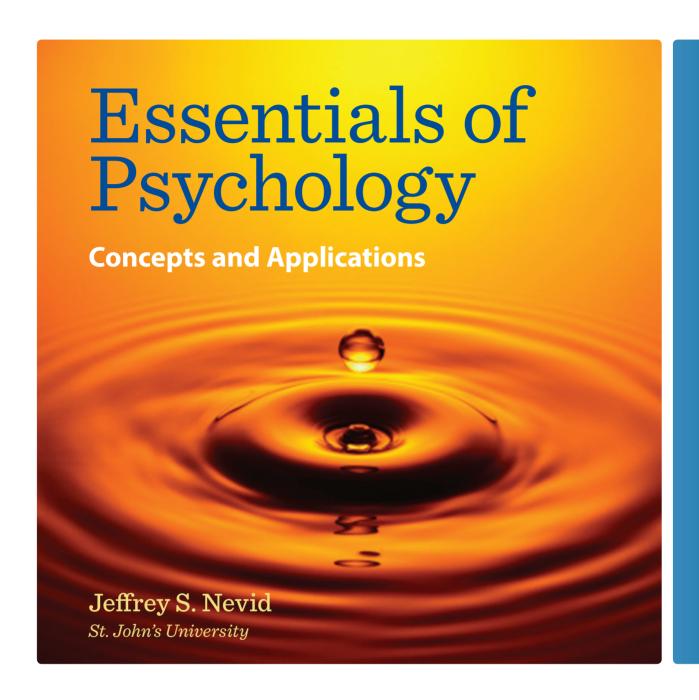
Essentials of Chology Concepts and Applications

Jeffrey S. Nevid







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This text is dedicated to the thousands of psychology instructors who share their excitement and enthusiasm for the field of psychology with their students and seek to help them better understand the many contributions of psychology to our daily lives and to our understanding of ourselves and others. I consider myself fortunate to have the opportunity to be one of them.

ABOUT THE AUTHOR



Dr. Jeffrey Nevid is professor of psychology at St. John's University in New York. He received his doctorate from the State University of New York at Albany and completed a postdoctoral fellowship in evaluation research at Northwestern University. Dr. Nevid has published more than 70 articles in professional publications and authored or coauthored more than 50 editions of textbooks and other books in psychology and related fields. His research encompasses many areas of psychology, including health psychology, clinical and community psychology, social psychology, gender and human sexuality, adolescent development, and teaching of psychology. His research publications have appeared in such journals as *Health Psychology, Journal of Consulting and Clinical Psychology, Journal of Community Psychology, Journal of Youth and Adolescence, Behavior Therapy, Psychology & Marketing, Professional Psychology, Teaching of Psychology, Sex Roles, and Journal of Social Psychology, among many others.*

Dr. Nevid has served as an editorial consultant for the APA journal *Health Psychology* and for *Psychology & Marketing*, and as an associate editor for the APA's *Journal of Consulting and Clinical Psychology*. He is actively involved in conducting research on pedagogical advances to help students succeed in their courses. His most recent research on effective learning has focused on journaling as a writing-to-learn exercise in introductory psychology and the IDEA model of course assessment.

Dr. Nevid has authored or coauthored a number of other college-level texts, including *Abnormal Psychology in a Changing World*, published by Pearson Education; *Human Sexuality in a World of Diversity*, also published by Pearson Education; *Psychology and the Challenges of Life: Adjustment and Growth*, published by John Wiley & Sons; and *HLTH*, published by Wadsworth/Cengage Learning. He lives in New York with his wife Judy and their two children, Michael and Daniella.

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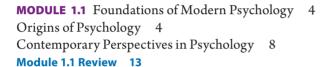
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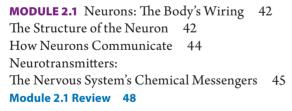
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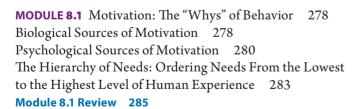
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PREFACE

Welcome to the fourth edition of *Essentials of Psychology: Concepts and Applications.* I set out to accomplish three major purposes in writing this text:

- 1. To make the study of psychology accessible and engaging to beginning students in psychology
- 2. To provide students with a solid grounding in the knowledge base in psychology
- 3. To help students succeed in the course

The IDEA Model of Course Assessment: Mapping Acquired Skills to APA Learning Goals

The APA Guidelines for the Undergraduate Psychology Major identify ten major learning goals and suggested learning outcomes for undergraduate majors in psychology. The learning objectives in this text are mapped onto APA learning goals to ensure that beginning students in psychology are exposed to core concepts in the field.

This text offers a unique pedagogical framework, called the IDEA Model of course assessment, which is grounded in the widely used taxonomy of educational objectives developed by renowned educational researcher Benjamin Bloom. Each chapter begins with a listing of learning objectives expressed in the form of action verbs tied to measurable learning outcomes. The action verbs represent four key acquired skills paralleling those in Bloom's taxonomy. The action verbs identify and define or describe represent basic cognitive skills in Bloom's taxonomy (knowledge and comprehension, or remembering and understanding in the revised taxonomy). The action verb apply represents an intermediate level of skills development needed to apply knowledge to real-life situations and examples, and the action verbs explain and evaluate represent the highest or most complex level of skills acquisition needed to analyze, synthesize, and evaluate information (or analyzing, evaluating, and creating in the revised taxonomy).

These action verbs spell out the simple acronym IDEA:

Identify . . . key figures in the history of psychology, parts of nervous system, and so on.

Define or Describe . . . key concepts and features of major psychological theories.

Evaluate or Explain . . . underlying processes and mechanisms of behavior and mental processes.

Apply ... psychological concepts to real-world examples. The IDEA model is integrated with the test-item file so that instructors can select items measuring these particular outcomes—to *identify*, *define* or *describe*, *evaluate* or

explain, and apply knowledge of psychology.

To help students accomplish these objectives, the text adopts a learning-centric approach to help students encode and retain key concepts in psychology. The keystones of this approach include the following concept-based pedagogical tools:

- Concept Signaling Key concepts, not just key terms, are identified and highlighted in the margins to help students encode and retain core concepts.
- Concept Charts These built-in study charts are "seeat-a-glance" capsulized summaries of key concepts to help reinforce new knowledge.
- Concept Links This feature highlights connections between key concepts across chapters. Concept links are integrated with the key concepts in the margins, so that students can see how core concepts are applied across different areas of psychology.
- learning tool helps students visualize connections between key concepts in the text. Concept maps are available through Cengage Learning's *MindTap*. Concept maps are schematic diagrams comprising key concepts that are represented in boxed shapes called *nodes*, which are connected by links that typically take the form of verbs or conjunctions. Unlike other study charts, concept maps can be read either across or down the page to express a coherent knowledge structure. To encourage active learning, concept maps are presented in an incomplete (fill-in-the-blanks) form to engage students in the process of completing these knowledge structures. The answers are also available online.

What's New?

The fourth edition of *Essentials of Psychology* includes many new features and updates, including the following:

New! Chapter opening **author podcasts** called Study Cast Previews bring the author's own voice into the

learning process to assist students in mastering key concepts. These short audio clips serve as advance organizers in the learning process by introducing key concepts that students will encounter in the chapter. Students can easily access these audio clips on their smartphones by scanning the accompanying QR (quick-response) code. If they don't already have a QR code scanner, they can download any of the free QR code scanners that are available in app stores. Students can also use their personal computers or tablets to access the author podcasts online.

New! Video links via QR codes give students the opportunity to directly access video clips that are related to the content they are reading about in the text. They can also access these video clips online. These informative and engaging video clips open up the world of psychology to students via devices they are most comfortable using—their smartphones, tablets, and personal computers or laptops. Students can use these video links to directly access an animation on the action potential, see an interview with a woman with dissociative identity disorder discuss her alter personalities, watch a pigeon being trained in a Skinner box, learn about a man with anterograde amnesia who is unable to form new memories, learn about how cognitive therapy is used to treat psychological problems, and much more.

New! Learning objectives are now directly integrated within the modules, replacing study (survey) questions.

New! Answers to "Recite It" sections in Module Reviews are set up in a fill-in-the-blanks format to foster active learning that encourages retrieval of key concepts. Research evidence consistently demonstrates the learning benefits of practicing retrieval skills.

New! Applications of psychological knowledge in daily life are now integrated directly in the modules themselves in a new feature called "Applying Psychology in Daily Life." Examples include "Psychology and Pain Management" (Chapter 3), "Putting Reinforcement Into Practice" (Chapter 5), "Becoming a Creative Problem Solver" (Chapter 7), and "Taking the Distress Out of Stress" (Chapter 10).

New! The chapter on social psychology has moved up in the "batting order" (now Chapter 12) and is placed directly following the chapter on personality theories. This reorganization follows a trajectory in which the study of individual differences precedes the study of social influences on behavior and places the study of normal variations in behavior before the study of abnormal behavior and treatment methods.

New! Recent research studies on the psychological effects of social media are interspersed throughout the text.

New! The text has been thoroughly updated from start to finish. The field of psychology stands still for no author!

New research developments are reported daily in professional journals and circulated widely in the popular media. As you thumb through the pages of this edition, you will find many hundreds of new citations to research findings and theoretical developments appearing in the scientific literature in just the past few years. Here is a sampling of new research included in this edition:

- New evidence from environmental psychology about how weather affects people's moods
- New evidence from sport psychology about why athletes "choke" in critical situations
- New evidence debunking the myth that the full moon is associated with bizarre behavior and suicides
- New research example featured in the "Anatomy of a Research Study" section called "What Do the Shoes You Wear Tell Us About Your Personality?"
- New evidence on the role of oxytocin—dubbed the "trust molecule"—in social behaviors
- New evidence on the role of environmental influences in turning on or turning off particular genes
- New evidence pointing to the role of dopamine in accounting for pleasurable excitement associated with falling in love
- New evidence from the emerging field of neuromarketing
- New evidence on the "color red" effect on sexual attractiveness
- New evidence on the staggering proportion of teens showing some form of hearing loss
- New evidence on the effects on men of exposure to a woman's tears
- New evidence on the effects of subliminal exposure to fast food images
- New evidence linking particular odors to feelings of happiness and disgust
- New evidence that we blink more when our mind wanders, making it more difficult for the brain to process information in class
- New evidence based on the Harvard iPhone app study that shows that people tend to report unhappier moods when their minds are wandering than when they were focused on activities
- Recent evidence showing that a sleeping brain works on information acquired during waking hours in order to process and consolidate new memories
- New evidence on the effects of sleep deprivation on psychological and physical processes, including tendencies for sleep-deprived people to reach for a donut rather than a healthy snack

