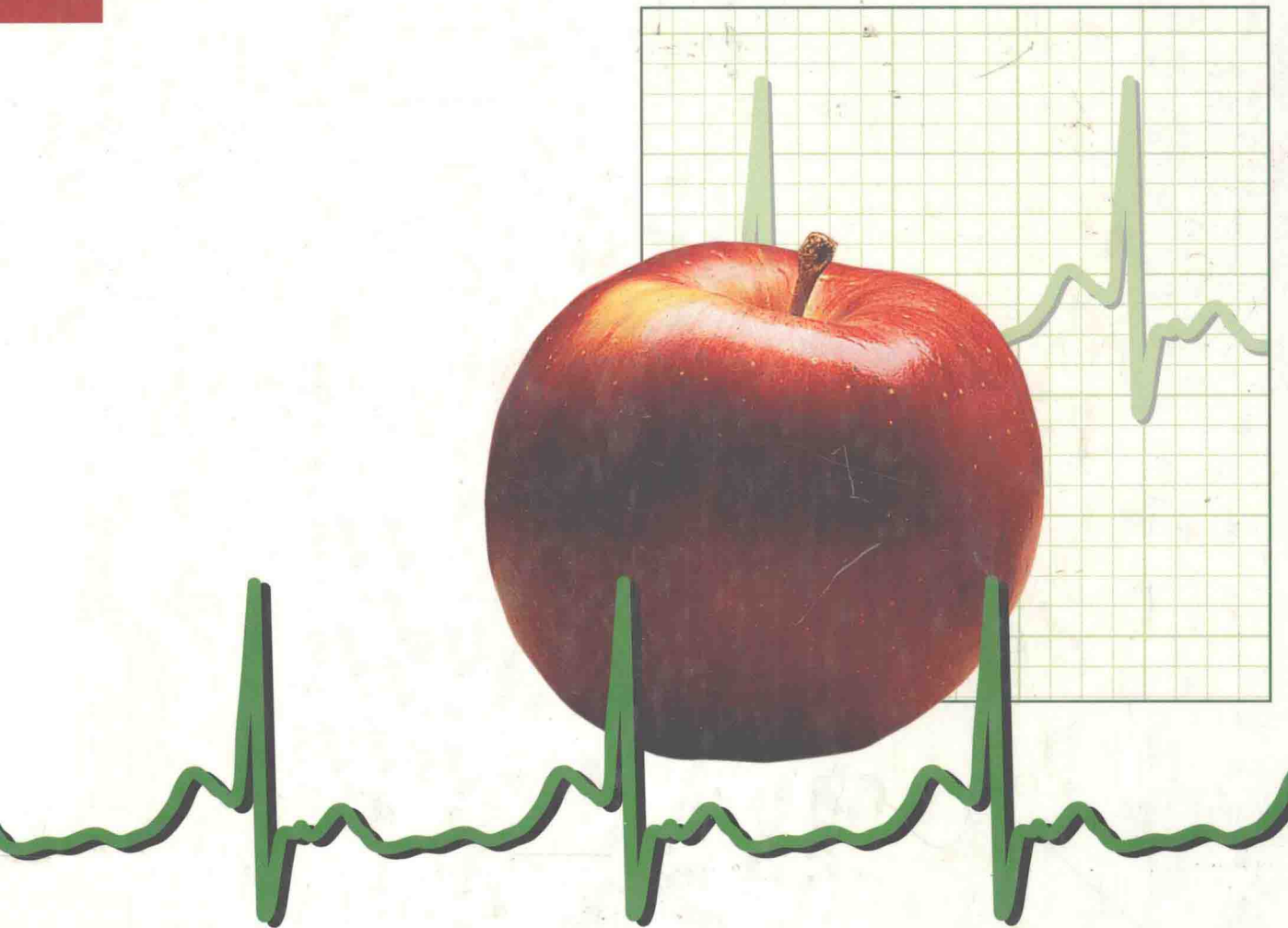


HEALTH PSYCHOLOGY

Biopsychosocial Interactions

Third Edition



EDWARD P. SARAFINO

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Edward P. Sarafino

The College of New Jersey
(formerly Trenton State College)



