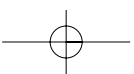
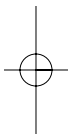
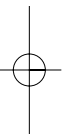


PSYCHOLOGY

The Science of Mind and Behavior



SECOND EDITION

PSYCHOLOGY

The Science of Mind and Behavior

Michael W. Passer

University of Washington

Ronald E. Smith

University of Washington



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To Bev and Kay, for their endless love and support.

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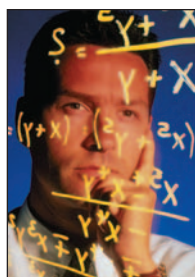
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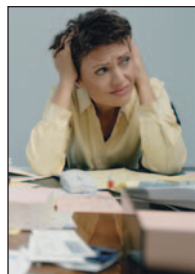
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Preface

Psychology: The Science of Mind and Behavior (2nd Edition)

—Michael W. Passer and Ronald E. Smith
University of Washington

Mind and behavior: There is nothing more fascinating in all the universe, but we didn't recognize this when we entered college. In fact, the study of psychology wasn't on either of our radar screens. Michael planned to major in physics, Ron in journalism. Then something unexpected occurred. Each of us took an introductory psychology course, and suddenly our life paths changed. Because of instructors who brought psychology to life, we were hooked, and that initial enthusiasm has never left us.

Now, through this textbook, we have the pleasure and privilege of sharing our enthusiasm with today's instructors and a new generation of students. We've endeavored to create a thoughtfully integrated book and multimedia package that strikes just the right balance between student friendliness and scientific integrity—a teaching tool that introduces students to psychology as a science while highlighting its relevance to their lives and to society. We want students to experience, as we did, the intellectual excitement of studying the mind and behavior. We also seek to help students sharpen their critical thinking skills, dispelling some commonly held myths. We have used clear prose, careful explanations, engaging examples, and supporting artwork to make the book and multimedia accessible to a wide range of students. All of this is done within a conceptual framework that emphasizes relations between biological, psychological, and environmental levels of analysis.

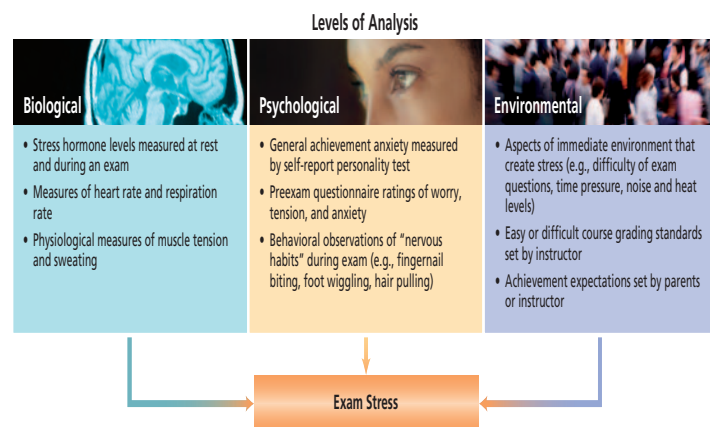
We are particularly excited about the unique way in which our second edition book is integrated with its supplements. This integration results in a learning package that “uses science to teach science.” Specifically, we are impressed with research (e.g., Moreland et al., 1997; Pauk & Fiore, 2000) showing that recall of textual material is significantly enhanced by specific focus questions and learning objectives that serve as retrieval cues and that help students identify important information and assess their mastery of the material. Over the years, students in our own courses have profited greatly from focus questions we've prepared. Because of the research evidence and our own experiences as instructors, we have retained the Focus Questions that were a popular feature in the first edition—and taken them to the next level by using them as a comprehensive learning framework for the supplements.

What you will find in the supplements is a carefully developed integration of the in-text Focus Questions with Learning Objectives throughout the various elements of the package. Instructors and students alike will be guided by the Learning Objectives, as they form the cornerstone of the Instructor's Manual, Online Learning Center, Instructor's Resource CD-ROM, student Study Guide, In-Psych Plus CD-ROM including exclusive Discovery ChannelTM video clips, and Test Banks. Items in the three Test Banks are keyed specifically to the Focus Questions and Learning Objectives. Students who are guided by the Focus Questions and Learning Objectives will be well prepared for questions taken from the test banks and should achieve at a high level.

Let's take a look at the features of our second edition.

ESTABLISHED FEATURES

- **Focus on Scientific Psychology:** Throughout the book we portray *psychology as a contemporary science* without becoming excessively formal or terminological. And because we live in an era in which students (along with everyone else) are bombarded with scientific information and misinformation, we focus not only on principles derived from research, but also on how good research is done.
- **Levels of Analysis: A Unifying Framework Students Will Remember:** To help students become more sophisticated in their everyday understanding of behavior, we present a simple framework that emphasizes how to study behavior at *biological, psychological, and environmental levels*, and how



these explanations for behavior are related to one another. While we carry this Levels of Analysis framework throughout the book in textual discussion and *Understanding Behavior* schematics, we apply it selectively without being overly repetitious for students or confining for instructors.

