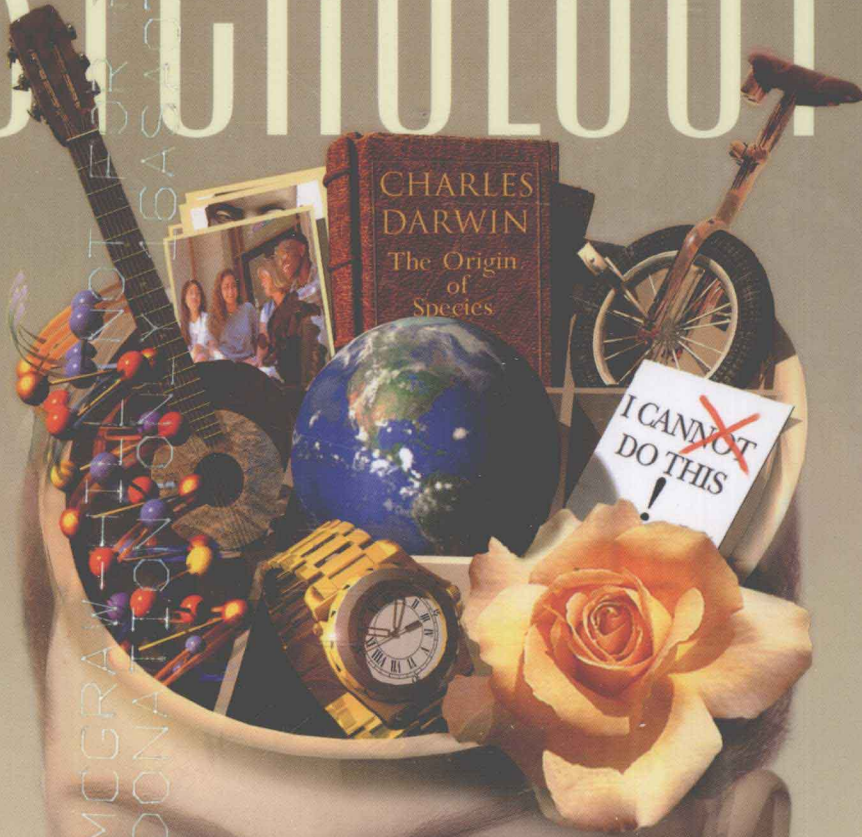


Updated Edition

# PSYCHOLOGY 7



JOHN W.  
SANTROCK

# Psychology

**UPDATED SEVENTH EDITION**

**John W. Santrock**

*University of Texas at Dallas*



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## Higher Education

### PSYCHOLOGY, UPDATED SEVENTH EDITION

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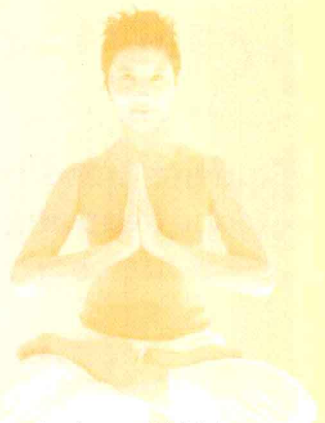
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# Find Balance!

**Balance** scientific research with real-world applications.



**Is Psychology Value-Free?**

Do you agree or disagree with the following statements?

|                                                                    | AGREE | DISAGREE |
|--------------------------------------------------------------------|-------|----------|
| 1. Human beings are basically good.                                | _____ | _____    |
| 2. By changing the environment, you can change people's behavior.  | _____ | _____    |
| 3. Intelligence is the most important human trait.                 | _____ | _____    |
| 4. People are too concerned about themselves.                      | _____ | _____    |
| 5. Physical attraction is important in choosing a mate.            | _____ | _____    |
| 6. Women are becoming too assertive.                               | _____ | _____    |
| 7. Divorce is wrong.                                               | _____ | _____    |
| 8. Religion is not an appropriate area of study for psychologists. | _____ | _____    |
| 9. Money can bring happiness.                                      | _____ | _____    |
| 10. It is okay to cheat if you don't get caught.                   | _____ | _____    |

The way you responded to these items provides insight into your values. If you decide to become a psychologist, might your views on these topics, as well as others, influence the area you choose to research? Might psychologists' values influence how they respond in a media interview? Might clinical psychologists' values affect the advice they give to clients? Might psychology professors' values influence the topics they choose to discuss in class and how they respond to students' questions?

In some cases, researchers' values might influence their choice of research questions. A divorced woman might decide to study the inadequate involvement and support of noncustodial fathers in their children's lives rather than the increased role of fathers in caring for children because of her unshared relationship with her ex-husband. An Asian American might choose to study the importance of conformity to a group's goals rather than an individual's unique contributions to a project because he or she believes that getting along with others in a group is more important than an individual's achievement.

When psychologists are called on as experts, they may make statements and recommendations that are laden with values. For example, a psychologist interviewed by Ted Koppel on *Nightline* may have certain values concerning government's responsibility in caring for the homeless, parents' responsibility in an adolescent's use of cocaine, and the responsibility of an individual with a psychological disorder who has committed mass murder.

