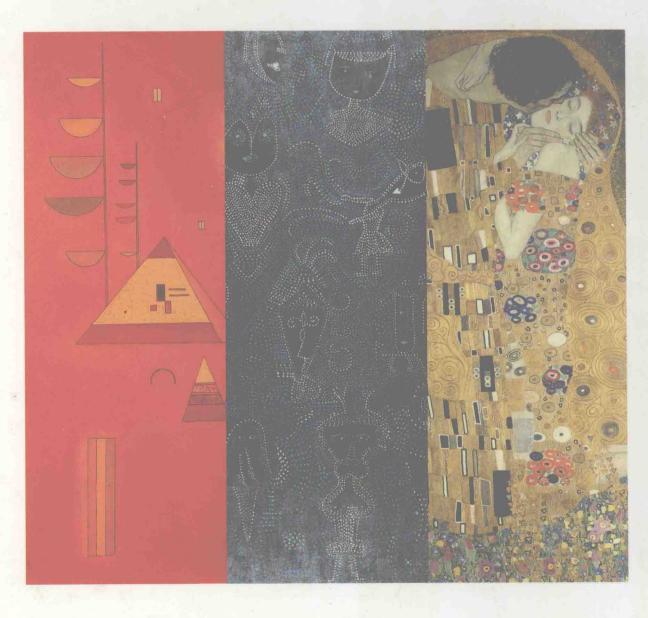
Sychology In W. Santrock



S I X T H E D I T I O N

John W. Santrock

UNIVERSITY OF TEXAS AT DALLAS



SIXTH EDITION



Boston Burr Ridge, IL Dubuque, IA Madison, WI New York San Francisco St. Louis Bangkok Bogotá Caracas Lisbon London Madrid Mexico City Milan New Delhi Seoul Singapore Sydney Taipei Toronto

McGraw-Hill Higher Education 2

A Division of The McGraw-Hill Companies

PSYCHOLOGY, SIXTH EDITION

Copyright © 2000, 1997 by The McGraw-Hill Companies, Inc. All rights reserved. Printed in the United States of America. Except as permitted under the United States Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a data base or retrieval system, without the prior written permission of the publisher.

This book is printed on recycled, acid-free paper containing 10% postconsumer waste.

234567890 QPH/QPH 09876543210

ISBN 0-07-039469-5

Editorial director: Jane E. Vaicunas Executive editor: Joseph Terry Editorial coordinator: Lai T. Moy Developmental editors: Susan Kunchandy/Glenn Turner Senior marketing manager: James Rozsa Project manager: Vicki Krug Senior production supervisor: Sandra Hahn Coordinator of freelance design: Michelle D. Whitaker Senior photo research coordinator: Carrie K. Burger Compositor: GTS Graphics, Inc. Typeface: 10.5/12 Minion Printer: Quebecor Printing Book Group/Hawkins, TN

Freelance cover designer: Maureen McCutcheon Freelance Interior designer: Diane Beasley Photo research: Burrston House and LouAnn K. Wilson

Cover images: (left) "Sweet Pink" by Wassily Kandinsky (1866-1944), Sotheby's London/SuperStock; (center) "Female of the Species" by John W. Santrock; (right) Erich Lessing/Art Resource, NY, Klimt Gustav (1862-1918). The Kiss. 1907-1908. Oesterreichische Galerie, Vienna, Austria

The credits section for this book begins on page C-1 and is considered an extension of the copyright page.

Library of Congress Cataloging-in-Publication Data

Santrock, John W.

Psychology / John W. Santrock.—6thed.

Includes bibliographical references and indexes.

ISBN 0-07-039469-5

1. Psychology. I. Title.

BF121.S265 2000

150-dc21

99-25380 CIP

INTERNATIONAL EDITION ISBN 0-07-116944-X

Copyright © 2000. Exclusive rights by The McGraw-Hill Companies, Inc. for manufacture and export. This book cannot be re-exported from the country to which it is consigned by McGraw-Hill. The International Edition is not available in North America.

www.mhhe.com

Osychology

ith special appreciation to my wife Mary Jo

About the Author

John W. Santrock

John 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 was recently 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*, Eighth Edition, *Life-Span Development*, Seventh Edition, *Children*, Fifth Edition, and *Adolescence*, Seventh Edition. He is co-author, with Jane Halonen, of *Psychology*, the Contexts of Behavior, Third Edition.



John Santrock has been teaching introductory psychology since the 1960s and continues to teach a range of undergraduate psychology courses.

Preface Preface

I have taught introductory psychology since 1967. Over the past four decades, my motivation and love for imparting psychology as a relevant science—one that is empirically sound yet meaningful for people's lives—has not wavered. Even when I first began teaching introductory psychology, I supplemented the text I used by having students read about such relevant topics as Erikson's theory of human development, case studies in abnormal psychology, and topics in applied psychology. In no other discipline (I am admittedly biased) will you find so many opportunities to better understand yourself and the people around you than in the discipline of psychology. This belief not only has been a foundation of my teaching introductory psychology for four decades, but also is the heart of this book.

New Or Revised?

When an introductory textbook reaches its sixth edition, it typically generates two reactions from instructors. The first is that instructors believe the book must be successful to have lasted this long in such a highly competitive and, most would say, overpublished market. Second, most instructors believe they already are sufficiently aware of the book's content and approach, because they have either used or evaluated a previous edition.

We acknowledge the accuracy of the first impression—over 300,000 students have used previous editions. However to the instructors who have the second frame of mind regarding the sixth edition, we optimistically challenge them to put it to the test. Why? With a new theme based on extensive marketing research, the inclusion of many new topics, the deletion of others, a new illustration program, new learning and study aids, new design, and line-by-line revision of existing material, we are confident that this edition more closely resembles a new rather than a revised edition. You will find more than 400 new citations from 1998–2000 along. The closer you look, the more confident we are that you will be surprised and impressed by the changes.

What Did We Learn?

What do most instructors and students really want from an introductory psychology text? In preparation for this revision, the author and the publisher were determined to obtain a concrete answer to this question. To accomplish this, the publisher solicited and received, through reviews and focus groups, more feedback from instructors and students than for all of the previous editions combined.