- Helping Students to Think Critically:** The Levels of Analysis framework reinforces the concept that behavior typically has multiple causes and encourages students to be wary of overly simplistic explanations. Moreover, the discussion section built into each *Research Close-Up* illustrates critical thinking about research results. Throughout the text we address critical thinking issues such as correlation and causation, noting that many faulty inferences—in everyday life as well as in science—are made by failing to understand the simple principle that correlation does not establish causation.
- Focus on Relations Between Basic Science and Applications:** Whether in the context of their personal lives or of larger societal issues, we point out that many questions studied from a basic science perspective are inspired by real-world questions and issues, and that basic research findings often guide solutions to social and individual problems.
- Integrated Coverage of Cultural and Gender Issues:** Cultural and gender issues are at the forefront of contemporary psychology, and rather than isolating this material within dedicated chapters we integrate it throughout the text. Our Levels of Analysis approach conceptualizes culture as an environmental factor and also as a psychological factor that reflects the internalization of cultural influences.
- Thorough, Up-To-Date Coverage:** To portray our discipline with accuracy, we have made every effort to be the most current book on the market. As in our first edition, our emphasis on new research is balanced with thorough coverage of classic studies.
- Research Close-Ups:** In each chapter this feature provides students with an inside look at research studies in a scientific journal format and engages students in a process of critical thinking about the research question.

- Applying Psychological Science:** In each chapter this feature brings a key concept into the realm of real-life application. Five of these *Applying Psychological Science* boxes throughout the book focus on important skills that can enhance students' learning and performance. In Chapter 1, this feature comprises a discussion of good study habits and other ways that students can enhance their learning. In Chapter 6, it focuses on behavioral self-regulation and breaking bad study habits. Other *APS* features emphasize memory enhancement (Chapter 7), systematic goal setting (Chapter 11), and stress management (Chapter 12).

paralyzing the underlying muscles whose contraction causes them.

The opposite effect on ACh occurs with the bite of the black widow spider. The spider's venom triggers a torrent of ACh, resulting in violent muscle contractions, convulsions, and possible death. Some chemical agents, such as the deadly sarin gas released into the Tokyo subway system by terrorists in 1995, also raise havoc by allowing ACh to run wild in the nervous system. Sarin and similar nerve gas agents prevent the activity of an enzyme that normally degrades ACh at the synapse. The result is uncontrolled seizures and convulsions that can kill. Among antidotes issued to coalition troops during the Iraq War was a substance that inhibits nerve agents from preventing the action of the enzyme.

Most neurotransmitters have their excitatory or inhibitory effects only on specific neurons that have receptors for them. Others, called neuro-

modulators, have a more widespread and generalized influence on synaptic transmission. These substances circulate through the brain and either increase or decrease (i.e., modulate) the sensitivity of thousands, perhaps millions, of neurons to their specific transmitters. The best known neuromodulators are the *endorphins*, which travel through the brain's circulatory system and inhibit pain transmission while enhancing neural activity that produces pleasurable feelings. Other neuromodulators play important roles in functions such as eating, sleeping, and coping with stress.

Knowledge about neurotransmitter systems has many important applied implications. For one thing, it helps us understand the mechanisms that underlie the effects of **psychoactive drugs**, chemicals that produce alterations in consciousness, emotion, and behavior. The following *Applying Psychological Science* feature focuses on mechanisms of drug effects within the brain.

For more on neural functioning, see interactive Figure 1.1.

▶ 13. How do agonist and antagonist functions underlie the neural and behavioral effects of psychoactive drugs?

APPLYING PSYCHOLOGICAL SCIENCE

UNDERSTANDING HOW DRUGS AFFECT YOUR BRAIN

A neurotransmitter from binding with the postsynaptic neuron by fitting into and blocking the receptor sites on the postsynaptic neuron.

With the distinction between agonist and antagonist functions in mind, let us consider how some commonly used drugs work within the brain. We will discuss drug effects on consciousness and behavior in greater detail in Chapter 5.

Alcohol is a depressant drug having both agonist and antagonist effects. As an agonist, it stimulates the activity of the inhibitory transmitter GABA, thereby depressing neural activity. As an antagonist, it decreases the activity of glutamate, an excitatory transmitter (Gonzalez & Jaworski, 1997). The double-barreled effect is a neural slowdown that inhibits normal brain functions of clear thinking, emotional control, and motor coordination. Sedative drugs, including barbiturates and tranquilizers, also increase GABA activity, and mixing them with alcohol intake can be a deadly combination when their depressant effects on neural activity are combined with those of alcohol.

Caffeine is a stimulant drug that increases the activity of neurons and other cells. It is an antagonist for the transmitter adenosine. Adenosine inhibits the release of excitatory transmitters. By reducing adenosine activity, caffeine helps produce higher rates of cellular activity and more available energy. Although caffeine is a stimulant, it is important to note that, contrary to popular belief, caffeine does *not* counteract the effects of alcohol

Continued

- Additional Pedagogical Features:** A textbook should inspire students and help them master the material at hand. Our book incorporates many pedagogical features to accomplish these goals.
 - Chapter opening vignettes** present interesting stories that capture students' attention, draw them into the material, and are used later in the chapter to reinforce important points.
 - Focus Questions** occur in the margin of the book adjacent to important material. These are designed to function as study guides, retrieval cues, and self-tests.