- Updated information on binge drinking in college, the rise in marijuana use among youths, and misuse of Adderall on campus
- New evidence on the "aha" effect in insight learning
- New evidence on the reliability of eyewitness testimony
- New evidence on long-term potentiation (LTP) and the cells that "fire together, wire together" effect
- New evidence indicating that memories of past events change through the process of remembering, much like the familiar game of telephone
- New evidence from a worldwide study of gender differences in math ability and confidence in math skills
- Updated evidence on the "Flynn" effect
- Updated evidence on the narrowing of racial differences in IQ scores in recent years
- A new case report of a woman who was incapable of showing fear
- New evidence of genetic factors in sensation seeking
- Updates on the prevalence of overweight and obesity in the United States
- New data from new large-scale, nationally representative survey of sexual behaviors in the United States
- New evidence on the protective effects of a strong parent-teen connection and close communication
- Updates on teenage sexual activity and birth rates
- New evidence regarding the effects among adolescents of connecting on social media on their real-life relationships
- New evidence on the emotional well-being of older adults
- Updates on the most recent APA survey on stress in the United States
- Updated survey on effects of stress on first-year college students
- Updates on the psychological benefits of psychological counseling for cancer patients
- New evidence linking Big Five traits of neuroticism, extraversion, and agreeableness to indices of mental health
- New evidence linking higher openness for new experiences to use of more features on Facebook's personal information section
- New evidence linking conscientiousness to higher grades, stronger performance motivation, and longevity

- New evidence that academic performance self-efficacy more strongly predicts college GPA than even high school GPA or SAT or ACT scores
- New evidence that students who spend more time on Facebook perceive others to be happier than themselves and to lead better lives
- New evidence on the "playing hard to get effect" based on Facebook profiles
- New evidence for effects of "standing tall" by adopting a power pose on risk taking and testosterone levels
- New evidence showing that baseball pitchers are more likely to hit batters in games played at high temperatures in which their own players had been hit by an opposing pitcher earlier in the game
- Full integration of the DSM-5 throughout the chapter on abnormal psychology
- Updates on causal factors in various psychological disorders
- New evidence on how fear affects perception of the size of a feared object (for example, a spider in the room)
- New evidence of emerging treatment modalities, including virtual reality therapy and technological aids in therapy, such as the PTSD Coach
- Therapeutic orientations of clinical psychologists based on a recent (2012) national survey
- Discussion of the risks and also the promise of online therapy services
- Updates on the use of psychotropic drugs in the United States and concerns about the large numbers of children treated with ADHD drugs and antidepressants

The Four E's of Effective Learning

The learning system adopted in this text is based on the Four E's of Effective Learning: (1) engaging interest; (2) encoding important information; (3) elaborating meaning; and (4) evaluating progress. This pedagogical framework is grounded in basic research on learning and memory and is supplemented by pedagogical research, including research I have conducted with my students. The pedagogical framework was then tested in classrooms throughout the country.

The four key elements of effective learning, the **"Four E's,"** are as follows:

- Engaging Interest
- Encoding Important Information
- Elaborating Meaning
- **■** Evaluating Progress

Engaging Interest

Learning begins with focused attention. A textbook can be an effective learning tool only if it engages and retains student interest. Students are not likely to encode or retain information without focused attention.

Essentials of Psychology: Concepts and Applications is designed to generate interest as well as involve students directly in the material they read. Personal vignettes are used to draw readers into the material and to illustrate how concepts discussed in the chapter relate to their personal experiences. In addition, the "Did You Know That..." chapter-opening features are designed to grab student attention and encourage further reading. These chapter-opening questions whet students' appetite for material presented in the chapter. Some questions debunk common myths and misconceptions, whereas others highlight interesting historical features or bring recent research developments into sharper focus. Accompanying page numbers are provided for easy cross-referencing to the chapter sections in which the information is discussed. A small sample follows:

Did You Know That . . .

- A major school of psychology was inspired by the view from a train? (Chapter 1)
- Exposure to bodily secretions of the opposite sex may have subtle effects on our behavior, even if we are not consciously aware of it? (Chapter 3)
- Albert Einstein used mental imagery in developing his theory of relativity? (Chapter 7)

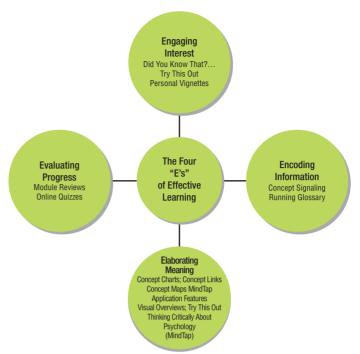
"Try This Out" Hands-On Exercises. These active learning exercises encourage students to apply psychological concepts to their own experiences. Whether the topic

Nevid, J. S. (2006, February). In pursuit of the "perfect lecture." American Psychological Society Observer, 19(2), 35–36, 42.

Nevid, J. S., & Mahon, K. (2009). Mastery quizzing as a signaling device to cue attention to lecture material. *Teaching of Psychology*, *36*, 1–4.

Nevid, J. S., Pastva, A., & McClelland, N. (2012). Writing-to-learn assignments in introductory psychology: Is there a learning benefit? *Teaching of Psychology*, 39, 272–275.

Nevid, J. S., & McClelland, N. (2013). Using action verbs as learning outcomes: Applying Bloom's taxonomy in measuring instructional objectives in introductory psychology. *Journal of Education and Training Studies*, 1 (2), 19–24.



involves trying to read a magazine sideways, breaking through the "Magic 7" barrier, reading emotions in facial expressions, or putting multitasking to the test, students can work through problems, generate solutions, and test out beliefs. Some *Try This Out* activities offer suggestions for *service learning* through participation in research and volunteer experiences, whereas others involve self-scoring questionnaires that allow students to evaluate their own behavior and attitudes about specific issues (for example, "Are You an Optimist or a Pessimist?").

Encoding Important Information

Learning and retaining key concepts in text material requires that information first be encoded in memory. The pedagogical technique of signaling or cueing can help people encode important information. Textbook authors have long used certain forms of signaling, such as headings and highlighted key terms. This text also includes two other types of signaling, the *running glossary* and *concept signaling*.

Running Glossary. Key terms are highlighted in the text and defined in the margins. Students do not need to interrupt their reading to thumb through a glossary at the end of the text whenever they encounter an unfamiliar term. (A full glossary is presented at the end of the text as well.)

Concept Signaling. Concept signaling is a unique pedagogical feature designed to help students encode and retain key concepts by extracting and highlighting them in the margins of the text. Cued concepts are signposts to help students gauge that they are getting the key points as they make their way through the chapter. Although

¹Nevid, J. S., & Carmony, T. M. (2002). Traditional versus modular format in presenting textual material in introductory psychology. *Teaching of Psychology*, 29, 237–238.

Nevid, J. S., & Lampmann, J. L. (2003). Effects on content acquisition of signaling key concepts in text material. *Teaching of Psychology*, 30, 227–229.

Nevid, J. S., & Forlenza, N. (2005). Graphing psychology: An analysis of the most commonly used graphs in introductory psychology textbooks. *Teaching of Psychology*, 32, 253–256.

some students can easily extract key concepts from text material, others struggle with the process of encoding key points. They may come away knowing a few isolated facts, but may miss many of the major concepts that form the basic building blocks of knowledge in the field. Or they may feel "lost" in the middle of a chapter and become frustrated.

To evaluate the learning benefits of concept signaling, we conducted a controlled study in which students read two different text passages—one with key concepts highlighted in the margins and one without cued concepts. Our results showed that signaling key concepts by extracting them and highlighting them in the margins significantly improved quiz performance overall as well as on a subset of items that directly measured knowledge of key concepts (Nevid & Lampmann, 2003)

Not surprisingly, we found that signaling key concepts had no effects on learning surrounding material that was not signaled. This finding only reinforces what instructors have known for years—that students should not use pedagogical aids (whether they be summaries, interim quizzes, or cued concepts) as substitutes for reading the text in its entirety. Importantly, though, our results suggest that students may be better able to learn key concepts when they are signaled or highlighted in the text.

We also polled students in our study on which format they preferred—the one with signaled concepts or the one without. More than three-fourths preferred concept signaling and found that it was easier to understand and more clearly presented than the standard (nonsignaled) format. (This was interesting in light of the fact that the content in the text passages was exactly the same in both formats.)

Elaborating Meaning

Though information must first be encoded to be learned, new learning needs to be strengthened to ensure longterm retention. Retention of newly acquired information can be strengthened through rote memorization, such as by rehearsal of particular words or phrases. But the types of deeper processing needed to build more enduring memories generally require elaborative rehearsal in which the person reflects on the meaning of the material and relates it to life experiences. This text provides several pedagogical features designed to facilitate elaborative rehearsal:

Concept Charts. These study charts summarize key concepts in tabular form. The Concept Charts reinforce knowledge of major concepts and help students make relational connections between concepts.

"Try This Out". These exercises not only engage student interest, but also encourage students to apply concepts they learn in the text to their own experiences.

Strengthening Learning Through Repeated Rehearsal.

Concepts are repeated in several forms to reinforce new learning—in the narrative itself, in Concept Charts, in marginal inserts of cued concepts, and in schematic diagrams. The use of different contexts for presenting information strengthens new learning.

Evaluating Progress

The text contains a number of study aids to help students evaluate their progress:

Module Review Sections. At the end of each module is a Module Review consisting of three sections, a Recite It section, a Recall It section, and a Think About It section.

Reciting new knowledge is a key feature of the SQ3R study method and an important, perhaps the most important, study tool. Recite It sections provide an opportunity for students to recite their knowledge of the learning objectives and then to compare their responses to sample answers given in the text.

The Recall It sections allow students to test their knowledge by taking a short quiz on several key concepts. The answers are given in Appendix B at the end of the text.

The Think About It features encourage critical thinking by posing thought-provoking questions to stimulate students to think more deeply about concepts presented in the text.

Visual Overviews. In addition, Visual Overview sections offer students a visual learning tool to help them review and strengthen their knowledge of new concepts and see relationships among concepts in summary form.

The Modular Approach

The text is organized in a modular format that breaks down each chapter into smaller instructional units called modules. Each module is a cohesive study unit organized around a set of key concepts in a particular area of study. The modular approach helps busy students better organize their study efforts by allowing them to focus on one module at a time rather than trying to tackle a whole chapter at once.

In our research, we found the majority of students preferred the modular format over the traditional format (57.3 percent versus 38.5 percent, with 4.2 percent expressing no preference) (Nevid & Carmony, 2002). In addition, students who preferred the modular format performed significantly better when material was presented in this format than in the traditional format. It stands to reason that when students prefer a particular format, they

will become more engaged in reading texts based on that format—an outcome that may translate into improved performance in classroom situations.

Targeting Critical Thinking Skills

The text encourages students to challenge their preconceived assumptions about human behavior and to think critically about information they hear or read about in the media in the light of scientific evidence. The Thinking Critically About Psychology sections at the end of each chapter provide students with opportunities to sharpen their critical thinking skills. Students can practice these skills by answering questions that require them to analyze problems and evaluate claims in relation to information presented in the chapters. Students may then compare their answers to sample responses presented in Appendix A of the text. The Think About It sections in each Module Review further reinforce critical thinking skills.

Built-In Study Method: SQ3R+

The SQ3R (Survey, Question, Read, Recite, Review) study method is a widely used technique for enhancing learning and encouraging students to adopt a more active role in the learning process. The SQ3R method is directly built into the text. The text not only incorporates the traditional elements of SQ3R but also adds another element, the Think About It feature, to foster critical thinking skills.

