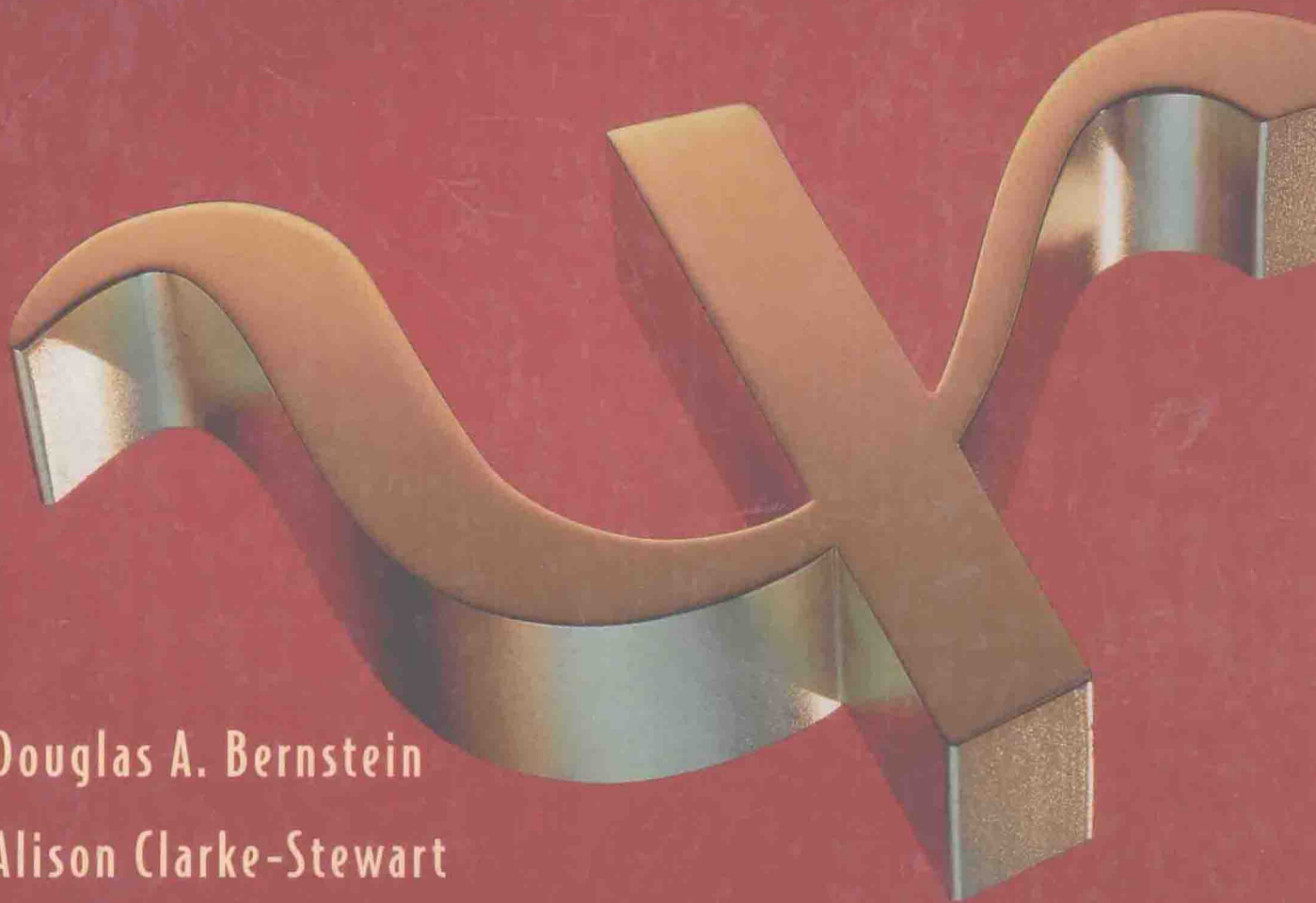


Psychology

THIRD EDITION



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*To the researchers, past and present,
whose work embodies psychology today,
and to the students who will follow
in their footsteps to shape the psychology
of tomorrow.*

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Preface

In revising *Psychology* we have rededicated ourselves to the goals we pursued in the first two editions:

- To explore the full range of psychology, from cell to society, in an eclectic manner as free as possible from theoretical bias.
- To balance our need to explain the content of psychology with an emphasis on the *doing* of psychology, through a blend of conceptual discussion and description of research studies.
- To foster scientific attitudes and to help our readers learn to think critically by examining the ways that psychologists have solved, or failed to solve, fascinating puzzles of behavior and mental processes.
- To produce a text that, without oversimplifying psychology, is clear, accessible, and enjoyable for the student to read—even spiced now and again with humor.
- To demonstrate that, in spite of its breadth and diversity, psychology is a notably integrated discipline in which each subfield is linked to other subfields by common interests and overarching research questions. The productive cross-fertilization among social, clinical, and biological psychologists in researching health and illness is just one recent example of how different types of psychologists benefit from and build on one another's work.