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PREFACE

"The first wealth is health," wrote the poet/philosopher Ralph Waldo Emerson in the 19th century. Although people have probably always valued good health, Americans today are becoming increasingly health conscious. This heightened consciousness generally reflects two beliefs: that we can do things to protect our health and that being sick is unpleasant—as Emerson put it, "Sickness is poor-spirited, and cannot serve anyone." If a person's health problem is serious, it can be quite distressing to the patient and his or her family and friends. These beliefs underlie psychologists' interests in helping people behave in ways that promote wellness, adjust to health problems that develop, and participate effectively in treatment and rehabilitation programs. I wrote this book because I share these interests.

Since 1987 when I began writing the first edition of this text, my goal for each edition has been to create a teaching instrument that draws from the research and theory of many disciplines to describe how psychology and health are interconnected. The resulting book is a comprehensive text that is appropriate for several courses, especially those entitled either Health Psychology or Behavioral Medicine. Two objectives were central regarding the likely audience in these courses. First, I aimed to make the content appropriate for upper-division students—mainly juniors. But the straightforward writing style also makes the material accessible to most sophomores. The content assumes that the reader has already had at least an introductory psychology course. Second, I tried to make the material relevant and interesting to students from diverse disciplines—particularly psychology, of course, but also fields such as sociology, allied health, pre-med, and health and physical education. Undergraduate training in health psychology has developed rapidly and can play an important role in helping students from many disciplines understand the interplay of biological, psychological, and social factors in people's health.

The field of health psychology is enormously exciting, partly because of its relevance to the lives of those who study it and individuals the students know or will work with in the future. The field is also exciting because it is so new, and researchers from many different disciplines are finding fascinating and important relationships between psychology and health every day. Keeping up to date in each area of such a

complex field presents quite a challenge. After culling through thousands of abstracts, I examined more than 1,000 new articles and books for the current revision. Of the more than 2,250 references cited in this edition, most were published within the last 10 years, and about 25% were published since the last edition of this book went to press in 1993.

NEW TO THIS EDITION

Although this edition retains the overall organization, pedagogy, and varieties of boxed material that students and instructors have praised in the last edition, important changes have been made. Every chapter was updated with new information, and I substantially revised or expanded the coverage of the following topics:

- psychoneuroimmunology
- methods of coping
- AIDS prevention
- smoking cessation
- weight control
- medical and psychosocial interventions for chronic illnesses
- age and gender differences in health and health promotion
- sociocultural differences in health and health promotion

I also expanded the description and research findings for the new and very significant *stages of change model* of behavior change.

THEMES

A phrase we often hear in psychology is that we need to understand the "whole person." In approaching this goal, this book adopts the *biopsychosocial model* as the basic explanatory theme. I have tried to convey a sense that the components of this model interrelate in a dynamic and continuous fashion, consistent with the concept of *systems*. The psychological research

cited reflects an eclectic orientation and supports a variety of behavioral, physiological, cognitive, and social–personality viewpoints. In addition, *gender and sociocultural differences* in health and related behaviors are addressed at many points in the book. In these ways, this book presents a balanced view of health psychology that is squarely in the mainstream of current thinking in the field.

One additional theme makes this book unique. I have integrated a focus on *life-span development* in health and illness throughout the book, and each chapter contains information dealing with development. For example, the book discusses how health and health-related behavior change with age and describes health care issues and examples that pertain to pediatric and elderly patients. Sometimes this information is organized as a separate unit, as with the sections “Development and Health-Related Behavior,” “When the Hospitalized Patient Is a Child,” “Assessing Pain in Children,” and “Alzheimer’s Disease.”