- Survey and Question Students can survey each chapter by reviewing the numbered listing of modules at the start of the chapter and by reading the introductory section in which material to be covered in the chapter is described. In addition, they can use the learning objectives as advance organizers to guide their reading and question themselves to ensure they have achieved these objectives.
- Read The writing style has been carefully developed for reading level, content, and style. Students are often addressed directly to engage them in the material and encourage them to examine how the information relates to their life experiences.
- Recite and Review Each module ends with a Module Review section that helps students review their knowledge of key concepts. Students should be encouraged to recite their knowledge of the learning objectives in the Recite It section of the Module Review before turning to the sample answers in the text for feedback. Students can then test their knowledge by completing a short quiz presented in the Recall It sections. These quizzes consist of fill-in, multiple-choice,

- matching, and short-answer questions. Concept Charts provide further opportunities for students to review the knowledge they have acquired.
- Think About It The text goes beyond review and recitation by posing thought-provoking questions in the Module Reviews that encourage reflection, critical thought, and self-exploration. These questions foster critical thinking (for example, "Do you believe that conventional intelligence tests are culturally biased? Why or why not?"), and encourage students to reflect on how the text material relates to their personal experiences (for example, "Are you a self-actualizer? Upon what evidence do you base your judgment? What steps could you take to become a self-actualizer?").

Integrating Coverage of Diversity in Psychology

One primary objective of this text is to raise students' awareness of the importance of issues relating to diversity. Discussion of cultural and gender issues is therefore integrated within the main body of the text rather than relegated to boxed features. A proliferation of boxes tends to break the flow of the text and to introduce unnecessary clutter that many students find distracting; it might even inadvertently convey the impression that material relating to diversity is less important than other material because it is boxed off. For a reference guide to the integrated coverage of gender and sociocultural issues in the text, see the complete listings available in the Instructor's Manual that accompanies Essentials of Psychology: Concepts and Applications.

Ancillaries

Even the most comprehensive text is incomplete without ancillaries. The ones accompanying *Essentials of Psychology: Concepts and Applications* help make it a complete teaching package.

Teacher Ancillaries

Teaching an introductory psychology course is a tremendous amount of work, and the supplements listed here should help make it possible for you to concentrate on the more creative and rewarding facets of teaching. All of these supplements are available online for download. Go to login.cengage.com to create an account and log in.

Online Instructor's Resource Manual. The Online Instructor's Resource Manual (IRM) contains a variety of resources to aid instructors in preparing and presenting text material in a manner that meets their personal

preferences and course needs. The IRM begins with a comprehensive preface, which covers preparation, pitfalls, planning, execution, resources, and best practices for both new and seasoned instructors. Each chapter provides a preview and a goals and activity planner to help organize classes. In addition, each chapter of the IRM contains a detailed outline, lecture suggestions, topics for discussion, classroom and individual activities with handouts, and writing assignment ideas.

Online Test Bank. The online test bank contains more than 2,400 items specifically developed for Essentials of Psychology: Concepts and Applications. Multiple-choice questions as well as essay questions with answers are written at both the chapter and the module level to provide flexibility for instructors. These questions are labeled by learning objective, module reference number, and heading reference for easier use in creating exams. The Test Bank also incorporates the IDEA model, with each test question tagged to its corresponding level within the model.

Cengage Learning Testing Powered by Cognero. The Test Bank also is available through Cognero, a flexible, online system that allows you to author, edit, and manage test bank content as well as create multiple test versions in an instant. You can deliver tests from your school's learning management system, your classroom, or wherever you want.

Online PowerPoints. Vibrant Microsoft PowerPoint lecture slides for each chapter assist you with your lecture by providing concept coverage using images, figures, and tables directly from the textbook.

Psychology MindTap. MindTap for Essentials of Psychology: Concepts and Applications is a personalized, fully online digital learning platform of authoritative content, assignments, and services that engages your students with interactivity while also offering you choice in the configuration of coursework and enhancement of the curriculum via web-apps known as MindApps. MindApps range from ReadSpeaker (which reads the text out-loud to students), to Kaltura (allowing you to insert inline video and audio into your curriculum), to an easily clickable Glossary. MindTap is well beyond an eBook, a homework solution or digital supplement, a resource center website, a course delivery platform or a Learning Management System. It is the first in a new category—the Personal Learning Experience. MindTap for Essentials of Psychology: Concepts and Applications allows complete flexibility in how a course is built, making it easier to take advantage of the modular format.

Acknowledgments

First, I am indebted to the thousands of psychologists and other scientists whose work has informed the writing of this text. Thanks to their efforts, the field of psychology has had an enormous impact in broadening our understanding of ourselves and enhancing the quality of our lives. On a more personal level, I owe a debt of gratitude to the many colleagues and publishing professionals who helped shape this manuscript into its present form. Let me begin by thanking the professional colleagues who reviewed the manuscript and helped me refine it through several stages of development:

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The people at Cengage are consummate publishing professionals and I am very thankful for the supportive way in which they have welcomed me and worked so closely with me to update and strengthen the text to make it an ever more effective learning platform designed to engage students in the study of psychology and help them succeed in the course. In particular I would like to thank my editor, Timothy Matray, for his continuing guidance and support and my developmental editor for this edition, Tom Finn, who has helped strengthen and guide this text to make it an even more effective teaching and learning platform.

> Jeff Nevid New York, New York jeffnevid@gmail.com

The IDEA Model of Course Assessment: Mapping Acquired Skills to Learning Goals

GOAL 1: Knowledge Base of Psychology

Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.

Specific goals in "The APA Guidelines for the Undergraduate Psychology Major"	Related Content in Text and Ancillaries	IDEA Model of Course Assessment: Skills Acquired—Identify Define or Describe Evaluate or Explain Apply
1.1 Characterize the nature of psychology as a discipline.	Module 1.1	Define psychology and explain why psychology is a science.
1.2 Demonstrate knowledge and understanding representing appropriate breadth and depth in selected content areas of psychology, including the following: (a) theory and research representing general domains: (i) learning and cognition (ii) individual differences,	1.2.a <i>i. Learning and cognition:</i> Module 5.1	Define learning in psychological terms. Define classical conditioning and describe the contributions of Ivan Pavlov. Explain the process by which conditioned responses become weaker or disappear. Explain how conditioned responses can be strengthened. Define stimulus generalization and discrimination, and describe their roles in classical conditioning. Explain classical conditioning from a cognitive perspective. Apply classical conditioning to examples discussed in the text.
psychometrics, personality, and social processes, including those related to sociocultural and international dimensions (iii) biological bases of behavior and mental processes (iv) developmental processes	Module 5.2	Define operant conditioning, identify the major figures in its development, and describe their contributions. Describe different types of reinforcement and schedules of reinforcement. Explain the effects of different types of reinforcement on response rates. Define punishment, and identify the concerns that psychologists raise about the use of punishment in disciplining children. Explain the difference between escape learning and avoidance learning. Apply operant conditioning to examples discussed in the text.
	Module 5.3	Define cognitive learning, and describe several types of cognitive learning
	Module 6.1	Identify and describe the basic processes and stages of memory. Identify and describe the different types of long-term memory. Explain the roles of the semantic network model and levels-of-processing theory in memory. Apply constructionist theory to explain memory distortions. Identify and discuss factors influencing the reliability of eyewitness testimony. Explain why the concept of recovered memory is controversial.
	Module 6.2	Describe the major theories and factors in forgetting. Explain why recognition tests of memory generally produce better results than recall tests. Describe the causes of amnesia and the two major types of amnesia.
	Module 7.1	Identify several ways in which we represent information in our minds. Explain the difference between logical and natural concepts. Identify and describe mental strategies we can use to solve problems more effectively. Identify and describe mental roadblocks that impede problem solving and decision making. Describe the basic processes of creative thought, and explain the difference between divergent and convergent thinking. Apply skills of problem solving to become a creative problem solver.
	Module 7.2	Identify the basic components of language and the milestones in language development, and describe the roles of nature and nurture in language development. Evaluate whether language is unique to humans, and evaluate the linguistic relativity hypothesis in light of evidence.
	Module 7.3	Define intelligence, identify different tests of intelligence, and evaluate the characteristics of a good test of intelligence. Evaluate gender differences in cognitive abilities. Describe the characteristics of the two extremes of intelligence and the misuses of intelligence tests. Describe the major theories of intelligence, and evaluate the roles of heredity and environment in intelligence.
	ii. Individual differences and social processes: Module 11.1	Define the concept of personality. Identify and describe the three levels of consciousness and three structures of personality in Freud's psychoanalytic theory. Identify and describe the stages in Freud's theory of psychosexual development. Describe the personality theories of lune. Adler and Harrany.

Continued on following page

Describe the personality theories of Jung, Adler, and Horney.

GOAL 1: Knowledge Base of Psychology, continued

Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.

Specific goals in "The APA Guidelines for the Undergraduate Psychology Major"	Related Content in Text and Ancillaries	IDEA Model of Course Assessment: Skills Acquired—Identify Define or Describe Evaluate or Explain Apply
	Module 11.2	Describe the trait theories of Allport, Cattell, Eysenck, and the Big Five model. Evaluate the genetic basis of personality traits.
	Module 11.3	Describe the social-cognitive theories of Rotter, Bandura, and Mischel.
	Module 11.4	Describe the self-theory of humanistic theorist Carl Rogers. Explain the difference between the concepts of self in collectivistic and individualistic cultures.
	Module 11.5	Identify the two major types of personality tests, describe their features, and evaluate self-report and projective personality tests.
	Module 12.1	 Identify the major influences on first impressions, and explain why first impressions often become lasting impressions. Identify and describe cognitive biases that influence causal attributions. Identify three components of attitudes, and describe the sources of attitudes and the pathways involved in changing attitudes through persuasive appeals. Describe cognitive dissonance theory, and explain how cognitive dissonance can be reduced.
	Module 12.2	Identify factors that influence attraction. Identify the components of love identified in the triangular model of love. Describe the decision-making model of helping, and identify factors that influence helping behavior. Define prejudice, explain how it develops, and apply your knowledge to ways of reducing it. Identify factors that contribute to human aggression.
	Module 12.3	 Define social identity, and evaluate cultural factors involved in social identity. Describe the basic finding of Asch's classic study on conformity, and identify factors that influence conformity. Explain the psychological bases of manipulative sales tactics. Describe the findings of Milgram's classic study, and evaluate why his methods were controversial. Evaluate the effects of the presence of others on performance. Define groupthink, and explain how it can lead to wrong decisions.
	iii. Biological bases of behavior and mental processes:	
	Module 2.1	Define what a neuron is, identify the parts of the neuron, and explain how neurons communicate with each other. Explain how an action potential is generated. Identify key neurotransmitters, and describe their functions. Explain the difference between agonists and antagonists.
	Module 2.2	Describe how the nervous system is organized. Describe the functions of the central nervous system and the divisions of the peripheral nervous system. Explain the differences in the functions of the sympathetic and parasympathetic divisions of the autonomic nervous system.
	Module 2.3	Describe how the brain is organized and the roles that particular brain structures play in behavior.
	Module 2.4	Describe methods scientists use to study the workings of the brain.
	Module 2.5	Explain how the two halves of the brain differ in their functions.
	Module 2.6	Describe how the endocrine system is organized and the roles that hormones play in behavior.
	Module 2.7	Evaluate the role of genetics in behavior. Describe methods psychologists use to study the roles of genes and environment in behavior.
	Module 6.3	Identify the key brain structures involved in memory, and explain the roles of neuronal networks and long-term potentiation. Explain the role that genetics plays in memory.
	iv. <i>Developmental processes:</i> Module 9.1	Identify and describe the stages of prenatal development and major threats to prenatal development.