Psychiatrists whom people consult about problems may have certain personal values concerning self-esteem, marriage, sexual conduct, and other topics that influence the advice they give. For example, one psychiatrist might perceive a client's sexual behavior as "sick," whereas another might think of it as an adaptive sexual variation.

Psychology professors have certain values about gender, moral behavior, religion, child rearing, and how to get ahead in life that might influence what they communicate in their lectures and how they respond to students' questions. For example, one professor might perceive that a female's assertive behavior is too aggressive, whereas another might think of the behavior as competent.

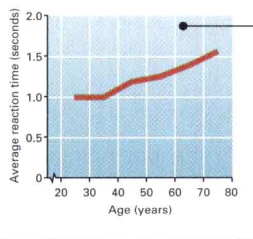
But wait a minute: Isn't psychology supposed to be an objective science? As a science, psychology is dedicated to discovering facts about behavior and creating theories to explain those facts. In this description, there is no mention of values. The scientific approach requires only that psychology discover the most dependable facts and generate the best theories possible (Kimble, 1999). *In the same world of science, there is no place for values. Some of science as value-free* (1960). They argue to reduce the role of values in behavior—in the conclusions and the advice they give.

**What do you think?**

- Is psychology value-free?
- How might the values of psychologists influence the advice they give?
- Are religious values psychological values?

## Research

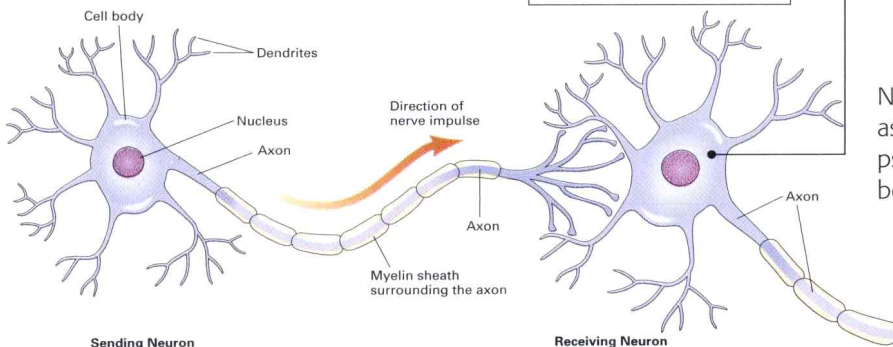
**Critical Controversy** boxes in each chapter highlight current debates in psychology and pose thought-provoking questions to encourage students to examine the evidence on both sides of an issue.



Clearly labeled graphs and explanatory captions help students become familiar with visual data presentation.

Expanded and updated coverage of neuroscience and evolutionary psychology reflects psychology's increasing emphasis on the biological bases of behavior.

New coverage of gender and cross-cultural research, as well as positive psychology and evolutionary psychology, is indexed inside the back cover of the book.



## Applications

In each chapter of the text, a **Psychology and Life** feature invites students to apply what they've learned to daily life.

**Dealing with Conflict**

Think about the following situations one at a time. Check which response is most typical of the way you would behave in that situation.

You are being kept on the phone by a salesperson trying to sell you something you don't want.

You want to break off a relationship that is no longer working for you.

You are sitting in a movie and the people behind you are talking.

Your doctor keeps you waiting more than 20 minutes.

You are standing in line and someone moves in front of you.

Your friend has owed you money for a long time and it is money you could use.

You receive food at a restaurant that is over- or undercooked.

You want to ask a major favor of your friend, romantic partner, or roommate.

Your friends ask you to do something that you don't feel like doing.

You are in a large lecture hall. The instructor is speaking too softly and you know other students are having trouble hearing what is being said.

You want to start a conversation at a gathering, but you don't know anyone there.

You are sitting next to someone who is smoking, and the smoke bothers you.

You are talking to someone about something that is important to you, but he or she doesn't seem to be listening.

You are speaking and someone interrupts you.

You receive an unjust criticism from someone.

In most circumstances, being assertive is the best strategy. However, there may be some situations in which a different style of interaction is needed. Look at each situation and check the response style you think is always the best strategy and the other styles might work best.

|                                                                                                                                                       | Assertive | Aggressive | Nonassertive | Passive |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|--------------|---------|
| 1. You are being kept on the phone by a salesperson trying to sell you something you don't want.                                                      | _____     | _____      | _____        | _____   |
| 2. You want to break off a relationship that is no longer working for you.                                                                            | _____     | _____      | _____        | _____   |
| 3. You are sitting in a movie and the people behind you are talking.                                                                                  | _____     | _____      | _____        | _____   |
| 4. Your doctor keeps you waiting more than 20 minutes.                                                                                                | _____     | _____      | _____        | _____   |
| 5. You are standing in line and someone moves in front of you.                                                                                        | _____     | _____      | _____        | _____   |
| 6. Your friend has owed you money for a long time and it is money you could use.                                                                      | _____     | _____      | _____        | _____   |
| 7. You receive food at a restaurant that is over- or undercooked.                                                                                     | _____     | _____      | _____        | _____   |
| 8. You want to ask a major favor of your friend, romantic partner, or roommate.                                                                       | _____     | _____      | _____        | _____   |
| 9. Your friends ask you to do something that you don't feel like doing.                                                                               | _____     | _____      | _____        | _____   |
| 10. You are in a large lecture hall. The instructor is speaking too softly and you know other students are having trouble hearing what is being said. | _____     | _____      | _____        | _____   |
| 11. You want to start a conversation at a gathering, but you don't know anyone there.                                                                 | _____     | _____      | _____        | _____   |
| 12. You are sitting next to someone who is smoking, and the smoke bothers you.                                                                        | _____     | _____      | _____        | _____   |
| 13. You are talking to someone about something that is important to you, but he or she doesn't seem to be listening.                                  | _____     | _____      | _____        | _____   |
| 14. You are speaking and someone interrupts you.                                                                                                      | _____     | _____      | _____        | _____   |
| 15. You receive an unjust criticism from someone.                                                                                                     | _____     | _____      | _____        | _____   |



