WAYNE WEITEN

BRIEFER VERSION

Psychology

THEMES & VARIATIONS



Psychology Themes and Variations

BRIEFER VERSION



Wayne Weiten

University of Nevada, Las Vegas

With Critical Thinking Applications

By Diane F. Halpern, Claremont McKenna College



THOMSON WADSWORTH

T. J., This one's for you. Publisher: Vicki Knight

Psychology Editor: Michele Sordi Developmental Editor: Jeremy Judson Assistant Editor: Jennifer Keever Editorial Assistant: Chelsea Junget

Technology Project Manager: Darin Derstine

Marketing Manager: Lori Grebe Marketing Assistant: Laurel Anderson

Advertising Project Manager: Tami Strang

Project Manager, Editorial Production: Paula Berman

Art Director: Vernon T. Boes

Print Buyer: Karen Hunt
Production Service: Thomas E. Dorsaneo, Publishing
Consultant

Text Designer: John Walker Design

Permissions Editor and Photo Researcher: Linda L. Rill

Copy Editor: Jackie Estrada Cover Designer: Laurie Anderson

Cover Image: @WIDES + HOLL/Taxi/Getty Images

Text and Cover Printer: CTPS

Compositor: Thompson Type

COPYRIGHT © 2005 Wadsworth, a division of Thomson Learning, Inc. Thomson LearningTM is a trademark used herein under license.

ALL RIGHTS RESERVED. No part of this work covered by the copyright hereon may be reproduced or used in any form or by any means—graphic, electronic, or mechanical, including but not limited to photocopying, recording, taping, Web distribution, information networks, or information storage and retrieval systems—without the written permission of the publisher.

Printed in China

3 4 5 6 7 08 07 06

For more information about our products, contact us at: Thomson Learning Academic Resource Center 1-800-423-0563

For permission to use material from this text or product, submit a request online at: www.thomsonrights.com

Any additional questions about permissions can be submitted by email to thomsonrights@thomson.com

ExamView® and ExamView Pro® are registered trademarks of FSCreations, Inc. Windows is a registered trademark of the Microsoft Corporation used herein under license. Macintosh and Power Macintosh are registered trademarks of Apple Computer, Inc. Used herein under license.

COPYRIGHT 2005 Thomson Learning, Inc. All Rights Reserved. Thomson Learning WebTutor $^{\text{TM}}$ is a trademark of Thomson Learning, Inc.

Library of Congress Control Number: 2003096146

Student Edition (paper): ISBN 0-534-63288-2 Student Edition (case): 0-534-64266-7

Instructor's Edition (paper): ISBN 0-534-63289-0

Wadsworth/Thomson Learning 10 Davis Drive Belmont, CA 94002-3098 USA

Asia

Thomson Learning 5 Shenton Way #01-01 UIC Building Singapore 068808

Australia/New Zealand

Thomson Learning 102 Dodds Street Southbank, Victoria 3006 Australia

Canada

Nelson 1120 Birchmount Road Toronto, Ontario M1K 5G4 Canada

Europe/Middle East/Africa

Thomson Learning High Holborn House 50/51 Bedford Row London WC1R 4LR United Kingdom

Latin America

Thomson Learning Seneca, 53 Colonia Polanco 11560 Mexico D.F. Mexico

Spain/Portugal

Paraninfo Calle Magallanes, 25 28015 Madrid, Spain

To the Instructor

Psychology is an exciting, dynamic discipline that has grown by leaps and bounds in recent decades. This progress has been reflected in the field's introductory texts, which have grown longer and longer. However, the length of the introductory psychology course generally has not changed. Hence, an increasing number of professors are reporting that they find it difficult to cover the wealth of material found in the typical introductory text. With this reality in mind, I decided to write a briefer version of *Psychology: Themes and Variations* to help meet the needs of those instructors who would like a challenging, but concise, introductory text.

If I had to sum up in a single sentence what I hope will distinguish this text, the sentence would be this: I have set out to create a *paradox* instead of a *compromise*.

Let me elaborate. An introductory psychology text must satisfy two disparate audiences: professors and students. Because of the tension between the divergent needs and preferences of these audiences, textbook authors usually indicate that they have attempted to strike a compromise between being theoretical versus practical, comprehensive versus comprehensible, research oriented versus applied, rigorous versus accessible, and so forth. However, I believe that many of these dichotomies are false. As Kurt Lewin once remarked, "What could be more practical than a good theory?" Similarly, is rigorous really the opposite of accessible? Not in my dictionary. I maintain that many of the antagonistic goals that we strive for in our textbooks only seem incompatible and that we may not need to make compromises as often as we assume.

In my estimation, a good introductory textbook is a paradox in that it integrates characteristics and goals that appear contradictory. With this in mind, I have endeavored to write a text that is paradoxical in three ways. First, in surveying psychology's broad range of content, I have tried to show that our interests are characterized by diversity *and* unity. Second, I have emphasized both research *and* application and how they work in harmony. Finally, I have aspired to write a book that is challenging to think about *and* easy to learn from. Let's take a closer look at these goals.

Goals

1. To show both the unity and the diversity of psychology's subject matter. Students entering an introductory

psychology course often are unaware of the immense diversity of subjects studied by psychologists. I find this diversity to be part of psychology's charm, and throughout the book I highlight the enormous range of questions and issues addressed by psychology. Of course, psychology's diversity proves disconcerting for some students who see little continuity between such disparate areas of research as physiology, motivation, cognition, and abnormal behavior. Indeed, in this era of specialization, even some psychologists express concern about the fragmentation of the field.

However, I believe that considerable overlap exists among the subfields of psychology and that we should emphasize their common core by accenting the connections and similarities among them. Consequently, I portray psychology as an integrated whole rather than as a mosaic of loosely related parts. A principal goal of this text, then, is to highlight the unity in psychology's intellectual heritage (the themes), as well as the diversity of psychology's interests and uses (the variations).

