

UNDERSTANDING PSYCHOLOGY



ROBERT S. FELDMAN

THIRD EDITION

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Robert S. Feldman

University of Massachusetts at Amherst



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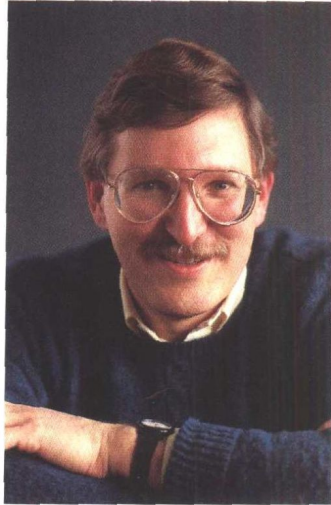
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In addition to the preceding professionals, I met with a panel of undergraduate students who had used the second edition of *Understanding Psychology* during their introductory psychology course. Over the course of a subsequent semester, we reviewed the second edition, literally line-by-line. Their insights and suggestions were invaluable in preparing this revision, and I am very appreciative of their efforts: Shannon O'Hearn, Risa Chudnofsky, Laura Verrette.

Robert S. Feldman

PREFACE

As I look out the window, the form of Mount Norwottock, an ancient volcanic mountain, rises above the landscape. I can see a farmer in the valley below Norwottock methodically plowing his fields, as, closer to home, a mother walks her child to school. A crew of carpenters is building a new house on land nearby, working together and following complicated architectural plans.

At the same time as I look out on this peaceful scene, the morning newspaper lying across my desk reports another terrorist attack, a Mideast treaty broken, and a murder in a small town nearby. It tells of a march of members of a Nazi-like organization who want to expel minorities from the United States, and of the upcoming release from a mental hospital of a killer judged innocent by reason of insanity.

Although nearly a decade has passed since I wrote these words at the beginning of the first edition of *Understanding Psychology*, the fundamental elements of the scene I describe are little changed today. The view from my study window continues to be dominated by the outline of Mount Norwottock and the tranquil fields that dot its base, while my daily newspaper is still filled with incidents of irrationality, selfishness, and violent competition among the world's people. For better or worse, the essential characteristics of human behavior have changed little over the last ten years.

What has changed, though, is the field of psychology. The discipline has made important advances that have brought us closer to understanding people's behavior and thought processes. This book, now in its third edition, is a testament to the field's progress, as well as to the basic principles on which the discipline of psychology is built.

THE THIRD EDITION OF UNDERSTANDING PSYCHOLOGY

Like its predecessors, the third edition of *Understanding Psychology* has three major goals. First, it is intended to provide effective and broad coverage of the field of psychology, introducing readers to the theories, research, and applications that constitute the science. Second, it is meant to provide an impetus for students to begin to think as psychologists, even after the recall of specific content has waned, and to foster an appreciation for the scientific basis of psychology. Finally, this book is designed to be engaging and interesting, arousing students' intellectual curiosity and building an appreciation of how psychology can increase their understanding of the world around them.

These goals, of course, are interdependent. In fact, I would argue that if the text is successful in accurately communicating the nature of psychology, an understanding of and interest in the field will follow naturally. To that end, the writing style of this book has received considerable attention. The style is intended to provide as close a facsimile to two people sitting down and discussing psychology as can be conveyed by the written word.

Furthermore, this text has special features that are designed to challenge students (Cutting Edge boxes with the latest findings), demonstrate the everyday relevance of psychology (Psychology at Work boxes), and improve the quality of

readers' own lives (Informed Consumer of Psychology sections). It is also a book that has been carefully designed to promote learning. Material is presented in rational, manageable chunks, each of which is followed by a succinct summary (called a "Recap") and a set of questions on the material (a "Review"). A reader who answers these questions—and then checks the answers, which are provided on a following page—will be able to assess the degree of initial mastery of the material, as well as having a head start on long-term recall and understanding of the information.

In sum, *Understanding Psychology* is, as I emphasize in the first chapter, designed to be user-friendly. It is a book that is meant not to merely expose readers to the content—and promise—of psychology, but to do so in a way that will bring alive the excitement of the field, and to keep that excitement alive long after readers have completed their introduction to the discipline.

WHAT'S NEW IN THE THIRD EDITION?

Much thought has gone into the changes incorporated into this edition of *Understanding Psychology*. Because the basic structure and features of the first two editions met with such a positive response from both students and professors, the fundamental attributes of the book remain intact. At the same time, additions that reflect important advances in the field of psychology have been incorporated.

To begin with, there are two new chapters—one that focuses on research methods (Chapter 2) and another that is devoted to consumer and industrial-organizational psychology (Chapter 21). The research methods chapter spotlights the role of research in shaping the field of psychology, and the consumer and industrial-organizational reflects the growing importance of these topics within the discipline.