Patrick McCarthy is an I/O psychologist who studies many aspects of organizations, including organizational change, motivation and work attitudes, and work/life balance.



Environmental psychologist Roberta Feldman is one of the positive environmental psychologists who has designed what are some of the most successful environmental psychology programs.

monitoring what they have read for meaning and periodically summarizing what they have read (Presley, 2000, 2003).

**Industrial and Organizational Psychology** Industrial and organizational psychology (I/O psychology) centers on the workplace, both on the workers and on the organizations that employ them. I/O psychology is often partitioned into industrial psychology and organizational psychology. Industrial psychology involves personnel and human resource management. Industrial psychology is increasingly referred to as personnel psychology. Organizational psychology examines the social and group influences of the organization (Goldstein & Ford, 2002; Muchinsky, 2003).

Patrick McCarthy is an I/O psychologist at Middle Tennessee State University. In addition to teaching undergraduate and graduate courses, he has consulted for a number of companies, such as Procter & Gamble.

Descriptions and photos of psychologists at work illustrate applications of psychology in various settings plus different career options for psychology majors.

# Stay Focused and Learn!

Students need help finding the key ideas in introductory psychology. Santrock's unique **learning system** keeps students **focused** on these ideas so they learn and remember fundamental psychological concepts.

## Chapter Outline and Learning Goals

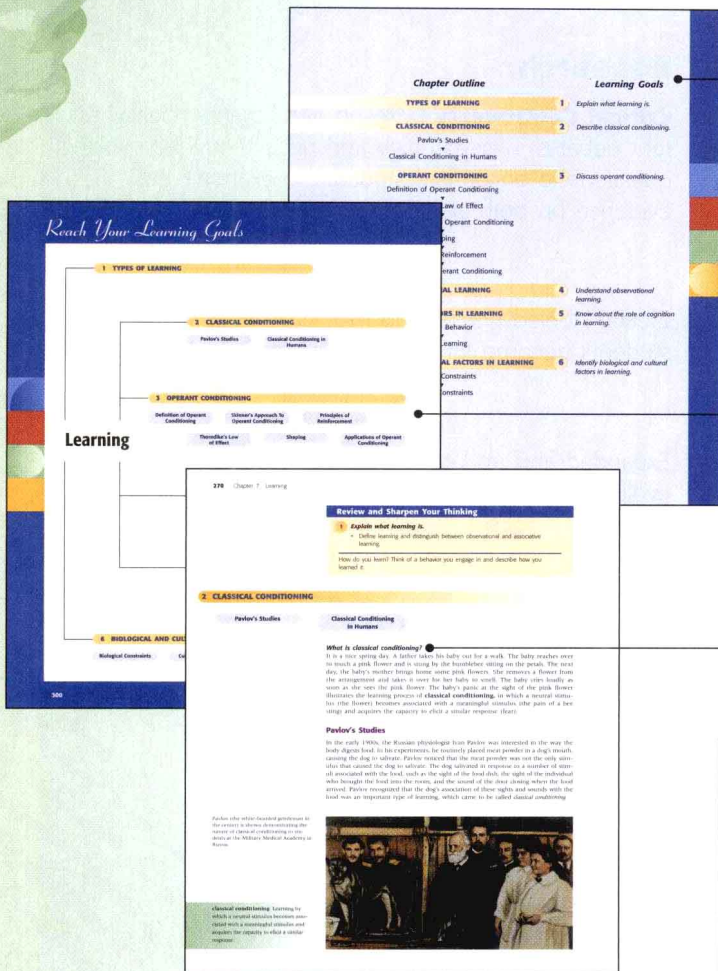
Learning Goals are linked directly to the primary section headings in the text and supplementary resources to underscore key ideas.

## Section Maps and Chapter Summary Map

Primary and secondary headings presented graphically provide a quick visual overview of the important topics covered in the chapter.

## Learning Goal

At the beginning of each primary section, that section's learning goal reappears in the form of a question.



