



# Health Psychology

AN INTERDISCIPLINARY APPROACH TO HEALTH

Deborah Fish Ragin



# HEALTH PSYCHOLOGY

AN INTERDISCIPLINARY APPROACH TO HEALTH

Deborah Fish Ragin  
*Montclair State University*



**Prentice Hall**

Boston Columbus Indianapolis New York San Francisco Upper Saddle River  
Amsterdam Cape Town Dubai London Madrid Milan Munich Paris Montreal Toronto  
Delhi Mexico City Sao Paulo Sydney Hong Kong Seoul Singapore Taipei Tokyo

*For Luther, Remi and Chrissy:  
To your health*

**Editor:** Susan Hartman  
**Editorial Assistant:** Laura Barry  
**Marketing Manager:** Nicole Kuntzmann  
**Marketing Assistant:** Shauna Fishweicher  
**Senior Production Project Manager:** Patrick Cash-Peterson  
**Manufacturing Buyer:** Debbie Rossi  
**Cover Designer and Administrator:** Joel Gendron  
**Editorial Production and Composition Service:** TexTech International  
**Interior Design:** TexTech International  
**Photo Researcher:** Martha Shethar

Credits from other sources that are reproduced within this text, with permission, appear on the appropriate page.

---

Copyright © 2011 Pearson Education, Inc., publishing as Prentice Hall, 1 Lake St., Upper Saddle River, NJ 07458  
All rights reserved. Manufactured in the United States of America. This publication is protected by Copyright, and permission should be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or likewise. To obtain permission(s) to use material from this work, please submit a written request to Pearson Higher Education, Rights and Contracts Department, 501 Boylston Street, Suite 900, Boston, MA 02116, or fax your request to 617-671-3447.

Many of the designations by manufacturers and sellers to distinguish their products are claimed as trademarks. Where those designations appear in this book, and the publisher was aware of a trademark claim, the designations have been printed in initial caps or all caps.

While CIP data was not available at the time of publication, this title is on record with the Library of Congress.

**Prentice Hall**  
is an imprint of

**PEARSON**

[www.pearsonhighered.com](http://www.pearsonhighered.com)

10 9 8 7 6 5 4 3 2 1 EB 14 13 12 11 10

ISBN 10: 0-13-196297-3  
ISBN 13: 978-0-13-196297-2

# PREFACE

The field of health psychology has changed considerably over the past several decades. The change largely reflects a better understanding of the factors that influence health. Traditionally, the study of individual, community, or even regional health involved an examination of individual physiological and behavioral factors, as well as the effects of familial or cultural practices. Today, with those elements as the foundation, we have added the following additional health outcome determinants to our study of the field of health psychology: physical environment, health systems, and health policy. Rather than rely on formulaistic determinations, health psychologists have come to understand health as a dynamic process represented by the interaction of biology, human behavior, physical and social environments, health systems, and health policy. In essence, the field of health psychology increasingly has taken a social ecological approach to the study of health and well-being.

*Health Psychology* presents a social ecological perspective, an approach consistent with the changes and developments in the field of health psychology. The ecological model allows us to expand on our discussion of the biological, psychological, and sociological factors traditionally associated with health psychology. Using this model we now include in greater depth, a review and analysis of the impact of cultural, environmental, spiritual, and systems factors on health and health outcomes. The expanded perspective encourages, and in fact requires, that we consider the role of related fields such as anthropology, biology, economics, environmental studies, medicine, public health, and sociology. Many health psychologists contend that it is only through the lens of an interdisciplinary approach to health that we come to understand how health affects the individual on a mental and emotional level, and how the individual responds to the challenges.

The expanded model of health evident in the social ecological model is also more consistent with the new definition of health proposed by the American Psychological Association's (APA) Division of Health Psychology. Members of the Division, and an increasing number of health psychologists, believe that a more comprehensive and integrated approach to health psychology will enable us to arrive at a better understanding of the role of each factor in determining health outcomes.

Consistent with an interdisciplinary approach to health, one that gives equal weight to the physiological, emotional, psychological, environmental, and systems contributions to overall individual well-being, we introduce several topics in this text not typically covered in health psychology. For example, we introduce and explore in greater detail than many texts the global nature of health. Comparing the health outcomes of people with the same illness in different countries allows us to see the impact of difference environments and health systems on health status. We also devote a chapter to HIV/AIDS, the pandemic of the twentieth century to explore how determinants such as individual behaviors and lifestyles, social environments, health systems, and health policy promote or inhibit the spread of the disease. At the same time, we can explore the vital contributions of health psychologists to research on HIV/AIDS and to mental and physical health care for persons with the disease.