Several new themes also emerge in this edition. Explicitly acknowledging the multicultural nature of U.S. society, greater emphasis has been placed on the influence of race and culture on human behavior, both from a subcultural and cross-cultural perspective. Rather than relegating this information to a chapter of its own, multicultural material is included throughout the book. To cite just a few examples, the chapter on sensation outlines cultural differences in the experience of pain; child-rearing practices of Japanese mothers are discussed in one of the chapters on development; and racial and ethnic differences in consumer behavior are discussed in Chapter 21.

The increasingly influential cognitive and cognitive neuroscientific perspectives have also provided a focal point for revision. Significant new material on cognition has been added throughout this edition. For example, the chapter on biopsychology discusses computational neuroscience and neural networks; the states of consciousness chapter discusses how cognitive expectations relate to the effect of alcohol; and gender differences in cognitive abilities are examined in the chapter on gender and sex. In addition, the chapter on cognition has been expanded and updated.

Overall, a wealth of contemporary research is cited in this edition. More than 750 new citations have been added, most of them published since 1990. Furthermore, an extensive array of new topics has been incorporated, along with information updating existing material. A sample of the new and revised topics featured in this edition provides a good indication of the currency of the revision: minority representation in the field of psychology, meta-analytic research techniques, circadian rhythms, development of taste preferences, sex differences in

smell, speech perception, new theories of dreaming, priming, bilingual training, implicit memory, everyday memory, emotional intelligence, cultural difference in emotion, sexual harassment, date rape, the world AIDS epidemic, genetic determinants of personality traits, homelessness, cultural factors in treatment, violence and pornography, and consumer psychology.

One of the distinctive characteristics of *Understanding Psychology* has always been its inclusion of substantial information designed to have a lasting impact on students' lives. This edition continues this tradition, including new material on such topics as breast and testicular self-examination (sensation chapter), the prevention of date rape and the use of safer sex practices (gender and sexuality chapter), and consideration of the social-influence tactics of advertisers (consumer and industrial-organizational psychology chapter).

AN OVERVIEW OF UNDERSTANDING PSYCHOLOGY

Understanding Psychology includes extensive coverage of the traditional topical areas of psychology, including the biological foundations of behavior, sensation and perception, learning, memory, cognition, human development, personality, abnormal behavior, and social psychological foundations of behavior. Notably, however, it also includes several distinctive chapters that focus primarily on applications of psychological theory and research in nonlaboratory, field settings. For example, there are separate chapters on health psychology and psychology in the workplace and the marketplace—burgeoning areas that represent the most important applied topics currently undergoing investigation.

The flexibility of this text's organizational structure is considerable. Each chapter is divided into three or four manageable, self-contained units, allowing instructors to choose and omit sections in accordance with their syllabus. Furthermore, because chapters are self-contained, it is possible to use this book in either biologically oriented or socially oriented introductory psychology courses by choosing only those chapters that are relevant. In addition, because the applications material is well-integrated throughout, even in the chapters that cover the most traditional, theoretical topics, those courses that omit the more applied topical chapters will still be successful in conveying the relevance of psychology to readers.

Overall, then, the book reflects a combination of traditional core topics and contemporary applied subjects, providing a broad, eclectic—and current—view of the field of psychology. It should be apparent that the volume is *not* an applied psychology text; nor is it a theories-oriented volume. Instead, it draws from theoretical and applied approaches, and integrates the two along with objective presentations of research that illustrate the way in which the science of psychology has evolved and grown. Indeed, the book exemplifies the view that a theory-application dichotomy is a false one. Applications are not presented as devoid of theory, but rather are placed in a theoretical context, grounded in research findings. Likewise, when theoretical material is presented, practical implications are drawn from it.

Some examples can illustrate this approach. If you turn to Chapter 4, you will find that it includes the traditional material on sight and the eye. But the text moves beyond a mere recitation of the various parts of the eye and theories of vision. It also explores current work involving laser surgery in which a slice of the eye's cornea is removed, permitting improved vision that makes eyeglasses and contact lenses obsolete. Similarly, Chapter 13 includes a presentation of the theories behind the nature-nurture issue and a discussion of developmental re-

search strategies. These are tied to a presentation of exciting new findings on genetic influences on temperament and shyness and to contemporary issues such as the effects of day-care on children's development. Finally, the chapter on abnormal behavior not only explores the development of models of abnormality but considers how they apply to homelessness, one of the major social problems of the 1990s. In each of these instances, the text demonstrates how applications grow out of the theoretical and research base of the field.