What did we learn? At the top of both instructors' and students' lists was their desire for a text that presents psychology as a *relevant science*. In our research, the majority of students gave their texts low grades for relevance and many believed their

courses failed to satisfy the goals they had in taking it. When asked to say how the subject matter could be presented in more relevant terms, students most commonly replied that the author must succeed in relating it to their own lives and experiences. Our panel of instructors agreed that the principal goal of the course is to present psychology as a science that students understand from an applied and personal perspective.

Psychology: The Relevant Science

As many instructors (and authors) know, it is quite a challenge to perceive what is needed to fulfill students' expectations, and then to fulfill them. How can we ensure that every page of a textbook has relevance? As we revise each sentence and each feature in the book, we must constantly ask ourselves: Why is this important? Is this a meaningful issue for today's students?

Psychology, sixth edition, has been infused with content, exercises, and resources that focus on psychology as a relevant science. The discipline of psychology is ideally suited to address some of the most important aspects of our lives. We don't have the answers to all of life's questions, but psychology can tell us much about matters like these:

- · How our biological heritage affects our behavior
- How, and to what extent, our environmental experiences can change our lives
- How we perceive, remember, solve problems, and can become more creative
- How the social worlds of people and relationships affect the way we behave
- · How the culture we live in influences us
- · How we are similar to and different from others
- How science can provide us with more objective information about many aspects of life
- How to draw on conceptually diverse ideas in thinking about problems and issues
- How to understand controversies about mind and behavior
- How to think critically about many aspects of mind and behavior

The above ten areas are featured in a new section in Chapter 1 called "Psychology and Life: What Matters." They also are woven through the remainder of the text where appropriate. In addition, as you will see shortly, some of the book's main features emphasize psychology's relevance.

Every chapter of the book includes these "Psychology of Life" features:

Images of Psychology and Life

This section appears at the beginning of each chapter and introduces students to some aspect of the chapter in an

interesting way. Examples of topics include: "Why Youth Kill" (chapter 1), "The Human Versus Big Blue, Cog, and CYC" (chapter 8), and "Showering Seven Times a Day, Looking at a Bleak Future, and Avoiding Breathing on People" (chapter 13).

Explorations in Psychology

These boxes, seamlessly interwoven with the text, provide an expanded look at many fascinating ideas and issues related to the content at that particular point in the chapter. Examples of topics include: "From Horoscopes to the Sex Lives of Tigers" (chapter 1), "The Brains of the Mankato Nuns" (chapter 3), and "Using Optimistic Thinking to Go from Sausage Stuffer to Optimistic Supersalesman" (chapter 15).

Thinking About Psychology and Life

These boxes appear several times in each chapter and encourage students to think critically or evaluate themselves in regard to content in that part of the chapter. Examples of topics include: "Nature, Nurture, and Politics" (chapter 3), "Evaluating Your Creative Thinking" (chapter 9), and "Are You Introverted or Extroverted?" (chapter 12).

Resources for Psychology and Life

This section appears at the end of each chapter and lists books, agencies, phone numbers, research journals, and psychological organizations. These extensive resources enlarge the scope of the chapter to help students learn more about research and practical matters in psychology and life.

Development

As we have emphasized, the content of *Psychology*, sixth edition, was extensively overhauled and fine-tuned. Two types of consultants went over every sentence and section with a fine-tooth comb, making countless recommendations for what to add, subtract, revise, update, and rephrase.

Expert Research Consultants. A number of leading research experts in psychology evaluated individual chapters in their areas of expertise. Their detailed recommendations significantly improved the currency and accuracy of the text's research content.

Expert Teaching Consultants. As previously mentioned, the sixth edition of *Psychology* underwent a more thorough review by individuals who teach introductory psychology than all of its first five editions combined. Their overall "big picture" view and detailed, line-by-line comments about what should go into an introductory psychology text and how it should be said have substantially reshaped this book in very positive ways.

Student Reviews and Focus Groups

For the first time in a formal context, we involved students in almost every facet of this revision. After all, they are the ultimate consumers of its content, and based on what we learned and the changes and improvements that were made as a result, we only wish we had obtained more of their input on earlier editions.

In addition to their part in determining the "relevance" theme for this edition, they told us (in focus groups) what elements worked and did not work for them in the various texts they used. They reacted to and advised us regarding several ideas we had developed for new substantive as well as pedagogical features. They critiqued the illustration program and gave numerous suggestions that helped guide the new format and design you see featured in this edition. All in all, their preferences are evident throughout the book.

"I really enjoy the layout of the book. I think the design, graphics are the most appealing part of this book. They make it interesting and they make it easier to turn the page."

"This is definitely a student friendly book, and it is not too intimidating, so it's accessible. I think [Explorations in Psychology] is a very interesting section in the book. It is aesthetically pleasing, it adds a little bit of more interesting info among pages of technical info. It offers more ease of reading."

Heather Shafer, Student

"Pretty student friendly and accessible. It's an attractive, inviting book. [Through the Eyes of a Psychologist] . . . is aesthetically pleasing, with good interesting quotes."

Srin Chakravorty, Student

- "I like how the author is writing on a personal level. It's easy to read... [the text is]... well laid out, easy for eyes to move through the book, adds to the overall effect quite positively...."

 Kelly Murphy, Student
- "[The text is] very easy to comprehend. It is coherent...box titles are very attention-grabbing...good explanations. [The design] is the best part. The art is really cool, attention getting and visually appealing."

Erica Mezi, Student

Fewer Chapters

The standard text for the fifth edition had 17 chapters. Because most instructors continue to ask for less encyclopedic texts, we reduced the number of basic chapter to 16 by combining the two social psychology chapters into one. However, based on extensive reviewing we are confident that you will find the combined social psychology chapter complete without being encyclopedic.

We have significantly updated and improved the content in *Psychology*, sixth edition. Much of this updating and improvement is based on input from the research and teaching experts. Following is a chapter-by-chapter overview of the new content in *Psychology*, sixth edition:

CHAPTER 1 What Is Psychology?