## Reach Your Learning Goals

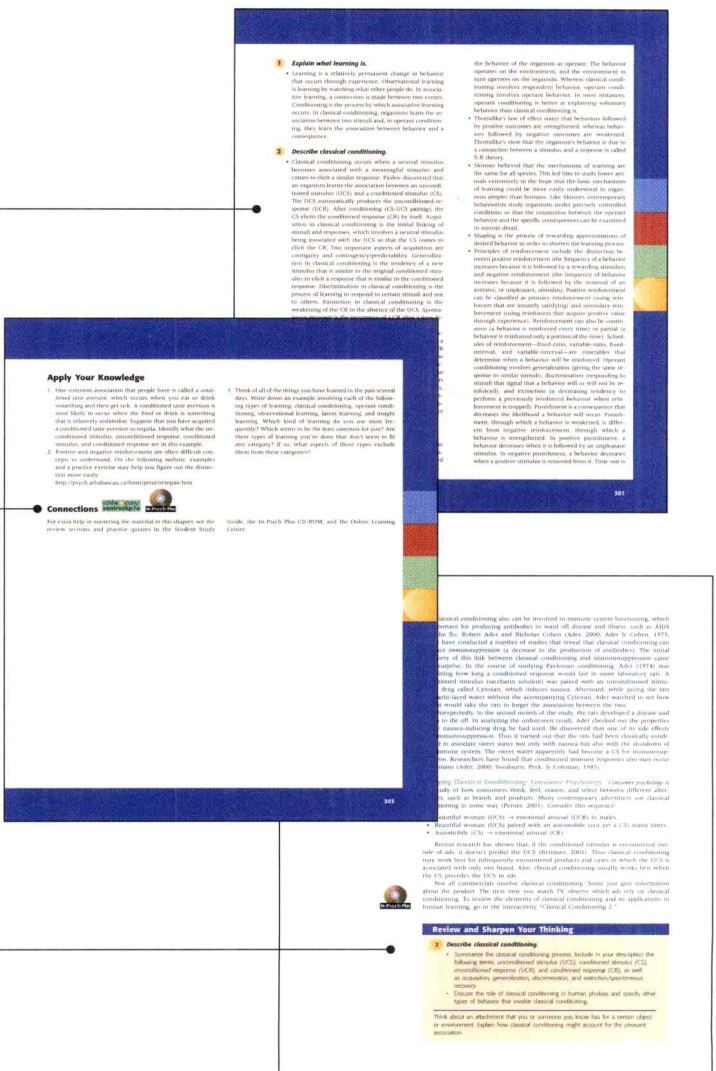
The chapter summary restates the Learning Goals and provides a bulleted review that matches up in a one-to-one fashion with the bulleted review statements in the section reviews.

## Connections

References to review quizzes, crossword puzzles, and additional resources remind students of the text-specific materials available for content review and enrichment.

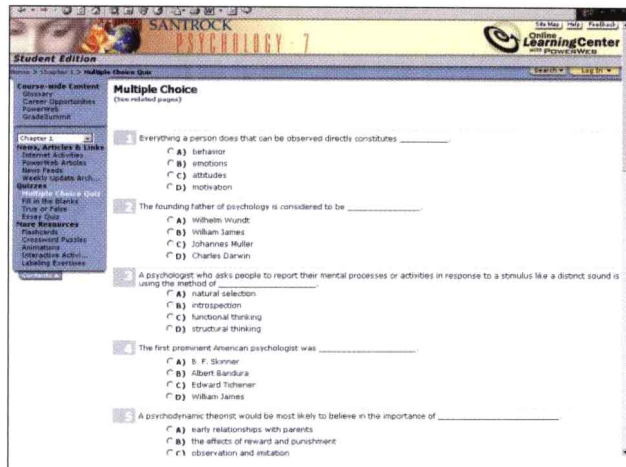
## Review and Sharpen Your Thinking

Learning Goals frame the section reviews, which end with an exercise designed to hone critical thinking skills.



# Make Connections and Succeed!

Supplementary print and media resources include a variety of review and assessment tools that carry through the text's emphasis on key ideas, reinforcing learning and enhancing student **success**.



## Online Learning Center

[www.mhhe.com/Santrockp7u](http://www.mhhe.com/Santrockp7u)

**Student Resources** Chapter outlines and practice quizzes are keyed to the text Learning Goals. The student section of the website also contains flashcards, interactive review exercises, and access, via **PowerWeb**, to current news about psychology, research tools, and many other valuable study tools.

**Instructor Resources** Teaching resources on this password-protected site include the Instructor's Course Planner, Image Bank, PowerPoint files, and Web links to additional resources.

## Student Study Guide

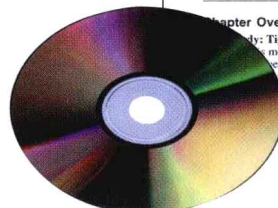
A guided review of the chapter is organized by text section and Learning Goals, as are the three practice tests provided for each chapter. As in the text, **Connections** direct students to other text-correlated resources for additional help in mastering key ideas and concepts.

## Instructor's Course Planner

The same Learning Goals that reinforce the key ideas in the text and Study Guide frame the teaching suggestions in this valuable manual. Chapter overviews, lecture/discussion suggestions, and goal reinforcement activities are a few of the resources provided in the Instructor's Course Planner.