ORGANIZATION

This text examines the major topics and problem areas in health psychology by using an overall organization that progresses in main focus across chapters from *primary*, to *secondary*, to *tertiary* prevention and care. As the table of contents shows, the book is divided into 15 chapters in the following seven parts:

- **Part I.** Chapter 1 presents the history and focus of health psychology and describes the major concepts and research methods used in the field. Chapter 2 provides an introduction to the body’s physical systems. Three reasons guided the decision to have a separate chapter on body systems, rather than introducing the needed physiological principles as they became relevant. First, this approach allows students to see how the various systems interrelate, as in the section entitled “The Endocrine and Nervous Systems Working Together.” Second, each body system is mentioned at many points in the book, and students have a single place to refer back to if needed, such as when reading about the neural transmission of pain signals in Chapter 11. Third, the next three chapters of the book rely on the reader’s firm knowledge
- of almost all body systems and discuss them in connection with people’s experience of stress.
- **Part II.** Chapters 3, 4, and 5 discuss stress, its relation to illness, and methods for coping with and reducing it. The material on body systems in Chapter 2 connects directly to discussions in Chapters 3 and 4, particularly the sections entitled “Biological Aspects of Stress,” “Physiological Arousal,” “Stress, Physiology, and Illness,” and “Psychoneuroimmunology.” This connection is one of the reasons why stress is covered early in the book. A reviewer recognized a second reason and wrote: “The issue of stress permeates all of the other topics, and it would be useful to have the students read about this first.” Chapter 5 includes information on psychosocial methods psychologists use in helping people cope better.
- **Part III.** The third part of the book examines issues involved in enhancing health and preventing illness. Chapters 6, 7, and 8 discuss how health-related behaviors develop and are maintained, how they can affect health, and psychosocial and public health approaches for preventing or reducing unhealthful behavior. Chapter 7 gives special attention to the topics of tobacco, alcohol, and drug use, and Chapter 8 discusses nutrition, weight control, exercise, and safety. The book up to this point focuses mainly on primary prevention.
- **Part IV.** In Chapter 9, the main focus shifts to secondary prevention by describing the kinds of health services that are available and considering why people use, do not use, and delay using these services. This chapter also examines patients’ relationships to practitioners and problems in adhering to medical regimens. Chapter 10 discusses the hospital setting and personnel, how people react to being hospitalized and cope with stressful medical procedures, and the role psychologists play in helping patients cope with their illnesses and medical treatments.
- **Part V.** Chapters 11 and 12 explore the physical and psychological nature of pain, ways to assess patients’ discomfort, and psychosocial methods for managing and controlling pain.
- **Part VI.** The sixth part of the book emphasizes tertiary prevention, examining different chronic health problems, their impact on patients and their families, and medical and psychosocial treatment

approaches. The health conditions included are separated into two chapters on the basis of their mortality rates. Chapter 13 focuses on several health conditions, such as diabetes and arthritis, that have either very low or moderate rates of mortality and may lead to other health problems or disability. In contrast, Chapter 14 examines four high-mortality illnesses—heart disease, stroke, cancer, and AIDS; we then consider people’s experiences with and reactions to terminal illness and loss.

- **Part VII.** Chapter 15 discusses goals and issues for the future of health psychology.

OPTIONAL ORGANIZATION

Because some instructors might like some *flexibility in the organization of chapters*, Chapters 10 through 14 were written with this possibility in mind. Chapter 10, Part V, and Part VI are written as three independent units that may be covered in any order. Two examples of alternate sequences that would work nicely after Chapter 9 are: (1) Part V, Part VI, and then Chapter 10; and (2) Part VI, Chapter 10, and then Part V. Other sequences would work well, too.

Language and Style


Because the field of health psychology involves complex issues and technical information, I have made extra efforts to make the material in this book readable and clear without sacrificing content. To accomplish this, I have limited the use of jargon and have sought to write in a concrete and engaging fashion. The gradual progression of concepts, choice of words, and the structure of each sentence were all designed to help students master and retain the material. When introducing new terms, I define them immediately. Many examples and case studies are included to clarify concepts and to bring them to life.


