mind and linked it to information processing theory—a major change. The analysis of language development began with a presentation of Roger Brown's work, which we thought would help readers to grasp this important topic.

Chapter 8. Psychosocial Development in Early Childhood

In our discussion of parenting techniques, we introduced the pros and cons of punishment. Our presentation of family included the different effects of culture on the interactions among family members. The work on divorce was updated to include the latest statistics and research suggesting the differential effects of divorce on boys and girls. We introduced several new important studies on the developmental outcome of day care. The section on gender development was completely reworked—updating and expanding the theory section, analyzing the role of culture, and introducing the latest research on the emotional life of boys, including violence.

Chapter 9. Physical and Cognitive Development in Middle Childhood

We pointed out the importance of nutrition during these years. We then totally revamped our discussion of intelligence to make it more meaningful for readers. Since reviewers seemed to focus on problem solving and critical thinking, we GREATLY expanded our discussion of critical thinking; we discussed taxonomies, the use of questions, the kinds of strategies children develop, etc. We refined and added to our analysis of reading skills with regard to language development.

Chapter 10. Psychosocial Development in Middle Childhood

We have made sweeping changes for this edition. We introduced a section on the development of violence (which has attracted so much attention today) and tied it to early clues for troublesome behavior. Following this

discussion, we then tied the topic to impulse control, one of the most significant issues for today's children. We made many changes in the peer section, detailing their important influence on development. In this edition, we decided—for obvious reasons—to link our discussion to schools and development. We brought in new work on the role of learning and problem solving. From there, we turned to the impact of television on development, using the National Television Violence Study. We concluded with an analysis of resilient children and, in this edition, introduced a section on the characteristics of resilient children.

Chapter 11. Physical and Cognitive Development in Adolescence

We included important new evidence on the secular trend—although menarche (first menstruation) is not starting any earlier, breast development is beginning sooner, and this has important ramifications for the social treatment of preadolescent girls. We also have a new section on body image and eating disorders, as well as new evidence on patterns of mental illness in the teen years.

Chapter 12. Psychosocial Development in Adolescence

New statistics on developments in the typical family, sexual behavior and sexually transmitted infections and pregnancy and the impact of divorce in the United States are provided in this chapter. There is also a new section on the use of the drug Ecstasy, as well as new statistics on other drug use today.

Chapter 13. Physical and Cognitive Development in Young Adulthood

We have included a considerable amount of new information in the area of the effect of lifestyle on health. There is also a new section on the phenomenon of the dual-career family.

Chapter 14. Psychosocial Development in Young Adulthood

New information on the sexual behavior of young adults is presented in this chapter, as well as an increased treatment of gender roles and their importance in the development of the members of this age group. We also include a new set of statistics on changing American marriages and families.

Chapter 15. Physical and Cognitive Development in Middle Adulthood

There's a new section on recent information on the climacteric for both men and women. Exciting new work on the way that memory operates has been included in this edition. We have also added several new studies to our section on the special problems of the working woman.

Chapter 16. Psychosocial Development in Middle Adulthood

We have added information about recent studies concerning the relationships between siblings and between middle-aged friends. A new section on sex and love in middle adulthood has also been included.

Chapter 17. Physical and Cognitive Development in Late Adulthood

We have expanded the sections on sensory abilities (especially hearing and eyesight) of elderly persons. We have made significant revisions on the subjects of health and appearance. In our coverage of Alzheimer's disease, we have added sections on new research on the causes and ways of treating this devastating problem. Our information on the concept of wisdom has also been expanded.

Chapter 18. Psychosocial Development in Late Adulthood

We have incorporated updated material on the sexual behavior of elderly adults, as well as a considerable amount of new information on the elderly and their families. There's new information on grandparenting (especially their role as primary parents). We have taken a new look at personality development among this age group and have revised the information we present on Erikson's point of view.

Chapter 19. Dying and Spirituality

We have a major new section on causes of suicide. We have considerably expanded our coverage of physician-assisted suicide and of the role of the hospice in helping the elderly prepare themselves for death when they are terminally ill. We have also increased our coverage of the rapidly expanding area of spirituality.

Teaching—Learning Features of the Updated Fifth Edition

You will enjoy and learn from this book to the extent that its topics, organization, and clarity make its contents meaningful to you. Helping you to master the book's contents in as uncomplicated a manner as possible has been the most important pedagogical goal of our work. To accomplish this task, we have built a number of features into each chapter, described here. The *Student Owner's Manual* that follows this preface also walks you through these features by pairing examples of features with explanations of their use.