2. To illuminate the process of research and its intimate link to application. For me, a research-oriented book is not one that bulges with summaries of many studies but one that enhances students' appreciation of the logic and excitement of empirical inquiry. I want students to appreciate the strengths of the empirical approach and to see scientific psychology as a creative effort to solve intriguing behavioral puzzles. For this reason, the text emphasizes not only what we know (and don't know) but how we attempt to find out. It examines methods in some detail and encourages students to adopt the skeptical attitude of a scientist and to think critically about claims regarding behavior.

Learning the virtues of research should not mean that students cannot also satisfy their desire for concrete, personally useful information about the challenges of everyday life. Most researchers believe that psychology has a great deal to offer to those outside the field and that psychologists should share the practical implications of their work. In this text, practical insights are carefully qualified and closely tied to data, so that students can see the interdependence of research and application. I find that students come to appreciate the science of psychology more when they see that worthwhile practical applications are derived from careful research and sound theory.

3. To make the text challenging to think about and easy to learn from. Perhaps most of all, I have sought

to create a book of ideas rather than a compendium of studies. I consistently emphasize concepts and theories over facts, and I focus on major issues and tough questions that cut across the subfields of psychology (for example, the extent to which behavior is governed by nature, nurture, and their interaction), as opposed to parochial debates (such as the merits of averaging versus adding in impression formation). Challenging students to think also means urging them to confront the complexity and ambiguity of our knowledge. Hence, the text doesn't skirt gray areas, unresolved questions, and theoretical controversies. Instead, readers are encouraged to contemplate openended questions, to examine their assumptions about behavior, and to apply psychological concepts to their own lives. My goal is not simply to describe psychology but to stimulate students' intellectual growth.

However, students can grapple with "the big issues and tough questions" only if they first master the basic concepts and principles of psychology—ideally, with as little struggle as possible. In my writing, I never let myself forget that a textbook is a tool for teaching. Accordingly, I have taken great care to ensure that the book's content, organization, writing, illustrations, and pedagogical aids work in harmony to facilitate instruction and learning.

Admittedly, these goals are ambitious. If you're skeptical, you have every right to be. Let me explain how I have tried to realize the objectives I have outlined.

Special Features

This text has a variety of unusual features, each contributing in its own way to the book's paradoxical nature. These special features include unifying themes, Personal Application sections, Critical Thinking Application sections, a didactic illustration program, WebLinks and other Internet-related features, an integrated running glossary, Concept Checks, and Practice Tests.

Unifying Themes

Chapter 1 introduces seven key ideas that serve as unifying themes throughout the text. The themes serve several purposes. First, they provide threads of continuity across chapters that help students see the connections among different areas of research in psychology. Second, as the themes evolve over the course of the book, they provide a forum for a relatively sophisticated discussion of enduring issues in psychology, thus helping to make this a "book of ideas."

Third, the themes focus a spotlight on a number of basic insights about psychology and its subject matter that should leave lasting impressions on your students. In selecting the themes, the question I asked myself (and other professors) was, "What do I really want students to remember five years from now?" The resulting themes are grouped into two sets.

THEMES RELATED TO PSYCHOLOGY AS A FIELD OF STUDY

Theme 1: Psychology is empirical. This theme is used to enhance the student's appreciation of psychology's scientific nature and to demonstrate the advantages of empiricism over uncritical common sense and speculation. I also use this theme to encourage the reader to adopt a scientist's skeptical attitude and to engage in more critical thinking about information of all kinds.

Theme 2: Psychology is theoretically diverse. Students are often confused by psychology's theoretical pluralism and view it as a weakness. I don't downplay or apologize for our field's theoretical diversity, because I honestly believe that it is one of our greatest strengths. Throughout the book, I provide concrete examples of how clashing theories have stimulated productive research, how converging on a question from several perspectives can yield increased understanding, and how competing theories are sometimes reconciled in the end.

Theme 3: Psychology evolves in a sociohistorical context.

This theme emphasizes that psychology is embedded in the ebb and flow of everyday life. The text shows how the spirit of the times has often shaped psychology's evolution and how progress in psychology leaves its mark on our society.

THEMES RELATED TO PSYCHOLOGY'S SUBJECT MATTER

Theme 4: Behavior is determined by multiple causes.

Throughout the book, I emphasize, and repeatedly illustrate, that behavioral processes are complex and that multifactorial causation is the rule. This theme is used to discourage simplistic, single-cause thinking and to encourage more critical reasoning.

Theme 5: Behavior is shaped by cultural heritage. This theme is intended to enhance students' appreciation of how cultural factors moderate psychological processes and how the viewpoint of one's own culture can distort one's interpretation of the behavior of people from other cultures. The discussions that elaborate on this theme do not simply celebrate diversity.

They strike a careful balance—that accurately reflects the research in this area—highlighting both cultural variations and similarities in behavior.

Theme 6: Heredity and environment jointly influence behavior. Repeatedly discussing this theme permits me to explore the nature versus nurture issue in all its complexity. Over a series of chapters, students gradually learn how biology shapes behavior, how experience shapes behavior, and how scientists estimate the relative importance of each. Along the way, students will gain an in-depth appreciation of what we mean when we say that heredity and environment interact.

Theme 7: People's experience of the world is highly subjective. People tend to forget the extent to which they view the world through their own personal lens. This theme is used to explain the principles that underlie the subjectivity of human experience, to clarify its