Departing from the format of some health psychology textbooks, this text does not include a separate chapter on biological systems. Rather, we incorporate in each chapter a section on the

physiological systems relevant to that issue. For example, when discussing emotional health and well-being, we devote a section of the chapter to a discussion of the biological systems and neurotransmitters that are essential to understanding the body's response to emotions. Likewise in the chapter on cardiovascular health, we review the heart and its components as well as the circulatory system prior to discussing specific cardiovascular diseases or their treatments.

Several features are included in this text to underscore the point that health is an integral part of our lives. First, each chapter begins with an *opening story* that poses a scenario or problem for consideration. The opening stories highlight a central concept in the chapter and draws readers into the main topic of the chapter. Stories summarize current events that pertain to or impact health and allow the reader to apply the concepts in the chapter to real life situations. For example, the chapter on Cancer begins with a story on the association between cell phone use and brain tumors.

Second, each chapter ends with a *Personal Postscript* that encourages students to reflect on the main concepts of the chapter and to apply them to actual or likely life events. Personal postscripts are designed especially for a college-aged audience. They propose situations and offer advice or solutions to situations commonly encountered by college students that pertain to health. Finally, the postscripts bring the chapters "full circle," allowing students to reflect again on the applied aspects of the health issues presented in the chapter.

Third, the chapters include special "*boxes*" that explore selected material in depth without disrupting the flow of the text. It is ideal for students and instructors who seek more in-depth information on a topic introduced in the text. At the same time, the information in boxes can be omitted by readers who are less interested in the detailed topic.

Fourth, and central to the social ecological model, one chapter is dedicated to the role of health systems and health policy which also identifies career opportunities in health policy. Students are presented with various ways in which health psychologists can provide research and direct service to health policy institutions that affect the health of individuals, communities, regions, and countries.

Fifth, a sample of actual survey and health instruments used in medicine and health to measure mental, emotional and physical health are included. The instruments provide students interested in health research with real examples of valid instruments that can serve as templates for their own research. Students interested in applied work in health psychology will find the instruments a good resource for future use.

Finally, the chapters conclude with *Important Terms*, concepts, and procedures common in health and health related fields. Terms are highlighted and defined in text and itemized at the end of each chapter to remind students of the important concepts to remember in each chapter.

## SUPPLEMENTS

Pearson Education is pleased to offer the following supplements to qualified adopters.

**Instructor's Manual (0205004717)** Prepared by Catherine Deering (Clayton State University), the instructor's manual is a wonderful tool for classroom preparation and management. Corresponding to the chapters in the text, each of the manual's 13 chapters contains lecture launchers, chapter outlines, extramural assignments, classroom demonstrations, and in-class student activities.

**Test Item File (0205004725)** Prepared by Michelle Loudermilk (Fayetteville Technical Community College), the test item file provides instructors with a bank of over 1,500 readymade multiple choice, short answer, true/false, and essay questions.

**PowerPoint Presentation (0205004733)** Prepared by Karla Felix (Brooklyn College), the PowerPoint Presentation is an exciting interactive tool for use in the classroom. Each chapter pairs key concepts with images from the textbook to reinforce student learning.

## ACKNOWLEDGMENTS

If it takes a village to raise a child, it also takes one to create a textbook. A number of people have given generously of their time, talents and knowledge, and evidenced great patience over several years to assist me in writing and producing this book. I am very grateful for the encouragement, support and assistance of two wonderful executive editors at Pearson, Susan Hartman and Jeff Marshall. Their strong support of my work and critical input was appreciated throughout this process. I am especially indebted to Jeff who, from the beginning, supported my desire to write a health psychology text that was consistent with my interdisciplinary view of health and who monitored the process carefully.

It has also been a pleasure to work with a wonderful group of editorial assistants, development editors, and a production team who through their professionalism and with plenty of patience guided me through the process and taught me about the world of publishing. A talented production team managed by Patrick Cash-Peterson worked to meet deadlines and to transform the manuscript into a visually impressive and professional end product. Among other tasks too numerous to mention, Susan McNally did an outstanding job with production, Patrick Cash-Peterson provided valuable advice and assistance specifically when selecting the photos for the book, and Melinda Alexander handled the time consuming job of permissions and research with incredible patience and enthusiasm. Finally Maheswari PonSaravanan's careful attention to detail helped transform the manuscript into its final, finished form. A host of editorial assistants assumed a number of tasks of which I probably know only a few. My sincere thanks to Laura Barry, Kara Kikel, Mary Lombard, Aaron Talwar and Amy Trudell for their editorial support.