- **Chapter Outlines.** The major topics of each chapter are presented initially so that you may quickly find the subject you need. An outline helps you to retain material (a memory aid) and is an efficient method for reviewing content.

- **Opening Quotation.** Each chapter opens with a quotation that sets the tone for what follows.
- **Opening Vignette.** Each chapter opens with a vignette that illustrates the chapter's content. These vignettes are intended to demonstrate how the topics described in the chapter actually work in the daily lives of human beings, young and old.
- **Chapter Questions.** Following the introductory section of each chapter, we present a concise list of questions that are answered in the chapter to guide your reading. When you finish reading the chapter, return to the list and test yourself to see if you can respond to their intent; that is, can you analyze, can you apply, can you identify, can you define, can you describe?
- **View Boxes.** We have designed our boxes to expand on the material under discussion and to do so in a manner calculated to aid student retention. The view boxes are of three types:
 1. **An Informed View.** Here we present controversial issues and you are asked to give your opinion after you have studied the facts. In some cases these boxes are accompanied by an icon indicating that additional information can be found on the World Wide Web.
 2. **An Applied View.** Here you will see how the topics under discussion apply to an actual situation, in settings such as a classroom or a medical facility.
 3. **A Sociocultural View.** Here we analyze the contributions of different cultures to individual development, as well as research on newly discovered influences of aging, gender, and other social factors.
- **Conclusion & Summary.** At the end of each chapter you will find a brief concluding statement that summarizes the main themes of the chapter. This statement provides you with a quick check of the purpose of the chapter and the content covered. Immediately following the brief concluding section is a more detailed set of summary statements that are grouped according to the major topics of the chapter. This section should help you to review the chapter quickly and thoroughly.
- **Key Terms.** In addition to the list that appears at the end of each chapter, you will also find definitions of key terms within the chapter's margins. These terms are highlighted and explained in the context of the chapter. We urge you to spend time mastering the meaning of each of these terms and relate them to the context in which they appear.
- **What Do You Think?** Following the Key Terms, you will find a series of questions intended to have you

demonstrate your knowledge of the chapter's content, not only by applying the material to different situations but also by asking you to be creative in answering the question or solving the problem.

- **Suggested Readings.** Interspersed in appropriate places throughout the text, you will find an annotated list of four or five books or journal articles that we think are particularly well suited to supplement the contents of the chapter. These references are not necessarily textbooks; they may not deal specifically with either education or psychology. We believe, however, that they shed an illuminating light upon the chapter's material.
- **Student Study Guide.** We include a student study guide in the body of the text, in the form of Guided Review sections, as one means of making the material as meaningful as possible and to aid retention.

Supplementary Materials

The supplements listed here may accompany Dacey & Travers' *Human Development across the Lifespan*, updated fifth edition. Please contact your local McGraw-Hill representative for details concerning policies, prices, and availability, as some restrictions may apply.

For the Instructor

Instructor's Manual and Test Bank

Developed by Rebecca Walker-Sands, Central Oregon Community College, the *Instructor's Manual* to accompany the updated fifth edition of *Human Development across the Lifespan* has been revised and expanded to include new teaching ideas and features available for instructors. Features in this edition of the *Instructor's Manual* include, for each chapter, a summary outline, learning objectives, key terms, lecture suggestions, classroom or student activities, and questions for review and discussion. In addition, we have included supplementary resources for both video/film and web site use for the human development instructor. The summary outline and learning objectives closely follow the text and highlight the important concepts and topics from each chapter. The learning objectives are also used in the test bank to help instructors select supporting questions. Key terms from the text are listed to show which terms need to be emphasized within lectures. Complete lecture suggestions that give entertaining, yet educational, ideas on how to enliven classroom discussion of the text material are provided as well. In addition, classroom activities serve to provide hands-on suggestions for applying course material to students' everyday lives in and out of the classroom. Questions for review and discussion are available for each chapter to aid instructors in promoting class participation and/or as essay question assignments.

The *Test Bank* portion of the *Instructor's Manual/Test Bank* provides instructors with a resource of over 1,500 test questions specifically related to the main text. This testing tool includes multiple-choice questions for each chapter from which to develop test materials. In addition, each test item is identified by type as either factual, conceptual, or applied for easier test development.

Computerized Test Bank CD-ROM

This computerized test bank contains all of the questions in the print version, and is now available on a hybrid CD-ROM that functions in both Windows and Macintosh platforms. These questions can be rearranged and customized using Microtest III, a powerful yet easy-to-use test generating program by Chariot Software Group. Professors may choose questions, instructions, headings, and even fonts. Tests may be personalized by adding or importing instructors' own questions to those already in the test bank.