Unifying Themes Highlighted in Each Chapter

	Theme						
Chapter	1 Empiricism	2 Theoretical Diversity	3 Sociohistorical Context	4 Multifactorial Causation	5 Cultural Heritage	6 Heredity and Environment	7 Subjectivity of Experience
1 The Evolution of Psychology		O	X		M	İΧ	
2 The Research Enterprise in Psychology							
3 The Biological Bases of Behavior					1751 3416	İΧ	AgentageA
4 Sensation and Perception	exercise of a	O	ng Triputa il nd Indiana	SES CREST NETST	16	art postorica A tambér Sin	
5 Variations in Consciousness		O	X	14113 year 16114 - 1	16	eri estenion develés ten	
6 Learning	etenikolese odeniko		X	n englet store K. Kalifoliusa	10 to 10 to	İΧ	
7 Human Memory		O	mp Tentorie	***************************************	nunos (
8 Cognition and Intelligence		en en en en en en en en en en en en en e	X	tog yest ke Stituens y	76	İX	
9 Motivation and Emotion	al indusya E 1819E, descr	O	X	***************************************	36	iX	on and the same
10 Development Across the Life Span		O	X	*	74	iX	ing stamps Liking grif
11 Personality: Theory, Research, and Assessment	12.53	O	X		74		
12 Stress, Coping, and Health	BUTTON TO	Octobre 1971 edet onlehe		***************************************	Enevos Lesisque	Prizopo to accidado h	
13 Psychological Disorders	SE SOURLE SELECTO	g vilvadesia engga anti	X	***	14	İΧ	na hasovert trograpalita
14 Treatment of Psychological Disorders	COSTONIA PA	O	en an Lea	usu at le disk gazet	M	SERVICE LIGHT	grand to
15 Social Behavior	0	mnotříbne	72 — Ville II II 737 — 27%21 V		->-	orac orac	

implications, and to repeatedly remind the readers that their view of the world is not the only legitimate view.

After all seven themes have been introduced in Chapter 1, different sets of themes are discussed in each chapter as they are relevant to the subject matter. The connections between a chapter's content and the unifying themes are highlighted in a standard section near the end of the chapter, in which I reflect on the "lessons to be learned" from the chapter. The discussions of the unifying themes are largely confined to these sections, titled "Putting It in Perspective." No effort was made to force every chapter to illustrate a certain number of themes. The themes were allowed to emerge naturally, and I found that two to five surfaced in any given chapter. The accompanying chart shows which themes are highlighted in each chapter. Color-coded theme icons found near the beginning of each "Putting It in Perspective" section highlight the specific themes featured in each chapter.

Personal Applications

To reinforce the pragmatic implications of theory and research stressed throughout the text, each chapter includes a Personal Application section that highlights the practical side of psychology. Each Personal Application devotes two to five pages of text (rather than the usual box) to a single issue that should be of special interest to many of your students. Although most of the Personal Application sections have a "how to" character, they continue to review studies and summarize data in much the same way as the main body of each chapter. Thus, they portray research and application not as incompatible polarities but as two sides of the same coin. Many of the Personal Applications—such as those on finding and reading journal articles, understanding art and illusion, and improving stress management—provide topical coverage unusual for an introductory text.

Critical Thinking Applications

A great deal of unusual coverage can also be found in the Critical Thinking Applications that follow the Personal Applications. Conceived by Diane Halpern (Claremont McKenna College), a leading authority on critical thinking, these applications are based on the assumption that critical thinking skills can be taught. They do not simply review research critically, as is typically the case in other introductory texts. Instead, they introduce and model a host of critical

thinking skills, such as looking for contradictory evidence or alternative explanations; recognizing anecdotal evidence, circular reasoning, hindsight bias, reification, weak analogies, and false dichotomies; evaluating arguments systematically; and working with cumulative and conjunctive probabilities.

The specific skills discussed in the Critical Thinking Applications are listed in the accompanying table, where they are organized into five categories using a taxonomy developed by Halpern (1994). In each chapter, some of these skills are applied to topics and issues related to the chapter's content. For instance, in the chapter that covers drug abuse (Chapter 5), the concept of alcoholism is used to highlight the immense power of definitions and to illustrate how circular reasoning can seem so seductive. Skills that are particularly important may surface in more than one chapter, so students see them applied in a variety of contexts. For example, in Chapter 7 students learn how hindsight bias can contaminate memory and in Chapter 11 they see how hindsight can distort analyses of personality. Repeated practice across chapters should help students spontaneously recognize the relevance of specific critical thinking skills when they encounter certain types of information. The skills approach taken to critical thinking and the content it has spawned are unprecedented for an introductory psychology text.

A Didactic Illustration Program

When I first outlined my plans for this text, I indicated that I wanted every aspect of the illustration program to have a genuine didactic purpose and that I wanted to be deeply involved in its development. In retrospect, I had no idea what I was getting myself into, but it has been a rewarding learning experience. In any event, I have been intimately involved in planning every detail of the illustration program. I have endeavored to create a program of figures, diagrams, photos, and tables that work hand in hand with the prose to strengthen and clarify the main points in the text.

The most obvious results of our didactic approach to illustration are the four summary spreads that combine tabular information, photos, diagrams, and sketches to provide exciting overviews of key ideas in the areas of learning, personality theory, psychopathology, and psychotherapy. But I hope you will also notice the subtleties of the illustration program. For instance, diagrams of important concepts (conditioning, synaptic transmission, EEGs, experimental design, and so forth) are often repeated