RESEARCH CLOSE-UP

MEMORY ILLUSIONS: REMEMBERING THINGS THAT NEVER OCCURRED

Study 1: College Students

Background

In this famous experiment, Henry Roediger III and Kathleen McDermott examined how often false memories occurred while people performed a simple laboratory task: remembering lists of words. They also investigated whether false memory rates depend on how memory is measured (i.e., recall versus recognition) and whether people experience false memories as being vivid and clear.

Method

Building on previous research (Deese, 1959), the researchers created 24 lists of 15 words. Each list contained words that, to varying degrees, were associated with a central organizing word. To illustrate, look at the following list:

nose, candy, sugar, honey, gum, taste, mouth, mice, honey, soda, chocolate, heart, cake, left, pie

The word *nose* doesn't occur in the list, yet it is associated with these items. The central word (*nose*) is called a *critical lure*.

Thirty-six college students each listened to 16 of the 24 lists. For 8 lists, students' recall was measured as soon as each list ended. For 8 other lists, recall was not measured. After finishing all 16 lists, students performed a recognition task. They were given a sheet of paper with the words, half of which actually had been on the lists. The other words were critical lures and filler items from the final 8 lists not read to each student. Students identified whether each word had been on the lists they heard. If they selected a word, they also reported whether they had a vivid memory of having heard it or, instead, were sure that they had heard it but lacked a vivid memory.

Results

Students correctly recalled 62 percent of the real words but falsely recalled almost as many (53 percent) of the critical lures.

SOURCE: Henry L. Roediger III and Kathleen McDermott (1995). Creating false memories: Remembering words not presented in lists. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 21, 803-814. See also A. Chaney, Richard J. McNulty, Daniel L. Schacter, Mark F. Lonergan, and Roger K. Passolunghi (2002). Memory distortion in people reporting abduction by aliens. *Journal of Abnormal Psychology*, 111, 435-441.

▶ 22. What is meant by the term *schizophrenia*? What are its major cognitive, behavioral, emotional, and perceptual features?

Of all the psychological disorders, schizophrenia is the most bizarre and, in many ways, the most puzzling. It is also one of the most challenging disorders to treat effectively (Hogarty, 2003). Despite many theories of schizophrenia and thousands of research studies, a complete understanding of this disorder continues to elude us.

- We have retained and, in some cases, improved other pedagogical features including *chapter outlines, bold-faced key terms* in the narrative, *summaries, Understanding Behavior schematics*, and an *end of chapter list of key terms*.

KEY TERMS AND CONCEPTS

Each term has been boldfaced and defined in the chapter on the page indicated in parentheses.

- | | | |
|---|--|--|
| archetypes (p. 436) | Minnesota Multiphasic Personality Inventory-2 (MMPI-2; p. 458) | repression (p. 433) |
| behavioral assessment (p. 457) | need for positive regard (p. 440) | Rorschach test (p. 459) |
| behavioral signatures (p. 451) | need for positive self-regard (p. 441) | self (p. 439) |
| behavior-outcome expectancy (p. 449) | neofreudian theorists (p. 435) | self-actualization (p. 439) |
| cognitive-affective personality system (CAPS; p. 449) | NEO-PI (p. 458) | self-consistency (p. 440) |
| collective unconscious (p. 436) | object relations theories (p. 436) | self-efficacy (p. 445) |
| conditions of worth (p. 441) | Oedipus complex (p. 435) | self-enhancement (p. 442) |
| congruence (p. 440) | personal unconscious (p. 436) | self-esteem (p. 441) |
| defense mechanisms (p. 433) | personality (p. 420) | self-monitoring (p. 424) |
| ego (p. 432) | personality trait (p. 421) | self-reinforcement processes (p. 450) |
| Electra complex (p. 435) | phenomenology (p. 439) | self-verification (p. 442) |
| empirical approach (p. 458) | pleasure principle (p. 432) | social-cognitive theory (p. 444) |
| evolutionary personality theory (p. 430) | projective tests (p. 459) | structured interview (p. 456) |
| factor analysis (p. 421) | psychosexual stages (p. 434) | sublimation (p. 433) |
| fixation (p. 434) | rational-theoretical approach (p. 458) | superego (p. 432) |
| fully functioning persons (p. 441) | reality principle (p. 432) | Thematic Apperception Test (p. 460) |
| gender schemas (p. 455) | reciprocal determinism (p. 444) | threat (p. 440) |
| id (p. 432) | regression (p. 434) | unconditional positive regard (p. 441) |
| internal-external locus of control (p. 444) | remote behavior sampling (p. 457) | |