Instructor's Resource CD-ROM

This teaching tool offers instructors the opportunity to customize McGraw-Hill materials to create their lecture presentations. Resources include the *Instructor's Manual*, *Computerized Test Bank*, PowerPoint presentation slides, and the *Image Database for Developmental Psychology*.

PageOut—Build your own course web site in less than an hour

You don't have to be a computer whiz to create a web site, especially with an exclusive McGraw-Hill product called PageOut™ that requires no prior knowledge of HTML—no long hours of coding and no design skills on your part. www.pageout.net

The McGraw-Hill Developmental Psychology Image Database & Overhead Transparencies

This set of 200 full-color images was developed using the best selection of our human development art and tables and is available in electronic format on the text's web site and as part of our *Instructor's Resource CD-ROM*, as well as in a print overhead transparency set. These images have been selected to correspond with the instructor's manual. Plus, instructors can add their own lecture notes to the electronic images as well as organize the images to correspond to their particular classroom needs.

Online Learning Center

This extensive web site, designed specifically to accompany Dacey & Travers' *Human Development across the Lifespan*, updated fifth edition, offers an array of resources for both instructor and student. PowerPoint Presentations, the Developmental Psychology Image Database, Web Links, and more resources can be found by logging on to the text site at <http://www.mhhe.com/dacey5u>.

Annual Editions—Human Development 2001/2002

Published by Dushkin/McGraw-Hill, this is a collection of 45 articles on topics related to the latest research and thinking in human development. These editions are updated annually and contain helpful features, including a topic guide, an annotated table of contents, unit overviews, and a topical index. An instructor's guide containing testing materials is available.

Sources: Notable Selections in Human Development

This is a collection of over 40 articles, book excerpts, and research studies that have shaped the study of human development and our contemporary understanding of it. The selections are organized topically around major areas of study within human development. Each selection is preceded by a headnote that establishes the relevance of the article or study and provides biographical information on the author.

Taking Sides

This is a debate-style reader designed to introduce students to controversial viewpoints on the field's most crucial issues. Each issue is carefully framed for the student, and the pro and con essays represent the arguments of leading scholars and commentators in their fields. An instructor's guide containing testing materials is available.

Guide to Lifespan Development for Future Educators & Guide to LifeSpan Development for Future Nurses

New course supplements help students apply the concepts of human development to education. Each supplement contains information, exercises, and sample tests designed to help students prepare for certification and understand human development from a professional perspective.

For the Student

Making the Grade CD-ROM

This user-friendly CD-ROM offers 15–25 multiple-choice practice test questions, with feedback, per chapter. By providing these materials, along with a Learning Assessment questionnaire to help students identify their learning styles, the CD gives students an opportunity to test their comprehension of the course material.

Online Learning Center

The official web site for the text contains chapter outlines, practice quizzes that can be e-mailed to the professor, links to relevant web sites, and other interactive activities such as crosswords and flashcards. <http://www.mhhe.com/dacey5u>.

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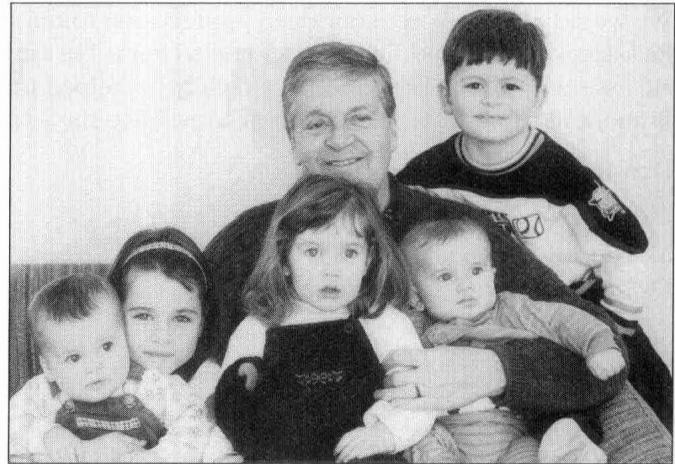
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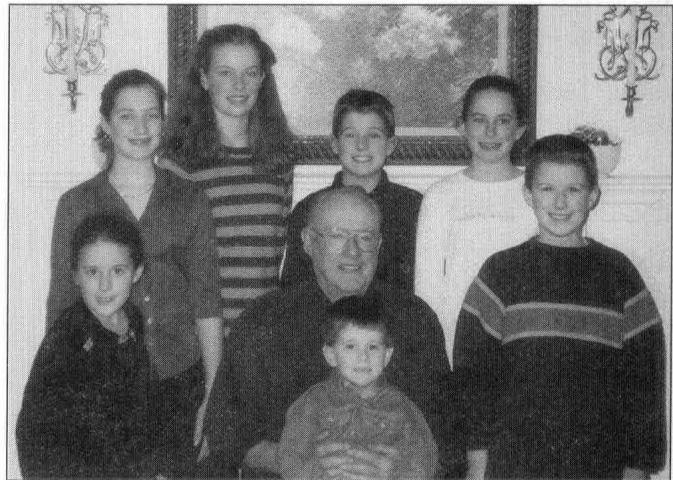
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John S. Dacey, Ph.D., is professor at Boston College in the Department of Counseling, Developmental Psychology, and Research Methods. He began his career as a junior high social studies teacher. Now a college teacher and a researcher in adolescent and adult development, he is the author of 12 books and nearly 30 articles on parenting, creativity, and general human development. His most recently published book is entitled *Your Anxious Child*. He is currently finishing a book on parental techniques for promoting family cohesion.