## New! In-Psych Plus CD-ROM

In-Psych Plus features video clips and interactivities that are referenced within the main text. The video clips, chosen for interest and relevance, expand on significant concepts and theories discussed in the text and are accompanied by summaries and quizzes. The CD-ROMs also include practice self-tests with feedback and a learning styles assessment, as well as other valuable features.



### Chapter 1—What Is Psychology?

#### Learning Goals

1. Explain what psychology is and how it developed.
2. Describe six contemporary approaches to psychology.
3. Describe two movements that reflect a positive approach to psychology.
4. Evaluate careers and areas of specialization in psychology.
5. Apply some strategies that will help you succeed in psychology.

#### The Big Picture: Chapter Overview

Psychology is a science dedicated to the study of behavior and mental processes. In this chapter you are introduced to the history of this science, a variety of contemporary perspectives in psychology, the positive psychology movement, and an overview of psychology-related careers. At the end of the chapter, the reader learns about the most effective methods of studying and learning.

There are three concepts important to the definition of psychology: science, behavior and mental processes. Psychologists use scientific methods to observe, describe, predict, and explain behaviors and mental processes. Behaviors are actions that can be directly observed, while mental processes are experiences that cannot be observed directly, such as thoughts and feelings.

The history of psychology is rooted in philosophy, biology, and physiology. Rene Descartes and Charles Darwin strongly influenced the origins of psychology. Descartes contributed with his view of a separate mind and body, thus opening the door for studies focusing exclusively on the mind. Darwin proposed that humans are part of an evolutionary process he termed *natural selection*. This view led psychologists to consider the role of the environment and adaptation in psychology.

In 1879, Wilhelm Wundt developed the first psychology laboratory. Wundt's approach, which emphasized the importance of conscious thought and classification of the mind's structures, was called *structuralism*. While structuralism focused inside the mind, William James emphasized the functions of the mind in adapting to the environment. James's approach was called *functionalism*.

Structuralism and functionalism were the first two schools of thought in psychology; however, behaviors and mental processes are the focus of modern psychology.

### Chapter One: What Is Psychology?

- Chapter Overview
- Teaching Objectives
- Teaching the Chapter
  - Lecture Outlines by Section
  - Lecture/Discussion Suggestions by Section
  - Explorations in Psychology
  - Critical Thinking Questions
  - Thinking About Psychology in Everyday Life
  - Goal Reinforcement Activities
  - Activity Handouts
- Resources for Psychology and Life
  - Suggested Articles from Annual Editions
  - Suggested Articles from Sources: Notable Selections in Psychology
  - Film Suggestions
  - Suggestions for Additional Reading
  - Organizations
  - Connections

#### Chapter Overview

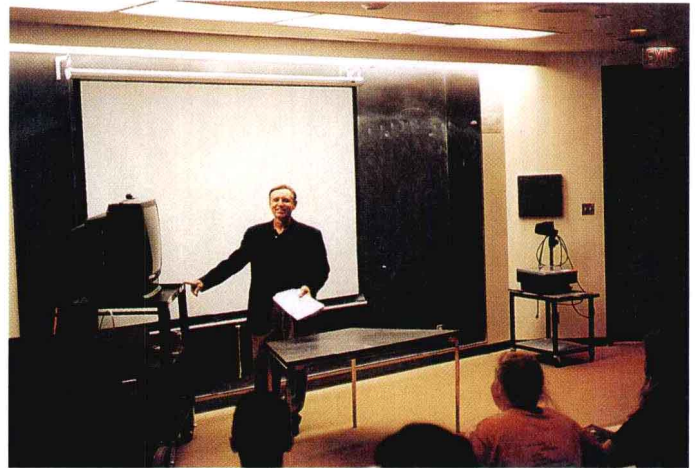
**Why Tiger Woods:** By opening the chapter with this feature, Santrock illustrates one of the most important constructs: The psychology of any human being is a complex system of behaviors constructed from and influenced by multiple determinants. Because multiple behaviors require multiple approaches, psychology studies the complexity of human nature from a variety of perspectives—each designed to address very different aspects of what makes us human. The chapter is revisited for each psychological approach.

**Psychology:** Psychology is defined as the scientific study of behavior, thought, and emotion. It seeks to observe, describe, and explain these phenomena.

*With special appreciation to my wife, Mary Jo*

# About the Author

**JOHN W. SANTROCK** received his Ph.D. from the University of Minnesota in 1973. He taught at the University of Charleston and the University of Georgia before joining the psychology department at the University of Texas at Dallas. He has been a member of the editorial board of *Developmental Psychology*. His research on father custody is widely cited and used in expert witness testimony to promote flexibility and alternative considerations in custody disputes. John has also authored these exceptional McGraw-Hill texts: *Child Development*, tenth edition, *Life-Span Development*, ninth edition, *Children*, eighth edition, *Adolescence*, tenth edition, and *Educational Psychology*, second edition.



# Preface

Since I started teaching psychology in 1967, my motivation and love for introducing students to this relevant science have not wavered. This commitment to relevance and to science not only has been a foundation of my teaching, but it is also the heart of this book. In this edition, I've kept the theme of psychology as a relevant science and, in line with current trends in the discipline, increased the emphasis on the biological aspects of psychology and on the positive changes psychology can help us achieve in our lives. These themes, together with a stronger focus on the key ideas in psychology, are the main features of this update of *Psychology*.