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GOAL 1: Knowledge Base of Psychology, continued

Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.

Specific goals in "The APA Guidelines		DEA Model of Course Assessment:
for the Undergraduate Psychology Major"		Skills Acquired—IdentifyDefine or DescribeEvaluate or ExplainApply
	Module 9.2	Identify reflexes present at birth. Describe the infant's sensory, perceptual, and learning abilities. Describe the development of the infant's motor skills in the first year of life.
	Module 9.3	Identify and describe three major types of temperament and three types of infant attachment styles. Identify and describe the major parenting styles. Identify and describe Erikson's stages of psychosocial development in childhood. Describe Piaget's stages of cognitive development. Describe Vygotsky's psychosocial theory of cognitive development.
	Modules 9.4, 9.5, and 9.6	Describe the physiological, cognitive, and psychosocial changes that occur during adolescence, and describe Erikson's beliefs about psychosocial development in adolescence. Describe Kohlberg's stages of moral reasoning, and evaluate his theory in light of Gilligan's criticism. Describe the physical and cognitive changes that occur during adulthood and Erikson's stages of psychosocial development in early and middle adulthood. Describe the physical and cognitive changes we can expect later in life and Erikson's views on psychosocial development in late adulthood. Evaluate the qualities associated with successful aging. Identify the stages of dying proposed by Kübler-Ross. Apply suggestions for living a longer and healthier life.
(b) history of psychology	1.2b History of psychology: Module 1.1	Identify early schools of psychology and the important contributors to these schools, and describe the major concepts associated with each school.
(c) relevant levels of analysis	1.2c Relevant levels of analysis: cellular, individual, group/systems, society/culture	Cellular: See Module 2.1. Individual: See Modules 11.1 to 11.5. Group/Systems: See Module 12.3. Society/Culture: See Modules 11.4, 12.1, 12.2, and 12.3.
(d) overarching themes, persistent questions, or enduring conflicts in psychology	1.2d Overarching themes: The interaction of heredity and environment: Module 2.7	Evaluate the role of genetics in behavior. Describe methods psychologists use to study the roles of genes and environment in behavior.
	Free will versus determinism: Modules 11.3 and 11.4	Describe the social-cognitive theories of Rotter, Bandura, and Mischel. Describe the humanistic theories of Carl Rogers and Abraham Maslow.
	Interaction of mind and body: Modules 10.1 and 10.2	Define stress in psychological terms. Identify and describe the major sources of stress. Define the general adaptation syndrome, and identify its three stages. Evaluate the effects of stress on the body's immune system. Identify and describe psychological factors that buffer the effects of stress. Apply stress management techniques to daily life. Identify psychological factors linked to coronary heart disease. Identify psychological factors linked to cancer. Apply knowledge of the transmission of sexually transmitted disease to steps we can take to protect ourselves from these diseases.
(e) relevant ethical issues	1.2e Relevant ethical issues:	
	Module 1.3	Describe the ethical standards that govern research in psychology.
	Module 12.3	Describe the findings of Milgram's classic study, and evaluate why his methods were controversial.
1.3 Use the concepts, language, and major theories of the discipline to account for psychological phenomena.	Early schools of psychology and contemporary perspectives	See Module 1.1 above.

GOAL 1: Knowledge Base of Psychology, continued

Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.

Specific goals in "The APA Guidelines for the Undergraduate Psychology Major"	Related Content in Sk	EA Model of Course Assessment: cills Acquired— <i>Identify Define or Describe Evaluate or</i> cplain Apply
	Theories of sleep, dreaming, and hypnosis: Modules 4.2 and 4.3	Explain why we sleep. Explain why we dream. Define and describe meditation and hypnosis. Identify and describe the two major contemporary theories of hypnosis.
	Learning theories	See Modules 5.1, 5.2, and 5.3 above.
	Theories of intelligence: Module 7.3	Describe the major theories of intelligence, and evaluate the roles of heredity and environment in intelligence.
	Theories of motivation: Module 8.1	Define the concept of motivation, and describe several major theories of motivation. Describe different types of psychosocial needs. Describe Maslow's hierarchy of needs, and identify the needs at each level in the hierarchy.
	Theories of emotion: Module 8.4	Describe the major theories of emotion, and identify the major theorists.
	Theories of cognitive and psychosocial development: Modules 9.3, 9.4, 9.5, and 9.6	Identify and describe Erikson's stages of psychosocial development in childhood. Describe Piaget's stages of cognitive development. Describe Vygotsky's psychosocial theory of cognitive development. Describe Kohlberg's stages of moral reasoning, and evaluate his theory in light of Gilligan's criticism. Describe Erikson's stages of psychosocial development in early and middle adulthood. Describe Erikson's views on psychosocial development in late adulthood.
	Theories of personality	See Modules 11.1, 11.2, 11.3, and 11.4 above.
1.4 Explain major perspectives of psychology (e.g., behavioral, biological, cognitive, evolutionary, humanistic, psychodynamic, and sociocultural).	Early schools of psychology and contemporary perspectives in	Module 1.1

GOAL 2 Research Methods in Psychology

Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation

psychology

Related Content in Text and Ancillaries	
Modules 1.1 and 1.3 Module 1.3: The Scientific Method Module 1.3: Research Methods Module 1.3: Anatomy of a Research Study Module 5.1: Classic study in psychology (Little Albert) Module 5.3: Classic study in psychology (Bandura's Bobo doll study) Module 6.1: Classic study in psychology (Loftus's study on the misinformation effect) Module 12.3: Classic study in psychology (Asch's study on obedience to authority) Module 12.3: Classic study in psychology (Milgram's study on obedience to authority)	
Module 1.3: Anatomy of a Research Study Statistics Appendix C	
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GOAL 3: Critical Thinking Skills in Psychology

Respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.

	Related Content in Text and Ancillaries
3.1 Use critical thinking effectively.	Module 1.3: Exposes students to the features of critical thinking to help them develop critical thinking skills to evaluate claims made by others and online information Thinking Critically About Psychology sections challenge students to apply critical thinking skills to evaluate claims Think About It features in each Module Review encourage critical thinking about issues raised in the text Interactive Concept Maps (online supplement) engage students in an active learning exercise in which they complete Concept Maps showing relational connections between key concepts
3.2 Engage in creative thinking.	The Brain Loves a Puzzle features throughout the text (one per chapter) encourage students to use critical thinking skills to extract information from the chapter to solve puzzles Module 7.1: Processes involved in creative thinking Interactive Concept Maps (see previous entry)
3.3 Use reasoning to recognize, develop, defend, and criticize arguments and other persuasive appeals.	Module 1.3 (see above) Thinking Critically About Psychology (see above)

GOAL 4: Application of Psychology

Understand and apply psychological principles to personal, social, and organizational issues.

Content		

4.1 Describe major applied areas (e.g., clinical, counseling, industrial/organizational, school, etc.) and emerging applied areas (e.g., health, forensics, media, military, etc.) of psychology.

4.2 Identify appropriate applications of psychology in solving problems, including the following:

a. The pursuit and effects of healthy lifestyles

b. Origin and treatment of abnormal behavior

c. Psychological tests and measurements

d. Psychology-based interventions in clinical, counseling, educational, industrial/organizational, community, and other settings and their empirical evaluation

e. The resolution of interpersonal and intercultural conflicts

4.3 Articulate how psychological principles can be used to explain social issues and inform public policy.

4.4 Apply psychological concepts, theories, and research findings as these relate to everyday life.

Modules 9.6 and 10.2

Modules 13.1, 13.2, 13.3, 13.4, and 13.5

Module 11.5 Module 14.1 Module 12.3

Module 1.2

Module 12.3

Applying Psychology in Daily Life

Module 1.3: Becoming a Critical Thinker

Module 2.4: Looking Under the Hood: Scanning the Human Brain

Module 3.4: Psychology and Pain Management

Module 4.2: Getting Your Z's

Module 5.2: Putting Reinforcement Into Practice

Module 6.3: Powering Up Your Memory

Module 7.1: Becoming a Creative Problem Solver

Module 8.4: Managing Anger

Module 9.6: Living Longer, Healthier Lives

Module 10.1: Taking the Distress Out of Stress

Module 11.4: Building Self-Esteem

Module 12.3: Compliance: Doing What Others Want You to Do

Module 13.4: Suicide Prevention **Module 14.1:** Getting Help

GOAL 5: Values in Psychology

Value empirical evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a science.

Related Content in Text and Ancillaries
Module 1.3
Module 1.3: Becoming a Critical Thinker Thinking Critically About Psychology feature in each chapter Think About It feature in each Module Review
Evidence-based evaluation of psychological claims integrated throughout text Module 1.3: Anatomy of a Research Study Module 1.3: Becoming a Critical Thinker Thinking Critically About Psychology feature in each chapter Think About It feature in each Module Review
Modules 4.2, 4.4, 6.1, 7.3, 13.1, 13.2, 13.3, 13.4, 13.5, and 13.6 (e.g., functions of sleep and dreaming, nature of intelligence, causes of substance use and abuse, repressed memories, causes of psychological disorders)

5.6 Assess and justify their engagement with respect to civic, social, and global responsibilities.

5.5 Recognize and respect human diversity.

5.7 Understand the limitations of their psychological knowledge and skills.

Thinking Critically About Psychology feature in each chapter

Think About It feature in each Module Review

Integrated throughout text

GOAL 6: Information and Technological Literacy

Demonstrate information competence and the ability to use computers and other technology for many purposes.

	Related Content in Text and Ancillaries
6.1 Demonstrate information competence.	Module 1.3: Introduction to parts of a scientific study in formal research papers (Anatomy of a Research Study) Module 1.3 Thinking Critically About Online Information (sourcing appropriate material) Study Guide (supplement)
6.2 Use appropriate software to produce understandable reports of the psychological literature, methods, and statistical and qualitative analyses in APA or other appropriate style, including graphic representations of data.	Module 1.3: Citing References (introduction to APA reference style) Statistics Appendix C
6.3 Use information and technology ethically and responsibly.	Module 1.3: Thinking Critically About Online Information

GOAL 7: Communication Skills

Communicate effectively in a variety of formats.	
	Related Content in Text and Ancillaries
7.1 Demonstrate effective writing skills in various formats (e.g., essays, correspondence, technical papers, note taking) and for various purposes (e.g., informing, defending, explaining, persuading, arguing, teaching).	Module 1.3: Introduction to parts of a research study Study Skills (Preface)
7.2 Demonstrate effective oral communication skills in various formats (e.g., group discussion, debate, lecture) and for various purposes (e.g., informing, defending, explaining, persuading, arguing, teaching).	Instructor's Manual: Suggestions for group discussion
7.3 Exhibit quantitative literacy.	Statistics Appendix C Graphs used to illustrate research findings throughout
7.4 Demonstrate effective interpersonal communication skills (e.g., attending to nonverbal behaviors, adapting communication to diverse ethnic and cultural partners).	Module 8.4: Cultural differences and gender differences in emotional expression Module 8.4: Reading emotions in facial expressions Module 12.1: Cultural differences in self-disclosure Module 12.1: Stereotyping in interpreting nonverbal behavior

GOAL 8: Sociocultural and International Awareness

Recognize, understand, and respect the complexity of sociocultural and international diversity.