NEW FEATURES

- **Multimedia Integration with the Text and Instructional Materials:** The Instructor’s Manual, In-Psych Plus CD-ROM, Test Banks, and other supplements are built to support this book; in turn, the book supports them with the Focus Questions and multimedia icons that appear in its margins. The Focus Questions are streamlined from the Learning Objectives on which the Instructor’s Manual is built, making it easy for instructors to use them in whatever way best supports their course, and to access Test Bank questions covering whichever Focus Questions they wish to emphasize. In addition, each multimedia segment—including McGraw-Hill’s exclusive Discovery ChannelTM video clips, additional videos, animation, and interactivities—has been chosen to support one or more Learning Objectives, is accompanied by its own pedagogy, and has Test Bank items and Instructor’s Manual commentary associated with it. Further details about these multimedia materials appear below under “Supplements.”
- **Revised Chapter Order and Structure of Topics:** In response to reviewer and user suggestions, the text now has 15 chapters, including a new chapter on *Stress and Health* and merged coverage of *Motivation and Emotion* within a single chapter. The former capstone chapter on *Psychology and Society* has been removed (its important components have been distributed into other chapters) and the chapter on social psychology now concludes the book.
- **A More Modular Approach:** To facilitate student understanding and instructor flexibility of assignments, chapters now feature fewer first-level sections, each one largely self-contained. At the end of each major section an interim summary (*In Review*) now breaks the content into more manageable modules or segments.

IN REVIEW

- **Somatoform disorders** involve physical complaints that do not have a physiological explanation. They include hypochondriasis, pain disorders, and conversion disorders in which a physical symptom or disability occurs in the absence of physical pathology.
- **Familial similarities in somatoform disorders** may have a biological basis, or they may be the result of environmental shaping through attention and sympathy. Somatoform patients may be highly vigilant and reactive to somatic symptoms. Such disorders tend to occur with greater frequency in cultures that discourage open expression of negative emotions.
- **Dissociative disorders** involve losses of memory and personal identity. The major dissociative disorders are psychogenic amnesia, psychogenic fugue, and dissociative identity disorder (DID).
- **The trauma-dissociation theory** holds that DID emerges when children dissociate to defend themselves from severe physical or sexual abuse. This model has been challenged by other theorists who believe that multiple personalities result from role immersion and therapist suggestion.

- **Increased Emphasis on Critical Thinking and Dispelling Misconceptions:** We now put more emphasis on critical thinking as a skill for students to learn and practice. Two new features, *Beneath the Surface* discussions and *What Do You Think?* exercises, challenge students to think critically in evaluating popular truisms, scientific and pseudoscientific claims, and psychology’s relevance to their own lives.

BENEATH THE SURFACE

COLLEGE-AGE DRINKING: HARMLESS FUN OR RUSSIAN ROULETTE?

The harmful problems that result from the behaviors of alcoholics and drug addicts are self-evident. But because college students view themselves as different from those populations, many fail to realize the extent to which they place themselves in harm’s way through their use of alcohol. Many students view parties featuring heavy drinking as a natural part of college life, like going to classes or athletic events. Studies have found that many heavy-drinking students, who average 40 to 50 drinks per week, do not view their behavior as either abnormal or problematic (Marlatt, 1998).

Beneath this surface of complacency lies evidence that heavy-drinking students are placing themselves at considerable risk. In one national study carried out by the Harvard School of Public Health, binge drinking was defined as having more than 4 (for women) or 5 (for men) drinks at a time on at least three occasions during the previous 2 weeks (Wechsler et al., 1994). Data from 18,000 students at 140 U.S. colleges revealed that 50 percent of the males and 40 percent of the women met this bingeing criterion, yet fewer than 1 percent saw themselves as having an alcohol problem. However, the dangerous consequences of their drinking became clear when binge drinkers were asked about alcohol-related problems (Table 12.6). Frequent binge drinkers were 7 to 10 times more likely than moderate drinkers to engage in unplanned and unprotected sexual intercourse, to suffer injuries, to

Table 12.6 Percentage of Binge-Drinking College Students Who Reported Drinking-Related Problems

Missed a class	61%
Forgot where they were or what they did	54%
Engaged in unplanned sex	41%
Got hurt	23%
Had unprotected sex	22%
Damaged property	22%
Got into trouble with campus or local police	11%
Had 5 or more alcohol-related problems in school year	47%

Source: Isreal and Wechsler et al., 1994.

drive under the influence of alcohol, to damage property, and to get into trouble with the law. At schools with the highest alcohol-consumption rates, nondrinkers and moderate drinkers were 2 to 3 times more likely to report physical assault, sexual harassment, destruction of their property, and interruption of their sleep and studying by heavy drinkers. Some college women (sound sleepers, apparently) complained that they woke up Sunday after Sunday to find a strange man in bed with their roommate (and all too frequently the heavy-drinking roommate didn’t know him either). Common belief may have it that heavy drinking is harmless fun, but scientific findings suggest otherwise.

What Do You Think?

DO STRESSFUL EVENTS CAUSE PSYCHOLOGICAL DISTRESS?

A consistent statistical relation has been shown between stressful life events and psychological distress: the greater the number of stressful events people have experienced, the more distress they are likely to report. Based on these results, are you willing to accept the conclusion that life stress causes distress, or can you think of other possible reasons for this relation? Think about it, then see page 504 for a commentary.

- **Enhanced Coverage of Culture, Gender and Sexuality, and Aging:** We have expanded our coverage of these topics throughout the narrative and via features such as the *Research Close-Ups* and *What Do You Think?* exercises. Notable in this regard are new sections in Chapter 13 (Psychological Disorders) on disorders of childhood and old age and in Chapter 14 (Treatment of Psychological Disorders) on cultural and gender issues in psychotherapy.
- **Key Terms with Definitions:** Key terms are now presented in the text in boldface, followed by italicized definitions. This in-context presentation serves as an *integrated glossary* supplementing the list of key terms at chapter's end and the overall glossary in the back of the book.