## New! Media Integration

References to video clips and interactivities, all drawn from various McGraw-Hill media resources and chosen for their interest and relevancy to the main content, appear within the main text. The *In-Psych Plus* CD-ROM marginal icon provides an additional, visual reference to the media. Each video and interactivity that is mentioned in the text appears on the *In-Psych Plus* CD-ROM, which is packaged free with the text. In addition, pedagogy, activities, test questions, and other features have been created to complement these video clips and reinforce students' grasp of the key concepts they illustrate. These materials are found on the *In-Psych Plus* CD-ROM, in the Study Guide, in the Instructor's Course Planner, and in the Test Item Files.

## Psychology: The Relevant Science

Many students come into the introductory psychology class asking why they should study psychology when their major is physics or computer science or French. To a psychologist, the answer is obvious: It will help you to understand yourself and others better. Psychology is relevant to almost every aspect of daily life. What psychologists have learned from memory research, for example, can be used to study more effectively, no matter what the subject is. Principles of learning can be applied to change undesirable behavior in children. Knowledge of sensation and perception can be used to more effectively design computers. Research on stress, coping, and health can help people to live fuller, happier lives.

Writing the preface for *Psychology*, I am convinced that the science of psychology is more relevant today than

ever. After September 11, 2001, psychologists and psychiatrists were called on to counsel not only people whose lives were directly affected by the attacks on the World Trade Center and the Pentagon but also students, teachers, parents, and others who were struggling to understand, as we were, what could trigger such hostility and violence toward Americans. Psychology teaches us about the roots of aggression and the influence of groups on individual behavior. It also suggests strategies for handling stress, whatever the source. Nothing is more relevant to contemporary life.

In addition to relevance, this edition continues to stress the scientific nature of the discipline. A hallmark of the book has always been its focus on research, the foundation of all sciences. Here the latest research findings are discussed, along with the classic studies that established psychology as an objective science. There are more than 900 citations from the twenty-first century, including many from 2002 through 2004. Also, numerous new graphs show students how scientific data can be presented visually.

## Neuroscience and Biological Influences on Behavior

The growing emphasis on neuroscience and genetics as the means to understand the effects of biology on behavior is also reflected in this edition. Evolutionary psychology, another area of increasing interest, receives increased attention as well. Knowing that students often have difficulty understanding why it is important to learn biology in a course on psychology, I've taken particular care to present these topics in a psychological context and to underscore the complex relationship between biology, environment, and behavior wherever appropriate. Neuroscientist Lawrence Cauller provided outstanding guidance for incorporating stronger biological neuroscience content in this edition.

## Positive Psychology

Currently, there is a movement in psychology to focus attention on the positive contributions psychology can make to everyday life. Proponents of positive psychology, notably Mihaly Csikszentmihalyi, share the belief that for much of

the twentieth century the discipline concentrated on the negative aspects of life and that it's time to emphasize the positive side of psychology. Positive psychology offers all of us the opportunity to take control of our lives and find balance. For this edition, I have revised many of the chapter-opening vignettes and examples in the text to highlight positive outcomes and, with Csikszentmihalyi's expert guidance, have incorporated material on positive psychology throughout the book.

## Focus on Key Ideas

The most significant instructional challenge facing introductory psychology teachers today is ensuring that students master the core content of the course. For students overwhelmed by information from lectures, textbooks, the Internet, and other media, it is more difficult than ever to find the main ideas in their courses. To address these challenges and help students achieve the best possible outcome, I have developed a learning system for this edition that emphasizes basic concepts and ideas, encourages review, and promotes critical thinking. This system frames the presentation in the text *and* the supplements, providing a truly integrated package that reinforces learning and gives instructors the tools they need to assess students' grasp of core concepts and ideas.

The learning system has several components, all centered on three to six key ideas per chapter. These ideas are encapsulated in learning goals, which correspond with the chapter's main headings, as shown at the opening of each chapter. The learning goals reappear at several places in the chapter: as a question at the beginning of a new topic, in a guided review at the end of the section, and again in a summary at the end of the chapter. Content maps of the section and subsection headings accompany the learning goal question at the beginning of each major section. Together with a complete chapter map at the end of the chapter, the section maps provide a visual guide to the core concepts that support the learning goals.

To encourage students to apply what they've learned, and increase the likelihood that they will remember the material, the learning system includes critical thinking questions keyed to the learning goals in the "Review and Sharpen Your Thinking" sections. Additionally, "What do you think?" exercises accompany each of the new Critical Controversy boxes and at least three critical thinking exercises follow the review section at the end of each chapter in a section titled "Apply Your Knowledge." For students who have access to the Web, the end-of-chapter exercises include at least one Web-based activity.

Incorporating the learning goals and maps in the student supplements reinforces the lessons from the text and eliminates the confusion many students have about how to use the supplements to boost their performance in the course.

## Changes in Coverage

Instructors who have used previous editions of this text will find much in the seventh edition that's different and much that hasn't changed. In addition to increased emphasis on neuroscience, genetics, evolutionary psychology, and positive psychology, the seventh edition contains increased coverage of diversity, controversies, and careers in psychology. This material is presented where appropriate throughout the book.