Images of Psychology and Life: Why Youth Kill
Psychology's Beginnings: Merging Ideas from Philosophy
and the Natural Sciences
Revision of Wundt's, Titchener's, and James' ideas
Updating of Bandura's social cognitive theory
Updating of the behavioral neuroscience approach

Expansion and updating of the evolutionary psychology approach

An eclectic approach

Thinking About Psychology and Life: Saddam Hussein and Mother Teresa

Extensive new section: Psychology and Life: What Matters

Explorations in Psychology: From Horoscopes

to the Sex Lives of Tigers

Expanded and updated coverage of careers in psychology

Some job possibilities for students with an undergraduate degree in psychology

Thinking About Psychology and Life: Which Areas of Psychology Interest You the Most?

"I give this chapter an overall rating of A because I find it well organized with clear writing and good coverage. The principle strength is its copious and effective use of examples to illustrate the various approaches to psychology. They make the different schools much more meaningful."

> -Gary D. Laver, California Polytechnic State University-San Luis Obispo

CHAPTER 2 Psychology's Scientific Methods

New section: Exploring the Science of Psychology Thinking About Psychology and Life: Participating in Psychological Experiments on the Internet

Substantial revision of the discussion of the scientific method with Bandura's classic research on observational learning and aggression as a theme

Operational definition

Who Will the Participants Be?

Extensive revision and updating of research methods with examples of aggression research carried through as a common theme

Recent research on physiological underpinnings of spousal abuse

Experimental Research Cautions: Experimenter Bias and Research Participant Bias

Thinking About Psychology and Life: No Magic Bullet

Multiple Research Methods

Thinking About Psychology and Life:

Isn't Everyone a Psychologist?

Revision and updating of ethics guidelines

Revision of Explorations in Psychology box:

Psychology and Values

Revision and updating of the research challenges involved in gender, culture, and ethnicity

Reading and Understanding Research Journals

"The coverage is . . . good and the writing is clear. Students should have no trouble understanding this chapter . . . the theme that science is not defined by what it studies but how it studies is a good one."

> -Keith Stanovich University of Toronto

CHAPTER 3 Biological Foundations and Neuroscience

New chapter title that includes neuroscience Dynamic photographs and drawings of the brain's structures

Genotype and phenotype

The Human Genome Project

The new view of heredity-environment interaction

Thinking About Psychology and Life:

Nature, Nurture, and Politics

New section: The Field of Neuroscience

Updated and expanded discussion of neurotransmitters

Agonists and antagonists

Brandi Binder's case, which provides evidence

of hemispheric flexibility

Thinking About Psychology and Life:

Your Brain and Your Behavior

"On balance, I feel that the chapter is very superior . . . Organizationally, it is very strong The coverage of the nervous system strikes me as excellent. Extremely sound decisions seem to have been made initially about what to include and what to modify."

> -James Johnson llinois State University

CHAPTER 4 Sensation and Perception

Dynamic drawings and photographs

Psychophysics Revised discussion of absolute thresholds

Revised discussion of signal direction theory

Updated coverage of feature detectors

Comparison of trichromatic and opponent-process theories

Different types of pain receptors

Thinking About Psychology and Life: Counting Aces of Spades The Stroop Effect

Thinking About Psychology and Life: Examining Art for Perceptual Cues and Organization

Attention

Approaches to perception including comparison of information-processing and ecological theories Thinking About Psychology and Life: Inventing a Video Game

"I thoroughly enjoyed reading this chapter. I give it an A+. I really like the combination of sensation and perception in a single chapter and this chapter is wonderfully written. It has an active and exciting voice that will easily hold the interest of students."

> -Linda Kline California State University-Chico

CHAPTER 5 States of Consciousness

The range of sleep in animals

Circadian rhythms and shiftworkers

Revised and expanded discussion of sleep deprivation and needs Thinking About Psychology and Life:

Do You Get Enough Sleep?

Sleep across the human life span

Expanded discussion of sleep disorders including strategies for reducing insomnia
Revised discussion of interpretation of dreams
Do males and females dream about different things?
Thinking About Psychology and Life: Lucid Dreaming
Revised discussion of theories of hypnosis
Updated coverage of trends in drug use
The hazards of binge drinking in college
Thinking About Psychology and Life: Do You Abuse Drugs?
Caffeine

Expanded coverage of alcoholism and prevention/treatment of drug abuse

"This is a very well-written overview of consciousness. I especially enjoyed the bits of history sprinkled throughout the chapter. I found the charts displaying information on the frequency of REM and NREM sleep, binge drinker, and psychoactive drugs, among others, to be excellent."

-Linda Kline California State University-Chico

CHAPTER 6 Learning

Diagram of Pavlov's classical conditioning Contingency in classical conditioning Thinking About Psychology and Life: Classical Conditioning and Calvin Klein Jean Ads Ethics of conditioning a phobia in Little Albert Associative learning including figure that compares associative learning aspects of classical and operant conditioning Diagrams that compare positive reinforcement and negative reinforcement Revised and expanded coverage of punishment, including positive and negative punishment Figure that compares positive reinforcement, negative reinforcement, positive punishment, and negative punishment Recent research on spanking and antisocial behavior Thinking About Psychology and Life:

"The overall rating for this chapter is an "A" (Excellent). It is well written and the concepts are clearly defined and described. In particular, Santrock did an excellent job differentiating between positive and negative reinforcement and negative reinforcement and punishment. The latter distinction is particularly important as students often confuse those two concepts."