Acquisition

Acquisition refers to the period during which a response is being learned. Suppose we wish to condition a dog to salivate to a tone. Sounding the tone initially may cause the dog to perk up its ears but not to salivate. At this time, the tone is a *neutral stimulus* because it does not elicit salivation (Figure 6.5). If, however, we place food in the dog's mouth, the dog will salivate. This salivation response to food is *reflexive*—it's what dogs do by nature. Because no learning is required for food to produce salivation, the food is an **unconditioned stimulus (UCS)**: a stimulus that elicits a reflexive or innate response (the UCR) without prior learning. Salivation is an **unconditioned response (UCR)**: a reflexive or innate response that is elicited by a stimulus (the UCS) without prior learning.

Next the tone and the food are paired—each pairing is called a *learning trial*—and the dog salivates. After several learning trials, if the tone is presented by itself, the dog salivates even though there is no food. The tone has now become a **conditioned stimulus (CS)**, a stimulus that, through association with a UCS, comes to elicit a conditioned response similar to the original UCR. Because the dog is now salivating to the tone, salivation has become a **conditioned response (CR)**, a response elicited by a conditioned stimulus. Notice that we have two terms for salivation: UCR and CR. When the dog salivates to food, this UCR is a natural, unlearned (unconditioned) reflex. But when it salivates to a tone, this CR represents a learned (conditioned) response.

During acquisition, a CS typically must be paired multiple times with a UCS to establish a strong CR (Figure 6.6). Pavlov also found that

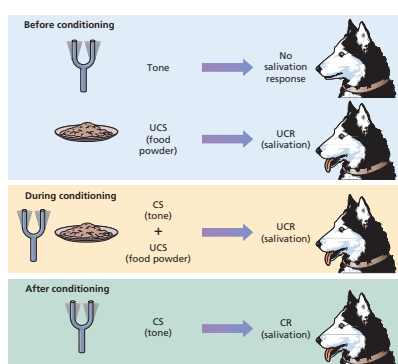


FIGURE 6.5

In classical conditioning, after a neutral stimulus such as a tone is repeatedly associated with food (unconditioned stimulus), the tone becomes a conditioned stimulus capable of eliciting a salivation response (conditioned response).

a tone became a CS more rapidly when it was followed by greater amounts of food. Indeed, when the UCS is intense and aversive—such as an electric shock or a traumatic event—conditioning may require only one CS-UCS pairing (Richard et al.,

- **New Art:** Approximately 30% of the photographs are new to this edition, and the line art program has been revised for improved conceptual clarity and visual appeal.
- **Updated coverage:** Our second edition is rich in discussions of research and new references—over 800 of the book's citations are from the years 2000 and beyond.

CONTENT CHANGES IN INDIVIDUAL CHAPTERS

Chapter 1: The Science of Psychology

- A new section on *The Scope of Psychology: From Brain to Culture* introduces the theme of multicausality early in the chapter and expands coverage of mind (brain)-body interactions and cultural influences.
- A new section on *Psychology's Intellectual Roots* condenses information previously spread throughout the chapter and provides a more integrated picture of how psychology became a science.
- Evolutionary psychology coverage is expanded and the positive psychology movement is discussed.
- New *What Do You Think?* exercises challenge students to think critically about alternative explanations for behavior (in this case, the phenomenon of “voodoo death”) and apply concepts from the chapter to a real-life situation (an instructor whose students seem to be apathetic).
- *Beneath the Surface*, a new critical thinking feature, calls students' attention to common misconceptions about the field of psychology and about the introductory psychology course.

Chapter 2: Studying Behavior Scientifically

- A new *Research Close-Up* on *Very Happy People* is presented to illustrate the causal limitations of correlational research.
- *What Do You Think?* exercises enable students to demonstrate the pitfalls of after-the-fact reasoning, test their understanding of why correlation does not establish causation, and hypothesize about why people believe in the paranormal despite a lack of scientific evidence.

Chapter 3: Biological Foundations Of Behavior: Evolution, Genetics, And The Brain

- Completely reorganized, the chapter begins with a new section on evolution, followed by treatment of genetic influences on behavior and concluding with a section on behavioral neuroscience (nervous, endocrine, and immune systems).
- A new section on genetic engineering describes recent developments and their implications for altering behavior.
- A new *Applying Psychological Science* feature describes how psychoactive drugs (including “date rape” substances) affect behavior and experience by altering neurotransmitter processes.
- A new *Research Close-Up* feature describes an fMRI study on neural processes in the brains of violent murderers and

how such processes are affected by previous environmental experiences, illustrating brain-environment interactions.

- The *Beneath the Surface* feature challenges the widely stated conception that we use only 10 percent of our brain capacity.
- New material on neural plasticity, including recent research on neurogenesis and neural stem cell interventions.
- An updated treatment of research on reciprocal interactions among the nervous, endocrine, and immune systems.