The table of contents and chapter sequence remain the same as in the sixth edition, except that human development now falls closer to the beginning of the book (chapter 4). With this change, instructors can cover a topic of high student interest early in the course, while the principles of genetics (chapter 3) are still fresh in students' minds, and later incorporate the material in their discussions of learning, cognition, and language.

Although the number of chapters and their topics are unchanged, the substance and presentation in each chapter have been revised thoroughly. Some of the detail that is less relevant today than it once was has been pruned to make room for cutting-edge research and some of the presentation was reconceptualized to focus on the key ideas reflected in the learning goals. Although there isn't enough space here to list all of the changes in this edition, here are the highlights:

### CHAPTER 1 What Is Psychology?

- Expanded, updated coverage of the evolutionary psychology approach and a new section on positive approaches to psychology, including the humanistic movement and the positive psychology movement
- Expanded treatment of psychology's careers, including descriptions of the work that different types of psychologists do
- New section added on how to get the most out of psychology, focusing on study habits and skills

### CHAPTER 2 Psychology's Scientific Methods

- New opening discussion of attitudes central to the scientific approach and on collaboration in science
- Introduction of James Pennebaker's research as an extended example of the scientific method and positive psychology
- Reorganized section on research methods focusing on descriptive, correlational, and experimental research and including new coverage of positive and negative correlations and their interpretation, as well as recent research on bias and the placebo effect
- New introduction to data analysis and interpretation, with explanation of descriptive statistics and inferential statistics

## CHAPTER 3 Biological Foundations of Behavior

- Reorganized chapter now starts with a discussion of the characteristics of the nervous system, focusing on complexity, integration, adaptability, and electrochemical transmission
- Revised presentation of neuron structure and function, including new material on drugs, neurotransmitters, and neural networks
- Updated coverage of functioning in the left and right hemispheres of the brain and many new drawings of the brain
- Separate section on the endocrine system
- Expanded and updated discussion of neurogenesis
- New section on genetics and evolution

## CHAPTER 4 Human Development

- Nature and nurture section now includes a discussion of genotype and phenotype, as well as a subsection on optimal experiences
- Added coverage on the brain and how it changes from infancy to adulthood
- Revised discussion of socioemotional development in childhood includes the effects of divorce, positive parenting, ethnic and cultural differences, and gender development
- New sections on positive psychology and development in childhood, adolescence, and adulthood
- Expanded discussion of biological aspects of aging, including new figures on telomeres and aging and updated information on Alzheimer's disease
- Updated coverage of cognitive changes and aging, including new figures on longitudinal changes in six intellectual abilities and on the relation of age to reaction time
- Discussion of John Gottman's work on what makes a successful marriage and of Laura Carstensen's research on emotion, social networks, and aging, including new figures on aging and remembering emotional material

## CHAPTER 5 Sensation and Perception

- Completely revised discussion of how we sense and perceive the world now includes transduction, bottom-up and top-down processing, new examples of signal detection theory, and selective attention
- New coverage on parallel processing in the visual cortex and on the process of binding in neural pathways and how it functions in visual perception
- Cochlear implants and sound localization added to discussion of the auditory system
- Discussion of parallel processing in touch
- Expanded coverage of pain, including new discussion of the "fast" and "slow" pain pathways, plus pain control and treatment

- New section on human factors and perception, including recent research of Susan Lederman and Roberta Klatsky and of Robert McCann at NASA

## CHAPTER 6 States of Consciousness

- Neuroscience coverage incorporated in sections on consciousness, stages of sleep, and psychoactive drugs
- Greater coverage of circadian rhythms, including the suprachiasmatic nucleus
- New coverage of the role of sleep in the storage and maintenance of long-term memory
- Addition of recent research on sleep deprivation in adolescents and older adults
- New section on sleep and disease
- Inclusion of new research on dream content across cultures
- Expanded and updated material on the activation-synthesis theory of dreaming
- Most recent data on trends in adolescent drug use (Johnston, O'Malley, & Bachman, 2001)

## CHAPTER 7 Learning

- Expanded and clarified discussion of classical conditioning, including new examples, such as fear of the dentist and how it varies across cultures; a new section on the role of classical conditioning in health problems; and applications to consumer psychology
- Expanded, improved, easier-to-understand examples of positive and negative reinforcement
- Expanded and easier-to-understand examples in comparing punishment and negative reinforcement
- Expanded applications of operant conditioning, including the use of shaping and behavior modification in the classroom

## CHAPTER 8 Memory

- Revised coverage of memory encoding includes the effects of divided attention
- New discussion of recent research on how verbal working memory can be impaired by negative emotion, and on how writing about negative emotional events can improve working memory
- Revised coverage of memory storage includes new sections on prospective memory and on connectionist networks and memory, plus a discussion of long-term potentiation
- Revised discussion of forgetting includes Ebbinghaus' Forgetting Curve, decay and transience, and a new section on motivated forgetting
- Complete reorganization of memory and study strategy section to correspond to organization of the section on memory

