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# Essentials of Psychology



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# Essentials of Psychology

To H. J. and Daisy,
who have more room in their hearts than anyone else I know,
and
to Sandra,
who certainly inherited that family trait!

### To the Student

#### WHY PSYCHOLOGY MATTERS: REFLECTIONS OF A LONG-TERM BELIEVER

In the mid 1970s, when I was on the faculty of Purdue University, I had a friend named Sam. Sam was an analytical chemist and one of the most brilliant people I have ever known. But what Sam didn't know about *people* would fill several books. Let me give you an example.

Sam was perpetually having problems with his department's copy room. Many jobs he sent there were not done on time—a real problem for him since he constantly worked against tight deadlines. After listening to Sam moan about this problem over and over again, I asked him the following questions: (1) Did he ever bring his really important jobs to the copy room himself rather than sending them down with his secretary? (2) Did he ever thank the people involved when copies were ready on time? Sam was puzzled by my questions. He couldn't see any purpose in visiting the copy room in person, and his attitude about on-time jobs was simple: Why should he thank someone for simply doing his or her job?

When I suggested that both of these steps might help, Sam seemed doubtful. But he was openminded, so he promised to give them a try. Several weeks later, he reported that they did seem to help. In fact, he said, after he thanked the copy-room staff in person a few times, a miraculous change occurred: They began to put his work on top of the stack rather than on the bottom. Sam was happy about this change, but confused about why it had occurred. When I described the basic principles of reinforcement to him, he listened in rapt attention. Here, I could tell, was something entirely new for Sam, world-class scientist though he was. Yes, Sam was brilliant, but as he himself admitted, he almost never thought about people.

I haven't seen my friend Sam in many years, but I'm tempted to dedicate this book to him. To me, he is a perfect illustration of the importance of psychology and of why everyone—top-notch scientists included—needs a basic, working knowledge of it. Psychology, I have long believed, is much more than a scientific field or a collection of findings and principles: It is also an invaluable perspective for

understanding ourselves, other people, our relationships, and just about everything else that really matters to most of us most of the time. It is, in short, an eminently useful field, with important practical benefits for anyone wise enough to use it, or at least to adopt it as a personal framework. So it's no exaggeration to state that I strongly believe in the theme of this book: *making psychology part of your life*. Psychology should be part of everyone's education and, ultimately, everyone's life. With it, and the knowledge it provides, we gain insight into virtually every aspect of our experience. Without it, we must struggle along like my friend Sam, constantly puzzled by our own reactions, others' behavior, and many aspects of daily existence.

Because of my strong convictions about the practical as well as the scientific value of psychology, this text is designed to do more than simply present a broad and up-to-date introduction to the field. It seeks to bring the usefulness of psychology sharply into focus, to illustrate its relevance and application to daily life—everyone's daily life. In order to attain this goal, I've incorporated many helpful features, summarized on the following pages.

#### SPECIAL FEATURES RELATED TO THE BOOK'S MAJOR THEME

Built into every chapter, these features give you a framework for organizing—and retaining text material.

Chapter Openings

At the beginning of every chapter, you will be engaged by interesting questions about the topics ahead. From there, I lay out a "road map" for the chapter, pointing the way through the contents ahead, helping you to preview the material to come.

Also, in every chapter I use personal experiences wherever appropriate to illustrate the relevance of psychology's principles and findings to what goes on every day. Students have consistently praised this feature.

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inked.

consider an example from my pers of my own family reacted to a vent was the news that my grandfather had dev. an or cancer. Curiously, the person least affected by the diagno. grandfather himself; he remained calm and collected, despite the imply for him personally. Why? Because, as he told me, he felt that he had do part; he had done everything he could to stay healthy. In contrast, my gramother took the news badly-but not just because of the discovery of the it. ness. Shortly before the examination in which doctors detected the cancer, she had given my grandfather a hard time about wasting time and money getting annual checkups. In particular, she felt that he paid too many visits to his lifeprog friend Herb, who also happened to be his personal physician. Each time ent for one of these check-ups, she had complained, Herb would tell him thing: "Good news, you're the picture of health—see you next time." wertainty of my grandfather's future, coupled with

hed her

Perspectives on Diversity

As our world grows smaller via electronics, communications, and transportation, today's students must understand the different perspectives on diversity and how they evolved. I try to help you understand these issues with integrated diversity sections such as these . . .