Chapter 4: Sensation and Perception

- An integrated treatment of sensation and perception as overlapping phenomena.
- New research on subliminal influences on perception and aggressive behavior.
- Expanded coverage of sensory prosthetic devices, including cortical implants and the “seeing tongue” research of Bach-y-Rita.

Chapter 5: States of Consciousness

- A new chapter opening vignette on “sleepwalking” replaces the vignette on dissociative identity disorder. (DID is now discussed in Chapter 13 on mental disorders).
- A new section on *Ecstasy (MDMA)* is added to the discussion of drugs.
- *Beneath the Surface* helps students think critically about the chance nature of so-called “psychic dreams.”
- Hypnosis coverage includes a new section on *The Hypnotized Brain* and ends with a reorganized section—*I’m Intoxicated, No Matter What You Say*—that integrates views of hypnosis with other aspects of mind-body relations.

Chapter 6: Learning and Adaptation: The Role of Experience

- A revised chapter structure more clearly highlights evolutionary influences on learning.
- *What Do You Think?* exercises help students better understand why some classically conditioned responses fail to extinguish, and ask students to consider ethical issues surrounding the case of “Little Albert.”
- *Beneath the Surface* explores whether “sparing the rod spoils the child” and is accompanied by an expanded discussion of punishment.

Chapter 7: Memory

- A new chapter opening vignette about a mnemonist, Rajan, now accompanies the vignette on the amnesia victim H.M.

- The discussion of mnemonic devices is expanded and a section on *Encoding and Exceptional Memory* is added.
- Coverage of how distinctiveness affects memory is updated and a new *Beneath the Surface* feature uses the September 11, 2001 attack on the World Trade Center as a framework to examine the accuracy of flashbulb memories and the relation between memory confidence and memory accuracy.
- *What Do You Think?* exercises ask students to consider whether perfect memory would indeed be a blessing, and to develop alternative explanations (beyond retrieval failure) for tip-of-the-tongue experiences.
- A new *Research Close-Up* ties in Roediger and McDermott’s classic study of memory illusions with a recent study of memory illusions among people claiming to be alien abductees.
- Discussions of children’s memory for traumatic events and of the repressed memory controversy are updated.
- A new section on *Culture and Memory Construction* is added.

Chapter 8: Language, Thinking, and Intelligent Behavior

- Linkages between language, thinking, and adaptive behavior are emphasized in this integrative chapter.
- Expanded treatment of language, including neural and environmental mechanisms of acquisition and sex differences in lateralization of language functions.
- Expanded coverage of psychometric principles underlying the development and evaluation of intelligence tests.
- Expanded treatment of cultural and sex differences in cognitive functions and their biological and social foundations.
- New research on neural processes underlying individual differences in intelligence.

Chapter 9: Motivation and Emotion

- This new chapter combines the motivation content from the first edition chapter on motivation (9) with the emotion section from the previous edition’s “Emotion, Stress, and Coping” chapter (10).
- Coverage of cultural factors that affect many aspects of motivation has been expanded.
- Coverage of evolutionary and alternative explanations for male-female differences in sexual motivation is expanded.
- Treatment of emotion is based on an integrative conceptual model that specifies relations among situational, cognitive, physiological, and behavioral components.
- A new section explores the factors underlying happiness and the implications of a positive psychology that focuses

on human strengths, and *Applying Psychological Science* provides students with research-based guidelines for increasing their own subjective well-being.

Chapter 10: Development Over the Life Span

- Coverage of childhood includes a new section on the development of early emotions and emotion regulation.
- A new section on parenting-heredity interactions illustrates how children's home environment and genetic inheritance jointly affect their behavior. This section also emphasizes the bidirectional nature of parent-child influences.
- Coverage of gender identity and gender socialization is expanded.
- Coverage of moral development is now divided into sections on moral thinking and a new section on moral behavior.
- A new Research Close-Up on *The "Ups and Downs" of Adolescence: Does Emotion Change During the Teen Years?* enhances coverage of adolescents' social-emotional development.
- The already substantial coverage of cognitive changes in late adulthood is expanded to include recent data on the prevalence of cognitive impairment.
- *Beneath the Surface* explores the nature of wisdom and whether we become "older but wiser" throughout adulthood.
- Coverage of marriage and family issues now describes changes in American family structure across recent generations.

Chapter 11: Personality

- A theme of this chapter is the psychological profile of mass murderer Charles Whitman, whose records were made public for the first time in 2002. We open with a vignette of Whitman and use his personality as a springboard for discussing various theories of personality throughout the chapter.
- Extended treatment of biological factors in personality. A new section discusses incentive and threat reactivity, their biological bases, and their effects on behavior.
- Updated treatment of recent developments in social cognitive theory, including Mischel and Shoda's Cognitive-Affective Personality System (CAPS).

Chapter 12: Adjusting to Life: Stress, Coping, and Health

- A new chapter that combines stress and coping topics from the first edition's Emotion, Stress, and Coping chapter (10) with health psychology topics from the former capstone chapter on Psychology and Society (16).