Learning Aids


This book contains many pedagogical features. Each chapter begins with a *contents* list, giving students an immediate overview of the progression of major topics and concepts. Then a *prologue* introduces the chapter with (1) a lively and engaging vignette that is relevant to the chapter material and (2) an overview of the basic ideas to be covered. The body of each

chapter includes many *figures*, *tables*, and *photographs* to clarify concepts or research findings. For example, special figures were created to show how the immune system functions and how gate-control theory explains pain perception. Important terms are printed in **boldface** type, and *italics* are used liberally for other terms and for emphasis.

Throughout the book, three types of boxed material are presented to fit with the surrounding content. They are identified in the text with the corresponding icons:

 **Highlight on Issues.** This type of box focuses on applied, high-interest, and new frontier topics. Some of these topics are: careers relating to health and psychology, breast and testicular self-examination, the effects of secondhand smoke, acute pain in burn patients, and the complex medical regimens for diabetes.

 **Focus on Research.** The second type of boxed material gives special attention to research methods in health psychology and to particularly unique or interesting findings. The research presented in this way includes that of (1) Janice Kiecolt-Glaser and her colleagues on stress and immune function; (2) Meyer Friedman, Lynda Powell, and Carl Thoresen’s work on the effects of changing Type A behavior on the development of heart disease; (3) the MRFIT group on dietary modification; and (4) Edward Blanchard, Frank Andrasik, and their associates on managing headache pain.

 **Assess Yourself.** This boxed feature of the book has students actively examine their own health-related characteristics, such as their lifestyles, typical daily hassles, ways of coping with stress, knowledge about the transmission of HIV, beliefs about alcohol use, and symptoms of health problems.

Each chapter ends with a substantial *summary* and a list of *key terms*. All these terms are redefined in the *glossary* at the back of the book.

INSTRUCTOR’S MANUAL

An instructor’s manual is available for this text. It contains a test bank and information to help instruc-

tors (1) organize and present the subject matter effectively and (2) enrich the classroom experience through activities and discussion.

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Writing this book and revising it have been enormous tasks. I am indebted first of all to the thousands of researchers whose important and creative work I have cited. There would be no health psychology without their work. I also received a great deal of direct help and encouragement from a number of people whose contributions I gratefully acknowledge.

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The textbook review process generated many helpful suggestions that have made this a better book than it would have been otherwise. Reviewers of the present and past editions of the book deserve my heartfelt thanks for their ideas and favorable comments regarding my plans for the book and the major parts of the manuscript they read. Because the new edition retains many of the features of earlier editions, I continue to be indebted to the following reviewers in my preparation of prior editions: *Tony Albinia*, Coastal Carolina College; *Karen Anderson*, Santa Clara University; *Tom Brozowski*, Grinnell College; *John Carey*, Sheridan College; *Donald Corriveau*, Southeastern Massachusetts University; *Alexander Dale*, Allegheny College; *Don Deakins*, Alfred Adler Institute; *Dennis Elsenrath*, University of Wisconsin-Stephens Point; *Robert Emmons*, University of California-Davis; *David D. Hanson*, James Madison University; *Craig Holt*, SUNY, Albany; *Joseph Istvan*, Oregon Health Sciences University; *Paul Jose*, Loyola University; *Lisa Judd*, Winona State University; *Charles Kaiser*, College of Charleston; *Jacqueline Lederman*, Boston University; *Brenda Loren*, University of North Carolina-Wilmington; *Bradley Lown*, Buffalo State College; *Robert MacAleese*, Spring Hill College; *Joseph Matarazzo*, Oregon Health Sciences University; *Karen Matthews*, University of Pittsburgh; *Barbara Melamed*,

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For the new edition, I am also grateful to my assistant, Vincent Malba, who photocopied hundreds of articles. The staff at the The College of New Jersey library was enormously helpful in acquiring needed materials, and the college accepted a grant for released time so that I could complete this work.

Very personal thanks go to the closest people in my life—family, friends, and colleagues—for encouraging and supporting my efforts to complete this book and for tolerating my preoccupation.