-David Penn Louisiana State University

CHAPTER 7 Memory

Models and Mentors in My Life

Substantial overhaul of chapter organization with this new sequence: The Nature of Memory, Memory Encoding, Memory Storage, Memory Retrieval and Forgetting, and Memory and Study Strategies

Exploring memory with an emphasis on Daniel Schacter's

Exploring memory with an emphasis on Daniel Schacter's ideas on the remarkable capabilities of memory as well as its imperfections

Dynamic diagrams of memory processes

Thinking About Psychology and Life:

Evaluating People's Memories in the Courtroom

Explorations in Psychology: Cognitive Neuroscience:

Watching Brain Activity During Memory Encoding

Remembering faces: Ted Kaczynski

Thinking About Psychology and Life: Generating Retrieval Cues

Revised discussion of priming

The three-level hierarchical structure

of autobiographical memory

New main section: Emotional Memories

Memory and personal trauma

Revised and updated discussion of repressed memories

Significantly revised and expanded coverage

of memory and study strategies

Thinking About Psychology and Life:

Memory and Study Strategies

"This chapter's strength is the breadth of the material covered. The author covers both classic memory research and areas of memory research that are currently in vogue in the field. I was unable to identify any substantial area of memory research that the author had neglected to address. Given the breadth and quantity of material on memory, this is an outstanding accomplishment."

-Cynthia Sifonis University of Illinois

CHAPTER 8 Thinking and Language

Images of Psychology: The Human Versus Big Blue, Cog, and CYC

New sequential organization of thinking: What Is Thinking?; Forming Concepts; Solving Problems; Thinking Critically, Reasoning, and Making Decisions

The concept of schools of art

Revised discussion of finding and framing problems New section on obstacles to solving problems that focuses on

becoming fixated and lacking motivation and persistence

Thinking About Psychology and Life: The Candle,

Nine-Dot, and Six-Matchstick Problems

Revised and updated discussion of critical thinking

Thinking About Psychology and Life:

Seeking Multiple Explanations

Ellen Langer's ideas about mindless behavior

Confirmation bias

Belief perserverence

Overconfidence bias

Hindsight bias

Research on language environments of children in poverty Explorations in Psychology: How to Talk with Babies and Toddlers

Revision and updating of bilingual education

"Santrock has his writing style going for him. I thought the descriptions were clear and accessible to any but the most ill-prepared undergraduate... there are some things about the book that are very attractive. What is here is well-balanced."

-John Best Eastern Illinois University

CHAPTER 9 Intelligence

Images of Psychology: Being Creative in "X"

Reorganization with the construction/evaluation of

intelligence tests now discussed early in the chapter

Links between reliability and validity

Thinking About Psychology and Life: Should Parents

Be Testing Their Own Child's IQ?

Explorations in Psychology: Project Spectrum

Thinking About Psychology and Life:

Evaluating Your Multiple Intelligences

Sternberg's triarchic intelligence and schools

Evaluating the multiple intelligences approach

Explorations in Psychology: The Repository

for Germinal Choice

Thinking About Psychology and Life:

Can Intelligence Be Increased?

Extensive revision and expansion of discussion of creativity

Thinking About Psychology and Life:

Evaluating Your Creative Thinking

"I found the Intelligence chapter of this text informative, wellbalanced, and up-to-date. It was also fun to read. . . . Particularly praiseworthy are the historical reviews. The social relevance of the topic is addressed quite well."

> -Mihalyi Csiksentmihalyi University of Chicago

CHAPTER 10 Human Development

Sequential reorganization of chapter so that major theories, such as Piaget's and Erikson's, are now presented intact rather than in separate locations

Discussion of gender removed and placed in Chapter 16, "Social Psychology"

Images of Psychology: Jessica Dubroff, Child Pilot

Thinking About Psychology and Life: Is There a Best Age to Be?

Early-later experience issue

Conclusions about developmental issues

New research on smoking mothers

Balanced evaluation of Piaget's Theory

Evaluation of Erikson's Theory

Temperament

Explorations in Psychology: Child Care in the United States

The mother's and father's roles

Why do people want to have children?

Revised discussion of Kohlberg's theory

Thinking About Psychology and Life:

How Long Would You Like to Live?

Contemporary discussion of estrogen replacement therapy Revised and expanded coverage of biological theories of aging

Alzheimer's disease

Revised and updated coverage of cognition and aging

Skills that employers want job candidates to have

McArthur (1999) study of midlife development

Successful aging

Thinking About Psychology and Life: **Exploring Personal Life Investment** "This chapter was wonderful. Santrock presents the information in a relaxed, straightforward manner that makes readability and comprehension almost guaranteed!"

> -Susan Amato **Boise State University**

CHAPTER 11 Motivation and Emotion

Images of Psychology: Terry Fox's Marathon Run

Reorganization of some ideas about the "whys" of behavior

Revised discussion of drive reduction theory

Thinking About Psychology and Life:

Are You a Sensation Seeker?

Revised and updated discussion of obesity

Moved discussion of dieting to this chapter

from health psychology chapter

Moved discussion of anorexia nervosa and bulimia

to this chapter from health psychology chapter

Pheromones and aphrodisiacs

Viagra

Explorations in Psychology: America's Sexual Landscape and Its Myths

Goal-setting, planning, and monitoring

Thinking About Psychology and Life:

How Goal-Directed Are You?

Explorations in Psychology: Comparing Math Achievement

in Asian and American Cultures

Reorganization of discussion of emotions. New sequence:

Defining Emotion; Biological Dimensions; Cognitive

Dimensions; Behavioral Dimensions; Sociocultural

Dimensions; and Classifying Emotions

Expanded discussion of the autonomic nervous system

New section on neural circuits and neurotransmitters

More dynamic diagrams of emotion topics

The Facial Feedback Hypothesis

Thinking About Psychology and Life: Pursuing the Good Life

"This chapter is well written and clear. Transitions between topics are smooth and there are numerous links to outside topics, such as other chapters in the book. The summary tables, photos, and figures are all very good. Another strength is the implicit theme of normal range versus pathology."

University of Wisconsin

CHAPTER 12 Personality

New summary figure on defense mechanisms

Thinking About Psychology and Life: Your Defense Mechanisms

Change of social learning theory to more

contemporary social cognitive theory Thinking About Psychology and Life:

Evaluating Who's Among the Self-Actualized

Self-esteem research

Revision of Allport's view of traits

Thinking About Psychology and Life:

Are You Introverted or Extraverted?

New figure on the Big Five factors of personality

Research on the Big Five factors

Updated research on the MMPI-2

"The content covered in this chapter is very appropriate for a survey class. Overall, an excellent presentation of these very complex topics. . . . this chapter is quite 'perfect'."