John Travers has worked with young people all his professional life, beginning with his own four children. He has taught in elementary and high school and now teaches undergraduate and graduate students at Boston College, where, among a faculty of 1,000, he was recognized as one of eight outstanding teachers in the university. He has also been honored as Teacher of the Year. His undergraduate and graduate teaching has been in the field of developmental psychology. Teaching, counseling, and writing have been constant themes in his professional life. He has written 17 books and approximately 30 professional articles.



To the Student

Owner's Manual: A Guide to Content Features

Chapter Outlines

The major topics of each chapter are presented initially so that you may quickly find the subject you need.

Opening Vignette

Each chapter opens with a vignette that illustrates the chapter's content. These vignettes are intended to demonstrate how the topics described in the chapter actually work in the daily lives of human beings, young and old.

Psychoanalytic theory
Freud's theory of the
development of personality.



Dr. Sigmund Freud was a medical doctor who proposed the psychoanalytic theory of development.

Sigmund Freud suggested that babies react to needful feelings such as hunger in several steps. First they become aware of the need, then they cry, next they imagine that the need has been met, and then they fall back to sleep. Slowly they learn that imagination is no substitute for real satisfaction of a need.

not stand alone; they are related to other aspects of science, that is, they should be tested experimentally and applied to actual situations. Only in this way can the truthfulness and usefulness of any theory be assessed.

In this chapter, we'll first turn to the major theorists who for many years have guided our thinking about development: Sigmund Freud, Erik Erikson, Jean Piaget, Lev Vygotsky, B. F. Skinner, and Albert Bandura. Next we'll discuss the present status of developmental theory and several issues related to the direction of developmental theory. Finally, we'll use Richard Lerner's notion of contextualism to reflect recent thinking regarding new directions in developmental analysis, which we hinted at in chapter 1.

Chapter Objectives

After you read this chapter, you should be able to answer the following questions.

- ◆ How does psychoanalytic theory explain development across the lifespan?
- ◆ What is the relationship between psychosocial crises and lifespan development?
- ◆ How did Piaget explain cognitive development?
- ◆ What impact does culture have on lifespan development?
- ◆ What is the behavioral perspective on development?
- ◆ What is the status of current developmental theory?

The Psychoanalytic Approach

On a beautiful spring day in 1885, Sigmund Freud sat down and wrote a startling letter to his fiancée. Telling her that he had just about completed a massive task—destroying his notes, letters, and manuscripts of the past fourteen years, a destructive act that he would repeat several times in his lifetime—Freud revealed his mistrust of future biographers. Yet, in spite of his efforts, the autobiographical nature of much of his published works and his vast correspondence left a lasting legacy.

Freud's ideas no longer dominate developmental psychology as they did in the early part of the 20th century. Yet his insistence on the early years as decisive in development has remained a potent and controversial concept (Gaines, 1998). In more than 100 years of psychological research, it is impossible to think of anyone who has played a larger role than Sigmund Freud. Even his most severe critics admit that his theory on the development of personality is a milestone in the social sciences (Fenns, 1997).

Let's begin by examining Freud's ideas about the structure of the mind.



CHAPTER 3

The Biological Basis of Development

Chapter Outline

The Fertilization Process	00
The Menstrual Cycle	00
Infertility	00
In Vitro Fertilization (IVF)	00
Adoption	00
Heredity at Work	00
Chromosomes and Genes	00
DNA Structure and Function	00
How Traits Are Transmitted	00
Hereditary Disorders	00
The Human Genome Project	00
How The Human Genome Project Began	00
Ethical, Legal, and Social Implications	00
Conclusion	00
Key Terms	00
What Do You Think?	00
Chapter Review Test	00

On October 6, 1998, Frank and Ellen Smith arrived at Dr. James Otis's office a few minutes early for their appointment. Married for seven years, they had been unable to conceive and had found that their problem was caused by male infertility. In this case, a low sperm count. As they attempted to learn more about their problem, they discovered that they were not alone; estimates are that one in six heterosexual couples has a fertility problem.