Chapter 2 The Biological Basis of Gender

Differences

Culture and the Interpretation Chapter 4

of Dreams

Culture and Memory: Chapter 6

Remembering What Fits with

Our Cultural Schemas

The Role of Cultural Factors in Chapter 9

Aggression: The Social Context

of Violence

Taking Account of Cultural Chapter 12

Factors in Psychological Disorders:

Improvements in the DSM-IV

are calm and relaxed, pain may be reduced. We'll explore the influence of other contextual factors—including culture—on the experience of pain in Perspectives on Diversity below.

#### Culture and the Perception of Pain

magine the following scene: You are in the midst of an ancient tribal ceremony. Nearly a hundred warriors are seated cross-legged on the ground of a smoke-filled lodge. Their attention is riveted on two persons, an old man and a young one, standing face to face at the center of the room. Only a low, rhythrid crumbeat breaks the silence. Sunlight through the lodge's apex penetrates the smoke, revealing what comes next. Using an eagle's talon, the properties of the properties of the properties of the properties of both properties of both properties of both properties of both portionally through each of the wounds. Amazingly, the young, man's stoic expression remains unchanged. Loops of rope are then secured around the bones, and the young man is hosted into the air, where he is allowed to dangle—until the bones tear through the skin or he becomes unconscious.

Sound like a sadistic late-night horror show? It's actually a description of "suminging to the pole," a ceremony practiced by the Lakota Sioux and Cheyenne tribes in which warriors demonstrated their courage and ability to withstand tremendous pain. This ceremony and similar ones in other cultures have led to intriguing questions about the nature of pain (Weisenberg, 1962). Although we ferences easie in a shout the nature of pain (Weisenberg, 1962). Although we reference sust in the interpretation and expression of pain, as tilbustrated in the "swinging" scene above. But what is the basis for these differences?

At first glance it is tempting to conclude that cultural differences in pain thrischold—physical differences—are the cause. After all, many of us could never endure such torture. However, no consistent experimental evidence usupports this view (Zatzick & Dimsdale, 1990). Instead, observed cultural differences in pain thrischold—physical differences—are the cause. After all, many of us could never endure such torture. However, no consistent experimental evidence surgests that expany to with the departition of the country and the pain thrischold prope

Endorphins, the opiatelike chemicals our body produces, discussed in chapter 2, may also interact with the spinal "gate" to lessen sensations of pain (Akil et al., 1944; Millan, 1986). Researchers have found that certain areas of the spinal cord are highly enriched in opiate receptors and endorphin-containing neurons; thus, these substances may close the spinal gate by rhibit-

SENSATION AND PERCEPTION: MAKING CONTACT WITH THE WORLD

only; a third received both components; and a fourth was a no-training control group. The results showed that participants who received both forms of training—information and behavioral modeling—performed best on measures of culture-specific knowledge and on a behavioral measure.

These findings, and those of other related studies, illustrate the important role that observational learning plays in alleviating the effects of culture shock. Observational learning initially enables us to perform behaviors appropriate to our own cultures, but later helps us to adapt to the demands of a rapidly changing world.

#### MAKING PSYCHOLOGY PART OF YOUR LIF

#### Getting in Shape: Applying Psychology to Get Fit and Stay Fit

eed to get back into shape? Or lose a pound or twenty? Why not make learning principles a part of your finese system? Establishing your finese program using the principles discussed in this chapter will help you hit the diet and exercise trail running. First, it is important to set your sights realistically. Don't try to lose all twenty pounds in one week or run ten miles the first time out. Why not? Recall reinforce-time to the state of the s

work to avoid the negative comments you may get if you are tempted to "take a day off...] ust because." Fourth, stimulus control can help set the stage for healthy responses. Avoid situations where you may be neathly responses. For example, by joining a health interest of the stage for the property of the stage for the sta



#### Making Psychology Part of Your Life

Appearing at the end of each chapter, these sections help you apply the chapter's principles to everyday living. On their own, these pages are an excellent set of reminders about skills you can use daily. Examples include . . .