I also wish to thank the many reviewers for their valuable comments and suggestions during the preparation of the manuscript. Included in that list are: Carole Baker, Todd Doyle, Karla Felix, Caren Ferrante, Tamara Fish, Timothy Hedman, Dave Holson, Michelle Loudermilk, Rafaela Machado, Cruz Medina, Meg Milligan, Christina J. Ragin, Luther M. Ragin, Jr., Renee Michelle Ragin, Sarah Riddick, Sangeeta Singg, Guido G. Urizar and Gary Winkel. A special thanks to Lynne D. Richardson, the late Shelly Jacobson, and my colleagues at the Mount Sinai School of Medicine, Department of Emergency Medicine for their support and assistance in our research on health care which shaped my current perspectives of health.

Finally, my greatest debt is to my husband, Luther M. Ragin, Jr. and our two daughters, Renee Michelle and Christina, without whose support and assistance I could not have written this text.

## ABOUT THE AUTHOR

Deborah Fish Ragin earned her A.B. in Psychology and Hispanic Studies from Vassar College in 1978, and her Ph.D. in Psychology from Harvard University in 1985. Dr. Ragin has served on the faculty several universities as an Assistant Professor in Community Health Education at Hunter College at the City University of New York, as an Assistant Professor at the Mount Sinai School of Medicine's Department of Emergency Medicine (New York City). Currently, Dr. Ragin is an Associate Professor of Psychology Montclair State University, and an Adjunct Associate Professor at the Mount Sinai School of Medicine. Her professional service includes a five year appointment as an American Psychological Association's (APA) Representative to the United Nations, where she focused on global efforts to address the psychosocial impact of HIV/AIDS, and serving as president of the APA's Society for the Study of Peace, Conflict and Violence (Division 48 Peace Psychology). Dr. Ragin is the author of numerous articles on HIV/AIDS, domestic violence, health care disparities.

# CONTENTS

*Preface* xiii

## **1 An Interdisciplinary View of Health 1**

Opening Story 2

Section I. A Brief History of Health 5

Health Practices in Early Civilizations 5

Health Practices in the United States 11

Summary 12

Section II. Defining Health Today 12

Early Holistic Concepts 12

Models of Health and Well-being 13

Section III. Current Views on Determinants of Health:

A Health Psychology Perspective 19

Individual/Demographic Influences 19

Family/Cultural Influences 20

Physical Environmental Influences on Health 22

Social Environmental Influences on Health 23

Health Systems/Health Policy Influences 23

Summary 24

Personal Postscript 25

Important Terms 27

## **2 Research Methods 28**

Opening Story 29

Section I. Measuring Health 30

Borrowing from Epidemiology 30

Summary 35

Section II. Methodology 36

Qualitative Studies 38

Correlational Studies 40

Experimental Studies 43

Intervention Studies 45

Ethical Consideration in Experimental Design 47

Quasi-Experimental Intervention Studies 49

Summary 50



Section III. Research Ethics and Policy 50  
Reactions to the Word *Research* 50  
The Tuskegee Syphilis Study 51  
The Nuremburg Code of 1974 54  
Study of Interpersonal Dynamics (Stanford Prison Experiment) 59  
Research without Informed Consent 62  
Summary 63  
Personal Postscript 63  
Important Terms 64

**3 Global Communicable and Chronic Diseases 65**

Opening Story 66  
Section I. Global Health Problems 70  
Communicable Diseases: Human-to-Human Transmission 70  
Recurring Diseases 78  
Chronic Diseases 80  
Measures of Life Expectancy, Quality of Life,  
and Chronic Illnesses 90  
Section II. Global Health Organizations 93  
World Health Organization (WHO) 93  
The Federation of Red Cross and Red Crescent Societies 95  
Médecins Sans Frontières (Doctors without Borders) 95  
Section III. Health Policy 96  
National Policy: Global Implications 96  
Isolation and Containment for TB and HIV/AIDS 96  
Section IV. The Economic Consequences of Poor Health 97  
Who Is Affected? 97  
Individual Health and Community Outcomes 98  
Summary 99  
Personal Postscript 99  
Important Terms 100