Other couples whom they had met in their search for a solution had recommended Dr. Otis as a physician who was sympathetic, knowledgeable, and successful in using DI—donor insemination. (Currently, close to 100,000 women in the United States will use DI each year.) Frank and Ellen chose this procedure because the screening process in accepting sperm for freezing lowers the risk of sexually transmitted diseases (STDs) and also provides detailed information about the donor: race, ethnic background, blood type, hair and eye color, physical characteristics, and personal background information.

The Smiths found that Dr. Otis was exactly as he had been described. Unhurried and calm, he told the couple just what would be expected of them. He also stressed that he received sperm from a large, nationally known, respected sperm bank. He explained that freezing techniques had improved in the last few years. Cryobiology, the study of how best to freeze living tissue, had made great strides by adding chemicals such as glycerol to liquid nitrogen at a temperature of -190 degrees C. This technique protects cells and tissues by preventing any damage that could be caused by the formation of ice crystals.

Frank and Ellen felt reassured by their discussion with Dr. Otis. They couldn't afford the time and money required for adoption, but from their reading they had decided their chances of conceiving through donor insemination were good. Healthy couples with no other problems have a 70 to 80 percent success rate within one year. This figure compares with a natural conception rate of 85 to 90 percent for fertile couples.

The Smiths were also pleased that Dr. Otis had so carefully explained the procedure to them. After carefully tracking a woman's menstrual cycle and searching for accurate



With approximately 5 million individuals in the United States who are thought to be infertile, many couples are consulting fertility specialists.

Chapter Objectives

This is a concise list of questions that are answered in the chapter to guide your reading. Once you've finished the chapter, you should be able to analyze, apply, identify, define, and describe.

A Sociocultural View

These provide analysis of different cultures to individual development, as well as research on newly discovered influences of aging, gender, and other social factors.

Suggested Readings

Interspersed throughout the text are titles of book and journal articles that are particularly well suited to supplement the contents of the chapter.

Guided Review Questions

Acting as an integrated study guide, these questions help you to study what you've just learned.

The Impact of the Cultural Climate

Understanding cultural differences will move our relationships with others to a level of mutual understanding in all settings. As an illustration, think of the changing American classrooms, where children and teachers from many different cultures are now coming together. Many minority children have had to make major adjustments to the dominant culture in the classroom (Chen & others, 1997). Teachers who are aware of the differences between the home culture and that of the school can do much to ensure that these children succeed academically and personally to achieve their potential (Greenfield & Suzuki, 1998).

A good example of this kind of endeavor can be seen in Kim's (1990) description of Hawaiian children's school experiences. Many Hawaiian children achieve at the lowest academic level and are labeled as lazy and disruptive by some teachers. Yet these same children are remarkably responsible at home—cooking, cleaning, taking care of their brothers and sisters. They demonstrate considerable initiative and a high performance level. When something needs to be done, they get together and make a group effort to do whatever is necessary. When they find themselves in an individualistic, competitive classroom, however, their performance suffers.

In a series of experiments, teachers were encouraged to model desired behaviors and not assign specific tasks to students. By the end of the academic year, the students would begin the day by examining the schedules of their learning centers and then divide themselves into groups that assigned tasks to individual members, obtained materials,

and used worksheets. Although their achievement scores improved significantly, once the students were returned to regular classrooms for the fourth grade, a familiar pattern of problems appeared (Kim, 1990).

The classroom is not the only location in which cultures merge. In the business world, people of various cultures work side by side; those designated as minorities may have leadership positions in which members of the dominant culture report to them. As companies become more global and as the number of international markets increases steadily, the workplace is beginning to resemble the classroom as a meeting place of cultures.

Our goal in urging you to adopt a multicultural perspective is to help you reach a level of significant understanding of those who seem different. If you adopt this perspective, you will come to realize that different people have different worldviews that distinctly influence their thinking. People from different cultures do not all think alike. Recognizing how diverse people are in their thinking and behavior will help you to identify and comprehend variations in people's backgrounds and how they become functioning members of their culture. In this way, you will work, play, or study more congenitally with others, thus fostering more positive relations in our society.

Finally, cultural awareness should also make us aware that we are all alike in important ways. It's mainly in our behavior, the manner in which we deal with the demands of our environments, that we differ.