	Related Content in Text and Ancillaries
8.1 Interact effectively and sensitively with people of diverse abilities, backgrounds, and cultural perspectives.	Module 2.5: Learning Through Volunteering Module 8.4: Cultural differences in emotional expression Module 12.1: Cultural differences in impression formation
8.2 Examine the sociocultural and international contexts that influence individual differences.	Modules 11.4 and 12.1: Collectivistic versus individualistic cultures Module 10.1: Acculturative stress faced by immigrant groups Module 14.1: Multicultural factors in psychotherapy Module 12.2: Sociocultural factors in aggression Module 12.3: Social identity Module 12.3: Sociocultural factors in conformity
8.3 Explain how individual differences influence beliefs, values, and interactions with others and vice versa.	Module 11.4: Culture and self-identity Module 12.1: Cultural differences in self-serving bias Modules 12.1 and 12.2: Effects of stereotyping Module 12.2: Individual differences in prejudice
8.4 Understand how privilege, power, and oppression may affect prejudice, discrimination, and inequity.	Module 12.2: Racism, prejudice, and discrimination Module 11.4: Classic study by the Clarks on self-esteem of African American children Module 12.2: Effects of stereotyping on stereotyped groups
8.5 Recognize prejudicial attitudes and discriminatory behaviors that might exist in themselves and in others.	Module 12.2: Roots of prejudice and discrimination Module 12.2: Methods of reducing prejudice Module 12.2: Examining prejudice

GOAL 9: Personal Development

Develop insight into their own and others' behavior and mental processes and apply effective strategies for self-management and self-improvement.

Develop insight into their own and others' behavior and mental processes and apply effective strategies for self-management	
	Related Content in Text and Ancillaries
9.1 Reflect on their experiences and find meaning in them.	Module 4.1: Savoring Your Food Module 8.4: Tracking Your Emotions Module 8.1: Are You a Sensation Seeker? Module 10.1: Are You Type A? Module 10.1: Are You an Optimist or a Pessimist? Module 10.1: How Stressful is Your Life? Module 11.1: Sizing Up Your Personality Module 13.4: Are You Depressed? Module 11.5: What Should I Become? Module 12.2: Examining Prejudice
9.2 Apply psychological principles to promote personal development.	Module 5.2 Putting Reinforcement Into Practice Module 6.3: Powering Up Your Memory Module 7.1: Becoming a Creative Problem Solver Module 11.4: Building Self-Esteem Module 14.1: Replacing Distorted Thoughts with Rational Alternatives Module 12.3: Resisting Persuasive Sales Pitches
9.3 Enact self-management strategies that maximize healthy outcomes.	Module 3.4: Psychology and Pain Management Module 4.2: Getting Your Z's Module 8.4: Managing Anger Module 9.6: Living Longer, Healthier Lives Module 10.1: Taking the Distress out of Stress Module 10.2: Suggestions for Quitting Smoking Module 10.2: Preventing STDs Module 13.4: Suicide Prevention Module 14.1: Getting Help

GOAL 10: Career Planning and Development

Pursue realistic ideas about how to implement their psychological knowledge, skills, and values in occupational pursuits in a variety of settings that meet personal goals and societal needs.

10.1 Apply knowledge of psychology (e.g., decision strategies, life span processes, psychological assessment, types of psychological careers) when formulating career choices.

10.2 Identify the types of academic experience and performance in psychology and the liberal arts that will facilitate entry into the workforce, postbaccalaureate education, or both.

10.3 Describe preferred career paths based on accurate self-assessment of abilities, achievement, motivation, and work habits.

Related Content in Text and Ancillaries

Module 1.2: Subfields in Psychology

Module 2.5: Learning Through Volunteering

Module 7.1: Becoming a Creative Problem Solver

Module 8.1: Achievement motivation versus avoidance motivation

Module 8.4: Emotional intelligence

Module 9.4: Erickson's concept of identity crisis

Module 1.2: Subfields in psychology

Study Tips for Getting the Most From This Course

(and Your Other Courses) (Preface)

Module 8.1: Are You a Sensation Seeker? (self-assessment exercise)

Thinking Critically About Psychology, Chapter 9: Applying Erikson's concept of ego identity status to

occupational decision making (self-assessment exercise)

Module 10.1: Are You Type A? (self-assessment exercise) **Module 11.2:** Sizing Up Your Personality

Module 11.5: What Should I Become?

A MESSAGE TO STUDENTS

Study Tips for Getting the Most From This Course (and Your Other Courses)

I often hear students say that they spend many hours reading their textbooks and attending classes, but their grades don't reflect the work that they do. I agree. Success is not a function of the time you put into your courses, but how well you use that time. Developing more effective study skills can help you become a more effective learner and get the most from this course as well as your other courses. Let's begin by discussing four key steps toward becoming an effective learner, which I call the four E's: (1) engaging interest; (2) encoding information; (3) elaborating meaning; and (4) evaluating progress.

The Four E's of Effective Learning

- 1. Engaging Interest Paying close attention is the first step toward becoming an effective learner. The brain does not passively soak up information like a sponge. When your attention is divided, it is difficult to process new information at a level needed to understand the complex material required in college-level courses and to retain this newly acquired knowledge. If you find your mind wandering during class or while studying, bring your attention back to the lecture or study material. Becoming an active note taker during class and when reading your text can help you remain alert and focused and avoid spacing out. Keep a notepad handy while reading the text and jot down key points as you read through the material.
- 2. Encoding Information Encoding is the process of bringing information into memory. To encode important information from your classes or assigned readings, make it a practice to stop and ask yourself, "What's the main point or idea? What am I hearing or reading? What am I expected to know?" Jot down the major concepts or ideas and review them later. Use the built-in study tools in your textbook, such as highlighted key terms and concepts, along with the Module Review sections, to identify main points and themes you need to learn.

- 3. **Elaborating Meaning** New learning is a fragile thing. Rehearsing or repeating the information to yourself in the form of rote memorization may help reinforce newly acquired knowledge, but a more effective way of reinforcing new learning and building more enduring memories is to work with these new concepts and ideas by elaborating their meaning, such as by linking them to real-life examples and using them to solve problems. Your teachers and parents may have encouraged you to demonstrate your understanding of new vocabulary words by using them in a sentence. When you learned formulas and other math skills in class, your teachers may have asked you to demonstrate this knowledge by using it to solve math problems in your textbooks or workbooks. Apply this principle to learning psychology. For every concept you read about in this text or learn in class, connect it to a real-life example or life experience. Your textbook authors and instructors provide many examples of concepts they use, but you can take this a step further by connecting these concepts to your own life experiences.
- 4. **Evaluating Progress** Keep track of your progress in the course. Most texts, including this one, have quizzes you can use to test yourself on the material you have just read. This text also offers online quizzes. Taking quizzes helps you gauge how you are doing and which areas you need to review further to improve your performance. Other built-in study tools that help you evaluate your progress include review sections and summaries. In this text, you'll find the Recite It section in the Module Review at the end of each module that provides brief answers to the learning objectives for the module. Recite your knowledge of the learning objectives before glancing at the sample answers in the text. Recitation is an important study skill that demonstrates you have acquired new knowledge. Recite your answers in your own words by jotting them down in a notebook or computer file as you read through the module or when you come to the Module Review. Use the answers provided in the text as feedback to determine if you have achieved the learning objectives or need further review of the related material in the text. Then test your knowledge

by taking the brief quiz in the Recall It section of the Module Review.

Tips for Succeeding in Class

Read the Syllabus. Think of the syllabus as a road map or a pathway you need to follow to succeed in the course. Take note of the course assignments, grading system, and other course requirements or expectations. Use your course syllabus as a guide to planning your semester, making entries in your calendar for examination dates and required papers and other course assignments.

Prepare for Class by Completing the Assigned Reading.

Instructors have good reasons for wanting you to read the assigned chapter or readings before coming to class. They know that students are better prepared for lectures when they have some familiarity with the topics discussed in class. When students have a working knowledge of the material before they come to class, instructors have more freedom to use class time to explore topics in greater depth and breadth, rather than simply to review basic concepts. However, lectures may not make much sense to students who lack basic knowledge about the material because they haven't kept up with their readings.

Attend Class. One of the most important steps to succeeding in college is attending classes regularly. Missing classes can quickly lead to falling behind. If you need to miss a class, notify your instructor beforehand and ask for any assignments you may miss. Then ask a classmate for the notes for the missed class, but only approach someone you believe is a a good note taker.

Be Punctual. There may be nothing more distracting to your instructor and classmates than students who come late to class. Though your instructor may not say anything directly, coming late to class conveys a poor impression of yourself. It also makes it difficult to keep up with lecture material because it puts you in the position of playing catch-up. You wouldn't think of arriving at a movie theater in the middle of a movie, so why should you expect to be able to follow the lecture when you arrive after it starts? If you occasionally arrive late due to traffic or an unexpected demand, drop your instructor a note of apology explaining the circumstances. All of us, including your instructors, occasionally face similar situations. However, if you have trouble regularly arriving on time, talk to your instructor or adviser about arranging a schedule that works better for you, or consider taking online courses that don't require regular class attendance.

Ask Questions. Don't hesitate to ask questions in class. Failing to ask your instructor to clarify a particular point you don't understand can lead you to feel lost or confused during class. Also, make sure to ask your instructor about the material that will be covered on an exam, as well as the format used for the exam, such as essay, short-answer, or multiple-choice questions.

Become an Active Note Taker. Don't try to write down everything the instructor says or every word that pops up on a PowerPoint slide or an overhead. Very few people can write that fast. Besides, trying to copy everything verbatim can quickly lead you to fall behind. Focusing your attention on writing down everything also distracts you from thinking more deeply about material discussed in class. A better idea is to listen attentively and write down key points as clearly and concisely as you can, as well as the examples the instructor uses to illustrate these points. No one has perfect recall, so don't expect to remember every important point or concept discussed during a lecture. Write concepts down to review later. Some instructors use PowerPoint slides as a guide to organizing the content of the lecture. Think of PowerPoint slides as a table of contents for the lecture. The bullet points in the slides are merely starting points for the lecture. Your instructor will likely expound upon each point. If you spend class time just copying bullet points, you may miss important information about each point that is discussed in class. Become an active note taker, not a copy machine. Listen attentively and write down the main concepts and ideas and any examples the instructor may give.