Taxonomy of Skills Covered in the Critical Thinking Applications

Understanding the way definitions shape how people think about issues	Chapter 5
dentifying the source of definitions	Chapter 5
Avoiding the nominal fallacy in working with definitions and labels	Chapter 5
Recognizing and avoiding reification	Chapter 8
Argument/Persuasion Analysis Skills	e Form to the research the experient feature research
Understanding the elements of an argument	Chapter 9
Recognizing and avoiding common fallacies, such as irrelevant reasons, circular reasoning, slippery slope reasoning, weak analogies, and false dichotomies	Chapters 9 and 10
Evaluating arguments systematically	Chapter 9
Recognizing and avoiding appeals to ignorance	Chapter 8
Inderstanding how Pavlovian conditioning can be used to manipulate emotions	Chapter 6
Developing the ability to detect conditioning procedures used in the media	Chapter 6
Recognizing social influence strategies	Chapter 15
udging the credibility of an information source	Chapter 15
Skills in Thinking as Hypothesis Testing	
ooking for alternative explanations for findings and events	Chapters 1, 8, and 10
ooking for contradictory evidence	Chapters 1, 3, and 8
Recognizing the limitations of anecdotal evidence	Chapters 2 and 14
Inderstanding the need to seek disconfirming evidence	Chapter 7
Inderstanding the limitations of correlational evidence	Chapters 10 and 12
Understanding the limitations of statistical significance	Chapter 12
Recognizing situations in which placebo effects might occur	Chapter 14
ikills in Working with Likelihood and Uncertainty	near thinson and the first terms
Itilizing base rates in making predictions and evaluating probabilities	Chapter 12
Inderstanding cumulative probabilities	Chapter 13
Inderstanding conjunctive probabilities	Chapter 13
Inderstanding the limitations of the representativeness heuristic	Chapter 13
Inderstanding the limitations of the availability heuristic	Chapter 13
Recognizing situations in which regression toward the mean may occur	Chapter 14
Inderstanding the limits of extrapolation	Chapter 3
Decision-Making and Problem-Solving Skills	terri de contencentencia interferanti di
Jsing evidence-based decision making	Chapter 2
lecognizing the bias in hindsight analysis	Chapters 7 and 11
eeking information to reduce uncertainty	Chapter 12
Naking risk-benefit assessments	Chapter 12
Generating and evaluating alternative courses of action	Chapter 12
Recognizing overconfidence in human cognition	Chapter 7
Inderstanding the limitations and fallibility of human memory	Chapter 7
Understanding how contrast effects can influence judgments and decisions	Chapter 4
Recognizing when extreme comparitors are being used	Chapter 4

in several chapters (with variations) to highlight connections among research areas and to enhance students' mastery of key ideas. Numerous easy-tounderstand graphs of research results underscore psychology's foundation in research, and photos and diagrams often bolster each other (for example, see the treatment of classical conditioning in Chapter 6). Color is used carefully as an organizational device, and visual schematics help simplify hard-tovisualize concepts (see, for instance, the figure explaining reaction range for intelligence in Chapter 8). And in this edition we have strived to enhance the realism and pedagogical value of our drawings of the brain and other neuroanatomy. All of these efforts have gone toward the service of one master: the desire to make this an inviting book that is easy to learn from.

Internet-Related Features

The Internet is rapidly altering the landscape of modern life, and students clearly need help dealing with the information explosion in cyberspace. To assist them, this edition has two features. First, I recruited web expert Vincent Hevern (Le Moyne College), the Internet editor for the Society for the Teaching of Psychology, to write a concise preface that explains the essentials of the Internet to the uninitiated. This preface, which follows the student preface, briefly explains URLs, domain names, hyperlinks, search engines, and so forth. Second, I also asked Professor Hevern to evaluate hundreds of psychology-related sites on the web and come up with some recommended sites that appear to provide reasonably accurate, balanced, and empirically sound information. Short descriptions of these recommended websites (called Web Links) are dispersed throughout the chapters, adjacent to related topical coverage. Because URLs change frequently, the URLs for the Web Links have been placed in an Appendix (C) in the back of the book. Insofar as students are interested in visiting these sites, we recommend that they do so through the Psychology: Themes & Variations, Briefer Version homepage at the Wadsworth Psychology Study Center website (http://www.psychology.wadsworth.com/ weiten_briefer_6e/). Links to all the recommended websites are maintained there, and the Wadsworth webmaster periodically updates the URLs.

Integrated Running Glossary

An introductory text should place great emphasis on acquainting students with psychology's technical language—not for the sake of jargon, but because a great many key terms are also cornerstone concepts (for example, independent variable, reliability, and cognitive dissonance). This text handles terminology with a running glossary embedded in the prose itself. The terms are set off in purple boldface print, and the definitions follow in purple boldface italics. This approach retains the two advantages of a conventional running glossary: vocabulary items are made salient, and their definitions are readily accessible. However, it does so without interrupting the flow of discourse, while eliminating redundancy between text matter and marginal entries.

Concept Checks

To help students assess their mastery of important ideas, Concept Checks are sprinkled throughout the book. In keeping with my goal of making this a book of ideas, the Concept Checks challenge students to apply ideas instead of testing rote memory. For example, in Chapter 6 the reader is asked to analyze realistic examples of conditioning and identify conditioned stimuli and responses, reinforcers, and schedules of reinforcement. Many of the Concept Checks require the reader to put together ideas introduced in different sections of the chapter. For instance, in Chapter 4 students are asked to identify parallels between vision and hearing. Some of the Concept Checks are quite challenging, but students find them engaging, and they report that the answers (available in Appendix A in the back of the book) are often illuminating.

Practice Tests

Each chapter ends with a 15-item multiple-choice Practice Test that should give students a realistic assessment of their mastery of that chapter and valuable practice taking the type of test that many of them will face in the classroom (if the instructor uses the Test Bank). This feature grew out of some research that I conducted on students' use of textbook pedagogical devices (see Weiten, Guadagno, & Beck, 1996). This research indicated that students pay scant attention to some standard pedagogical devices. When I grilled my students to gain a better undertstanding of this finding, it quickly became apparent that students are very pragmatic about pedagogy. Essentially, their refrain was "We want study aids that will help us pass the next test." With this mandate in mind, I devised the Practice Tests. They should be useful, as I took most of the items from Test Banks for previous editions.

In addition to the special features just described, the text includes a variety of more conventional, "tried and true" features as well. The back of the book contains a standard alphabetical glossary. Opening outlines preview each chapter, and a thorough review of key ideas appears at the end of each chapter, along with lists of key terms (with page numbers indicating where the terms were introduced) and key people (important theorists and researchers). I make frequent use of italics for emphasis, and I depend on frequent headings to maximize organizational clarity. The preface for students describes these pedagogical devices in more detail.

Content

The text is divided into 15 chapters, which follow a traditional ordering. The chapters are not grouped into sections or parts, primarily because such groupings can limit your options if you want to reorganize the order of topics. The chapters are written in a way that facilitates organizational flexibility, as I always assumed that some chapters might be omitted or presented in a different order.