- New material on Ann Masten's exploration of psychosocial factors that underlie resilience in children who grow up in highly stressful environments.
- New section on the physical stressor of pain explores biological, psychological and cultural factors.
- A new *Research Close-Up* focuses on a recent longitudinal study on attitudes toward aging and longevity, illustrating the role of psychological factors on physical well-being.
- *Beneath the Surface* focuses on new data on the dangers that attend heavy drinking among college students.

Chapter 13: Psychological Disorders

- New sections focus on disorders of childhood and old age.
- New *Research Close-Up* highlights a recent study that compares the effects of rape and nonsexual physical assault on the development and course of posttraumatic stress disorder in women.
- Updated material on scientific, legal, and social issues in psychiatric diagnosis.

Chapter 14: Treatment of Psychological Disorders

- New coverage of the use of VR (virtual reality) in exposure therapy for fear of flying is featured in the *Research Close-Up*.
- New material on cultural factors in seeking and remaining in therapy and on the training of culturally competent therapists.
- *Beneath the Surface* feature challenges the misconception that psychotherapy need be a long and expensive process by focusing on new 2002 and 2003 studies on the course of improvement and the efficacy of briefer forms of treatment.
- New PET-scan research showing that similar brain activation changes are found in phobics successfully treated with either drug or cognitive-behavioral treatments, indicating alternate methods for producing the same neurological changes.
- Expanded and updated treatment of preventive and community approaches to mental health.

Chapter 15: Social Thinking and Behavior

- This chapter is fully reorganized, incorporating coverage from the prior Chapter 12 (Behavior in a Social Context) as well as material on reducing prejudice from the prior Chapter 16 (Psychology and Society). The sequence of major sections now begins with Social Thinking and is followed by coverage of Social Influence and Social Relations.
- A major section on interpersonal attraction is updated from the prior Chapter 9 (Motivation) and now incorporated into the section on Social Relations.

- Coverage of how culture and general cognitive style influence attribution has been expanded.
- The discussion of compliance techniques (formerly under Social Thinking) is now in the module on Social Influence and is updated to include recent research examining compliance techniques used via e-mail.
- A *Beneath the Surface* feature on the effects of video game violence highlights recent experiments and the results of three comprehensive research reviews.

SUPPLEMENTS

A unique feature of our second edition supplements package is the comprehensive chapter-by-chapter list of Learning Objectives linked to the Focus Questions in the margins of the textbook. The Learning Objectives form the cornerstone of not only the Instructor's Manual, but also the Test Banks, multimedia CDs, and student Study Guide. Instructors may use the Learning Objectives as a guide to structuring the content of their courses, to preparing lectures, class activities, quizzes and exams. Students may use them to focus on key concepts before, during, and after the reading of the chapter; as well as to review and test their knowledge.

For the Instructor

Instructor's Manual

Written by Kevin Larkin of West Virginia University, this invaluable 500-page guide (ISBN 0-07-295228-8) contains a wealth of material that you can tailor to your teaching preferences and goals. For new instructors, it offers a master blueprint for organizing and structuring the introductory psychology course. Learning Objectives for each section of a chapter expand upon the Focus Questions found in the textbook's margins, and serve as the foundation upon which all instructor resources are built. These resources include: pre-class student assignments, material for lecture enhancement, in-class demonstrations and activities, suggestions for class discussions, a list of images available either as overhead transparencies or in digital formats, recommended guest presentations, an extensive array of handouts, and a complete list of the technology resources relevant to that portion of the text. Recommended strategies for evaluating student progress on mastery of the Learning Objectives cap off each section of a chapter. The Instructor's Manual incorporates the **In-Class Activities Manual for Instructors of Introductory Psychology** written by the Illinois State University team of Pat Jarvis, Cynthia Nordstrom, and Karen Williams.

Three Test Banks Featuring Over 7,200 Items

Consonant with our top-down media integration, all Test Bank questions are written to support the Learning Objec-

tives and can be customized for instructor control and convenience.

- Test Bank 1, written by Donald S. Christensen, is revised and expanded over the previous edition, and now includes not only fact- and application-based questions but also more challenging conceptual items (33%). This comprehensive resource offers 4,133 items in all, including multiple choice, true-false, fill-in-the-blank, matching, and essay questions; there are also 3 questions for each multimedia segment (264 in all).
- Test Bank 2, written by P. Niels Christensen, comprises 2500 multiple choice items, of which 46% are conceptual in nature.
- Test Bank 3, written by Jacqueline E. Pickrell, offers 40 conceptual questions per chapter (600 in all). This unique resource is especially appealing to instructors who wish to challenge their students to think more conceptually.

As with other McGraw-Hill test banks, these are available in Brownstone, a dual platform computer testing system that lets you easily select questions and print tests and answer keys. You can also customize questions, headings, and instructions; add or import your own questions; and print tests in a choice of printer-supported fonts. The test items are also available in Word format (Rich text format) on the Instructor's Resource CD-ROM.

McGraw-Hill Media Resources for Teaching Psychology

McGraw-Hill and The Discovery Channel^(TM) have formed an exclusive partnership to bring you video segments and interactivities for use in your psychology course. 48 video segments and 17 interactivities were chosen especially to support the Learning Objectives and are fully described in the Instructor's Manual. The majority of the video segments are timed at 5 minutes or less; the longest at 12 minutes. They are available either as a DVD + CD-ROM set (ISBN 0-07-293885-4) or as a set of two VHS videocassettes + CD-ROM (ISBN 0-07-293884-6).