An excellent introduction to the changing cultural conditions in our country is *Multicultural Education of Children and Adolescents*. This text, by M. Lee Manning and Leroy R. Harris and published in Boston by Allyn and Bacon (1998), is thorough, well written, and practical.

- To assess current cultural change initiatives, such as intervention programs in the United States, and program development in other countries, such as Pen's Human Development Institute, which encourages development through the schools (Harrison, 2000).

Contributors to Biopsychosocial Interactions

If you examine table 1.4 carefully, you'll note several characteristics listed for the biological, psychological, and social aspects of interactions. These certainly aren't exhaustive but indicate several developmental features that affect growth during the lifespan. More importantly, however, we would like you to think about the interactions that occur among the three categories and how these interactions affect development. To give a simple example, genetic damage (biological) may negatively affect cognitive development (psychological), and lead to poor peer relationships (social).

We believe that by recognizing the significance of biopsychosocial interactions, you'll better understand and remember the material of any chapter. This perspective also helps to emphasize those social-cultural features that so powerfully influence development through the lifespan.

Guided Review

- A belief in _____ is to hold the opinion that early experiences in a child's life continue to exert influence throughout the lifespan.
- Those who believe that developmental change occurs because of a slow and steady progression believe in _____.
- Today's developmental psychologists interpret the influence of nature and nurture as one of an _____ between the two.

Developmental Research

Having identified several key developmental issues and theoretical viewpoints, we must now ask: How can we obtain reliable data about these topics so that we may better understand them?

Today we use many approaches to understanding human behavior. Each has its strengths and weaknesses; none is completely reliable. Most developmental psychologists employ one of three data collection methods: descriptive studies, manipulative experiments, and naturalistic experiments. In the first type, information is gathered on subjects without manipulating them in any way. In the second two, an experiment is performed before the information is gathered.

An Applied View

When Are Research References Too Old?

Probably for the rest of your career, you will be reading research—articles, chapters in books, monographs, and so on. When should you decide that a reference is too old to be credible any longer? As with so many aspects of social science, the answer is "It all depends." Guidelines exist, however, so let's try to understand them by looking at several references. Before reading our decision, you might try to guess what a good judgment would be.

As many as one-third of adolescents receive less than 70 percent of their minimum daily requirement for the most common minerals such as calcium and iron (U.S. Department of Health, Education, and Welfare, 1972).

Since eating habits of adolescents are likely to change with the times (depending, among other things, on the economic condition of the country), this statistic is unreliable because about 30 years have passed since the data were collected.

Although the average number of homosexuals who are contracting AIDS each year is decreasing, they are still the most vulnerable group (U.S. National Center for Health Statistics, 1990).

This study is much more recent, but it too is suspect because we know that the AIDS epidemic is changing very rapidly. In fact, heterosexual females are now experiencing the greatest rate of increase per capita.

Noise-induced hearing loss is recognized as the second most common cause of irreversible hearing loss in older persons (Harpin & others, 1978).

Here is another study that is quite dated, but because there is no known reason to believe that aging factors have changed much over the years, if the study was well designed, we may still accept the results.

The major crisis in the first year and one-half of human life is the establishment of basic trust (Erikson, 1953).

This statement is not a research finding but rather represents Erikson's belief as reflected in his psychosocial theory of human development. As such, it is accurate because that is exactly what Erikson said.

Can you think of other factors that influence the timeliness of research references? Can you think of other criteria for judging them?

Answers

1. stability 16. continuity 17. interaction

An Applied View

These provide examples to demonstrate how the chapter material relates to real-life situations.

An Informed View

These highlight controversial issues, challenging you to give your opinion after you have studied the facts.

In Vitro Fertilization (IVF)

In vitro fertilization (IVF) is the external fertilization technique you are probably most familiar with. The steps in IVF are as follows (Curtis & Barnes, 1994):

- The woman is usually treated with hormones to stimulate maturation of eggs in the ovary, and she is observed closely to determine the timing of ovulation (i.e., the time at which the egg leaves the surface of the ovary).
- The physician makes an incision in the abdomen and inserts a laparoscope (a thin tubular lens through which the physician can see the ovary) to remove mature eggs.
- The egg is placed in a solution containing blood serum and nutrients.
- Capacitation** takes place—this is a process in which a layer surrounding the sperm is removed so that it may penetrate the egg.
- Sperm are added to the solution; fertilization occurs.
- The fertilized egg is transferred to a fresh supporting solution.
- Fertilized eggs (usually three) are inserted into the uterus.
- The fertilized egg is implanted in the uterine lining.

Capacitation Removal of a layer surrounding sperm.