The topical coverage in the text is relatively conventional, but there are some subtle departures from the norm. For instance, Chapter 1 presents a relatively "meaty" discussion of the evolution of ideas in psychology. This coverage of history lays the foundation for many of the crucial ideas emphasized in subsequent chapters. The historical perspective is also my way of reaching out to the students who find that psychology just isn't what they expected it to be. If we want students to contemplate the mysteries of behavior, we must begin by clearing up the biggest mysteries of them all: "Where did these rats, statistics, synapses, and genes come from, what could they possibly have in common, and why doesn't this course bear any resemblance to what I anticipated?" I use history as a vehicle to explain how psychology evolved into its modern form and why misconceptions about its nature are so common.

I also devote an entire chapter (Chapter 2) to the scientific enterprise—not just the mechanics of research methods but the logic behind them. I believe that an appreciation of the nature of empirical evidence can contribute greatly to improving students' critical thinking skills. Ten years from now, many of the "facts" reported in this book will have changed, but an understanding of the methods of science will remain invaluable. An introductory psychology course, by itself, isn't going to make a student think like a scientist, but I can't think of a better place to start the process.

As its title indicates, this book is a condensed version of my introductory text, *Psychology: Themes and*

Variations. I have reduced the length of the book from 325,000 words to 232,000 words. How was this reduction in size accomplished? It required a great many difficult decisions, but fortunately, I had excellent advice from a team of professors who served as consultants. About 40% of the reduction came from deleting entire topics, such as psychophysics, mental retardation, blocking in classical conditioning, and so forth. However, the bulk of the reduction was achieved by compressing and simplifying coverage throughout the book. I carefully scrutinized the parent book sentence by sentence and forced myself to justify the existence of every study, every example, every citation, every phrase. The result is a thoroughly rewritten text, rather than one that was reassembled through "cut and paste" techniques.

Changes in the Sixth Edition

A good textbook must evolve with the field of inquiry it covers. Although the professors and students who used the first five editions of this book did not clamor for alterations, there are some changes. The most significant change is the reduction from 16 chapters in previous editions to 15 in this edition. I chose to make this reduction because 15 chapters is more compatible with the typical length of a semester, which is usually 15 weeks. This reduction was accomplished by combining the two chapters that were previously devoted to cognition and intelligence into one chapter (now Chapter 8). Another major change is our systematic effort to improve the drawings of neuroanatomy throughout the book. Over the course of the last several editions, as we added new neuroanatomical drawings from a variety of sources, the anatomical illustrations gradually became less consistent in style than I wanted them to be. To remedy this problem, we secured the services of Fred Harwin, a superb medical illustrator, who redrew all the neuroanatomical graphics in a consistent (and strikingly beautiful) style.

We have also added cartoons to the text for the first time. I have wanted to add them for a while, but constraints on the length of a brief text made doing so a tough decision. However, the reduction to 15 chapters made length constraints a less pressing issue, allowing us to incorporate some carefully selected cartoons. My take on cartoons is that a little comic relief can help maintain students' interest. Moreover, some of the comics can be surprisingly effective in reinforcing key points in the text.

You will also find a variety of other changes in this edition, including a new color treatment of the inte-

grated running glossary intended to make it more salient to students and an enhancement of the lists of Key Terms and Key People found near the end of each chapter, which now include the page numbers on which the key terms or key people were first introduced. Also new to this edition are the theme icons, found at the beginning of each "Putting It in Perspective" section. These icons should help to make the thematic structure of the book more prominent.

Of course, the book has been thoroughly updated to reflect recent advances in the field. One of the exciting things about psychology is that it is not a stagnant discipline. It continues to move forward at what seems a faster and faster pace. This progress has necessitated a host of specific content changes that you'll find sprinkled throughout the chapters. Of the roughly 3000 references cited in the text, almost 800 are new to this edition.

PsykTrek: A Multimedia Introduction to Psychology

PsykTrek is a multimedia supplement that will provide students with new opportunities for active learning and reach out to "visual learners" with greatly increased efficacy. PsykTrek is intended to give students a second pathway to learning much of the content of introductory psychology. Although it does not cover all of the content of the introductory course, I think you will see that a great many key concepts and principles can be explicated more effectively in an interactive audiovisual medium than in a textbook.

PsykTrek consists of four components. The main component is a set of 62 Interactive Learning Modules that present the core content of psychology in a whole new way. These tutorials include thousands of graphics, hundred of photos, hundreds of animations, approximately four hours of narration, 35 carefully selected videos, and about 160 uniquely visual concept checks and quizzes. The Simulations allow students to explore complex psychological phenomena in depth. They are highly interactive, experiential demonstrations that will enhance students' appreciation of research methods. Three new simulations can be found on PsykTrek 2.0. A Multimedia Glossary allows students to look up over 800 psychological terms, access hundreds of pronunciations of obscure words, and pull up hundreds of related diagrams, photos, and videos. The Video Selector allows students to directly access the 35 video segments that are otherwise embedded in the Interactive Learning Modules.

The key strength of *PsykTrek* is its ability to give students new opportunities for active learning out-

side the classroom. For example, students can run themselves through re-creations of classic experiments to see the complexities of data collection in action. Or they can play with visual illusions on screen in ways that will make them doubt their own eyes. Or they can stack color filters on screen to demonstrate the nature of subtractive color mixing. *PsykTrek* is intended to supplement and complement *Psychology: Themes & Variations,* Briefer Version. For instance, after reading about operant conditioning in the text, a student could work through three interactive tutorials on operant principles, watch three videos (including historic footage of B. F. Skinner shaping a rat), and then try to shape Morphy, the virtual rat in one of the simulations.

Other Supplementary Materials

The teaching/learning package that has been developed to supplement *Psychology: Themes and Variations, Briefer Version* also includes many other useful tools. The development of all its parts was carefully coordinated so that they are mutually supported.

Concept Charts for Study and Review

To help your students organize and assimilate the main ideas contained in the text, I have created a booklet of Concept Charts. This booklet contains a two-page Concept Chart for each chapter. Each Concept Chart provides a detailed visual map of the key ideas found in the main body of that chapter. These color-coded, hierarchically organized charts create snapshots of the chapters that should allow your students to quickly see the relationships among ideas and sections.