The Danger of Stereo Headsets: Chapter 3

Let's Turn Down the Volume

Chapter 6 Improving Your Memory:

Some Useful Steps

Chapter 8 Preparing for Tomorrow's

Job Market Today

Getting Motivated: Some Chapter 9

**Practical Techniques** 

Chapter 10 How Accurate Is Your

Self-Concept?

Chapter 14 Are You in Love? One Way

of Telling

#### THE POINT OF IT ALL

classroom climates. Parents also recognize the imprortance of teamwork between school and hom in promoting healthy development (Arson et al. 1991). In other words, some parents in poverty-stricken neighborhood-actively cooperate with local schools to make sure that positive behaviors are necouraged in both home and school and that the messages youngetes hear in one setting are echeed in the other.

Research designed to identify the factors that help adolescents from disadvantaged backgrounds overcome their problems is relatively received in the other comments of the content the view that children designed to identify the content of the content

#### Overcoming the Odds: Adolescents in High-Risk

magine what it would be like to grow up in an environment like the one magine what it would be like to grow up in an environment like the one was the second of the process of the process



NORTHERN IRELAND
Despite the fact that millions of
children around the world grow up
in disadvantaged environments like
this one in Northern Ireland, most
of them grow up to be productive,
law-abiding members of society.
Psychologists are attempting to
identify the factors that help such
children overcome these cremendous early disadvantages.

#### The Point of It All

These sections explain the impact of psychological findings and their practical applications, helping to answer the question "Why study psychology?"

Chapter 2 High-Tech Snoopers:

**Putting Brain-Imaging** 

Devices to Work

Chapter 6 Repression: Do We

> Sometimes Forget Because We Want to

Forget?

Chapter 8 Overcoming the Odds:

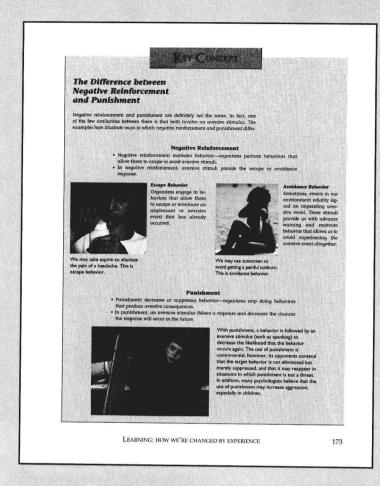
> Adolescents in High-Risk Environments

Chapter 11 Putting Psychology to

> Work: Reducing Stress in the Workplace

#### **Key Concept pages**

These full-page, graphically appealing sections fully illustrate or summarize difficult concepts to give you a better grasp of chapter material.



#### **Key Questions**

By answering the Key Questions, you will be preparing yourself thoroughly for tests and quizzes. Strategically placed at the end of major sections, they reinforce chunks of information by questioning you on key points.

#### Key Questions

- What is the aim of health psychologists?
- What is behavioral medicine?
- To what can many of today's leading causes of premature death be attributed?

#### **Learning Objective 11.2**

Understand the basic nature and causes of stress, including the general adaptation syndrome and the cognitive appraisal process.

#### **Learning Objective 11.3**

Describe how stress can affect health and task performance and cause burnout.

#### **Learning Objectives**

At the beginning of each major section, learning objectives preview your goals for successfully studying that section.

**Teaching Graphs** 

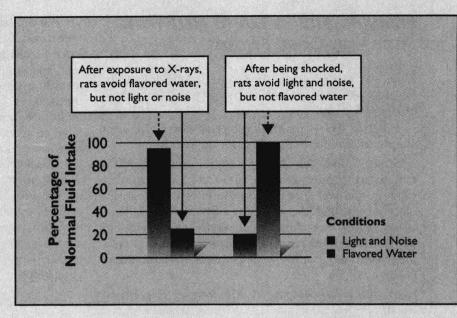
Certain figures include recognizable "teaching labels" pointing out the key results and helping you understand and interpret research findings.