To Clone or not to Clone

Dolly, the most famous lamb in history, was born at 5:00 p.m. on a warm summer's day, July 5, 1996. It was a remarkably quiet introduction to one of the most controversial events of the twentieth century. Dolly was a clone—that is, she was not the product of the union of a sperm and egg. Ian Wilmut, a quiet, unassuming embryologist, combined the udder cell of a 6-year-old sheep with the egg of another sheep, after first removing the genetic material from the egg. The udder cell's genes now assumed command of the growth and development of the newly fertilized egg. The result: Dolly, an identical twin of the original sheep that supplied the udder cell. But the identical twin was born six years later (Kilgus, 1998).



Dolly, a cloned lamb, is destined to become the most famous lamb in history.

Until Dolly's birth, scientists had mainly discounted the possibility of cloning from adults since their only success had come from cloning the cells of embryos. Attempts using adult cells consistently failed until researchers discovered that the secret lay in the growth cycle of cells. As part of their normal cycle, cells enter into resting periods called G0 (gap zero). As long as the cell is in the G0 state, the egg would accept the DNA of the adult cell and use it to direct growth.

You have probably anticipated the next stage in the chronology of cloning: Is it possible to clone a human? As you can imagine, this question has ignited a firestorm of controversy. Do the benefits of cloning (replicating perfect farm animals, adding genes so that a cow might have valuable drugs in its milk, allowing childless couples to have children, developing organs to use in transplants) suggest that cloning humans is a necessary next step? Or do the negative features of cloning (sacrificing embryos to obtain one healthy clone, the possibility of genetic monstrosities, unresolved issues about the self—are we the product of our genes or not, if not, what makes us not) outweigh any potential benefits?

Considering the inevitable collision between available technology and the forces arrayed against cloning, do you think the cloning of humans will ever occur? If you would like to have a more informed view on this issue, you may want to read one or more of the references in this chapter. (For example, Gina Kolata (1998) has written a fascinating account of the background and techniques of this process.) You may also wish to learn more about it by going to our web site at <http://www.oxfile.com/dacey>.

For an excellent summary of the cloning process, see Gina Kolata, *Clone*, which was published by William Morris & Co. in 1998.

In this chapter, we introduced you to several interpretations of development that will help you to understand and integrate developmental data. Although we might have chosen many theories to include in this chapter (some of which we'll discuss later), the ones we have presented here have played or are playing major roles in our understanding of human development. You have a lot to remember, but we'll be coming back again and again to these seminal ideas to help you to gain a firm understanding of them.

In summary:

How does psychoanalytic theory explain development across the lifespan?

- Freud considered the unconscious mind to be the key to understanding human beings.
- Important information in the unconscious mind is kept hidden through an array of defense mechanisms.
- The mind is divided into three constructs: the id, the ego, and the superego, each of which appears at different stages of a child's development.
- Personality development is divided into five instinctive stages of life—oral, anal, phallic, latency, and genital—each stage serving a major function.
- Development passes through a stage of development results in fixation, which halts a person from becoming fully mature.

What is the relationship between psychosocial crises and lifespan development?

- Erikson believed that human life progresses through eight "psychosocial" stages, each one marked by a crisis and its resolution.
- Although the ages at which one goes through each stage vary, the sequence of stages is fixed. Stages may overlap, however.
- A human being must experience each crisis before proceeding to the next stage. Inadequate resolution of the crisis at any stage hinders development.

How did Piaget explain cognitive development?

- Piaget focused on the development of the cognitive structures of the intellect during childhood and adolescence.
- Organization and adaptation play key roles in the formation of structures.
- Piaget believed that cognitive growth occurred in four discrete stages: sensorimotor, preoperational, concrete operational, and formal operational.

What impact does culture have on lifespan development?

- Lev Vygotsky, a leading commentator on the role of culture in development, emphasized the significance of social processes to bring about satisfactory growth.

- Vygotsky believed that the capacity to learn depends on abilities of the child's teachers as well as on the child's abilities.
- The difference between the child's ability to learn independently and to learn with help is called the zone of proximal development.

What is the behavioral perspective on development?

- Skinner believed that the consequences of behavior are critical.
- Skinner's paradigm involves three steps: a stimulus occurs in the environment; a response is made in the presence of that stimulus; and the response is reinforced, punished, or extinguished.
- Bandura has extended Skinner's work to the area of social learning, which he calls observational learning.

What is the current status of developmental theory?

- Today's developmental theorists believe that traditional theories cannot explain the complexity of development.
- Interactions among the various levels of development are the focus of current developmental research.
- **Lerner's developmental contextualism** concentrates on the exchanges between an individual's levels of developmental and the context to explain developmental processes.