Rephrase and Review Your Notes. An effective way of reinforcing new learning is typing your class notes into a computer file. But rather than typing them word for word, try rephrasing them in your own words. Reworking your notes in this way encourages deeper processing of the material, which is a key factor in strengthening memory of newly learned information. The more you think about the material, the more likely you'll be to remember it when exam time comes around.

Building Effective Study Skills

Where to Study. Select a quiet study space that is as neat, clean, and as free of distractions as possible.

When to Study

 Prevent procrastination. Schedule regular study times and keep to your schedule.

- Plan to study at times of the day you are most likely to be alert and best able to concentrate. Don't leave it until the very end of the day when you are feeling tired or sleepy. Avoid studying directly after a big meal. Give your body time to digest your food. Likewise, avoid studying at a time of day when you're likely to be distracted by hunger pangs.
- Avoid cramming for exams. Cramming causes mental fatigue that can interfere with learning and retention. Establish a weekly study schedule to ensure you are well prepared for exams. Plan to review or brush up on the required material the day or two before the exam.

How to Study

- Plan study periods of about 45 or 50 minutes. Very few people can maintain concentration for longer than 45 minutes or so. Take a 5- or 10-minute break between study periods. Give your mind and body a break by getting up, stretching your legs, and moving around.
- Establish clear study goals for each study period. Goals can include topics you want to cover, pages in the textbook you want to read or review, questions you need to answer, problems you need to solve, and so
- Sit properly to maintain concentration. Sit upright and avoid reclining or lying down to prevent nodding off or losing focus. If your mind begins to wander, bring your thoughts back to your work. Or break the tendency to daydream by getting yourself out of your chair, gently stretch your muscles, take a quick walk around the room, and then return to studying.

How Much to Study. A convenient rule of thumb to use is to study two hours a week for each hour of class time. Like most rules of thumb, you may need to adjust it according to the amount of work you need to complete.

Read for Understanding. Slow down the pace of your reading so that you can pay close attention to the material you are trying to learn.

- Stop for a moment after every paragraph and pose questions to yourself about what you have just read. Jot down your answers to the questions you pose to yourself to reinforce this new learning.
- After reading a section of text, take a brief break and then review any concepts you don't fully understand to make sure you get the main points before moving to the next section or chapter. Yes, active reading takes more time and effort than just skimming, but it

will make the time you spend reading more productive and meaningful.

Reach Out for Help. When you struggle to understand something, don't give up out of frustration. Ask your instructor for help.

Form Study Groups. Reach out to other students to form study groups. Studying as part of a group may induce you to hit the books more seriously.

Using This Textbook as a Study Tool

You are about to embark on a journey through the field of psychology. As with any journey, it is helpful to have markers or road signs to navigate your course. This text provides a number of convenient markers to help you know where you've been and where you're headed. Take a moment to familiarize yourself with the terrain you'll encounter in your journey. It centers on the unique organizational framework of the text—the concept-based modular format.

Listen to the Author Podcasts Before Reading Each **Chapter.** This text includes a brief author podcast (Study Cast Preview) at the start of each chapter to introduce you to the concepts you will be reading about. I have prepared these audio clips to guide you through each chapter in order to help you succeed in mastering key concepts. You can easily access the podcasts by using your smartphone to scan the QR code on the first page of the chapter. Free QR scanners are widely available for downloading by visiting your app store. You can also listen to the audio clips by accessing them online.

Use Concept-Based Modules to Organize Your Study

Time. This text is organized in instructional units called modules to help you structure your study time more efficiently. The modules in each chapter break down the chapter into these smaller instructional units. Rather than try to digest an entire chapter at once, you can chew on one module at a time. Each module is organized around a set of key concepts. As you make your way through a module, you will be learning a set of basic concepts and how they relate to the theoretical and research foundations of the field of psychology.

Use Concept Signaling as at Tool to Learning Key Con**cepts.** Key concepts in each module are highlighted or signaled in the margins of the text to help ensure you learn the main points and ideas as you make your way through the text. Importantly, make sure to read all the surrounding material in the text, not just the material highlighted in the concept boxes in the margins. Your exams will likely test your knowledge of all the assigned material in the text.

Keep Notes as You Read. Taking notes in your own words strengthens deeper, more durable learning. Avoid underlining or highlighting whole sections of text. Let your brain—not your fingers—do the work. Highlight only the important sections of text you want to review further.

Use the Running Glossary to Learn Key Terms. Key terms are highlighted (boldfaced) in the text and defined in the margins for easy reference. To ensure you understand the meaning of these terms in context, see how they are used in the adjacent paragraphs of the text.

Review Your Progress. Each module begins with a set of learning objectives. Jot down these objectives in a notebook or computer file and try to answer them as you read along or when you come to the end of module. As noted previously, you can check your answers against the sample answers in the Recite It sections of the Module Review. Then test yourself by taking the brief quizzes you'll find in the Recall It sections of the Module Reviews. If you find you are struggling with the quiz questions, review the corresponding sections of the text to strengthen your knowledge and then test yourself again.

Use Additional Study Aids. Use publisher-provided online study tools, which include the student *Study Guide* and *more*.

Get the Study Edge with the SQ3R+ Study Method

This text includes a built-in study system called the SQ3R+ study method, a system designed to help students develop more effective study habits that expands upon the SQ3R method developed by psychologist Francis P. Robinson. SQ3R is an acronym that stands for five key study features: *survey, question, read, recite,* and *review.* This text adds an additional feature, the Think About It section of the Module Review, which is the "+" in the SQ3R+ study method. Here's how the SQ3R+ study method works:

- 1. **Survey** Preview each chapter before reading it.
- 2. **Question** Question yourself as you read through the text to ensure that you are mastering the learning

objectives. The learning objectives for each module test your ability to identify, define or describe, apply, and evaluate or explain your knowledge of psychology. To become a more active learner, use the learning objectives as a set of learning goals you want to achieve as you make your way through the chapter. Generate additional questions about the material you can pose to yourself to further assess your knowledge of the material.

- 3. **Read** Read the module to address the learning objectives as well as to grasp key concepts and related information. To strengthen your understanding of text material, you may find it helpful to read each module a second or third time before an exam.
- 4. **Recite** When you reach the end of the module, gauge how well you understand the material by using the Module Review section to evaluate your progress. Remember to recite your knowledge of the learning objectives before looking at the sample answers in the text. Hearing yourself speak the answers enhances retention of newly learned information.
- 5. **Review** Establish a study schedule for reviewing text material on a regular basis. Test yourself each time you review or reread the material to boost long-term retention. Use the brief quiz in the Recall It section of the Module Review to test your knowledge.
- 6. Think About It The Think About It feature in the Module Review poses thought-provoking questions that encourage you to apply critical thinking skills and to reflect on how the material relates to your own experiences. Thinking more deeply about these concepts and relating them to your life experiences helps strengthen new learning.

I hope this guide to college success will help you succeed not only in this course but in your other courses as well. I also hope you enjoy your journey through psychology. I began my own journey through psychology in my freshman year in college and have continued along this path with a sense of wonder and joy ever since.

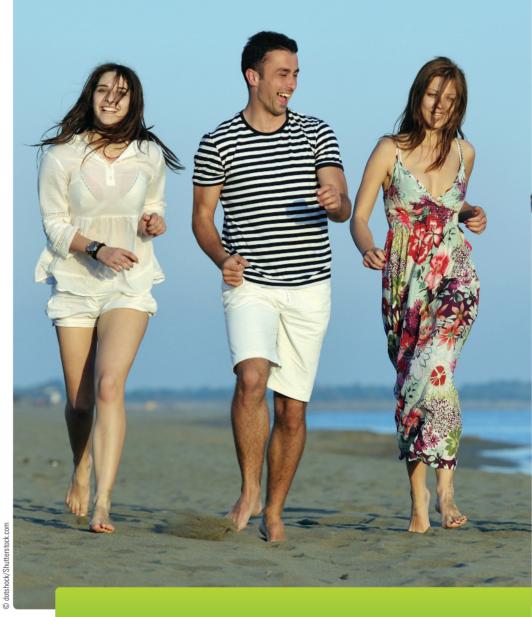
Please email your comments, questions, or suggestions to me at jeffnevid@gmail.com.

Jeff Nevid New York, NY

LEARNING OBJECTIVES

By reading this chapter, you will be able to . . .

- **1 DEFINE** psychology and **EXPLAIN** why psychology is a science.
- 2 IDENTIFY early schools of psychology and the important contributors to these schools, and DESCRIBE the major concepts associated with each school.
- **3 IDENTIFY** the major contemporary perspectives in psychology, and **DESCRIBE** each perspective.
- **4 IDENTIFY** specialty areas or subfields of psychology and emerging specialty areas.
- **5 DESCRIBE** ethnic and gender characteristics of psychologists today and the changes that have occurred over time.
- **6 IDENTIFY** the steps in the scientific method.
- 7 IDENTIFY and DESCRIBE research methods that psychologists use, and EVALUATE their strengths and weaknesses.
- **8 DESCRIBE** the ethical standards that govern research in psychology.
- 9 APPLY critical thinking skills to EVALUATE claims made by others as well as online information.



PREVIEW

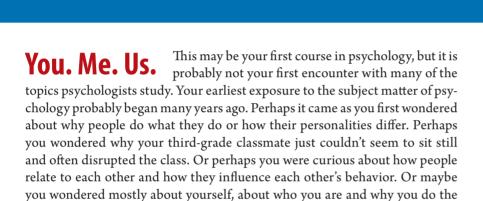
Module 1.1 Foundations of Modern Psychology

Module 1.2 Psychologists: Who They Are and What They Do

Module 1.3 Research Methods in Psychology

more about yourself.

The Science of Psychology



Psychologists study behavior in all its forms. One way of thinking about psychology is to understand that it involves the study of *you* (the behavior of other people), *me* (one's own behavior), and *us* (how our behavior is affected by groups and social influences). Psychologists are interested in studying behavior in nonhuman species as well. Studies of behavior of other animals can shed light on basic principles of behavior and may help inform our understanding of our own behavior as well.

things you do. Perhaps one of the reasons you are taking this course is to learn

You may find answers to many of the questions you have about yourself and others in this introductory course in psychology. But you will probably not find all the answers you are seeking. There is still so much we do not understand, so much that remains to be explored. This text, like the field of psychology itself, is really about the process of exploration—the quest for knowledge about behavior and mental processes.

As is the case with any scientific discipline, psychology requires that opinions, assumptions, beliefs, and theories about the subject matter it studies be tested and scrutinized in the light of the available evidence. Psychologists seek answers to the questions they and others pose about human nature by using scientific methods of inquiry. Like other scientists, psychologists are professional skeptics. They have confidence only in theories that can be tied to observable evidence. As in all branches of science, investigators in the field of psychology gather evidence to test their theories, beliefs, and assumptions.

Before we go further with our exploration of psychology, let us define what we mean by the term *psychology*. Though many definitions of psychology







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?

DID YOU KNOW THAT...