> -Iutta Street Wake Technical Community College

CHAPTER 13 Abnormal Psychology

Restructured chapter headings and subheadings Images of Psychology: Showering Seven Times a Day, Looking at a Bleak Future, and Avoiding Breathing on People Revised discussion of defining abnormal behavior and improved examples Some myths and misconceptions about abnormal behavior Legal aspects of mental disorders moved to earlier in chapter with expanded, revised content Explorations in Psychology: Jack Ruby, Sirhan Sirhan, Jeffrey Dahmer, Ed Gein, John Hinkley, and Lorena Bobbitt Figure 13.4: Some Prominent Categories of Mental Disorders in DSM-IV Revised and updated discussion of panic disorder and agoraphobia Social phobia John Madden and Jack Nicholson Dissociative identity disorder Thinking About Psychology and Life: Evaluating Whether You Are Depressed More on manic episodes Explorations in Psychology: Suicide Russell Weston, Jr., and schizophrenia Revised discussion of personality disorders with expanded description of clusters

"My overall impressions of this chapter are quite favorable. Santrock makes very good use of clinical case material which serves to catch the student's attention and highlights the issues being discussed . . . the research is current and accurately summarized."

> -Richard P. Halgin University of Massachusetts-Amherst

CHAPTER 14 Therapies

Comparison of Ellis' and Beck's therapies

New, less complex organization Images of Psychology: Should I End My Life Today? Revised and updated discussion of mental hospitals and deinstitutionalization Recent developments, including managed care Licensing and certification Connections with personality theories More case study examples Figure 14.5: Overview of Main Psychotherapy Approaches Revised discussion of person-centered therapy, including new therapist-client exchange Figure 14.9: Classical Conditioning: The Backbone of Aversive Conditioning Revised and expanded discussion of Beck's cognitive therapy

Thinking About Psychology and Life: Designing a Study to Evaluate the Effectiveness of Psychotherapy Revised, expanded, updated discussion of research on the effectiveness of psychotherapy Thinking About Psychology and Life: Evaluating Whether to Seek Psychotherapy Revised, updated discussion of gender/ethnicity and therapy Updated, revised discussion of drug therapy Figure 14.12: Drug Therapy for Mental Disorders Revised, expanded Figure 14.13: Therapy Comparisons New final section for chapter: Therapy Integrations

Revised, updated discussion of self-help support groups

"This chapter is very good. Santrock has done a very nice job of covering the major therapies and incorporating pedagogical tools that will engage students and help them understand the wealth of material. I would give the chapter an overall qualitative rating of A."

> -Richard P. Halgin University of Massachusetts-Amherst

CHAPTER 15 Health Psychology

Reorganization of chapter with stress and coping now coming prior to promoting health Revised, updated, expanded introduction to the scope of health psychology Two biological pathways to stress Updated, revised discussion of psychoneuroimmunology including recent research Revised discussion of Lazarus' ideas on stress Thinking About Psychology and Life: Evaluating Life Events in Your Life Explorations in Psychology: Poverty, Stress, and Violence: The Lives of Lafayette and Pharaoh Thinking About Psychology and Life: Opening Up Explorations in Psychology: Using Optimistic Thinking to Go from Sausage Stuffer to Optimistic Supersalesman Recent research on social support and coping with stress Updated, revised discussion of assertive behavior Thinking About Psychology and Life: Dealing with Conflict Thinking About Psychology and Life: Coping with Failure Revised discussion of proper nutrition Updated and expanded discussion of not smoking

Thinking About Psychology and Life: Sexual Myths and Realities

"I was very impressed with all the current research and writings cited in this chapter. Many of the citations had 1998 and 1999 after them. I appreciate the thorough literature searches that you have made for the book."

Sound Sexual Decision Making (new section for this edition)

-Michael Zickar **Bowling Green State University**

CHAPTER 16 Social Psychology

This edition has an integrated single chapter on social psychology (the fifth edition had two separate chapters)

Images of Psychology and Life: The Reverend James Jones' Dark Side with David Koresh and Marshall Herff Applewhite

Substantial reorganization of chapter. Attribution now is the first main topic discussed

Expanded, updated coverage of attribution

Self-serving bias

Revised and updated discussion of attitudes and behavior Social influence is now a major heading with subheadings of Conformity and Obedience, Group Influence, and Cultural and Ethnic Influences

Normative social influence and informational social influence Revised, updated discussion of groupthink

Revised discussion of cultural/ethnic influences

Thinking About Psychology and Life:

Prejudice and Reconstructive Memory

Thinking About Psychology and Life: Seeking Common Ground New section on aggression

Gender now discussed at appropriate places in this chapter rather than in Chapter 10, "Human Development."

Updated discussion of freshman life goals

Thinking About Psychology and Life:

The Type of Love You Have

Strategies for overcoming loneliness

Ellen Berscheid's (1999) ideas about environmental demands and close relationships

"This chapter was well-done in practically all aspects. It is interesting, well-written, and contains a nice blending of classic and contemporary scholarship. The author uses examples, illustrations, cartoons, photographs, and the like in a persuasive, didactic way. The chapter also reflects a high degree of care and wisdom (such as the thoughtful discussion of Milgram's work, including more recent ethical concerns). As compared to the relevant material in leading social psychology texts, the coverage and writing in Santrock's social psychology chapter are outstanding."

-John Harvey University of Iowa

Optional Chapters

In addition to the main 16 chapters that are standard in many introductory psychology texts, the optional bundle for *Psychology*, sixth edition, consists of four chapters that can be packaged with the main book:

Evolution and Heredity Gender and Sexuality Applied Psychology The Psychology of Religion

These four chapters were chosen by instructors as the most popular ones to add to a standard introductory psychology text. Each chapter is accompanied by a full Web-based ancillary package including Student Study Guide, Instructor's Manual, Test Bank, and AIE resources.