Art and Lecture Outline Booklet

This supplement is a great tool for students. It features printed PowerPoint® slides and selected textbook art. The slides match the PowerPoint® presentations on the Multimedia Manager product, allowing students to make notes directly on the figures.

Study Guide (by Richard Stalling and Ronald Wasden)

For your students, an exceptionally thorough *Study Guide* is available to help them master the information in the text. It was written by two of my former professors, Richard Stalling and Ronald Wasden of Bradley University. They have over 30 years of experience as a team writing study guides for introductory psychology texts, and their experience is readily apparent in the high-quality materials that they have developed.

The review of key ideas for each chapter is made up of an engaging mixture of matching exercises, fill-in-the-blank items, free-response questions, and programmed learning. Each review is organized around learning objectives that I wrote. The *Study Guide* is closely coordinated with the *Test Bank*, as the same learning objectives guided the construction of the questions in the *Test Bank*. The *Study Guide* also includes a review of key terms, a review of key people, and a self-test for each chapter in the text.

Instructor's Resource Manual (coordinated by Randolph Smith)

A talented roster of professors have contributed to the *Instructor's Resource Manual (IRM)* in their respective areas of expertise. The *IRM* was developed under the guidance of Randolph Smith, the editor of the journal *Teaching of Psychology*. It contains a diverse array of materials designed to facilitate efforts to teach the introductory course and includes the following sections.

- The Instructor's Manual, by Randolph Smith (Kennesaw State University), contains a wealth of detailed suggestions for lecture topics, class demonstrations, exercises, discussion questions, and suggested readings, organized around the content of each chapter in the text. It also highlights the connections between the text coverage and PsykTrek content and features an expanded collection of masters for class handouts.
- Strategies for Effective Teaching, by Joseph Lowman (University of North Carolina), discusses such practical issues as what to put in a course syllabus, how to handle the first class meeting, how to cope with large classes, and how to train and organize teaching assistants.
- AV Media for Introductory Psychology, by Russ Watson (College of DuPage), provides a comprehensive, up-to-date critical overview of educational films relevant to the introductory course.
- The Use of Computers in Teaching Introductory Psychology, by Susan J. Shapiro (Indiana University—East), offers a thorough listing of computer materials germane to the introductory course and analyzes their strengths and weaknesses.
- Integrating Writing into Introductory Psychology, by Jane Jegerski (Elmhurst College), examines the writing-across-the-curriculum movement and provides suggestions and materials for specific writing assignments chapter by chapter.
- Crossing Borders/Contrasting Behaviors: Using Cross-Cultural Comparisons to Enrich the Introductory Psychology Course, by Ginny Zhan, Bill Hill and Michael

- Reiner (Kennesaw State University), discusses the movement toward "internationalizing" the curriculum and provides suggestions for lectures, exercises, and assignments that can add a cross-cultural flavor to the introductory course.
- Teaching Introductory Psychology with the World Wide Web, by Michael R. Snyder (University of Alberta), discusses how to work Internet assignments into the introductory course and provides a guide to many psychology-related sites on the World Wide Web.
- Using InfoTrac in Introductory Psychology, by Randolph Smith, discusses how to make effective use of the InfoTrac subscription that is made available to students with this text. InfoTrac College Edition is an online database of recent full-text articles from a huge collection of scholarly and popular periodicals.

Test Bank (by S. A. Hensch)

Shirley Hensch (University of Wisconsin, Marshfield/ Wood County) has done an excellent job revising all the test questions for this edition of the book. The questions are closely tied to the chapter learning objectives and to the lists of key terms and key people found in both the text and the *Study Guide*. The items are categorized as (a) factual, (b) conceptual/applied, (c) integrative, or (d) critical thinking questions. The *Test Bank* also includes a separate section that contains about 700 multiple-choice questions based on the content of *PsykTrek's* Interactive Learning Modules.

Computerized Test Items

Electronic versions of the *Test Bank* are available for a variety of computer configurations. The *ExamView* software is user-friendly and allows teachers to insert their own questions and to customize those provided.

Test Bank Volume II

Available in *ExamView* only, this alternative test bank allows professors to draw from an entirely new set of questions. Each chapter has 100–125 multiple choice questions.

Transparencies (by Susan Shapiro)

A collection of *text-specific transparencies* has been created to enhance visual presentations in the classroom. The development of the transparencies was supervised by Susan Shapiro (Indiana University–East), who has great expertise in the use of visual media in the classroom. Suzie has done a terrific job making the transparencies clear, readable, pedagogically sound, and technically accurate. A second set

of transparencies from other Wadsworth psychology texts is also available.

Challenging Your Preconceptions: Thinking Critically About Psychology, 2nd Edition (by Randolph Smith)

This brief paperback book is a wonderful introduction to critical thinking as it applies to psychological issues. Written by Randolph Smith (Kennesaw State University), this book helps students apply their critical thinking skills to a variety of topics, including hypnosis, advertising, misleading statistics, IQ testing, gender differences, and memory bias. Each chapter ends with critical thinking challenges that give

students opportunities to practice their critical thinking skills.

Cross-Cultural Perspectives in Introductory Psychology (by William Price and Richley Crapo)

This book, containing 27 articles on cultural groups around the globe, is an ideal supplementary book. Each cross-cultural reading or vignette enriches the traditional material of the course. These articles were specifically chosen to increase student understanding of the similarities and differences among the peoples of the world as they relate to psychological principles, concepts, and ideas.

Acknowledgments

Creating an introductory psychology text is a complicated challenge, and a small army of people have contributed to the evolution of this book. Foremost among them are various editors that I have worked with over the years—Claire Verduin, C. Deborah Laughton, John Bergez, Phil Curson, Eileen Murphy, and Edith Beard Brady. They have helped me immeasurably, and each has become a treasured friend along the way. I am especially indebted to Claire, who educated me in the intricacies of textbook publishing, and to John, who has left an enduring imprint on my writing.