Online Learning Center for Instructors

The instructor side of the Passer & Smith *Psychology* 2nd edition Web site at <http://www.mhhe.com/passer2> contains all the material you need to design your course. Ask your local McGraw-Hill representative for your password.

- **PowerPoint Lecture Outlines** These presentations (also available as transparency masters) cover the key points of each chapter and include charts and graphs from the text. Helpful lecture guidelines are provided in the notes section for each slide. They can be used as-is or modified to meet your needs.
- **PowerWeb** This unique online reader at www.dushkin.com/powerweb provides readings, *New York Times* news feeds, weekly updates, curriculum-based

materials, refereed Web links; tools for research, study, and assessment; and interactive exercises. You will be excited by this powerful tool for helping keep your lectures up to date and timely.

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 - **Image Banks** These files include all of the figures, tables, and photos from this textbook (more than 150 images in all) for which McGraw-Hill holds copyright.

Overhead Transparencies

These four-color transparency masters (ISBN 0-07-256336-2), which are also available in PowerPoint, include approximately 125 images from the text.

Instructor's Resource CD-ROM

This CD-ROM (ISBN 0-07-256335-4) conveniently contains the Instructor's Manual, Test Banks and Brownstone testing system, Image Bank, and PowerPoint lectures described above. Also visit McGraw-Hill's *Psychology Supersite* at <http://www.mhhe.com/psych>. This comprehensive web resource provides a superstructure that organizes and houses all of our psychology text websites.

As a full service publisher of quality educational products, McGraw-Hill does much more than just sell textbooks to your students. We create and publish an extensive array of print, video, and digital supplements to support instruction on your campus. Orders of new (versus used) textbooks help us to defray the cost of developing such supplements, which is substantial. We have a broad range of other supplements in psychology that you may wish to tap for your introductory psychology

course. Ask your local McGraw-Hill representative about the availability of these and other supplements that may help you with your course design.

For The Student

In-Psych Plus Student CD-ROM

In-Psych Plus sets a new standard for introductory psychology multimedia through its total integration with the textbook and Learning Objectives. Each CD-ROM icon in the margin of the textbook guides students to the multimedia item on the CD (video, animation, or interactive segment) pertaining to the topic under discussion. Each multimedia segment includes a pre-test, follow-up discussion questions, and Web resources. In-Psych Plus also includes chapter quizzes, a student research guide, and an interactive timeline that puts events, key figures, and research in psychology in historical perspective. Teachers may choose to test students on any of these items.

Although each cycle through the sleep stages takes an average of about 90 minutes, Figure 5.12 shows that as the hours pass, stage 4 and stage 3 drop out and REM periods become longer.

For more on sleep stages, see Interactive Segment 5.1.



Study Guide

The Study Guide (ISBN 0-07-256340-0) is built upon the same list of chapter-by-chapter Learning Objectives that forms the cornerstone of many of the instructor supplements, encouraging students to focus on the same key concepts that they are learning from the textbook and in class lectures and activities. New to this edition of the Study Guide is the "Analyze This" feature, in which students examine an assertion based on information in the text by using a series of critical thinking questions. Critical thinking is also promoted by the essay questions at the end of each chapter, which challenge students to apply concepts from the chapter to issues of ethics, social policy, and their own personal lives.

Online Learning Center for Students

The Passer & Smith, *Psychology* 2nd edition, Website at <http://www.mhhe.com/passers2> gives students access to *New York Times* news feeds, chapter outlines, practice quizzes, key term flashcards, interactive exercises, Internet activities, Web Links to relevant psychology sites, drag-and-drop labeling exercises, Internet primer, a career appendix, and a statistics primer, and our PowerWeb Online Reader.

PowerWeb

A PowerWeb passcard is included free with each new copy of the book—students should be sure to save it so that they can benefit from this unique online reader. Here they will find readings, *New York Times* news feeds, weekly updates, curriculum-based materials, refereed Web links; tools for research, study, and assessment; and interactive exercises.

GradeSummit

GradeSummit is an online assessment tool used by students to identify their understanding of course concepts and offers a guide for further study. This focuses their study efforts on the materials they haven't learned and helps them make their study time more useful. Instructors can also view the student's progress, without needing to upload or download data. Visit the Web site at <http://www.gradesummit.com> for more information.

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In today's competitive market, outstanding supplements are a critical element in the success of any textbook, but our supplement authors have gone beyond excellence in implementing the total integration of the supplements with the text. We are in great debt to Kevin Larkin (West Virginia University) for developing an absolutely first-class Instructor's Manual that not only includes a wealth of useful material for novice and experienced instructors alike, but also coordinates outstanding audio/visual and electronic resources with the content of the textbook. David Jones (Westminster College) developed a highly effective, parsimonious set of Powerpoint slides that instructors can use to augment their lectures, and Elsa Peterson did a stellar job of enhancing the Student Study Guide for this edition. Finally, Donald S. Christensen (Tacoma Community College), P. Niels Christensen (San Diego State University) and Jacqueline E. Pickrell

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