#### Summary and Review of **Key Questions**

This summary reviews the chapter by heading, answers the Key Questions posed throughout the chapter, and lists key terms for study.

#### Critical Thinking Questions

Exercises in critical thinking are interwoven throughout, both within the text and at the end of each chapter.



Note the boxes with explanations of findings and interpretations of data



#### CLASSICAL CONDITIONING: LEARNING THAT SOME STIMULI SIGNAL OTHERS

What is learning?

Learning is any relatively permanent change in behavior (or behavior potential) produced by experience.

What is classical conditioning?

Classical conditioning is a form of learning in which neutral stimuli (stimuli initially unable to elicit a particular response) come to elicit that response through their association with stimuli that are naturally able to do so.

association with stimuli that are naturally asse to not account of the control of

#### • What is extinction?

What is extinction?
 Extinction is the process through which a conditioned stimulus that is no longer paired with an uncondi-tioned stimulus gradually ceases to elicit a conditioned response. However, the conditioned response can be quickly restored through reconditioning.

What is the difference between stimulus general-ization and stimulus discrimination?

ization and stimulus discrimination?

Stimulus generalization allows us to apply our learning
to other situations, stimulus discrimination allows us to
differentiate among similar but different simulus.

Is classical conditioning equally easy to establish
with all stimuli for all organisms?

Because of biological constraints on learning that differ
emong species, types of conditioning readily accomplished by some species are only slowly acquired—or
not acquired at all—by others.

How are conditioned taste aversions acquired?

Conditioned taste aversions are typically established

Conditioned tasts aversions are typically established when a food or a beverage (conditioned stimulus) is paired with a stimulus that naturally leads to feelings of illness (unconditioned stimulus). Conditioned taste aversions can be established after a single CS-UCS pairing.

How do modern views of classical conditioning differ from earlier perspectives?

Modern views of classical conditioning emphasize the important role of cognitive processes.

What is blocking?
 In blocking, conditioning to one stimulus is prevented by previous conditioning to another stimulus.

 What are flooding and systematic desensitization? Flooding and systematic desensitization are procedures used to extinguish fears established through classical

CHAPTER 5

conditioning. In flooding, a person is forced to come into contact with fear-eliciting stimuli without an avenue of escape. Cases in which fearful thoughts are too painful to deal with directly are treated by systematic desensitization—a progressive technique designed to replace anxiety with a relaxation response.

 Do classical conditioning principles have practical applications in solving problems of everyday life? Basic principles of classical conditioning have been used to solve a variety of everyday problems, including phobias (learned fears) and unexplained instances of drug overdose.

KEY TERMS: learning, p. 158; classical conditioning, p. 159; stimulus, p. 159; unconditioned stimulus (UCS), p. 160; unconstimulus, p. 159; unconditioned stimulus (UCS), p. 160; uncon-ditioned response (UCR), p. 160; conditioned stimulus, for-ditioned response (CR), p. 160; equisition, p. 161; dealqued conditioning, p. 161; neceountiforning, p. 161; adaqued conditioning, p. 161; neceountiforning, p. 161; extrinction, p. 164; prouditioning, p. 165; postaneous recom-p. 164; stimulus generalization, p. 164; stimulus discrimination, p. 164; biological constraints on learning, p. 165; conditioned taste neversion, p. 166; pholesis, p. 169; flooding, p. 169

#### OPERANT CONDITIONING: LEARNING BASED

· What is operant conditioning?

In operant conditioning, organisms learn the relationships between certain behaviors and the consequences they produce.

Which operant techniques strengthen behavior?
 Which ones weaken behavior?
 Both positive and negative reinforcement strengthen or increase behavior. In contrast, punishment and omission training are techniques that suppress or weaken behavior.

What are examples of primary reinforcers and conditioned reinforcers?

Primary reinforcers include food, water and sexual pleasure; conditioned reinforcers include money, sta-

. What is the Premack principle?

The Premack principle suggests that more preferred activities can be used to reinforce less preferred activities.