Preparing the Third Edition provided us with new ways to do justice to our goals.

We sought to respond to the needs of instructors who wanted us to reduce or expand coverage of various topics. For example, many instructors asked us to expand our coverage of research methods. The result, a new Chapter 2, not only introduces students to the methodology of psychological research, it also grounds students in the rigors of critical thinking.

We sought to strike an ideal balance between classic and current research. The important historic findings of psychological research are here, but so is coverage of much recent work. Approximately one third of the research citations are new to the Third Edition, and we have added the latest information on such topics as:

- Quasi-experimental designs (Chapter 2)
- Identity and development of the self (Chapter 3)
- Plasticity in the brain (Chapter 4)
- Parallel and hierarchical processing of visual information (Chapter 5)
- Network processing of sensory information (Chapter 6)
- Attention and automatic processing (Chapter 6)
- Computational view of perception (Chapter 6)
- Mental processing without awareness (Chapter 7)
- Blindsight (Chapter 7)
- The neuropsychology of consciousness (Chapter 7)
- The role of neural networks in learning (Chapter 8)
- Explicit and implicit memory (Chapter 9)
- Transfer-appropriate and parallel distributed processing models of memory (Chapter 9)
- Semantic memory networks (Chapter 9)
- An ecological approach to mental abilities (Chapter 11)
- The role of the paraventricular nucleus in hunger and eating (Chapter 12)
- Sexual orientation (Chapter 12)
- Health-belief and stages-of-readiness models of health behavior (Chapter 13)
- The *Life Experience Survey* (Chapter 13)
- Preventing and coping with AIDS (Chapter 13)
- The MMPI-2 (Chapter 14)
- The DSM-IV classification of psychological disorders (Chapter 15)
- Seasonal affective disorder (Chapter 15)
- Social construction of the self (Chapter 17)
- Attraction and personality style (Chapter 17)
- Descriptive and injunctive norms (Chapter 18)
- Causes and management of interpersonal conflict (Chapter 18)

The Third Edition also contains abundant new material on human diversity. Throughout the text students will encounter recent research on multicultural phenomena both domestic and global. We introduce this multicultural emphasis in Chapter 1, and follow it through such topics as:

- Human diversity and research methods (Chapter 2)
- Culture and cognitive development (Chapter 3)
- Forming a personal and ethnic identity (Chapter 3)
- Culture, experience, and perception (Chapter 6)
- Cultural factors in learning and teaching (Chapter 8)
- Knowledge, language, and culture (Chapter 10)
- Cultural differences in logical reasoning (Chapter 10)
- Bilingualism (Chapter 10)
- Cultural bias in mental ability testing (Chapter 11)
- Ethnic differences in IQ (Chapter 11)

- Cultural aspects of emotional expression (Chapter 12)
- Cultural and gender differences in achievement motivation (Chapter 12)
- Cultural factors in personality development (Chapter 14)
- Sociocultural factors in psychological disorders (Chapter 15)
- Gender and cultural differences in depression and suicide (Chapter 15)
- Cultural factors in psychotherapy (Chapter 16)
- Human diversity and drug treatment (Chapter 16)
- Cultural factors in social norms (Chapter 18)
- Cultural factors in aggression (Chapter 18)

We also have increased our coverage of behavior genetics and evolutionary psychology. These topics are introduced in Chapters 1 and 2 and explored wherever appropriate—for example, when we discuss:

- Biopreparedness for learning (Chapter 8)
- Genetic components of intelligence (Chapter 11)
- Evolutionary explanations of mate selection (Chapter 12)
- Innate expressions of emotion (Chapter 12)
- The heritability of personality (Chapter 14)
- Genetic factors in psychological disorders (Chapter 15)
- Sociobiological explanations for helping and altruism (Chapter 18)

Chapter Organization

Three points are worth noting about the organization of the Third Edition.

First, we have refrained from grouping the eighteen chapters into sections. Indeed, we designed each chapter to be a freestanding unit so that you may assign chapters in any order you wish.