LEARNING AIDS AND FEATURES OF UNDERSTANDING PSYCHOLOGY

Understanding Psychology has been designed with its ultimate consumer—the student—in mind. As you can see from the following list of elements that are common to every chapter, the book incorporates educational features, based on learning and cognitive instructional design theory and research, that are meant to make the book an effective learning device and, at the same time, enticing and engaging:

- **Chapter Outline.** Each chapter opens with an outline of the chapter structure. Not only does the outline provide a means of understanding the interrelationships of the material within the chapter, but it serves as a chapter organizer, helping to bridge the gap between what a reader already knows and the subsequent chapter content.
- **Prologue.** Each chapter starts with an account of a real-life situation that involves major aspects of the topics of the chapter. These scenarios demonstrate the relevance of basic principles and concepts of psychology to actual issues and problems. For example, the chapter on sensation discusses rock star Pete Townshend's hearing loss; the chapter on health and stress describes the psychological impact of participation in the war in the Persian Gulf; and the chapter on attitudes and social cognition discusses the case of Rodney King, who was stopped by Los Angeles police and beaten in a racial incident.
- **Looking Ahead.** A chapter overview follows the prologue. It articulates the key themes and issues and lists a set of questions that are answered in the chapter.
- **Psychology at Work.** The Psychology at Work boxes illustrate an application of psychological theory and research findings to a real-world problem. For example, Chapter 2 discusses how psychologists' theoretical findings on the brain are used by advertisers to analyze commercials; the chapter on states of consciousness considers how a psychologist analyzed the speech of the captain of the Exxon Valdez, a ship involved in a major Alaskan oil spill, to determine if he was intoxicated; and Chapter 19 discusses the way in which prejudice reduction techniques have been employed on college campuses.
- **The Cutting Edge.** These boxed inserts describe a contemporary research program that is in the forefront of the discipline—suggesting where the field of psychology is heading. This feature helps provide a sense of the growing and developing status of the science of psychology. For instance, the biopsychology chapter explores current work on gender differences in the brains of males and females; the memory chapter discusses the evidence for implicit memory while anesthetized; the chapter on adolescence and adulthood presents findings relating the use of drugs to social adjustment; and

the chapter on attitudes and social cognition discusses new evidence regarding the prevalence of stereotypes.

■ *The Informed Consumer of Psychology.* Every chapter includes information designed to make readers more informed consumers of psychological information and knowledge by giving them the ability to evaluate critically what the field of psychology offers. For example, these sections discuss treatment for dyslexia (perception chapter), dealing with drug- and alcohol-related problems (states-of-consciousness chapter), using behavior modification techniques for time management (learning chapter), personality and vocational testing (personality chapter), choosing a physician (health and stress chapter), and evaluating psychological therapy (treatment chapter).

■ *Recap and Review.* Research clearly indicates the importance of careful organization of textual material, learning material in relatively small chunks, and actively reviewing material. Consequently, each chapter is divided into three or four sections, each of which concludes with a Recap and Review. A Recap summarizes the key points of the previous section, and a Review presents a variety of types of questions for students to answer—including multiple choice, fill-in, short answer, and critical thinking questions—in order to test both recall and higher-level understanding of the material.

■ *Running Glossary.* Key terms are highlighted in boldface type when they are introduced, and they are defined in the margin of the text, with pronunciation guides for difficult words. There is also an end-of-book Glossary.

■ *Looking Back.* To facilitate the review of the material covered in each chapter and to aid in the synthesis of the information covered, a numbered summary is included at the end of every chapter. The summary emphasizes the key points of the chapter and is organized according to the questions asked in the “Looking Ahead” section at the beginning of the chapter.

■ *Key Terms and Concepts.* A list of key terms and concepts, including the page numbers where they were first introduced, is also provided at the end of each chapter.

■ *A full-color graphic design.* To support the instructional design features of the text, a team of graphic designers has developed a design structure to enhance the pedagogy of the text. The beautiful design and photos make the text inviting and a book from which it is easy to learn.

ANCILLARY MATERIALS

The third edition of *Understanding Psychology* is accompanied by an extensive, integrated set of supplemental materials designed to support the classroom teaching of both new and veteran instructors. The centerpieces of the supplements are the student Study Guide, Instructor’s Manual, and Test Bank, all written by Professor Mark Garrison of Kentucky State University. A master teacher and experienced author, Professor Garrison’s materials provide a consistent pedagogical framework for students and professors using *Understanding Psychology*.

The Study Guide has been completely revised and reorganized to provide a streamlined, integrated review of the material in each textbook chapter. Each *Study Guide* chapter contains a chapter outline with highlighted key terms, a detailed chapter summary, learning objectives keyed to page numbers in the text, and a set of self-study questions of various types and levels of difficulty. New to this edition are essay questions with detailed sample answers and an intro-

ductory essay which provides the student with suggestions for how best to utilize the *Study Guide* and covers the SQ3R study and review method.

