

# HEALTH PSYCHOLOGY

10E

*Shelley E. Taylor*

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# HEALTH PSYCHOLOGY

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# HEALTH PSYCHOLOGY

TENTH EDITION

**SHELLEY E. TAYLOR**

University of California, Los Angeles





## HEALTH PSYCHOLOGY, TENTH EDITION

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For Nathaniel

## ABOUT THE AUTHOR

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**SHELLEY E. TAYLOR** is Distinguished Professor of Psychology at the University of California, Los Angeles. She received her Ph.D. in social psychology from Yale University. After a visiting professorship at Yale and assistant and associate professorships at Harvard University, she joined the faculty of UCLA. Her research interests concern the psychological and social factors that promote or compromise mental and physical health across the life span. Professor Taylor is the recipient of a number of awards—most notably, the American Psychological Association’s Distinguished Scientific Contribution to Psychology Award, a 10-year Research Scientist Development Award from the National Institute of Mental Health, and an Outstanding Scientific Contribution Award in Health Psychology. She is the author of more than 350 publications in journals and books and is the author of *Social Cognition*, *Social Psychology*, *Positive Illusions*, and *The Tending Instinct*. She is a member of the National Academies of Science and the National Academy of Medicine.

## INTRODUCTION TO HEALTH PSYCHOLOGY 1

### CHAPTER 1

#### What Is Health Psychology? 2

##### Definition of Health Psychology 3

Why Did Health Psychology Develop? 3

##### The Mind-Body Relationship: A Brief History 4

##### The Rise of the Biopsychosocial Method 5

Psychosomatic Medicine 5

Advantages of the Biopsychosocial Model 5

Clinical Implications of the Biopsychosocial Model 6

The Biopsychosocial Model: The Case History of Nightmare Deaths 6

##### The Need for Health Psychology 6

Changing Patterns of Illness 7

Advances in Technology and Research 8

Expanded Health Care Services 8

Increased Medical Acceptance 9

##### Health Psychology Research 9

The Role of Theory in Research 9

Experiments 10

Correlational Studies 10

Prospective and Retrospective Designs 10

The Role of Epidemiology in Health Psychology 11

Methodological Tools 11

Qualitative Research 12

##### What Is Health Psychology Training For? 12

### CHAPTER 2

#### The Systems of the Body 14

##### The Nervous System 15

Overview 15

The Brain 15

**BOX 2.1** Costs of War to the Brain 17

The Role of Neurotransmitters 17

Disorders of the Nervous System 17

##### The Endocrine System 19

Overview 19

The Adrenal Glands 19

Disorders Involving the Endocrine System 19

##### The Cardiovascular System 20

Overview 20

The Heart 20

Disorders of the Cardiovascular System 21

Blood Pressure 22

The Blood 22

##### The Respiratory System 23

Overview 23

The Structure and Functions of the Respiratory System 23

Disorders Associated with the Respiratory System 24

Dealing with Respiratory Disorders 25



**The Digestive System and the Metabolism of Food 25**

- Overview 25
- The Functioning of the Digestive System 25
- Disorders of the Digestive System 25

**The Renal System 27**

- Overview 27
- Disorders of the Renal System 27

**The Reproductive System 28**

- Overview 28
- The Ovaries and Testes 28
- Fertilization and Gestation 28
- Disorders of the Reproductive System 28

**Genetics and Health 29**

- Overview 29
- Genetics and Susceptibility to Disorders 29

**The Immune System 31**

- Overview 31
- Infection 31
- The Course of Infection 31
- BOX 2.2** Portraits of Two Carriers 32
- Immunity 32
- Disorders Related to the Immune System 34

## PART 2

**HEALTH BEHAVIOR AND PRIMARY PREVENTION 37****CHAPTER 3****Health Behaviors 38****An Introduction to Health Behaviors 39**

- Role of Behavioral Factors in Disease and Disorder 39

**Health Promotion: An Overview 39**

- Health Behaviors and Health Habits 39
- Practicing and Changing Health Behaviors: An Overview 40
- Barriers to Modifying Poor Health Behaviors 41
- Intervening with Children and Adolescents 42
- Intervening with At-Risk People 43
- Health Promotion and Older Adults 44
- Ethnic and Gender Differences in Health Risks and Habits 45

**Changing Health Habits 45**

- Attitude Change and Health Behavior 45
- The Health Belief Model 47
- The Theory of Planned Behavior 47
- Criticisms of Attitude Theories 49
- Self Regulation and Health Behavior 49
- Self Determination Theory 49
- Implementation Intentions 49
- Health Behavior Change and the Brain 50

**Cognitive-Behavioral Approaches to Health Behavior Change 50**

- Cognitive-Behavior Therapy (CBT) 50
- Self-Monitoring 50
- Stimulus Control 51
- The Self-Control of Behavior 51