Edward P. Sarafino

TO THE STUDENT

"I wish I could help my father stop smoking," a student in my health psychology course said. Maybe she did help—he quit by the end of the semester. This example points out two things that will probably make health psychology interesting to you: (1) the material is *personally relevant* and (2) many of the things you learn can actually be *applied* in your everyday life. Studying health psychology will also help you answer important questions you may have considered about health and psychology in the past. Does the mind affect our health—and if so, how? What effect does stress have on health and recovery from illness? What can be done to help people lead more healthful lives than they do? Why don't patients follow their doctors' advice, and what can health care workers do to help? What special needs do children have as patients, and how can parents and health care workers address these needs? How can families, friends, and health care workers help patients adjust to disabling or life-threatening health problems?

As these questions indicate, a knowledge of health psychology can be relevant both now and later when you enter *your future career*. This is so whether you are studying to be a psychologist, medical social worker, nurse or physician, physical or occupational therapist, public health worker, or health educator. You will learn in this course that the relationship between the person's health and psychology involves a "two-way street"—each affects the other. Psychological factors go hand in hand with medical approaches in preventing and treating illness and in helping patients adjust to the health problems they develop.

THE BOOK

This book was designed for you, the reader. First and foremost, it provides a thorough and up-to-date presentation of the major issues, theories, concepts, and research in health psychology. Throughout the book, the major point of view is "biopsychosocial"—that is, that health and illness influence and result from the interplay of biological, psychological, and social aspects of people's lives. Because integrating these aspects involves complex concepts and techni-

cal material, I have made special efforts to write in a straightforward, clear, and engaging fashion.

To help you master the material and remember it longer, the book includes the following learning aids:

- **Chapter Contents and Prologue.** Each chapter begins with a contents list that outlines the major topics in the order in which they are covered. The prologue then introduces the chapter with a vignette that is relevant to the material ahead and gives an overview of the basic ideas you will read about.
- **Illustrations.** The many figures, tables, and photographs in each chapter are designed to clarify concepts and research findings and help them stick in your mind.
- **Boxed material.** Three types of boxed material are included in the chapters. Each type of box has a special icon that is used in "Go to . . ." instructions, prompting you to read the appropriate box at the right point in the text.
- **Summary and Key Terms.** Each chapter closes with two features: (1) the summary, which presents the most important ideas covered, and (2) the key terms—a list of the most important terms in the chapter, arranged in order of their appearance.
- **Glossary.** The glossary at the back of the book gives definitions of important terms and concepts, along with pronunciation keys for the most difficult words. It will be useful when you are studying or reading and are not sure of the exact meaning or pronunciation of a term.

STUDY HINTS

There are many ways you can use the features of this book to learn and study well, and you may want to "experiment" to find the best way for you. I will describe one method that works well for many students.

Survey the chapter first. Read the contents list and browse through the chapter, examining the figures, tables, and photographs. Some students also find it useful to read the summary first, even though it contains terms they may not yet understand. Then read the prologue. As you begin each new section of the chapter, look at its title and turn it into a *question*.

Thus, the heading early in Chapter 1, “An Illness/Wellness Continuum,” might become “What is an illness/wellness continuum?” Doing this helps you focus on your reading. After reading the section, *reflect* on what you have just read. Can you answer the question you asked when you reworded the title?

When you have finished the body of the chapter, *review* what you have read by reading the summary and trying to define the items in the list of key terms. If there is something you do not understand, look it up in the chapter or glossary. Last, *reread* the chapter at least once, concentrating on the important concepts or ideas. You may find it helpful to underline

or highlight selected material now that you have a good idea of what is important. If your exam will consist of “objective” questions, such as multiple choice, using this approach intensively should be effective. If your exam will have essay items, you will probably find it helpful to develop a list of likely questions and write an outline or a complete answer for each one.

I hope that you enjoy this book, that you learn a great deal from it, and that you will share my enthusiasm and fascination for health psychology by the time you finish the course.

Edward P. Sarafino

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