The *Instructor's Manual* contains a wide variety of lecture ideas and resources for both first-time and experienced instructors. Designed to complement the *Study Guide* and *Test File*, each chapter in the *Instructor's Manual* includes a detailed chapter outline, a chapter summary, learning objectives, and a set of Lecture Resources including discussion topics, ideas for classroom demonstrations, a list of relevant films and videos, and suggestions for activities and projects that can be used both in and out of the classroom. New features in this edition include learning objectives, as well as chapter summaries that are indexed to the text and keyed to student learning objectives and the relevant test bank questions.

The *Test File* contains a mix of factual and conceptual multiple-choice questions indexed to the text and keyed to learning objectives for a total of over 3000 items. In addition, there are approximately twenty-five true-false questions per chapter. *Computerized Test Banks* are available in IBM (on both 5.25" and 3.5" disks).

In addition to the student Study Guide, Instructor's Manual, and Test Bank, McGraw-Hill provides a wide variety of audiovisual and computerized teaching aids. For example, Philip G. Zimbardo of Stanford University and Allen Funt have developed an innovative set of laser discs and videotapes using clips from *Candid Camera*, available exclusively through McGraw-Hill. Furthermore, the Instructor's Manual includes a list of the films available for use with each chapter, along with information about how these films can be acquired. Finally, a Transparency and Slide Set is available to instructors using the text.

Several software packages also accompany this text. These include *Psych-World*, 2d ed. (for IBM 3½ and 5¼); *Computer Activities for Psychology*, 4th ed. (CAPS IV, for IBM); and *Statistical Computation Program for Students* (for IBM).

Finally, professors using the third edition of *Understanding Psychology* will receive a monthly *Update*, written by this book's author. The *Update* will include reports of new psychological findings and will discuss the psychological implications of current events in the news. The *Update* can be distributed to students or incorporated into lectures. In order to ensure timeliness, the newsletter will be sent to instructors via FAX.

ACKNOWLEDGMENTS

As the long list of reviewers on pages xxvii–xxviii attests, this book involves the efforts of many people. They lent their expertise to evaluate all or part of the manuscript, providing an unusual degree of quality control. Their careful work and thoughtful suggestions have improved the manuscript many times over from its first-draft incarnations. I am grateful to them all for their comments.

My thinking has been shaped by many teachers along the way. I was introduced to psychology at Wesleyan University, where several committed and inspiring teachers—and in particular Karl Scheibe—made the excitement and relevance of the field clear to me. By the time I left Wesleyan I could envision no other career but that of psychologist. Although the nature of the University of Wisconsin, where I did my graduate work, could not have been more different from the much smaller Wesleyan, the excitement and inspiration were similar. Once again, a cadre of excellent teachers—led, especially, by the late Vernon Allen—molded my thinking and taught me to appreciate the beauty and science of the discipline of psychology.

My colleagues and students at the University of Massachusetts at Amherst provide ongoing intellectual stimulation, and I thank them for making the University a very fine place to work. Several people also provided extraordinary research and editorial help; they include John Graiff, Nancy Goff, Sean Donovan, Lee Rosen, Carolyn Dash, Richard Fleming, Wendy Copes, Frances Ramos, Lisa Beck, and the late Kate Cleary. I also thank James M. Royer, who provided a draft of the material in the statistics appendix.

Every reader of this book owes a debt of gratitude to Rhona Robbin, senior developmental editor for this edition of *Understanding Psychology*. Her relentless pursuit of excellence shaped the underlying quality of this book. Chris Rogers, executive editor, is a throwback to the old-fashioned days of publishing. Chris's creativity and concern about quality are increasingly rare commodities in a world of publishing conglomerates. I'm thankful to both Rhona and Chris, and I'm pleased to count them as friends.

Other people at McGraw-Hill were central to the design and production process; these include David Dunham, editing supervisor, Jo Jones, designer, Fred Schulte, production supervisor, and Elsa Peterson, photo editor. I am proud to be a part of this first-class team.

Finally, I am, as always, indebted to my family. My parents, Leah Brochstein and the late Saul D. Feldman, provided a lifetime foundation of love and support. My extended family also play a central role in my life. They include, more or less in order of age, my nieces and nephews, my brother, various brothers- and sisters-in-law, Ethel Radler, and Harry Brochstein. I'm thankful for all that they add to my life. Finally, my late mother-in-law, Mary Evens Vorwerk, had an important influence on this book, and I remain ever grateful to her.

Ultimately, my children, Jonathan, Joshua, and Sarah, and my wife, Katherine, remain the focal point of my life. I thank them, with great love.

Robert S. Feldman

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