CHAPTER 17 Evolution and Heredity

More streamlined and easier to read discussion of evolution Thinking About Psychology and Life:

The "Nobel Prize Sperm Bank"

New research on sperm sorting for selection of the offspring's sex

Expanded and updated coverage of genetic counseling Incorporated material on identical twins reared apart into body of text

Contemporary section on conclusions about heredity-environment interaction

Thinking About Psychology and Life: Nature, Nurture, and Politics

"Santrock's evolution and heredity chapter is thorough and wellorganized. Terms are clearly defined and wonderful photographs represent human diversity. I give it a rating of excellent."

-Eastern Maine Technological College

CHAPTER 18 Gender and Sexuality

Improved discussion and definitions of estrogens and androgens New coverage of evolutionary psychology view of gender New discussion of social roles view of gender Thinking About Psychology and Life: Rethinking the

Words We Use in Gender Worlds

New section on gender in contexts

Extensively revised and updated discussion of men's issues Expanded coverage of the human sexual response pattern New material on Viagra

Expanded discussion of heterosexual attitudes and behavior Revised and updated coverage of forcible

sexual behavior and harassment

New section on sound sexual decision making

Thinking About Psychology and Life:

Sexual Myths and Realities

New discussion of strategies for protecting against AIDS and other sexually transmitted diseases

"I am extremely satisfied with the focus of Santrock's gender and sexuality chapter. Why? Because one of the courses I teach here is Human Sexuality. Santrock's gender and sexuality chapter provides an excellent introduction to the fascinating topic of human sexuality and does it with tact. My students love this gender and sexuality chapter. The gender and sexuality coverage projects well into the 21st century."

-Kirtland Community College

CHAPTER 19 Applied Psychology

This is virtually a completely new chapter for the sixth edition of *Psychology* Thinking About Psychology and Life:

ninking About Psychology and Life: Knock 'Em Dead in an Interview

New discussion of research on the Big Five factors and predicting job success

New section on leadership in the world of work Human factors psychology no longer is discussed under

I/O psychology but now has its own section

New research on human factors by the FAA New research on human factors involved in touch

New description of environmental psychologist

Roberta Feldman and her work

Thinking About Psychology and Life: Analyzing the Built Environment in Which You Live

New main section: Forensic Psychology

Explorations in Psychology: Psychological Profiling New main section: Sport Psychology New main section: Educational Psychology Explorations in Psychology and Life: Schools for Thought

"Santrock did a nice job of providing a broad overview of these exciting new fields in psychology. The chapter should be very interesting to a wide variety of students, psychology major and nonmajor alike."

-Earlham College

CHAPTER 20 The Psychology of Religion

Includes recent survey on religious interest in America New discussion of controversy involving what religion is and what spirituality is

Thinking About Psychology and Life: Spiritual Well-Being New discussion of positive and negative aspects of religion Deletion of section on fundamentalism and right-winged authoritarianism

New section on religion and physical health Much expanded and updated coverage of religion and mental health

Recent research on religious coping styles Recent research on religion and sexuality

Recent research on gender and religion

Recent research on religiousness and generosity toward the poor Thinking About Psychology and Life:

Religion, Spirituality, and Cults New section on religion and cults Significantly updated research citations

"The psychology of religion is a much neglected topic and I applaud John Santrock for writing this chapter. He did a good job of covering the breadth of the psychology of religion and the chapter is written in an engaging manner. The resource list at the end is lovely."

-Arizona State University

Acknowledgments

I owe debts to many people who substantially improved the 6th Edition of Psychology but three individuals deserve special thanks. Joseph Terry, Psychology Editor, was especially influential in supporting and shaping the book. Jim Rozsa, Senior Marketing Manager in Psychology, played a key role in conceptualizing the book's many changes and themes. I also benefited enormously from Glenn Turner's extensive, detailed analysis and recommendations. I value not only the extraordinary, competent professional input of these three individuals, but also their friendship.

In both the 5th edition and the current, 6th edition of Psychology a number of leading experts in different subfields of psychology have provided me with invaluable advice about their areas of expertise.

Chapter 1: What Is Psychology: Ludy Benjamin, Texas A&M, Charles Brewer, Clemson University; Chapter 2: Psychology's Scientific Methods: Keith E. Stanovich, University of Toronto; Chapter 3: Biological Foundations and the Brain: Jackson Beatty, UCLA; Chapter 4: Sensation and Perception: Alice O'Toole, University of Texas at Dallas; Chapter 5: States of Consciousness: G. William Domhoff; Chapter 6: Learning: Michelle Perry, U. of Illinois at Urbana, Champaign; Chapter 7: Memory: James Bartlett, University of Texas at Dallas; Daniel Schacter, Harvard University, Steven Smith, Texas A&M; Chapter 8: Thinking and Language: Karen A. Luh; Jean Berko Gleason; Chapter 9: Intelligence: Mihalyi Csiksentmihalyi, University of Chicago; Chapter 10: Human Development: Illene Noppe, University of Wisconsin-Green Bay; Chapter 11: Motivation and Emotion: Laura King, SMU; Chapter 12: Personality:

N.C. Higgins, University of North British Columbia; Chapter 13: Abnormal Psychology: Lillian Comas-Diaz, Transcultural Institute; Chapter 14: Therapies: Richard P. Halgin, University of Massachusetts, Amherst; Chapter 15: Health Psychology: David Mostofsy, Boston University; James Pennebaker, University of Texas; Chapter 16: Social Psychology: Stanley Gaines, Pomona College; James Jones, U. of Delaware; John Harvey, U. of Iowa, Richard Brislin, East-West Center; Chapter 17: Evolution and Heredity: David Buss, University of Texas; Chapter 18: Gender and Sexuality: Florence Denmark, Pace University; Seth Kalichman, Georgia State U.; Chapter 19: Applied Psychology: Robert Gifford, University of Victoria; Chapter 20: The Psychology of Religion: Raymond Paloutzian, Westmont College

In addition, many instructors who teach introductory psychology made special efforts to provide detailed feedback, in many cases on a lineby-line basis, about Psychology, 6th Edition. They were:

Valerie Ahl, University of Wisconsin-Madison Susan Amato, Boise State University Jim Backlund, Kirtland Community College John Best, Eastern Illinois University Michelle Boyer-Pennington, Middle Tennessee State University James Calhoun, University of Georgia Ellen Dennehy, University of Texas-Dallas Kim Dielmann University of Central Arkansas James Francis, San Jacinto College James Greer, Louisiana State University Jean Berko Gleason, Boston University James J. Johnson, Illinois State University Paul R. Kleinginna, Georgia Southern University Linda Kline, California State University-Chico Karen Kopera-Frye, The University of Akron Phil Kraemer, University of Kentucky Eric Landrum, Boise State University Gary D. Laver, California Polytechnic, San Luis Obispo Marta Losonczy, Salisbury State University Karen E. Luh, University of Wisconsin-Madison Jerry Marshall, University of Central Florida Vicki Mays, University of California-Los Angeles Carol Nemeroff, Arizona State University Cindy Nordstrom, Illinois State University David Penn Louisiana State University Jeffrey Pedroza, Lansing Community College Lawrence A. Pervin, Rutgers University Vincent Punzo, Earlham College Ed Raymaker, Eastern Main Technical College Judith A. Sheiman, Kutztown University Paula Shear, University of Cincinnati Cynthia Sifonis, University of Illinois Charles M. Slem, California Polytech University Jutta M. Street, Wake Technical Community College Roger M. Tarpy, Jr,. Bucknell University Christopher Taylor, University of Arizona Leonard Williams, Rowan University Michael Zickar, Bowling Green State

Another group of psychologists also deserve thanks. They wrote material for individual chapters in previous editions and some of this material served as a base for the development of chapters in the 6th edition. In this regard, thanks go to:

Alice O'Toole, U. of Texas at Dallas (Research in Psychology; Sensation and Perception)

James Bartlett, U. of Texas at Dallas (Memory; Thinking and Language) Laura King, Southern Methodist University (Motivation and Emotion) David Neufeldt, Hutchinson Community College (Applied Psychology) Robert Gifford, U. of Victoria (Applied Psychology)

Raymond Paloutzian, Westmont College (Psychology of Religion) Morton Harmatz, U. of Massachusetts (Therapies)

Barry Stein, Tennessee Technological U. (Thinking and Language)

Student-Driven Pedagogy

Students not only should be challenged to study hard and think more deeply and productively about psychology, they should also be provided with an extensive pedagogical framework to help them learn. Each of the learning and study aids that follow, some of which are unique to this text, have been tested and endorsed by the majority of students attending our focus groups. As a consequence, we are more confident than ever before that your students will find this edition of *Psychology* to be very student friendly.

Images of Psychology and Life

Opens each chapter with an imaginative, high-interest discussion that focuses on a topic related to the chapter content.

Chapter Outline

Shows the organization of topics by heading levels.

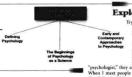
What Is Psychology? Images of Psychology and Life Why Youth Kill "My friend . . . care for IT 15-YEAR-OLD Kin Kinkel has an innocent look and a shy smile. In May 1998, Kinkel strode into the cafeteria at Thurston High School in Springfield, Oreour psyche, and . . . make it gon, and opened fire on his fellow students, murdering two of them and injuring as good as possible. . . . Know many others. Later that day, police went to Kip's home and found his parents lying thyself, for once we know dead on the floor, also victims of Kin's violence. A series of other velocal related ourselves, we may learn how shootings also have recently occurred in the United States. In April, 1999 at to care for ourselves, but Columbine High School in Littleton, Colorado, Eric Harris (18) and Dylan Kiebold otherwise we never shall. (17), members of an outcast clique called "The Trenchcoat Mafia," killed 12 students and a teacher, planted bombs around the school, then committed suicide. Harris had a web page on which he had bragged of making four pipe bombs more than a year before the shootings but no one apparently took it seriously. Is there any way psychologists can predict whether a youth will turn violent? It's Preview a complex task but they have pieced together some clues (Cowley, 1998). Violent youth are overwhelmingly male and many are driven by feelings of powerlessness Violence seems to infuse these youth with a sense of power. Sixteen year-old Luke

NEW! Mini Cognitive Maps

These mini-maps appear three to five times per chapter and provide students with a more detailed, visual look at the organization of the chapter.

> 4 Santrock • Psychology Woodham was known as a chubby nerd at his school in Pearl, Mississippi. But in the fall of 1997, he shed that image by stabbing his mother to death and shooting nine of his classmates, killing two of them. Woodham wrote in a letter, "I killed because people like me are mistreated every day. Murder is not weak and slow-witted. Murder is gutsy and daring." University of Virginia psychologist Dewey Cornell (1998) says that many youth

give clear indications of their future violence but aren't taken seriously. Kip Kinkel had an obsession with guns and explosives, a history of abusing animals, and a nasty temper when crossed. When police examined his room, they found two pine bombs three larger bombs, and bomb-making recipes that Kip had downloaded from the Internet. Clearly, signs were present to suggest some serious problems in Kip's life But it is difficult to predict whether youth like Kip will actually act on their angeand sense of powerlessness to commit murder (Garbarino, 1999).



Exploring Psychology

Trying to figure out what moritore people like Kip Kinkel to commit murder is one of the many things psychologists do. What described the properties of the second of the second

- contemporary pyecologica as were:

 research psychologic trained in cognitive psychology paintakingly constructs the thousands of steps of a computer program that, presented with handreds of steps of the computer program that, presented with handreds of steps of the computer program that the contemporary contemporary

Santrock • Psychology Inmuch the Eves of Psychologist Sandra Graham, UCLA

Reading and Understanding Research Journals

Preview

A brief look at what the chapter is about, including a series of questions that will be explored.

NEW! Through the Eyes of Psychologists

This feature, appearing several times throughout each chapter, includes a photograph and quotation from leading psychologists to stimulate further thinking about the content.

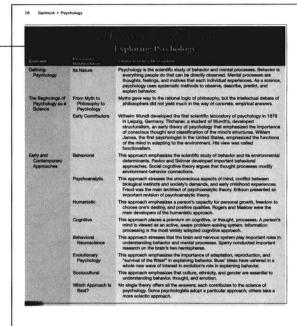
Cartoons

Students like cartoons—perhaps because learning works best when the learner is in a good mood. To that end, cartoons appear several times in each chapter.