Many instructors who followed our chapter organization in the First and Second Editions found, as we have, that preceding physiology with human development had a salutary effect on their students. In the Third Edition we have retained this organizational feature. Wherever possible, we use Chapter 3 on development to show the reader how the principles and processes studied in each subfield come together across the human being's life span. Again, however, if you wish to assign the development chapter out of sequence you may do so comfortably.

Finally, in the Third Edition we have combined coverage of motivation and emotion in a single chapter (Chapter 12). Thus, even with the addition of Chapter 2 on research methods, the total number of chapters has not increased. We believe that we continue to cover mo-

tivation and emotion with appropriate breadth and rigor, but somewhat more concisely.

Special Features

Psychology contains a number of special features designed to promote efficient learning and students' mastery of the material. Features from the previous editions have been revised and enhanced in the Third.

Linkages

We have built into the book an integrating tool called Linkages, which highlights some of the relationships among the various subfields in psychology. In the Third Edition, this tool consists of four parts:

1. In the first few pages of each chapter, a linkage diagram (Linkages) illustrates how the chapter sheds light on other chapters and how material in other chapters helps illuminate the current one. Each contains six "linking questions" and carries a caption that helps students to use the diagram. The page numbers following each linking question direct the student to pages that carry further discussion of that question.
Every linkage diagram contains at least one question new to the Third Edition.
2. To further reinforce the linkages concept as the student reads through each chapter, each linking question is repeated in the margin of the page where the discussion appears.
3. One such discussion appears in each chapter, in a linkages section that addresses at length a particularly timely or provocative question previously raised in that chapter's linkage diagram.
4. Each chapter contains at least one captioned photo that illustrates how the content of the chapter is related to that of another chapter.

By establishing ties among chapters, the Linkages material combines with the text narrative to highlight the network of relationships among psychology's subareas. However, the Linkages program does not require that you follow our text's chapter sequence.

Thinking Critically

A section in each chapter is called Thinking Critically. We try throughout the book to describe research on psychological phenomena in a way that reveals the logic of the scientific enterprise, that identifies possible flaws in design or interpretation, and that leaves room for more questions and further research. In other words, we try to display critical thinking processes. The Thinking Critically sections are designed to make these processes more

explicit and accessible by providing a framework for analyzing evidence before drawing conclusions. The framework is built around five questions that the reader should find useful in analyzing not only studies in psychology but other forms of communication as well. These questions, first introduced when we discuss the importance of critical thinking in Chapter 2, are

1. What am I being asked to believe or accept?
2. What evidence is available to support the assertion?
3. Are there alternative ways of interpreting the evidence?
4. What additional evidence would help to evaluate the alternatives?
5. What conclusions are most reasonable?

Thinking Critically sections new to the Third Edition include:

- Are there drugs that can make you smarter? (Chapter 4)
- Can nonhumans use language? (Chapter 10)
- Does evolution explain how people choose a marriage partner? (Chapter 12)
- Does the hostile Type A behavior pattern increase the risk of heart disease? (Chapter 13)

In Review Charts

In Review charts summarize information in a convenient tabular format. We have placed two or three In Review charts strategically in each chapter to help students synthesize and assimilate large chunks of information—for example, on drug effects, key elements of personality theories, and stress responses and mediators. In Review charts new to the Third Edition include:

- Neurons, neurotransmitters, and receptors (Chapter 4)
- Organization of the brain (Chapter 4)
- Principles of perceptual organization and constancy (Chapter 6)
- Factors affecting retrieval from long-term memory (Chapter 9)

Future Directions

Each chapter concludes with Future Directions, a section intended to excite and inform students about new trends. Here we offer our views on the directions that theory, research, and applications are likely to take in future years. We also suggest courses that an interested student could take in psychology and other disciplines to learn more about the chapter's topic.

Chapter Summaries

These summaries are configured to reflect clearly the heading structure of each chapter. The chapters' key

terms are integrated into the summaries rather than set off as a separate list. These terms are defined in the glossary.

Ancillary Package

Accompanying this book are, among other ancillaries, a *Test Bank*, an *Instructor's Resource Manual*, and a *Study Guide*. Because these items were prepared by the lead author and his colleagues from the University of Illinois psychology department, you will find an especially high level of coordination between the textbook and these supplements. All three are unified by a shared set of learning objectives. Equally important, all three have been significantly revised and enhanced for the Third Edition.

Test Bank (by Graeme McGufficke, Sandra S. Goss, and Douglas A. Bernstein)

The *Test Bank* contains more than 3,000 multiple-choice items (165 per chapter plus 45 on statistics), plus one to four essay questions for each chapter of the text. Half of these multiple-choice questions are new; in all others, the foils have been scrambled for the Third Edition.