The challenge of meeting a difficult schedule in producing this book was undertaken by a talented team of people coordinated by Tom Dorsaneo, who did a superb job pulling it all together. Credit for the book design goes to Gladys Rosa-Mendoza and John Walker, who were very creative in building on the previous design developed by John Odam. Linda Rill handled permissions and photo research with enthusiasm and extraordinary efficiency, and Jackie Estrada did an outstanding job once again in copy editing the manuscript. Fred Harwin, Jeanne Koelling, Suzanne Olivier, and Cyndie H. Wooley made stellar contributions to the new artwork, and Alma Bell efficiently oversaw the composition process.

A host of psychologists deserve thanks for the contributions they made to this book. I am grateful to Diane Halpern for her work on the Critical Thinking Applications; to Vinny Hevern for contributing the Web Links and Internet essay; to Rick Stalling and Ron Wasden for their work on the *Study Guide*; to Shirley

Hensch for her work on the *Test Bank*; to Randy Smith, Joseph Lowman, Russ Watson, Jane Jegerski, Ginny Zhan, Bill Hill, Michael Reiner, Susan Shapiro, and Michael Snyder for their contributions to the *Instructor's Resource Manual*; to Susan Shapiro for her work on the transparencies; to Jim Calhoun for providing item analysis data for the test items; to Harry Upshaw, Larry Wrightsman, Shari Diamond, Rick Stalling, and Claire Etaugh for their help and guidance over the years; and to the chapter consultants listed on page xviii and the reviewers listed on page xix, who provided insightful and constructive critiques of various portions of the manuscript.

Many other people have also contributed to this project, and I am grateful to all of them for their efforts. At the College of DuPage, where I taught until 1991, all of my colleagues in psychology provided support and information at one time or another, but I am especially indebted to Barb Lemme, Alan Lanning, Pat Puccio, and Don Green. I also want to thank my former colleagues at Santa Clara University (especially Tracey Kahan, Tom Plante, and Jerry Burger), who were a fertile source of new ideas, and the students at UNLV who helped complete the reference entries for this edition (Jane Karwoski, Gary Ogren, and Dionna Phillips).

My greatest debt is to my wife, Beth Traylor, who has been a steady source of emotional sustenance while enduring the grueling rigors of her medical career, and to my son T. J., for making Dad laugh all the time.

Wayne Weiten

Integrated Coverage of Evolutionary Psychology

Emergence of evolutionary psychology as a major theory, pp. 12–13

Evolutionary basis of sex differences in spatial skills, pp. 12, 24–25 Critique of evolutionary view of sex differences in spatial skills, p. 25

Overview of Darwin's original theory and key concepts, pp. 80–81 Further refinements to evolutionary theory, pp. 81–82

Evolutionary bases of selected animal behaviors, pp. 82-83

Evolutionary significance of color vision, p. 99

Evolutionary basis of cortical "face detectors," p. 99

Evolution and sex differences in taste sensitivity, p. 116

Evolutionary roots of consciousness, p. 131

Evolutionary bases of sleep, p. 137

Evolutionary significance of conditioned taste aversion, p. 179

Evolution and species-specific learning propensities, pp. 179–180

Evolutionary analysis of error and bias in decision making, p. 237

Evolutionary basis of fast and frugal heuristics in decision making, pp. 237–238

Evolutionary approach to motivation, p. 263

Evolution and mate selection in animals, p. 269

Implications of parental investment theory for human sexual behavior, pp. 269–271

Evolution and sex differences in sexual activity, p. 270

Evolutionary basis of mating priorities, pp. 270-271

Critique of evolutionary analyses of human sexual behavior, pp. 271–272

Evolutionary theories of emotion, pp. 283-284

Bowlby's evolutionary view of attachment, p. 299

Evolutionary perspective on innate cognitive abilities, p. 307

Evolutionary approach to explaining gender differences in human abilities, p. 319

Evolutionary basis of Big-Five personality traits, pp. 346–347

Problem of hindsight in evolutionary analyses of personality,

p. 355

Evolution, preparedness, and phobias, p. 396

Evolutionary explanations of bias in person perception, p. 459

Evolutionary analyses of how aspects of physical appearance influence reproductive fitness, p. 466

Evolutionary basis of mate-attraction tactics, p. 467

Evolutionary basis of sex differences in the perception of sexual interest and relationship commitment, p. 467

Integrated Coverage of Cultural Factors

Increased interest in cultural diversity, pp. 11–12 Introduction of theme: Behavior is shaped by cultural heritage, p. 18

Cultural variations in the pace of life, pp. 39-40

Culture and depth perception, pp. 107-108

Cultural variations in susceptibility to illusions, pp. 110-111

Cultural variations in taste preferences, p. 115

Cultural variations in pain tolerance, p. 118

Culture and patterns of sleeping, pp. 136-137

Cultural variations in the significance of dreams, pp. 140-141

Cultural differences in field dependence-independence, p. 230

Cultural variations in holistic versus analytic cognitive style, pp. 230–231

IQ testing in non-Western cultures, pp. 243-244

Cultural and ethnic differences in IQ scores, pp. 247-249

Culture and food preferences, pp. 266-267

Cross-cultural similarity of mating preferences, p. 271

Cultural similarities in expressive aspects of emotions, p. 280

Cultural variations in categories of emotions, display rules, p. 281

Culture and motor development, pp. 298-299

Culture and patterns of attachment, p. 300

Cross-cultural validity of Piaget's theory, p. 306

Cross-cultural validity of Kohlberg's theory, p. 309

Cross-cultural validity of the Big Five trait model, p. 347

Culture and independent versus interdependent views of self,

pp. 347, 349

Culture and the concept of normality, p. 391

Relativistic versus pancultural view of psychological disorders,

pp. 411, 414

Culture-bound disorders, p. 414

Cultural variations in existence of eating disorders, p. 416
Contribution of Western cultural values to eating disorders, p. 417
Western cultural roots of psychotherapy, p. 440
Barriers to the use of therapy by ethnic minorities, p. 441
Culture, collectivism, and individualism, pp. 461–462
Culture and attributional bias, pp. 461–463
Cultural variations in romantic relationships, p. 466
Cultural variations in conformity and obedience, p. 476
Culture and social loafing, pp. 477–478
Ethnic stereotypes and modern racism, p. 482
Contribution of attribution bias to ethnic stereotypes, pp. 482–483
Learning of ethnic stereotypes, p. 483
Outgroup homogeneity and ethnic stereotypes, p. 483