Chapter 1 • What is Psychology?

Summary Tables

These within-the-chapter reviews are coordinated with, and have the same headings as, the within-the-chapter cognitive maps. They give students a handle on information before they reach the end of the chapter.





PEANUTS reprinted by permission of Closed Feature Specimen.

These are but a few of the many different portraits of psychologists. As you read this book, you will discover that psychology is a diverse field and psychologists have

Defining Psychology

To state exacts, pyricasoly y intungs may stake you are being significe continis enters, but studies often turn up the unexpected in human behavior. For example, it may be the studies of the state of

Psychology is the scientific study of behavior and mental processes. There are three aspects to this definition: science, behavior, and mental processes.

aspects to this definitions, courselves, behavior, and mental processes, cooking resist, as expective flowers of the processes of the processe

Let's now examine what behavior and mental processes are. Behavior is everything we do that can be directly observed—two people kissing, a baby crying, a col-

Mental processes are trickier to define than behavior; they are the thoughts, feel ings, and motives that each of us experiences privately but that cannot be observed directly. Though we cannot directly see thoughts and feelings, they are nonethely real. They include thinking about kissing someone, a baby's feelings when its mother



Explorations in Psychology

This feature addresses many controversial issues in psychology and science, asking the student to think critically and evaluate their own stance on these issues.

NEW! Key Terms

These are boldfaced in the text and their definition is italicized.





Within a matter of hours after fertilization, a human egg divides, of cells, and continues this mapping of cells at an astonishing months, there is a squalling bundle of energy that has its grandm ther's eyes, and its mother's abundant hair.

NEW! Cross-Linkage

This system, unique to this text and new in this edition, refers students to the primary discussion of all key concepts. A specific page reference appears in the text with a backward pointing arrow each time a key concept occurs in a chapter subsequent to its initial coverage.

NEW! McGraw-Hill Website

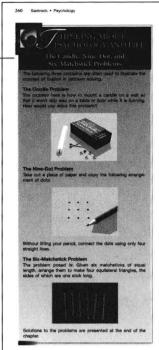
A website icon appearing in the margin next to content guides student to the *Psychology*, 6e Website where they will find connecting Internet links that provide them with additional information. The label for each Web icon corresponds to the same label on the Santrock web site.

Thinking About Psychology and Life

This feature emphasizes the relevance of psychology to a student's everyday life through use of surveys and illustrative problems.

Overview

This consists of 2 parts:
(1) an overall cognitive map of the entire chapter, and (2) a brief summary of the chapter.



writing a paper for a psychology course. What might be some subguling strengers from the problem you have right book and research journals on the problem you have the right book and or the problem you have the right books and journals, now this likely hearlf from establishing some subgoals in terms of what you need to accomplish along the way to your good or a pollude psychology paper. If the paper is due in two months, you might set a subgoal of a first direl for paper to wooks belore it is due, another subgoal of completing reading for the paper a month before it is due, and yet another subg

Notice that in establishing the subgoals, we worked backward. Working backward in establishing subgoals is a good strategy. You first create a subgoal that is closest to the final goal and then work backward to the subgoal that is closest to the beginning of the problem-solving effort.

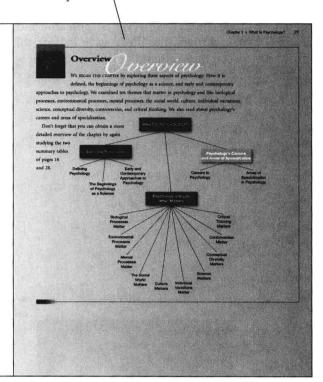
Agorithms are strategies that guarantee a solution it problem. Algorithms come in different forms, such a using a formula, following a set of directions, or trying ou all possible solutions. We often use algorithms in solvin math problems by applying formulas, and when we follow the instructions to put something together, like a law chair or a table.

In some cases an algorithmic strategy might take a long time. Consider a person who is working a crossover program of the prog

instance of using an algorithm to solve this type of problem, most crossword-puzzle enthiliasts use heuristics, which me strategies are talle of flumin that suggest as includen to a problem to the one guarantee an unswer. Thus, we know that certain combinations of letters are more likely as work than others, bet example, in our attempts were allowed to the contract of the contrac

problems in which it is wise to use heuristics rather than algorithms. Heuristics help us narrow down the possible solutions to find the one that works.

3) Evaluate Solutions Once we think we have olved a problem, we really won't know how effective our olution is until we find out if it actually works. It helps



NEW! Key People

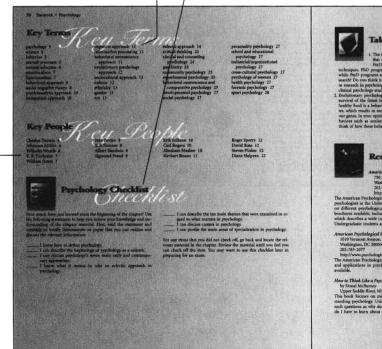
The most important theorists and researchers in the chapter are listed and page-referenced.

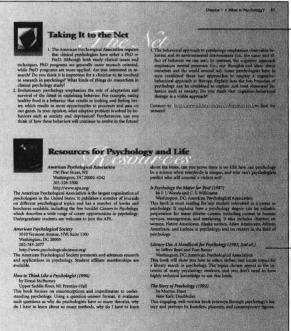
End of Chapter Key Terms

The key terms are listed and page-referenced to the chapter in addition to a comprehensive glossary at the end of the book.

NEW! Psychology Checklist

This checklist provides students with an opportunity to check their knowledge and understanding of the chapter's content.





NEW! Taking It To The Net

Students are presented with questions to explore on the Internet, related to the chapter. From the *Psychology,* 6e Website under Taking It To The Net, students will find links to other Websites providing information that will help them to think more deeply about the questions posed.

Resources for Psychology and Life

Here, students will find information about both academic and practical resources, including books, phone numbers, agencies, research journals, and psychological organizations.