All multiple-choice items are keyed to the learning objectives listed in the *Instructor's Resource Manual* and *Study Guide*. More than 1,000 questions have already been class-tested with approximately 2,000 students and are accompanied by graphs indicating the question's discriminative power, level of difficulty, the percentage of students who chose each response, and the relationship between students' performance on a given item and their overall performance on the test in which the item appeared.

Instructor's Resource Manual (by Sandra S. Goss, Joel I. Shenker, and Douglas A. Bernstein)

The *Instructor's Resource Manual* contains a complete set of lecture outlines and learning objectives. The manual contains 160 specific teaching aids—58 of them new to the Third Edition—including handouts, demonstrations, and classroom exercises. It also contains other material that will be useful to teachers of large introductory courses, such as a section on classroom management and administration of large multisection courses, and a discussion of careers in psychology that instructors may want to distribute to students.

Study Guide (by Bridget Schoppert, Marcia Graber, and Douglas A. Bernstein)

The *Study Guide* employs numerous techniques that help students to learn. Each chapter contains a detailed out-

line, a key-terms section that presents fresh examples and aids to remembering, learning objectives, and a "Concepts and Exercises" section that shows students how to apply their knowledge of psychology to everyday issues and concerns. In addition, each chapter concludes with a two-part self-quiz consisting of thirty multiple-choice questions. An answer key tells the student not only which response is correct but also why each of the other choices is wrong. The revised *Study Guide* also includes a write-in quiz for each chapter. New to the Third Edition guide is a package of critical-thinking exercises.

Other Ancillaries Available to Adopters

The *Test Bank*, *Instructor's Resource Manual*, and *Study Guide* are also available to adopters on disk for use on microcomputers. All are available in IBM and Macintosh formats.

The *Computer Test Bank* allows instructors to generate exams and to integrate their own test items with those on the disk.

The *Computer Lecture Outlines*, derived from the *Instructor's Resource Manual*, are available on disk in a generic ASCII-code version. This format allows instructors to use standard word-processing software to integrate their own lecture notes and ideas into the text lectures.

The *Computer Study Guide* is an interactive program that gives students feedback on incorrect as well as on correct answers.

These additional software items are available to qualified adopters:

- *Psychabilities* (by Sarah Ransdell, New College of the University of South Florida). These thirteen computer simulations, specially designed for use in either the classroom or the computer laboratory, illustrate intriguing phenomena and recreate important experiments. They include a multiple-choice self-quizzing program to test progress and encourage mastery.
- *Flash Card*, an interactive vocabulary-building program that helps students to master the technical language of psychology.

Also offered to adopters are:

- *The Psychology Show*, Houghton Mifflin's video supplement for introductory psychology, available in both videodisc and videotape formats. Containing nineteen motion segments plus nearly one hundred still images, *The Psychology Show* is designed to expand on text coverage and to stimulate class discussion through the length of your course. An accompanying instructor's guide offers information on each motion segment and still image, as well as advice on using a videodisc player. Available on adoption of a minimum number of new books.

- *Succeed in College!*, a skills-building booklet containing selected chapters from Walter Pauk's best-selling study skills text *How to Study in College*. This booklet, which offers time-tested advice on notetaking, test-taking, and other topics, can be shrinkwrapped free of charge with new copies of the student text.
- A range of videocassettes containing films on topics in psychology is available on adoption of a minimum number of new books.
- A transparency set containing 100 images from the text, most in full color; plus 50 images from outside the text.
- A film rental policy enabling qualified adopters to rent films or videos from a consortium of university film libraries.

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Finally, we want to express our deepest appreciation to our families and friends. Once again, their love saw us through an exhilarating but demanding period of our lives. They endured our hours at the computer, missed meals, postponed vacations, and occasional irritability during the creation of the First Edition of this book, and they had to suffer all over again during the lengthy process of revising it again. Their faith in us is more important than they realize, and we will cherish it forever.