**4 Theories and Models of Health Behavior Change 101**

Opening Story 102  
Section I. Theories and Models of Health Behavior Change 103  
Expectancy Value Theory (EVT) 103  
Social Cognitive Theory (SCT) 106

Theory of Planned Behavior (TPB)	108
Health Belief Model	111
Transtheoretical Model of Behavioral Change	115
Section II. Social Marketing: A Technique to Promote Behavioral Change	119
Definition	119
The Four Ps	120
Blended Models	122
Section III. The Ecological Approach to Health: Factors That Influence Health Behaviors	126
Individual Factors	126
Cultural and Social Networks	129
Physical Environment	131
Health Systems	132
Health Policy	134
Section IV. Challenges to Sustaining Health Behavior Change	136
Short- versus Long-Term Adherence	136
The Appeal of Unhealthy Behaviors	137
Personal Postscript	137
Important Terms	138
<b>5 Risky Health Behaviors</b>	<b>139</b>
Opening Story	140
Section I. Unintentional Injury and Violence	144
Motor Vehicle Accidents	144
Violence	146
Section II. Substance Use and Abuse: Influence of Culture, Age and Gender	152
Cigarettes	152
Alcohol	158
Illegal and Prescription Drugs	164
Section III. Risky Sexual Behaviors	168
Defining Risk	168
Early Initiation Behaviors	169
Health-Protecting Behaviors	170
Multiple Sexual Partners	171

Substance Use and Sexual Behaviors	171
Teenage Pregnancies	171
Section IV. Eating Disorders	172
Anorexia Nervosa	172
Bulimia	173
Obesity	175
Binge Eating	176
Eating Disorders in Context	177
Summary	177
Personal Postscript	178
Important Terms	178
<b>6 Emotional Health and Well-Being</b>	<b>180</b>
Opening Story	181
Section I. Four Models of Well-Being	183
Biomedical Model	183
Biopsychosocial Model	185
Wellness Model	191
Social Ecological Model	193
Summary	199
Section II. Positive Psychology	200
Defining Positive Psychology	200
Positive versus Negative Psychology?	201
Positive Psychology and Health	202
Critiques of Positive Psychology	203
Section III. Traditional Medicines	205
Contributions of Traditional Medicines	206
Chinese Traditional Medicine (CTM)	207
Curanderismo	210
Native American Health Practices	212
Important Terms	214
<b>7 Stress and Coping</b>	<b>216</b>
Opening Story	217
Section I. Defining Stress	219
Three Theories of Stress	219
Section II. Stress and Illness	226

Chronic Illness as a Stressful Stimulant	227
Stress: A Determinant of Illness	228
The Diathesis-Stress (D-S) Model of Disease	229
Personality Type, Stress, and Illness	230
Psychosocial Events and Stress	232
Daily Life Hassles and Stress	235
High-Risk Behaviors and Stress	237
Stress, Sexual Behaviors, and Substance Abuse	238
Stress and Catastrophic Events	239
Section III. Coping With Stress	239
Cognitive Coping	240
Behavioral Coping Strategies	242
Positive Affect and Stress	246
Personal Postscript	248
Important Terms	250
<b>8 HIV and AIDS</b>	<b>251</b>
Opening Story	252
Section I. The Science of HIV and AIDS	254
Definition of HIV and AIDS	254
The Human Immune System	255
Summary	261
Section II. HIV Prevalence, Human Transmission, and Human Behavior	261
Origins	262
Human-to-Human Transmission	263
Symptoms of HIV and AIDS	265
Prevalence of HIV and AIDS: The Effects of Human Behavior and Health Policy	266
HIV/AIDS in the United States: Prevalence and Prevention	270
HIV Prevention/Intervention Strategies That Work	276
Global Epicenters and Global "Hot Spots"	277
Section III. Psychosocial Perspectives on New HIV Testing and Treatments	280
Testing for and Preventing HIV	280
Antiretroviral Treatments	283

Mother-to-Child Transmission (MTCT) Prevention 284  
HIV and Psychological Stress 285  
Section IV. Psychoneuroimmunology 287  
Personal Postscript 288  
Important Terms 289