- One of the founders of modern psychology was such a poor student he was actually left back a grade in school? (p. 5)
- A movement that once dominated psychology believed that psychologists should turn away from the study of the mind? (p. 6)
- A major school of psychology was inspired by the view from a train? (p. 7)
- The school of psychology originated by Sigmund Freud holds that we are generally unaware of our true motives? (p. 8)
- Multiracial Americans are the nation's fastestgrowing population group? (p. 11)
- The popularity of women's names influences the judgments people make about a woman's physical attractiveness? (p. 26)
- Patients treated for irritable bowel syndrome reported some relief from their symptoms after receiving a placebo ("sugar pill"), even though they knew it was a placebo and not an active drug? (p. 27)

have been proposed, the one most widely used today defines psychology as the science of behavior and mental processes. But what do these terms mean—behavior and mental processes?

Broadly speaking, anything an organism does is a form of behavior. Sitting in a chair is a form of behavior. Reading, studying, and watching TV are forms of behavior. Making yourself a sandwich and talking on the phone are forms of behavior. Smiling, dancing, and raising your arm are also behaviors. Even thinking and dreaming are forms of behavior. Increasingly, people are interacting online, especially on social networking sites like Facebook. Online interactions are a form of social behavior and an area of increasing interest among psychologists and other social scientists. Young people today are "digital natives" who have never known a time before the personal computer, the Web, or cell phones. They are an Internet surfing, iPoding, texting, Googling, Facebooking, and instant messaging generation (Nevid, 2011). Through the course of our study of psychology, we explore what psychologists are learning about the ways in which social networking and other electronic technology affect our lives.

Mental processes are the private experiences that constitute our inner lives. These private experiences include thoughts, feelings, dreams and daydreams, sensations, perceptions, and beliefs that others cannot directly observe or experience. Among the challenges psychologists face is finding ways of making such inner experiences available to scientific study.

Before we begin exploring how psychologists study behavior and mental processes, let us take the story of psychology back to its origins to see how it developed as a scientific discipline and where it stands today.



Foundations of Modern Psychology

- **1 Define** psychology, and **explain** why psychology is a science.
- Identify early schools of psychology and the important contributors to these schools, and describe the major concepts associated with each school.
- **3 Identify** the major contemporary perspectives in psychology, and **describe** each perspective.

CONCEPT 1.1

Psychology is the scientific discipline that studies behavior and mental processes.

CONCEPT 1.2

Although psychology is a relatively young science, interest in understanding the nature of mind and behavior can be traced back to ancient times.

This first module in the text sets the stage for our study of psychology. It describes the development of psychology as a scientific discipline. How did psychology develop? What were the important influences that shaped its development as a scientific discipline? Here we address those questions by recounting a brief history of psychology. Let us begin by noting that although psychology is still a young science, its origins can be traced back to ancient times.

Origins of Psychology

The story of psychology has no clear beginning. We cannot mark its birth on any calendar. We can speculate that the story very likely began when early humans developed the capacity to reflect on human nature. Perhaps they were curious, as many

of us are today, about what makes people tick. But what they may have thought or said about the nature of human beings remains unknown, as no record exists of their musings.

The word **psychology** is derived from two Greek roots: *psyche*, meaning "mind," and *logos*, meaning "study" or "knowledge." So it is not surprising that serious inquiries into psychology can be traced back to ancient Greece, when philosophers began to record their thoughts about the nature of mind and behavior. Psychology remained largely an interest of philosophers, theologians, and writers for several thousand years. It did not begin to emerge as a scientific discipline until the late nineteenth century.

The founding of psychology as an independent science is generally credited to a German scientist, Wilhelm Wundt (1832–1920). The credit is given to Wundt (pronounced *Voont*) because he established the first scientific laboratory dedicated to the study of psychology (Stout, 2008). With the founding of Wundt's laboratory in Leipzig, Germany, in 1879, psychology made the transition from philosophy to science (Benjamin, 2000).

Wundt was in some respects an unlikely candidate to found a new science. As a boy, he was a poor student and was even required to repeat a grade. The problem for young Wundt was that he tended to daydream in class. He would often be found sitting with an open book in his hand, staring off into space rather than reading his assigned text (a practice this author hopes you don't emulate too closely when you open your psychology text). But he persevered, eventually graduating from medical school and, from there, launching a successful research career as a physiologist. Later, he would apply his scientific training to his true passion, the understanding of conscious experience. In establishing the first psychology laboratory, the man who had once been left back in school because he was so absorbed in his own thoughts became the first scientist of the mind.

Like any scientific discipline, the field of psychology is an unfolding story of exploration and discovery. In this text, you will encounter many of the explorers and discoverers who have shaped the continuing story of psychology. The bridge from ancient thought to the present starts with Wundt; there, we encounter his disciple Edward Titchener and structuralism, the school of thought with which both men were associated. (See Figure 1.1 for a timeline of the early days of psychology.)

Wilhelm Wundt, Edward Titchener, and Structuralism

Wilhelm Wundt was interested in studying mental experiences. He used a method called **introspection**, or careful self-examination and reporting of one's conscious experiences. For example, he would present subjects with an object, such as piece of fruit, and ask them to describe their impressions or perceptions of the object in terms of its shape, color, or texture and how the object felt when touched. Or subjects might be asked to sniff a scent and describe the sensations or feelings the scent evoked in them. In this way, Wundt and his students sought to break down mental experiences into their component parts, including sensations, perceptions, and feelings, and then discover the rules that determine how these elements come together to produce the full range of conscious experiences.

Edward Titchener (1867–1927), an Englishman who was a disciple of Wundt, brought Wundt's teachings and methods of introspection to the United States and other English-speaking countries. The school of psychology identified with Wundt and Titchener became known as **structuralism**, an approach that attempted to define the structure of the mind by breaking down mental experiences into their component parts.

The first American to work in Wundt's experimental laboratory was the psychologist G. Stanley Hall (1844–1924) (Johnson, 2000). In 1892, Hall founded the American Psychological Association (APA), now the largest organization of psychologists in the United States, and he served as its first president. Nine years earlier, in 1883, he had established the first psychology laboratory in the United States, which was housed at Johns Hopkins



Psychologists study what we do and what we think, feel, dream, sense, and perceive. They use scientific methods to guide their investigations of behavior and mental processes.



Archives of the His Akron

Wilhelm Wundt

CONCEPT 1.3

Structuralism, the early school of psychology associated with Wundt and Titchener, used introspection as a method of revealing the fundamental structures of mental experience in the form of sensations, perceptions, and feelings.

psychology The science of behavior and mental processes.

introspection Inward focusing on mental experiences, such as sensations or feelings.

structuralism The school of psychology that attempts to understand the structure of the mind by breaking it down into its component parts.

1860	Gustav Fechner publishes <i>Elements of Psychophysics</i>
1875	 William James gives first psychology lecture at Harvard
1878	G. Stanley Hall receives first Ph.D. in psychology in the U.S.
1879	Wilhelm Wundt establishes first psychology laboratory
1883	 First American psychology laboratory established at Johns Hopkins University by G. Stanley Hall
1887	G. Stanley Hall initiates the American Journal of Psychology
1889	 James Mark Baldwin establishes first Canadian psychology laboratory at University of Toronto
1890	 James writes first psychology text, Principles of Psychology
1892	 American Psychological Association (APA) formed; G. Stanley Hall first president
1894	 Margaret Floy Washburn is first woman to receive a Ph.D. in psychology
1895	Sigmund Freud publishes first work on psychology
1896	• Lightner Witmer establishes the first psychology clinic in the U.S.
1900	• Freud publishes <i>The Interpretation of Dreams</i>
1905	 Two Frenchmen, Alfred Binet and Théodore Simon, announce development of the first intelligence test, which they describe as "a measuring scale of intelligence" Mary Whiton Calkins becomes first woman president of APA
1908	 Ivan Pavlov's work on conditioning first appears in an American scientific journal
1910	 Max Wertheimer and colleagues begin research on Gestalt psychology
1913	 Watson publishes the behaviorist manifesto, Psychology as the Behaviorist Views It
1920	 Francis Sumner is first African American to receive a Ph.D. in psychology in the U.S. Henry Alston is first African American to publish his research findings in a major psychology journal in the U.S.

FIGURE 1.1 Psychology, the Early Days: A Timeline

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CONCEPT 1.4

William James, the founder of functionalism, believed that psychology should focus on how our behavior and mental processes help us adapt to the demands we face in the world.

CONCEPT 1.5

Behaviorism was based on the belief that psychology would advance as a science only if it turned away from the study of mental processes and limited itself to the study of observable behaviors that could be recorded and measured.

University (Benjamin, 2000). Although Hall played a pivotal role in the early days of psychology in the United States, Harvard psychologist William James is generally recognized as the father of American psychology.

William James and Functionalism

William James (1842–1910) was trained as a medical doctor but made important contributions to both psychology and philosophy. Although he too used introspection, he shifted the focus to the *functions* of behavior.

James founded **functionalism**, the school of psychology that focused on how behavior helps individuals adapt to demands placed upon them in the environment. Whereas structuralists were concerned with understanding the structure of the human mind, functionalists were concerned with the functions of mental processes (Willingham, 2007). Unlike the structuralists, James did not believe that conscious experience can be parceled into discrete elements. To James, consciousness is not like a jigsaw puzzle that can be pieced together from its component parts.

Functionalists examined the roles or functions of mental processes—why we do what we do. For example, James believed we develop habits, such as the characteristic ways in which we use a fork or a spoon, because they enable us to perform more effectively in meeting the many demands we face in daily life.

John Watson and Behaviorism

In the early 1900s, a new force in psychology gathered momentum. It was called **behaviorism**, and its credo was that psychology should limit itself to the study of overt behavior that observers could record and measure. The founder of behaviorism was the American psychologist John Broadus

Watson (1878–1958). Watson reasoned that because you can never observe another person's mental processes, psychology would never advance as a science unless it eliminated mentalistic concepts like mind, consciousness, thinking, and feeling. He rejected introspection as a method of scientific inquiry and proposed that psychology should become a science of behavior, not of mental processes (Tweney & Budzynski, 2000). In this respect, he shared with the ancient Greek philosopher Aristotle the belief that science should rely on observable events. The problem with introspectionism is that there is no way to directly observe a person's mental experiences or know how one person's feelings or sensations compare to another's.

Watson believed that the environment molds the behavior of humans and other animals. He even boasted that if he were given control over the lives of infants, he could determine the kinds of adults they would become:

Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might suggest—doctor, lawyer, merchant-chief and, yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and the race of his ancestors. (Watson, 1924, p. 82)

No one, of course, took up Watson's challenge, so we never will know how "a dozen healthy infants" would have fared under his direction. Psychologists today, however, believe that human development is much more complex than Watson thought. Few would believe that Watson could have succeeded in meeting the challenge he posed.

Nonetheless, by the 1920s, behaviorism had become the main school of psychology in the United States, and it remained the dominant force in American psychology for several generations. Its popularity owed a great deal to the

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By reinforcing specific responses, we can teach a raccoon to shoot a basketball and a fish to peck at a particular shape. Still, the three-point shot might be beyond the raccoon's range.