Brief Contents

	Preface	xv
1	<i>Introducing Psychology</i>	2
2	<i>Research in Psychology</i>	18
3	<i>Human Development</i>	40
4	<i>Biological Aspects of Psychology</i>	92
5	<i>Sensation</i>	130
6	<i>Perception</i>	174
7	<i>Consciousness</i>	212
8	<i>Learning</i>	248
9	<i>Memory</i>	286
10	<i>Thought and Language</i>	322
11	<i>Mental Abilities</i>	364
12	<i>Motivation and Emotion</i>	400
13	<i>Health, Stress, and Coping</i>	450
14	<i>Personality</i>	482
15	<i>Psychological Disorders</i>	520
16	<i>Treatment of Psychological Disorders</i>	566
17	<i>Social Cognition</i>	606
18	<i>Social Behavior and Group Influences</i>	638
	 <i>Appendix: Statistics in Psychological Research</i>	 A-1
	<i>Glossary</i>	A-10
	<i>References</i>	A-32
	<i>Credits</i>	A-120
	<i>Name Index</i>	A-125
	<i>Subject Index</i>	A-145

Contents

Preface xv

1

Introducing Psychology 2

The World of Psychology: An Overview 3

Subfields of Psychology 3

Approaches to Psychology 4

Unity and Diversity in Psychology 9

Research: The Foundation of Psychology 10

Linkages Within Psychology and Beyond 11

Human Diversity and Psychology 12

Future Directions 15

Summary and Key Terms 16

2

Research in Psychology 18

Thinking Critically About Psychology (or Anything Else) 19

Critical Thinking and Scientific Research 20

The Role of Theories 21

Research Methods in Psychology 22

Naturalistic Observation 23

Case Studies 23

Surveys 24

Testing Hypotheses Through Correlational
Research 24

Experimental Research 25

Human Diversity and Research Methods 28

Statistical Analysis of Research Results 30

Descriptive Statistics 30

Inferential Statistics 32

Ethical Guidelines for Psychologists 33

Linkages: Psychological Research and Genetics 34

Principles of Genetics and Heredity 34

Behavior Genetics 36



Future Directions 38

Summary and Key Terms 38

3

Human Development 40

Exploring Human Development 41

Beginnings 45

Prenatal Development 45

The Newborn 47

Infancy and Childhood: Cognitive Development 48

The Development of Knowledge: Piaget's Theory 49

Modifying Piaget's Theory 54

Information Processing During Childhood 55

Culture and Cognitive Development 56

Individual Variations in Cognitive Development 58

Infancy and Childhood: Social and Emotional Development 59

Individual Temperament 60

The Infant Grows Attached 61

Thinking Critically: Does Day Care Harm the
Emotional Development of Infants? 65

Relationships with Parents and Peers 66

Social Skills and Understanding 70

Gender Roles 71

Adolescence 72

- The Big Shakeup 73
- Identity and Development of the Self 74
- Abstract Thought and Moral Reasoning 76

Adulthood 80

- The Aging Body 80
- The Experienced Mind 81
- The Social Clock 83
- Death and Dying 86

Linkages: Human Development and Personality 87**Future Directions 88****Summary and Key Terms 89**

4

Biological Aspects of Psychology 92**Levels of Analysis: From Molecules to Memories 93**

- Cells of the Nervous System 94
- Action Potentials 96
- Synapses and Communication Between Neurons 98
- Organization and Functions of the Nervous System 101

The Peripheral Nervous System: Keeping in Touch with the World 102

- The Somatic Nervous System 102
- The Autonomic Nervous System 103

The Central Nervous System: Making Sense of the World 104

- The Spinal Cord 105
- The Brain 105
- Thinking Critically: Are There Drugs That Can Make You Smarter?* 110
- The Cerebral Cortex 112
- The Divided Brain in a Unified Self 115
- Plasticity in the Brain 118

Linkages: Human Development and the Changing Brain 120**The Endocrine System: Coordinating the Internal World 122****The Immune System: Linking the Brain and the Body's Defense System 125****Future Directions 126****Summary and Key Terms 127**

5

Sensation 130**Sensory Systems 131**

- The Problem of Coding 132
- Representing Stimuli 134

Hearing 134

- Sound 134
- The Ear 136
- Coding Intensity and Frequency 138
- Auditory Pathways and Representations 141

Vision 141

- Light 141
- Focusing Light 141
- Converting Light into Images 142
- Seeing Color 147
- Visual Pathways 152
- Visual Representations 153

The Chemical Senses: Smell and Taste 157

- Olfaction 158
- Gustation 160
- Smell, Taste, and Flavor 160

Somatic Senses and the Vestibular System 161

- Touch and Temperature 161
- Pain 163
- Thinking Critically: Does Acupuncture Relieve Pain?* 167
- Proprioception 168