**9 Cardiovascular Disease 290**

Opening Story 291  
Section I. The Heart and Its Functions 292  
Structure 292  
Function 294  
Summary 294  
Section II. Cardiovascular Disease 295  
Coronary Artery Disease (CAD) 296  
Cardiac Arrest 297  
Stroke 298  
Hypertension 299  
Section III. Psychosocial Factors and Cardiovascular Disease 301  
Stress 301  
Ethnicity 301  
Perceived Racism 302  
Personality 303  
Summary 304  
Section IV. Cardiovascular Disease and Health Determinants 304  
Individual Determinants 304  
Community/Environment 315  
Health Systems and Access to Care 316  
Personal Postscript 317  
Important Terms 318

**10 Chronic Pain Management and Arthritis 319**

Opening Story 320  
Section I. Chronic Pain Management 322  
Measuring Pain 322  
Changing Characteristics of Pain 323

Pain Management versus Pain Elimination	324
Difference in Pain Perception	325
Caregivers, Pain Management, and Psychological Distress	327
Section II. Arthritis Defined	328
Rheumatoid Arthritis (RA)	329
Ankylosing Spondylitis (AS)	330
Osteoarthritis (OA)	332
Gout	333
Pain Measures	334
Section III. Medical and Psychotherapeutic Treatments	339
Medical Therapies for Arthritis	339
Exercise Therapy	343
Psychotherapeutic Treatments	345
Personal Postscript	350
Important Terms	351
<b>11 Cancer</b>	<b>352</b>
Opening Story	353
Section I. Defining Cancer	355
Tumors	356
Categories of Cancer	356
Comparing Global and U.S. Incidences of Cancer	360
Section II. Risk Factors for Cancer	360
Cancer and Gender	360
Genetic Factors	363
Race/Ethnicity and Cancer	366
Environment and Cancer Mortality	368
Health Behaviors and Cancers	370
Section III. Cancer: Treatments and Preventions	374
Preventive Health Behaviors	375
Section IV. Medical and Psychological Treatments	381
The Diagnosis: A Psychological Process	381
Medical Therapies	382
Psychological Comorbidity	383
Psychotherapeutic Approaches	384
Summary	389

Personal Postscript	389
Important Terms	389
<b>12 Health Care Systems and Health Policy: Effects on Health Outcomes</b>	<b>391</b>
Opening Story	392
Section I. Access to the Health Care System	394
Health Care: An Unnecessary Expense?	394
Health Care: An Unaffordable Expense?	396
Section II. Overview of Health Care Systems in the United States	396
In the Beginning	396
Health Plans: Gatekeepers to Health Care	397
Section III. Negotiating The System	404
Consumer Satisfaction	405
Consumer-Provider Communication	407
Trust	409
Section IV. Challenges for Health Care Providers	410
Physicians' Three "Fatal" Communication Errors	410
Physician Miscommunication or Patient Inattentiveness	412
Nonverbal Communication Cues	412
Section V. Health Policy	415
Preventive Care	415
Single Payer Health Care System	416
Personal Postscript	418
Important Terms	419
<b>13 The Health Psychologists' Role: Research, Application, and Advocacy</b>	<b>420</b>
Opening Story	421
Section I. Working with Individuals	422
Education	423
Evaluation of Interventions	428
Promoting Individual Self-Advocacy	428
Section II. Working with Communities	437
Community Needs Assessment	437
Program Implementation	439

Selecting Populations within Communities	440
Promoting Community Advocates	440
Section III. Working with Health Care Systems	441
Accessing Access to Health Care	442
Promoting Access to Health Care through Advocacy	443
Section IV. Working in Health Policy	444
Smoking Bans as Health Policy	445
Workplace Safety	445
A Healthy Workplace	447
Advocating for New Health Policies	448
Health Psychologists as Health Advocates	450
Personal Postscript	451
Important Terms	451

*References* 453

*Author Index* 495

*Subject Index* 505



## *Chapter One*



# An Interdisciplinary View of Health

## *Chapter Outline*

Opening Story: How Would You Describe Winston's Health?

Section I: A Brief History of Health

Section II: Defining Health Today

Section III: Current Views on Determinants of Health: A Health Psychology Perspective

Personal Postscript

Important Terms

## *Chapter Objectives*

After studying this chapter, you will be able to:

1. Identify three ancient cultures that contributed to our current concept of determinants of health.
2. Identify Hippocrates and explain the mind-body connection in health.
3. Identify the role of health policy as a determinant of health in three civilizations.
4. Describe how religion influenced beliefs about health and illness.
5. Identify the four domains of health as defined by the American Psychological Association Division of Health Psychology.
6. Identify and describe four current models of health.