In what way is shaping useful?

Shaping is useful for establishing new responses by initially reinforcing successive approximations, which are behaviors that increasingly resemble the desired

#### · What is chaining?

Chaining is a procedure used to establish a complex sequence or chain of behaviors. The final response in

the chain is shaped first; then, working backwards, ear-lier responses in the chain are reinforced by the oppor-tunity to perform the last response in the chain, which leads to a reward.

#### · What are schedules of reinforcement?

What are schedules of reinforcement?
 Schedules of reinforcement are rules that determine the occasion on which a response will be reinforced.
 Schedules of reinforcement can be time-based or event-based, fixed or variable. Each schedule of reinforcement produces a characteristic pattern of responding.

When is the use of a continuous reinforcement schedule desirable?

A continuous reinforcement schedule is useful for establishing new behaviors; partial or internitent schedules of reinforcement are more powerful in maintaining behavior.

#### • What is a discriminative stimulus?

A discriminative stimulus signals the availability of reinforcement if a specific response is made. When a behavior occurs consistently in the presence of a dis-criminative stimulus, it is said to be under stimulus control.

What evidence supports the involvement of cogni-tive factors in operant conditioning?

Studies of learned helplessness and contrast effects sup-port the conclusion that cognitive factors play an im-portant role in operant conditioning.

Why is knowledge of operant conditioning important?

Procedures based on operant conditioning principles can be applied to help solve many problems of every-day life.

KEY TERMS: operant conditioning, p. 171; reinforcement, p. 171; positive reinforcers, p. 171; Premack principle, p. 171; negative

reinforcers, p. 172; punishment, p. 172; omission training, p. 172; shaping, p. 175; chaining, p. 175; schalules of reinforce ment, p. 176; continuous reinforcent schedule, p. 177; fixed-interval schedule, p. 177; variable-interval schedule, p. 177; fixed-ratio schedule, p. 177; variable-trail schedule, p. 177; discriminative stimulus, p. 179; stimulus control, p. 178

#### OBSERVATIONAL LEARNING: LEARNING FROM THE BEHAVIOR AND OUTCOMES OF OTHERS

What is observational learning?

Observational learning is the acquisition of new infor-mation, concepts, or forms of behavior through expo-sure to others and the consequences they experience.

What factors determine the extent to which we acquire new information through observational learning?

learning? In order for observational learning to be effective, we must pay attention to those modeling the behavior, remember the modeled speech or action, possess the ability to act on this memory, and have the motivation to do so.

In what forms of behavior does observational learning play a role?

Observational learning plays a role in many types of behavior, including aggression.

In what ways can observational learning be used to solve problems of everyday life?

Observational learning can play an important role in work settings—for example, in training workers to interact more effectively with people from different cultural backgrounds.

KEY TERM: observational learning, p. 185

Appraisal	At the present time, many psychologists are moving increasingly toward a cognitive view of the learning process. Do you think this movement is appro- priate, or is there still a role for operant principles?
Controversy	Growing evidence suggests that animals do indeed form mental representa- tions of their environments that are analogous to those formed by human- beings. Does this mean that animals think? What are your views on this issue! What are the implications of this theory of animal learning?
MAKING PSYCHOLOGY PART OF YOUR LIFE	Knowing something about important principles of learning is very useful to persons who wish to get into shape or lose weight. But these are only two ways in which knowledge of learning can be applied to help people. Can you

LEARNING: HOW WE'RE CHANGED BY EXPERIENCE

#### LEARNING AIDS: A LOT OF HELP FROM SOME VERY GOOD FRIENDS

This text is accompanied by a complete learning package for students. The key parts of this package are described below.

**Practice Tests** are multiple-choice tests for each chapter that help prepare you for the real thing.

Study Guide Plus offers a comprehensive, carefully structured learning guide to all of the important concepts in this text. Organized around chapter learning objectives, it includes a variety of book-specific exercises, review sections, and exercises to strengthen your critical thinking and application skills. A computerized Study Guide with graphics and animations is also available.