Linkages: Sensation and Motivation/Emotion 169

Future Directions 170

Summary and Key Terms 171

6

Perception 174

Three Views of Perception 175

Psychophysics 178

- Absolute Thresholds: Is Something Out There? 178
- Going Beyond the Threshold: Signal Detection Theory 179
- Judging Differences Between Stimuli: Weber's, Fechner's, and Stevens's Laws 181
- Thinking Critically*: Can People Perceive What Cannot Normally Be Sensed? 182

Organizing the Perceptual World 184

- Principles of Perceptual Organization 184
- Perceptual Constancy 186
- Depth Perception 188
- Perception of Motion 191
- Perceptual Illusions 192
- Culture, Experience, and Perception 193

Recognizing the Perceptual World 196

- Bottom-up Processing 196
- Top-down Processing 197
- Top-down and Bottom-up Processing Together 200
- Network Processing 200

Linkages: Perception and Human Development 201

Attention 204

- Attention and Automatic Processing 204
- Allocating Attention 205
- Attention and the Brain 206

Applications of Research on Perception 207

- Aviation Psychology 207
- Reading 208

Future Directions 209

Summary and Key Terms 210

7

Consciousness 212

Analyzing Consciousness 213



The Role of Consciousness 215

- Mental Processing Without Awareness 215
- The Neuropsychology of Consciousness 217
- Levels of Consciousness 219
- Thinking Critically*: Can You Be Influenced by Subliminal Perceptions? 219
- States of Consciousness 221

Sleeping and Dreaming 222

- Stages of Sleep 222
- Sleep Disorders 224
- Why Do People Sleep? 226
- Dreams and Dreaming 228

Hypnosis 229

- Experiencing Hypnosis 230
- Explaining Hypnosis 230
- Some Uses of Hypnosis 232

Linkages: Meditation, Health, and Stress 232

Psychoactive Drugs 233

- Psychopharmacology 233
- The Varying Effects of Drugs 235
- Depressants 237
- Stimulants 239
- Narcotics 241
- Psychedelics 242

Future Directions 243

Summary and Key Terms 245

8

Learning 248

Classical Conditioning: Learning Signals and Associations 249

- Pavlov's Discovery 250

- Changing Conditioned Responses Over Time:
Learning, Extinction, and Spontaneous
Recovery 252
- The Signaling of Significant Events 253
- Conditioning New Associations: Are All Signals
Created Equal? 255
- Some Applications of Classical Conditioning 257

Linkages: Learning and Consciousness 258

Instrumental and Operant Conditioning: Learning the Consequences of Behavior 259

- From the Puzzle Box to the Skinner Box 260
- Basic Components of Operant Conditioning 262
- Forming and Strengthening Operant Behavior 264
- Why Reinforcers Work 268
- Punishment 269
- Operant Conditioning of Human Behavior 271

Cognitive Processes in Learning 273

- Latent Learning and Cognitive Maps 273
- Insight 274
- Observational Learning: Learning by Imitation 275
- Thinking Critically*: Does Watching Violence on
Television Make People More Violent? 277
- Cognition and Conditioning 279
- Skill Learning 279
- Forming Associations: The Role of Neural
Networks 281

Cultural Factors in Learning and Teaching 282

Future Directions 283

Summary and Key Terms 284

9

Memory 286

What Is Memory? 287

- Types of Memory 287
- Explicit and Implicit Memory 288
- Basic Memory Processes 289
- Models of Memory 290

How Do People Acquire New Memories? 293

- Sensory Memory 293
- Short-Term, or Working, Memory 294
- Long-Term Memory 297
- Distinguishing Between Short-Term and Long-Term
Memory 298

Why Do People Forget? 300

- The Course of Forgetting 300
- The Roles of Decay and Interference 301



Retrieving Memories 304

- Retrieval Cues and Encoding Specificity 304
- Context and State Dependence 304
- Retrieval from Semantic Memory 305
- Constructing Memories 307
- Thinking Critically*: Is the Memory of Eyewitnesses
and Jurors Adequate to Produce Just Verdicts? 309

Linkages: Motivation, Emotion, and Memory 312

Biological Bases of Memory 313

- Biochemical Mechanisms 313
- Brain Structures 315

Improving Your Memory 316

- Classical Mnemonics 316
- Guidelines for More Effective Studying 316

Future Directions 319

Summary and Key Terms 320

10

Thought and Language 322

Studying the Mind 323

- Errors in Information Processing 324
- Information-Processing Speed: Reaction Time 325
- Picturing Information Processing: Evoked Brain
Potentials 327

Elements of Thought 327

- Concepts 328
- Representing and Combining Concepts 330

Thinking Strategies 332

- Logical Reasoning: Deductive Logic 332
- Inductive Reasoning: The Role of Heuristics in
Forming Beliefs 334