Integrated Coverage of Issues Related to Gender

Important women in the history of psychology, p. 5
Gender and spatial skills, p. 12
Alternative explanations for sex differences in spatial skills, p. 25
Health correlates of closetedness among gay males, pp. 30–32
Gender differences in online sexual pursuits, pp. 41–42
Association between sex and color blindness, p. 100
Gender gap among super tasters, p. 116
Frequency of childhood sexual abuse among men and women, p. 208
Physiology of human sexual response in males and females,

pp. 268–269
Sex differences in parental investment, pp. 269–270
Gender differences in number of sexual partners, uncommitted sex, p. 270

Gender differences in mating priorities, pp. 270–271
Prevalence of homosexuality among males and females, pp. 272–273

Childhood masculinity and femininity in relation to development of homosexuality, p. 273

Genetic influences on homosexuality in males and females, pp. 273–274

Possible link between prenatal exposure to hormone (DES) and lesbian sexual orientation, p. 274

Development of secondary sex characteristics in males and females, p. 310

Effects of early and late maturation in males and females, p. 310

Postpartum stress in women, p. 315

Mothers' adjustment to the empty nest, p. 315

Effects of menopause, p. 316

Nature of gender stereotypes, p. 318

Gender differences in cognitive abilities, pp. 318-319

Gender differences in social behavior, p. 319

Evolutionary explanations for gender differences, p. 319

Contribution of hormones to gender differences, pp. 319-320

Brain organization and gender differences, p. 320

Environmental processes contributing to gender differences, pp. 320–321

Sources of gender-role socialization, p. 321

Possible social ramifications of father absence, p. 322

Controversy regarding the effects of father absence, pp. 322-323

Concerns about possible sexist bias in Freudian theory, p. 337

AIDS transmission in males and females, p. 377

Gender gap in the prevalence of panic disorder, p. 394

Gender gap in the prevalence of somatization disorder, p. 397

Gender gap in the prevalence of major depression, p. 402

Gender, depression, and rumination, p. 404

Gender gap in the prevalence of eating disorders, p. 416

Eating disorders and cultural pressures on females to be thin, p. 417

Gender and willingness to seek therapy, p. 425

Importance of therapist's gender in selecting a psychotherapist, p. 448

Gender gap in the importance of physical appearance, p. 463 Gender disparities in characteristics sought in partners, pp. 466–467

Gender disparities in tactics used to attract mates, p. 467 Gender disparities in the perception of sexual interest and relationship commitment, p. 467

Gender bias in attributions for success, pp. 482-483

Chapter Consultants

Chapter 1

Charles L. Brewer Furman University

C. James Goodwin

Wheeling Jesuit University

David Hothersall

Ohio State University

E. R. Hilgard

Stanford University

Chapter 2

Larry Christensen

Texas A & M University

Francis Durso

University of Oklahoma

Donald H. McBurney

University of Pittsburgh

Wendy Schweigert

Bradley University

Chapter 3

Nelson Freedman

Queen's University at Kingston

Michael W. Levine

University of Illinois at Chicago

James M. Murphy

Indiana University-Purdue University

at Indianapolis

Paul Wellman

Texas A & M University

Chapter 4

Nelson Freedman

Queen's University at Kingston

Kevin Jordan

San Jose State University

Michael W. Levine

University of Illinois at Chicago

John Pittenger

University of Arkansas, Little Rock

Lawrence Ward

University of British Columbia

Chapter 5

Frank Etscorn

New Mexico Institute of Mining and

CHAPTER CONSULTANTS

Technology

Tracey L. Kahan

Santa Clara University

Charles F. Levinthal

Hofstra University

Wilse Webb

University of Florida

Chapter 6

A. Charles Catania

University of Maryland

Michael Domjan

University of Texas, Austin

William C. Gordon

University of New Mexico

Barry Schwartz

Swarthmore College

Chapter 7

Tracey L. Kahan

Santa Clara University

Ian Neath

Purdue University

Tom Pusateri

Loras College

Stephen K. Reed

San Diego State University

Patricia Tenpenny

Loyola University, Chicago

Chapter 8

John Best

Eastern Illinois University

David Carroll

University of Wisconsin-Superior

Charles Davidshofer

Colorado State University

Shalynn Ford

Teikyo Marycrest University

Tom Pusateri

Loras College

Lorus conege

Stephen K. Reed

San Diego State University

Timothy Rogers

University of Calgary

Dennis Saccuzzo

San Diego State University

Chapter 9

Robert Franken

University of Calgary

Russell G. Geen

University of Missouri

Douglas Mook

University of Virginia

D. Louis Wood

University of Arkansas, Little Rock

Chapter 10

Ruth L. Ault

Davidson College

John C. Cavanaugh

University of Delaware

Claire Etaugh

Bradley University

Barbara Hansen Lemme

College of DuPage

Chapter 11

Susan Cloninger

Russel Sage College

Caroline Collins

University of Victoria

Christopher F. Monte

Manhattanville College

Chapter 12

Robin M. DiMatteo

University of California, Riverside

Jess Feist

McNeese State University

Chris Kleinke

University of Alaska, Anchorage

Chapter 13

David A. F. Haaga

American University

Richard Halgin

University of Massachusetts, Amherst

Chris L. Kleinke

University of Alaska, Anchorage

Elliot A. Weiner

Pacific University

Chapter 14

Gerald Corey

California State University, Fullerton

Herbert Goldenberg

California State University, Los Angeles

Jane S. Halonen

Alverno College

Thomas G. Plante

Santa Clara University

Chapter 15

Jerry M. Burger

Santa Clara University

Stephen L. Franzoi

Marquette University

Donelson R. Forsyth

Virginia Commonwealth University