Studying Psychology: A Manual for Success by Robert T. Brown, is a brief how-to manual designed to help you develop the skills needed to succeed in psychology and in other college-level courses. The down-to-earth techniques and ideas in this manual will help you develop effective strategies for studying, listening, learning from lectures, and preparing for exams.

Evaluating Psychological Information: Sharpening Your Critical Thinking Skills, Second Edition, by James Bell, focuses on helping you evaluate research as you build critical thinking skills through step-by-step exercises.

World of Psychology is a brief series of current articles on diversity from the Washington Post. Highly interesting, topical, and provocative, these articles will help build critical thinking skills.

**Psychology and Culture**, edited by Walter Lonner and Roy Malpass, is a broad-based book of readings that serves as an introduction to the role of culture and ethnicity in human behavior. It features original articles by experts in the field.

**Sound Guide for Psychology** is a unique audio study aid that reinforces text concepts and helps you review, rehearse, and take practice tests.

PsychScience by Syan, Inc., offers computer simulations that put you in the same classic situations as some of the most noted psychologists and their subjects. These include 12 interactive modules for IBM and Macintosh computers. Additional computerized study aids and a CD-ROM are also available.

#### SOME FINAL COMMENTS . . . AND A REQUEST FOR HELP

Friends who know me well often describe me as a "high sensation-seeker," and I think they are right:

I'm not one who likes to sit back, put my feet up, and take a rest. I am always getting involved in new projects. Given this fact, my taking on an "essentials" text isn't at all surprising-a "stand-pat" approach is just not my style. But this text was not written just for the sake of change; rather, it reflects my desire to make a better book to respond to helpful feedback from instructors and students, and-just as important-to make it obvious to readers, no matter what their background or interests, that psychology really does matter! As always, only you, my readers, can tell me whether, and to what extent, I've succeeded in achieving these goals. So please do write, call, or fax me with your comments and suggestions. I'll listen carefully, and the odds are good that they will be reflected in the next edition. Thanks in advance for your help.



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### To My Colleagues

#### ARE SEMESTERS GETTING SHORTER OR DOES IT JUST SEEM THAT WAY?

If your experience is anything like mine, you've sometimes felt overwhelmed by the amount of material to be covered in introductory psychology. "How will I ever get through all these chapters in a semester?" you may have wondered. I've had precisely that experience while teaching the course in summer sessions. And although I've never offered introductory psychology in a school on the quarter system, I can only imagine what a nightmare that can be. So, one important reason for preparing this book is my recognition of the fact that there are many situations in which a briefer text can come in handy.

A second reason is that I've learned, largely through discussions with many colleagues, that some want to hold reading assignments to a minimum. There are many situations in which this is useful: for example, when dealing with students whose academic preparation is not very strong or with students whose interests clearly do not center on psychology—like the engineering students at my own university. In such cases, shorter reading assignments leave more room for projects and class discussion; and these activities, in turn, are often just what's needed to make the course a more enjoyable experience for these students.

With these thoughts in mind, I've sought to write a book that "covers all the bases"—including all the major content that most psychologists consider part of the core of our field-but at the same time is somewhat shorter than full-length books. The result is a text of about 600 pages—considerably shorter than many other introductory psychology texts. Although length has been reduced, I want to emphasize that this has not been achieved at the cost of essential content. On the contrary, I've attained these reductions primarily by following two strategies: (1) combining topics and chapters and (2) holding nonessential detail to a minimum. Chapter 8, which covers all aspects of human development, is a clear example of the first strategy. Here, I've covered child, adolescent, and adult development in a single chapter instead of in two separate units. Similarly, I've included coverage of intelligence in the chapter on cognition instead of in a chapter of its own. With respect to the second strategy, I've tried to hold nonessential detail to a minimum throughout the book. For example, in describing specific experiments, I've often focused on the major findings and their implications rather than on details of experimental procedure.

I also want to emphasize, however, that *Essentials* of *Psychology* is not a "stripped-down version" of a full-length text. On the contrary, it is as broad in scope and as up to date in content as I could make it. Each chapter contains references from 1994 and even 1995; and I've included coverage of many new topics at the cutting edge of our field. A small sample of these topics follows.