Source: Courtesy of Ulrike Siebeck, reproduced with permission of the *Journal of Experimental Biology*. U. E. Siebeck, L. Litherland and G. M. Wallis, JEB 212, 2113–2119 (2009), http://jeb.biologists.org/cgi/content/full/212/13/2113.

work of the Harvard University psychologist B. F. Skinner (1904–1990). Skinner studied how behavior is shaped by rewards and punishments, the environmental consequences that follow specific responses. Skinner showed he could train animals to perform simple behaviors by rewarding particular responses. A rat could learn to press a bar and a pigeon to peck a button if they were rewarded for these responses by receiving pellets of food. Skinner also showed how more complex behaviors could be learned and maintained by manipulation of rewards, which he called *reinforcers*. In some of his more colorful demonstrations of the use of reinforcement, he trained a pigeon to play a tune on a toy piano, and a pair of pigeons to play a type of pingpong in which the birds rolled a ball back and forth between them. These methods can even be used to teach a raccoon to shoot a basketball and to train fish to tap a particular target shape (Carroll, 2009).

Although Skinner studied mainly pigeons and rats, he believed that the same principles of learning he observed in laboratory animals could be applied to humans as well. He argued that human behavior is as much a product of environmental consequences as the behavior of other animals. Everything we do, from saying "excuse me" when we sneeze, to attending class, to reading a book, represents responses learned through reinforcement, even though we cannot expect to recall the many reinforcement occasions involved in acquiring and maintaining these behaviors.

Max Wertheimer and Gestalt Psychology

In 1910, at about the time Watson was appealing to psychologists to abandon the study of the mind, another young psychologist, Max Wertheimer (1880–1943), was traveling by train through central Germany on his way to a vacation (Hunt, 1993). What he saw from the train would lead him to found a new movement in psychology. Called **Gestalt psychology**, it is the school of psychology that studies the ways in which the brain organizes and structures our perceptions of the world.

What had captured Wertheimer's attention was the illusion that objects in the distance—telegraph poles, houses, and hilltops—appeared to be moving along with the train, even though they were obviously standing still. Wertheimer was intrigued to find out why the phenomenon occurred. He had the idea that the illusion was not a trick of the eye but reflected higher-level processes in the brain that created the perception of movement. He promptly canceled his vacation and headed back to his laboratory to begin studying this phenomenon. The experiments he conducted with two assistants, Wolfgang Köhler (1887–1967) and Kurt Koffka (1886–1941), led to major discoveries about the nature of perception—the processes by which we

functionalism The school of psychology that focuses on the adaptive functions of behavior.

behaviorism The school of psychology that holds that psychology should limit itself to the study of overt, observable behavior.

Gestalt psychology The school of psychology that holds that the brain structures our perceptions of the world in terms of meaningful patterns or wholes.



FIGURE 1.2 What Is This?

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CONCEPT 1.6

Gestalt psychology was based on the principle that the human brain organizes our perceptions of the world, so that we perceive organized patterns or wholes, not individual bits and pieces of sense experiences added together.



CONCEPT LINK

Although the influences of Gestalt psychology extend to many areas of psychology, it is best known for its contributions to the study of perception. See Module 3.5.

CONCEPT 1.7

According to Freud, much of our behavior is determined by unconscious forces and motives that lie beyond the reach of ordinary awareness.



CONCEPT LINK

Freud's model of therapy, called psychoanalysis, is based on the belief that therapeutic change comes from uncovering and working through unconscious conflicts within the personality. See Module 14.1.

CONCEPT 1.8

Although some early schools of psychology have essentially disappeared, contemporary perspectives in the field, including the behavioral, psychodynamic, humanistic, physiological, cognitive, and sociocultural perspectives, continue to evolve and to shape our understandings of behavior.

gestalt A German word meaning "unitary form" or "pattern."

unconscious In Freudian theory, the part of the mind that lies outside the range of ordinary awareness and that contains primitive drives and instincts.

organize our sense impressions and form meaningful representations of the world around us.

The Gestalt psychologists rejected the structuralist belief that mental experience could be understood by breaking it down into its component parts. The German word **gestalt** can be roughly translated as "unitary form" or "pattern." Gestalt psychologists believe the brain organizes our perceptions of the world by grouping elements together into unified or organized wholes, rather than as individual bits and pieces of sense experience (Sayim, Westheimer, & Herzog, 2010). The well-known Gestalt maxim that the "whole is greater than the sum of the parts" expresses this core belief. You perceive the dots in Figure 1.2 not as a formless array of individual dots but as a representation of an arrow. When you see a large number of black objects flying overhead, you instantly recognize them as a flock of birds flying in formation. In other words, your brain interprets what your eyes see as organized patterns or wholes.

Sigmund Freud and Psychoanalysis

Around the time that behaviorism and Gestalt psychology were establishing a foothold in organized psychology, a very different model of psychology was emerging. It was based on the writings of an Austrian physician named Sigmund Freud (1856–1939). Freud's psychology focused not only on the mind, but also on a region of the mind that lay beyond the reach of ordinary consciousness—a region he called the **unconscious**. Freud conceived of the unconscious as the repository of primitive sexual and aggressive drives or instincts and of the wishes, impulses, and urges that arise from those drives or instincts. He believed that the motives underlying our behavior involve sexual and aggressive impulses that lie in the murky depths of the unconscious, hidden away from our ordinary awareness of ourselves. In other words, we may do or say things without understanding the true motives that prompted these behaviors.

Freud also believed that early childhood experiences play a determining role in shaping our personalities and behavior, including abnormal behaviors like excessive fears or phobias. He held that abnormal behavior patterns are rooted in unconscious conflicts originating in childhood. These conflicts involve a dynamic struggle within the unconscious mind between unacceptable sexual or aggressive impulses striving for expression and opposing mental forces seeking to keep this threatening material out of conscious awareness. Thus, Freud's view of psychology, and that of his followers, is often called the **psychodynamic perspective**.

Unlike Wundt, James, and Watson, Freud was a therapist, and his main aim was to help people overcome psychological problems. He developed a form of psychotherapy or "talk therapy" that he called **psychoanalysis** (discussed in Chapter 14). Psychoanalysis is a type of mental detective work. It incorporates methods, such as analysis of dreams and of "slips of the tongue," that Freud believed could be used to gain insight into the nature of the underlying motives and conflicts of which his patients were unaware. Freud maintained that once these unconscious conflicts were brought into the light of conscious awareness, they could be successfully resolved, or "worked through," during the course of therapy.

Contemporary Perspectives in Psychology

What do we find when we look over the landscape of psychology today? For one thing, we find a discipline that owes a great debt to its founders but is constantly reinventing itself to meet new challenges. Not all schools of thought have survived the test of time. Structuralism, for one, has essentially disappeared from the landscape; others maintain small groups of devoted followers who remain true to the original precepts. But by and large, the early schools of psychology—functionalism, behaviorism, Gestalt

psychology, psychoanalysis—have continued to evolve or have been consolidated within broader perspectives. Today, the landscape of psychology can be divided into six major perspectives: the behavioral, psychodynamic, humanistic, physiological, cognitive, and sociocultural.

The Behavioral Perspective

The linchpin of the **behavioral perspective**, which focuses on observable behavior and the important role of learning in behavior, is, of course, behaviorism. However, many psychologists believe that traditional behaviorism is too simplistic or limited to explain complex human behavior. Though traditional behaviorism continues to influence modern psychology, it is no longer the dominant force it was during its heyday in the early to mid-1900s.

Many psychologists today adopt a broader, learning-based perspective called **social-cognitive theory** (formerly called *social-learning theory*). This perspective originated in the 1960s with a group of learning theorists who broke away from traditional behaviorism (see Chapter 11). They believed that behavior is shaped not only by environmental factors, such as rewards and punishments, but also by *cognitive* factors, such as the value placed on different objects or goals (for example, getting good grades) and expectancies about the outcomes of behavior ("If I do X, then Y will follow."). Social-cognitive theorists challenged their fellow psychologists to find ways to study these mental processes rather than casting them aside as unscientific, as traditional behaviorists would. Traditional behaviorists may not deny that thinking occurs, but they do believe that mental processes lie outside the range of scientific study.

The behavioral perspective led to the development of a major school of therapy, **behavior therapy**. Behavior therapy involves the systematic application of learning principles that are grounded in the behaviorist tradition of Watson and Skinner. Whereas psychoanalysts are concerned with the workings of the unconscious mind, behavior therapists help people acquire more adaptive behaviors to overcome psychological problems such as fears and social inhibitions. Today, many behavior therapists subscribe to a broader therapeutic approach, called *cognitive-behavioral therapy*, which incorporates techniques for changing maladaptive thoughts as well as overt behaviors (see Chapter 14).

The Psychodynamic Perspective

The psychodynamic perspective remains a vibrant force in psychology. Like other contemporary perspectives in psychology, it continues to evolve. As we'll see in Chapter 11, "neo-Freudians" (psychodynamic theorists who have followed in the Freudian tradition) tend to place less emphasis on basic drives like sex and aggression than Freud did and more emphasis on processes of self-awareness, self-direction, and conscious choice.

The influence of psychodynamic theory extends well beyond the field of psychology. Its focus on our inner lives—our fantasies, wishes, dreams, and hidden motives—has had a profound impact on popular literature, art, and culture. Beliefs that psychological problems may be rooted in childhood and that people may not be consciously aware of their deeper motives and wishes continue to be widely endorsed, even by people not formally schooled in Freudian psychology.

The Humanistic Perspective: A "Third Force" in Psychology

In the 1950s, another force began to achieve prominence in psychology. Known as **humanistic psychology**, it was a response to the two dominant perspectives at the time, behaviorism and Freudian psychology. For that reason, humanistic psychology was called the "third force" in psychology. Humanistic psychologists, including the Americans Abraham Maslow (1908–1970) and Carl Rogers (1902–1987), rejected the

CONCEPT 1.9

Many psychologists today subscribe to a broad learning-based perspective, called social-cognitive theory, that emphasizes the environmental and cognitive influences on behavior.

CONCEPT LINK

Social-cognitive theorists believe that personality comprises not only learned behavior but also ways in which individuals think about themselves and the world around them. See Module 11.3.

CONCEPT 1.10

The psychodynamic perspective focuses on the role of unconscious motivation (inner wishes and impulses of which we are unaware) and the importance of childhood experiences in shaping personality.

psychodynamic perspective The view that behavior is influenced by the struggle between unconscious sexual or aggressive impulses and opposing forces that try to keep this threatening material out of consciousness.

psychoanalysis Freud's method of psychotherapy; it focuses on uncovering and working through unconscious conflicts he believed were at the root of psychological problems.

behavioral perspective An approach to the study of psychology that focuses on the role of learning in explaining observable

social-cognitive theory A contemporary learning-based model that emphasizes the roles of cognitive and environmental factors in determining behavior.

behavior therapy A form of therapy that involves the systematic application of the principles of learning.

humanistic psychology The school of psychology that believes that free will and conscious choice are essential aspects of the human experience.