**BOX 3.1** Classical Conditioning 52**BOX 3.2** Operant Conditioning 53**BOX 3.3** Modeling 54

- Social Skills and Relaxation Training 54
- Motivational Interviewing 54
- Relapse Prevention 55
- Evaluation of CBT 56

**The Transtheoretical Model of Behavior Change 56**

- Stages of Change 56
- Using the Stage Model of Change 57

**Changing Health Behaviors Through Social Engineering 58****Venues for Health-Habit Modification 59**

- The Practitioner's Office 59
- The Family 59
- Self-Help Groups 60
- Schools 60
- Workplace Interventions 60
- Community-Based Interventions 60
- The Mass Media 61
- Cellular Phones and Landlines 61
- The Internet 61

**CHAPTER 4****Health-Promoting Behaviors 64****Exercise 65**

- Benefits of Exercise 65
- Determinants of Regular Exercise 66
- Exercise Interventions 67

**Accident Prevention 68**

- Home and Workplace Accidents 68
- Motorcycle and Automobile Accidents 69

**Vaccinations and Screening 69**

- Vaccinations 70
- Screenings 70
- Colorectal Cancer Screening 71

**Sun Safety Practices 71****Developing a Healthy Diet 72**

- Changing Diet 73
- Resistance to Modifying Diet 73

**Sleep 75**

- What Is Sleep? 75
- Sleep and Health 75

**Rest, Renewal, Savoring 76****CHAPTER 5****Health-Compromising Behaviors 79****Characteristics of Health-Compromising Behaviors 80****Obesity 81**

- What Is Obesity? 81
- Obesity in Childhood 83
- B O X 5.1** The Biological Regulation of Eating 85
- SES, Culture, and Obesity 85
- Obesity and Dieting as Risk Factors for Obesity 86
- Stress and Eating 87
- Interventions 87
- B O X 5.2** Don't Diet 88
- Cognitive Behavioral Therapy (CBT) 88

- Evaluation of Cognitive-Behavioral Weight-Loss Techniques 90
- Taking a Public Health Approach 90

**Eating Disorders 91**

- Anorexia Nervosa 91
- B O X 5.3** The Barbie Beauty Battle 92
- Bulimia 93
- Binge Eating Disorder 94

**Alcoholism and Problem Drinking 94**

- The Scope of the Problem 94
- What Is Substance Dependence? 95
- Alcoholism and Problem Drinking 95
- Origins of Alcoholism and Problem Drinking 95
- Treatment of Alcohol Abuse 96
- Treatment Programs 97
- B O X 5.4** After the Fall of the Berlin Wall 97
- B O X 5.5** A Profile of Alcoholics Anonymous 98
- B O X 5.6** The Drinking College Student 99
- Evaluation of Alcohol Treatment Programs 100
- Preventive Approaches to Alcohol Abuse 100
- Drinking and Driving 101
- Is Modest Alcohol Consumption a Health Behavior? 101

**Smoking 101**

- Synergistic Effects of Smoking 102
- A Brief History of the Smoking Problem 102
- Why Do People Smoke? 103
- Nicotine Addiction and Smoking 105
- Interventions to Reduce Smoking 106
- Smoking Prevention Programs 109
- B O X 5.7** The Perils of Secondhand Smoke 110

**PART 3****STRESS AND COPING 113****CHAPTER 6****Stress 114****What Is Stress? 115**

- What Is a Stressor? 115
- Appraisal of Stressors 115

**Origins of the Study of Stress 115**

- Fight or Flight 115
- Selye's General Adaptation Syndrome 115
- Tend-and-Befriend 117
- How Does Stress Contribute to Illness? 117

**The Physiology of Stress 118**

- Effects of Long-Term Stress 119
- Individual Differences in Stress Reactivity 120
- Physiological Recovery 121
- Allostatic Load 121
- B O X 6.1** Can Stress Affect Pregnancy? 122

**What Makes Events Stressful? 122**

- Dimensions of Stressful Events 122
- Must Stress Be Perceived as Such to Be Stressful? 123
- Can People Adapt to Stress? 124

**How Has Stress Been Studied? 124**

- Studying Stress in the Laboratory 124
- Must a Stressor Be Ongoing to Be Stressful? 124
- Inducing Disease 125
- Stressful Life Events 125
- BOX 6.2** Post-Traumatic Stress Disorder 126
- Daily Stress 127

**Sources of Chronic Stress 128**

- Effects of Early Stressful Life Experiences 128
- BOX 6.3** Can an Exciting Sports Event Kill You?
  - Cardiovascular Events During World Cup Soccer 128
- BOX 6.4** A Measure of Perceived Stress 129
- BOX 6.5** The Measurement of Daily Strain 130
- Chronic Stressful Conditions 130
- Stress in the Workplace 131
- BOX 6.6** Can Prejudice Harm Your Health? 132
- Some Solutions to Workplace Stressors 134
- Combining Work and Family Roles 134