#### **CURRENT TOPICS**

**Evolutionary Perspective** 

Ethical Issues in the Practice of Psychology Interpreting Diverse Results: Meta-Analysis and the

Multiple (Cognitive) Resource Theory

Search for an Overall Pattern

Warning Labels: When Are They Effective?

New Findings on the Effects of Pleasant Fragrances on Behavior

Potential Benefits of Increased Self-Consciousness Dreams of Absent-Minded Transgression: Their Role in Quitting Smoking and Reducing Alcohol Consumption

Stimulus Control of Behavior and Protecting the Environment

Operant Conditioning and Seatbelt Use

Memory for the Time When a Past Event Occurred Repression of Memories of Childhood Sexual Abuse

The Oversight Bias in Reasoning

Artificial Intelligence and Neural Networks

Information Processing and Cognitive Development Adolescent Invulnerability

Successful Development in High-Risk Environments Effects of Mood on Information Processing

Gender Differences in Social Behavior and Mate Selection

The Neuroscience Approach to Intelligence Sensation Seeking

The Potential "Downside" of High Self-Esteem Stress from Natural and Human-Caused Disasters Changing Risky Behaviors DSM-IV Posttraumatic Stress Disorder Chronic Mental Illness and the Homeless Settings for Therapy

Prevention of Psychological Disorders

Tilts in Social Cognition: Automatic Vigilance, Motivated Skepticism

Troubled Relationships: When Love Dies Effects of Being in a Good Mood on Physicians' Judgments

Antisocial Personality Disorder and Weak Reactions to Negative Stimuli

New Evidence on the Effects of Punishment on Criminal Behavior

Techniques for Enhancing the Accuracy of Eyewitness Testimony

#### SUPPLEMENTS FOR INSTRUCTORS

Instructor's Resource Manual The Instructor's Resource Manual provides step-by-step instructions, as well as ready-to-duplicate handouts for over 125 activities and demonstrations. It also includes detailed notes on lecture launchers, Chapter-at-a-Glance tables that show how to organize the many supplementary materials available for each chapter, and an array of additional teaching aids.

Transparencies Over 140 transparencies from both the text and other sources supplement your teaching. Developed in consultation with instructors who teach large sections, they will help you save time as you introduce and reinforce key chapter principles. An additional set of supplemental transparencies is also available.

Allyn and Bacon Testing Services The testing resources at instructors' disposal include the following:

- *Test Bank I* contains over 2000 factual, applied, and conceptual multiple-choice questions, each rated for difficulty and referenced by page number.
- Test Bank II with 1500 more alternate items.
- Computerized Test Bank ESATEST III, the best available state-of-the-art test generation software program, is available free to adopters for both IBM (DOS and Windows) and Macintosh computers.
- Call-in and FAX Testing Call in your test request, and the Allyn and Bacon testing center will send you a finished, ready-to-duplicate test within 48 hours or FAX you a test for rush service.



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Allyn and Bacon Video Library offers an impressive selection of videos from such sources as Films for the Humanities and Annenberg/CPB for qualified adopters.



#### Some Words of Thanks

Writing, as my family well knows, is a solitary activity that occurs largely behind closed doors. Converting an author's words into a book, however, requires the help of many persons. In preparing this text, I have been aided by a large number of talented people—too many, in fact, to thank here. However, I do wish to express my appreciation to those whose help has been most valuable.

First and foremost, I offer sincere thanks to my good friend and colleague Michael J. Kalsher, who played the primary role in preparing several chapters. It's no exaggeration to say that his help has been invaluable, and I rank it—and his friendship—as precious commodities, indeed!

I also wish to express my thanks to the many colleagues who read and commented on various portions of the manuscript. Their comments and suggestions were exceptionally constructive and certainly played a key role in the final content and form of this book. These reviewers are:

Professor Norman Austin Monroe Community College

Professor Janice Beal Prairie View A&M University

Professor Deborah Best Wake Forest University Professor Jerry Bruce Sam Houston State University

Professor James Calhoun University of Georgia

Professor William Calhoun University of Tennessee

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