Problem Solving 335

- Strategies for Problem Solving 336
- Problems in Diagnosis and Problem Solving 338
- Problem Solving by Computer 341

Decision Making 344

- Evaluating Options 345
- Biases and Flaws in Decision Making 346

Linkages: Group Processes in Problem Solving and Decision Making 347

Language 349

- The Elements of Language 349
- Understanding Speech 351
- Learning to Speak: Stages of Language Development 353
- How Is Language Acquired? 355
- Thinking Critically: Can Nonhumans Use Language?* 357
- Knowledge, Language, and Culture 360

Future Directions 360

Summary and Key Terms 362

11

Mental Abilities 364

Assessing Mental Abilities: Principles of Testing 365

- Reliability 366
- Validity 367

Testing for Intelligence 368

- A Brief History of IQ Tests 368
- IQ Tests Today 371

Evaluating IQ Tests 373

- Are IQ Tests Reliable and Valid? 373
- Thinking Critically: Are IQ Tests Unfairly Biased Against Certain Groups?* 374
- Do IQ Scores Measure Innate Ability? 377
- What Causes Group Differences in IQ Scores? 379
- What Conditions Can Raise IQ Scores? 381
- IQ Scores in the Classroom 383

Understanding Intelligence 385

- The Psychometric Approach 385
- The Information-Processing Approach 386
- The Triarchic Theory of Intelligence 387
- Multiple Intelligences 388
- An Ecological Approach 389

Diversity in Mental Abilities 390

- Creativity 390
- Intelligence, Problem Solving, and Cognitive Complexity 392
- Extremes of Mental Ability 393

Linkages: Mental Abilities and Aging 395

Future Directions 397

Summary and Key Terms 398

12

Motivation and Emotion 400

Concepts and Theories of Motivation 401

- Sources of Motivation 402
- Instinct Theory and Its Descendants 403
- Thinking Critically: Does Evolution Explain How People Choose a Marriage Partner?* 404
- Drive Reduction Theory 406
- Arousal Theory 407
- Incentive Theory 408

Hunger and Eating 409

- Biological Signals for Hunger 410
- Flavor, Learning, and Appetite 412
- Eating Disorders 413

Sexual Behavior 416

- Hormones and Sexual Desire 417
- Social Factors and Sexual Activity 419
- Sexual Orientation 420

Success and Work 421

- Achievement Motivation 422
- Jobs and Motivation 424

Relations and Conflicts Among Motives 426

- Maslow's Hierarchy 426

Linkages: Conflicting Motives and Stress 427

**What Is Emotion? 428**

- Defining Characteristics 428
- Emotions and the Autonomic Nervous System 430

Where Is Emotion: In the Heart or in the Head? 433

- William James's Theory 433
- Schachter's Cognitive Labeling Theory 437
- Walter Cannon's Theory 439

How Do People Communicate Emotions? 441

- Innate Expressions of Emotion 442
- Social and Cultural Aspects of Emotional Expression 443
- Facial Expressions and the Brain 446

Future Directions 446**Summary and Key Terms 448**

13

Health, Stress, and Coping 450**Health Psychology 451****Understanding Stress 453**

- Stressors 454
- Stress Responses 455
- Stress Mediators: Interactions Between People and Stressors 460

Linkages: Thinking Under Stress 466**The Physiology and Psychology of Health and Illness 467**

- Stress, the Immune System, and Illness 467

Heart Disease and Behavior Patterns 469

Thinking Critically: Does the Hostile Type A Behavior Pattern Increase the Risk of Heart Disease? 470

Risking Your Life: Health-Endangering Behaviors 472

Promoting Healthy Behavior 473

- Health Beliefs and Health Behaviors 474
- Changing Health Behaviors: Stages of Readiness 474
- Programs for Stress-Coping and Health Promotion 475

Future Directions 479**Summary and Key Terms 480**

14

Personality 482**The Psychodynamic Approach 484**

- The Structure and Development of Personality 485
- Variations on Freud's Personality Theory 489
- Contemporary Psychodynamic Theories 490
- Evaluation of the Psychodynamic Approach 491

The Dispositional Approach: Types and Traits 492

- Personality Types 493
- Personality Traits 493
- The "Big Five" Model of Personality 496
- Thinking Critically:* Are Personality Traits Inherited? 497
- Evaluation of the Dispositional Approach 499