## CHAPTER 9 Thinking and Language

- Expanded coverage of concepts, including new sections on the functions and structures of concepts
- New section on expertise, including four ways that experts solve problems differently than novices do
- Earlier discussion of the link between cognition and language
- Revised section on language acquisition and development includes material on the level of maternal speech to infants and its effects on vocabulary development in infants, a new figure on language milestones, a discussion of how young children find the boundaries between words, and recent research on how long it takes to become competent at a second language

## CHAPTER 10 Intelligence

- Intelligence testing now cohesively discussed in opening section
- New section on neuroscience and intelligence with subsections on head and brain size, information processing speed, electrical activity in the brain, and energy consumption in the brain
- Added sections on theories of multiple and emotional intelligence, including a comparison of Gardner's, Sternberg's, and Mayer/Salovy theories of intelligence
- New section on the influence of heredity and environment includes the research of Craig Ramey and colleagues, as well as gender and cultural comparisons

## CHAPTER 11 Motivation and Emotion

- Section on motivation theory now includes the evolutionary approach to motivation, arousal and sensation seeking, expanded coverage of intrinsic and extrinsic motivation, and a discussion of the importance of self-generated goals
- Hunger section includes expanded and updated discussion of blood chemistry and the role of leptin in obesity, new material on neurotransmitters in the section on brain processes and hunger, new data on obesity in the United States, and more coverage of anorexia nervosa and bulimia nervosa
- Social cognitive motivation section now includes a cross-cultural comparison of math achievement in the United States, Japan, and Taiwan; achievement applications in the workplace and in sports; and discussions of the motivation for affiliation and well-being
- Section on emotion includes a new discussion of the roles of neural circuits and neurotransmitters, including Joseph LeDoux's concept of direct and indirect pathways for fear in the brain, and of the links between emotion and the brain's hemispheres

- New focus on positive emotions, including Barbara Frederickson's research on how they might enhance people's well-being and David Buss' ideas on the evolved mechanisms that can produce a deep sense of happiness

## CHAPTER 12 Personality

- Issues in the study of personality now at beginning of chapter
- Social cognitive theory section revised to include discussions of personal control, locus of control, and optimism
- New figure showing the link between self-efficacy and smoking cessation
- New discussion of changes in self-esteem across the life span, including new figure based on 2002 research study
- Section on personality assessment expanded to include discussion of the big five factors, locus of control, and the selection of employees

## CHAPTER 13 Psychological Disorders

- The multiaxial system in the *DSM-IV* covered in greater depth, including a new figure on the major categories of psychological disorders, organized according to Axis I and Axis II
- Introduction of concept of etiology, new discussion of the etiology of anxiety disorders, and expanded discussion of post-traumatic stress disorder
- Added material on the hidden observer concept applied to dissociative disorders
- Updated discussion of mood disorders, including new coverage on neurobiological abnormalities, new material on the depressive realism view of depression, and several new figures
- New section on suicide, including coverage of suicide rates across cultures
- Expanded discussion of schizophrenia, including recent information about heredity and schizophrenia, as well as neurobiological factors and case studies

## CHAPTER 14 Therapies

- Substantially reorganized chapter with biological therapies now covered in the first section
- Updated discussion and figures on the effects of drug therapies, including Prozac and Risperdal
- New sections on cognitive behavior therapy and using cognitive therapy to treat psychological disorders
- New section on sociocultural approaches and issues, including new coverage of the community mental health movement

## CHAPTER 15 Stress, Coping, and Health

- Reorganization of stress discussion to focus on sources and responses
- New section on coping strategies with new coverage of problem-focused and emotion-focused coping, optimism, and positive thinking and the role of religion in helping people cope with stress
- Section on healthful living updated with new coverage of the role of the antidepressant Zyprexa in helping people quit smoking, as well as the effective rates of other approaches, such as nicotine patches

## CHAPTER 16 Social Psychology

- Revised social influence section with expanded discussion of symptoms of groupthink and strategies for avoiding groupthink, as well as a discussion of leadership styles in women and men
- Expanded, updated discussion of prejudice focusing on the reasons people develop prejudice
- Updated section on social interaction, including discussion of neurotransmitters and aggression, recent information on children's TV viewing habits and possible links to aggression, and updated coverage of trends in altruism among U.S. college students
- In relationships section, addition of recent research on gender and relationships; new research on loneliness, stress, and health; and new discussion of loneliness and technology

## Print and Media Supplements

### For the Student

**PowerWeb** This unique online tool provides students with current articles, curriculum-based materials, weekly updates with assessment, informative and timely world news, Web links, research tools, study tools, and interactive exercises. A PowerWeb access card is packaged FREE with each new copy of the text.

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#### Ruth Hallongren, Triton College

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### For the Instructor

#### Instructor's Course Planner

#### Susan Weldon, Eastern Michigan University

This manual provides many useful tools to enhance your teaching. In each chapter, you will find teaching objectives, chapter overviews, key terms, Teaching the Chapter, lecture/discussion suggestions, goal reinforcement classroom activities, Experiencing Psychology boxed feature, critical thinking questions, video/media suggestions, and references and sources of bibliographical information.

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#### Test Item File II: Susan E. Swithers, Purdue University

#### Test Item File III: Susan Weldon, Eastern Michigan University

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