KEY TERMS

Accommodation	Genital stage	Organization
Adaptation	Id	Phallic stage
Anal stage	Identity crisis	Positive reinforcement
Assimilation	Instrumental conditioning	Psychoanalytic theory
Cognitive structures	Latency stage	Punishment
Developmental contextualism	Life Course Theory	Reinforcement
Ego	Modeling	Scaffolding
Equilibration	Negative reinforcement	Schemes
Evolutionary psychology	Observational learning	Social (cognitive) learning theory
Extinction	Operant conditioning	Superego
Functional invariants	Urial stage	Zone of proximal development

Key Terms

This represents a list of those terms that are essential to understanding the ideas and suggestions of that chapter.

Chapter Review Test

Use this end-of-chapter test to check your understanding of the chapter's key points.

Conclusion & Summary

Following a brief summary of the chapter's main themes, a detailed set of summary statements helps you to review the chapter quickly and thoroughly.

What Do You Think?

This series of questions challenges you to demonstrate your knowledge of the chapter's content, not only by applying the material to different situations but also by asking you to be creative in answering the question or solving the problem.

WHAT DO YOU THINK?

- | | | |
|---|--|---|
| 1. What is your reaction to the statement: "The truth or falseness of a theory has little to do with its usefulness?" | 5. If Piaget were alive today, what would his reaction be to developmental contextualism? | looked inside one. What's your position? |
| 2. Some people say that in his concept of human development, Freud emphasized sexuality too much. What do you think? | 6. Skinner criticized the other theorists in his chapter for believing they can describe what goes on in the human mind. After all, he said, no one has ever | 7. Is it possible for a person to be deeply intimate with another person and still be in a state of identity confusion? |

CHAPTER REVIEW TEST

1. Freud's structure of the mind includes:
 - a. cognitive structures.
 - b. safety needs.
 - c. ego.
 - d. reinforcing elements.
2. The id is that structure of the mind that is present:
 - a. at birth.
 - b. through experience.
 - c. by internal representations.
 - d. through crisis resolution.
3. Freud believed that development entailed moving through:
 - a. psychosocial stages. Difficulty at any stage can cause a person to become:
 - a. fixated.
 - b. operational.
 - c. negatively reinforced.
 - d. displaced.
4. Ideas that are rejected by the conscious mind are kept from consciousness by:
 - a. the ego.
 - b. fear reactions.
 - c. the superego.
 - d. defense mechanisms.
5. Jimmy was told by his teacher that he could not go on a field trip with the class because of his misbehavior. Jimmy said he was glad the trips are "no fun anyway." Jimmy's defense mechanism is called:
 - a. regression.
 - b. compensation.
 - c. rationalization.
 - d. disorientation.
6. One-year-old Jane has already learned that her mother will be there when Jane needs her. This predictable world helps a child to develop:
 - a. creativity.
 - b. intimacy.
 - c. generativity.
 - d. trust.
7. The psychosocial crisis of industry versus inferiority must be resolved during:
 - a. the school years.
 - b. early childhood.
 - c. adolescence.
 - d. adulthood.
8. Piaget's theory of cognitive development focused on the formation and development of:
 - a. zones of proximal development.
 - b. reinforcement schedules.
 - c. cognitive structures.
 - d. modeling strategies.
9. Piaget placed considerable emphasis on operations, which he viewed as:
 - a. reflexes.
 - b. age-appropriate responses.
 - c. internalized actions.
 - d. interactions.
10. Although both Piaget and Vygotsky devoted their lives to studying cognitive development, Vygotsky placed greater emphasis on:
 - a. cognitive structures.
 - b. social interactions.
 - c. sensitive periods.
 - d. observational learning.
11. Skinner carefully analyzed the role of reinforcement in development and distinguished it from:
 - a. cognitive structures.
 - b. reward.
 - c. operations.
 - d. needs.
12. In operant conditioning, the environment acts as the major source of:
 - a. operations.
 - b. cognitive structures.
 - c. defense mechanisms.
 - d. reinforcement.
13. The great value of observational learning is that a person need not overtly learn to learn:
 - a. mental operations.
 - b. new responses.
 - c. ego identity.
 - d. schedule of reinforcements.
14. Today's developmental psychologists consider theories such as those of Freud and Piaget as too:
 - a. insensitive.
 - b. biologically focused.
 - c. cultural oriented.
 - d. unidimensional.
15. Lerner's analysis of development depends on analyzing:
 - a. multiple levels of development.
 - b. schedules of reinforcement.
 - c. identity stages.
 - d. cognitive stages.

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