The Cognitive-Behavioral Approach 500

- Roots of the Cognitive-Behavioral Approach 500
- Rotter's Expectancy Theory 501
- Albert Bandura and Reciprocal Determinism 502
- Mischel's Person-Situation Theory 502
- Evaluation of the Cognitive-Behavioral Approach 503

The Phenomenological Approach 504

- The Self Theory of Carl Rogers 505
- Maslow's Humanistic Psychology 506
- Evaluation of the Phenomenological Approach 506

Linkages: Personality, Culture, and Human Development 508**Assessing Personality 510**

- Objective Tests 510
- Projective Tests 514
- Using Personality Tests 515

Future Directions 517**Summary and Key Terms 518**



15

Psychological Disorders 520

Understanding Psychological Disorders: Some Basic Issues 521

What Is Abnormal 522

Explaining Psychological Disorders 526

Linkages: Psychological Disorders and Approaches to Personality 528

Classifying Psychological Disorders 531

A Classification System: DSM-IV 532

Thinking Critically: Is Psychodiagnosis Biased? 535

Anxiety Disorders 537

Types of Anxiety Disorders 537

Causes of Anxiety Disorders 539

Somatoform Disorders 541

Dissociative Disorders 543

Mood Disorders 544

Depressive Disorders 544

Bipolar Disorder 546

Causes of Mood Disorders 547

Schizophrenia 550

Symptoms of Schizophrenia 550

Types of Schizophrenia 551

The Search for Causes 552

Personality Disorders 555

A Sampling of Other Psychological Disorders 556

Substance-Related Disorders 557

Psychological Disorders of Childhood 560

Mental Illness and the Law 561

Future Directions 562

Summary and Key Terms 563

16

Treatment of Psychological Disorders 566

Essentials of Treatment 567

Psychodynamic Psychotherapy 569

Classical Psychoanalysis 570

Contemporary Variations on Psychoanalysis 572

Phenomenological Psychotherapy 574

Client-Centered Therapy 574

Gestalt Therapy 576

Behavior Therapies 577

Techniques for Modifying Behavior 578

Cognitive-Behavior Therapy 582

Group and Family Therapies 584

Evaluating Psychotherapy 586

Thinking Critically: Is One Approach to Psychotherapy Better Than the Others? 588

Addressing the "Ultimate Question" 589

Cultural Factors in Psychotherapy 589

Rules and Rights in the Therapeutic

Relationship 592

Biological Treatments 593

Electroconvulsive Therapy 593

Psychosurgery 594

Psychoactive Drugs 595

Evaluating Biological Treatments 599

Drugs and Psychotherapy 600

Linkages: Biological Aspects of Psychology and the Treatment of Psychological Disorders 600

Community Psychology: From Treatment to Prevention 601

Future Directions 602

Summary and Key Terms 603

17

Social Cognition 606

Social Construction of the Self 607

Social Comparison 607

Social Identity Theory 608

Linkages: Social Cognition and Psychological Disorders 609



Social Perception 610

- First Impressions 610
- Explaining Behavior: Attribution 613
- The Self-Protective Functions of Social Cognition 617

Interpersonal Attraction 618

- Keys to Attraction 618
- Intimate Relationships and Love 621

Attitudes 623

- Components of Attitudes 624
- Forming Attitudes 626
- Changing Attitudes: The Role of Persuasive Communications 627

Prejudice and Stereotypes 630

- Theories of Prejudice 631
- Thinking Critically*: Does Contact with a Group Decrease Prejudice Against It? 633

Future Directions 635

Summary and Key Terms 636

18

Social Behavior and Group Influences 638

Social Influence 639

Linkages: Motivation and the Presence of Others 641

Conformity and Compliance 642

- The Role of Norms 642
- Why Do People Conform? 643
- When Do People Conform? 644
- Inducing Compliance 646



Obedience 647

- Factors Affecting Obedience 649
- Evaluating Milgram's Studies 651

Aggression 653

- Why Are People Aggressive? 654
- When Are People Aggressive? 656
- Thinking Critically*: Does Pornography Cause Aggression? 658

Altruism and Helping Behavior 661

- Why Do People Help? 661
- When Are People Most Likely to Help? 662

Cooperation, Competition, and Conflict 665

- The Prisoner's Dilemma 665
- Fostering Cooperation 666
- Interpersonal Conflict 667

Group Processes 668

- Group Leadership 669
- Groupthink 670
- Social Dilemmas 671

Future Directions 671

Summary and Key Terms 672

Appendix: Statistics in Psychological Research A-1

Glossary A-10

References A-32

Credits A-120

Name Index A-125

Subject Index A-145