**CHAPTER 7**

**Coping, Resilience, and Social Support 137**

**Coping with Stress and Resilience 138**

- Personality and Coping 138
- BOX 7.1** The Measurement of Optimism: The LOT-R 140

- Psychosocial Resources 140
- BOX 7.2** Religion, Coping, and Well-Being 142
- Resilience 142
- Coping Style 143
- Problem-Focused and Emotion-Focused Coping 144
- BOX 7.3** The Brief COPE 145

**Coping and External Resources 146**

- BOX 7.4** Coping with HIV 146

**Coping Outcomes 147**

**Coping Interventions 147**

- Mindfulness Meditation and Acceptance/Commitment Therapy 147
- Expressive Writing 148
- Self-Affirmation 149
- Relaxation Training 149
- Coping Skills Training 149

**Social Support 151**

- What Is Social Support? 151
- Effects of Social Support on Illness 152
- BOX 7.5** Is Social Companionship an Important Part of Your Life? 153
- Biopsychosocial Pathways 153
- Moderation of Stress by Social Support 154
- What Kinds of Support Are Most Effective? 155
- BOX 7.6** Can Bad Relationships Affect Your Health? 156
- Enhancing Social Support 157

---

**SEEKING AND USING HEALTH CARE SERVICES 159**

**CHAPTER 8**

**Using Health Services 160**

**Recognition and Interpretation of Symptoms 161**

- Recognition of Symptoms 161
- Interpretation of Symptoms 162
- Cognitive Representations of Illness 162
- BOX 8.1** Can Expectations Influence Sensations?
  - The Case of Premenstrual Symptoms 163
- Lay Referral Network 164
- The Internet 164

**Who Uses Health Services? 164**

- Age 164
- Gender 164

- Social Class and Culture 165
- Social Psychological Factors 165

**Misusing Health Services 165**

- Using Health Services for Emotional Disturbances 165
- Delay Behavior 166
- BOX 8.2** The June Bug Disease: A Case of Hysterical Contagion 167

**CHAPTER 9**

**Patients, Providers, and Treatments 170**

**Health Care Services 171**

- Patient Consumerism 171

- Structure of the Health Care Delivery System 171
- Patient Experiences with Managed Care 172
- The Nature of Patient-Provider Communication 173**
  - Setting 173
  - Provider Behaviors That Contribute to Faulty Communication 174
  - B O X 9.1** What Did You Say?: Language Barriers to Effective Communication 175
  - Patients' Contributions to Faulty Communication 175
  - Interactive Aspects of the Communication Problem 176
- Results of Poor Patient-Provider Communication 177**
  - Nonadherence to Treatment Regimens 177
  - Good Communication 177
  - B O X 9.2** What Are Some Ways to Improve Adherence to Treatment? 178
- Improving Patient-Provider Communication and Increasing Adherence to Treatment 178**
  - Teaching Providers How to Communicate 178
  - B O X 9.3** What Can Providers Do to Improve Adherence? 179
- The Patient in the Hospital Setting 180**
  - Structure of the Hospital 181
  - The Impact of Hospitalization on the Patient 182
  - B O X 9.4** Burnout Among Health Care Professionals 183
- Interventions to Increase Information in Hospital Settings 184**
- The Hospitalized Child 184**
  - B O X 9.5** Social Support and Distress from Surgery 185
  - Preparing Children for Medical Interventions 185
- Complementary and Alternative Medicine 186**
  - Philosophical Origins of CAM 186
- CAM Treatments 188**
  - Dietary Supplements and Diets 188
  - Prayer 188
  - Acupuncture 189
  - Yoga 189
  - Hypnosis 190
  - Meditation 190
  - Guided Imagery 190
  - Chiropractic Medicine 191
  - Osteopathy 191
  - Massage 191
- Who Uses CAM? 192
- Complementary and Alternative Medicine: An Overall Evaluation 192
- The Placebo Effect 193**
  - History of the Placebo 193
  - What Is a Placebo? 193
  - Provider Behavior and Placebo Effects 194
  - B O X 9.6** Cancer and the Placebo Effect 194
  - Patient Characteristics and Placebo Effects 194
  - Patient-Provider Communication and Placebo Effects 195
  - Situational Determinants of Placebo Effects 195
  - Social Norms and Placebo Effects 195
  - The Placebo as a Methodological Tool 196
- CHAPTER 10**
- The Management of Pain and Discomfort 199**
- The Elusive Nature of Pain 201**
  - B O X 10.1** A Cross-Cultural Perspective on Pain: The Childbirth Experience 202
  - Measuring Pain 202
  - The Physiology of Pain 204
  - B O X 10.2** Headache Drawings Reflect Distress and Disability 204
  - B O X 10.3** Phantom Limb Pain: A Case History 206
  - Neurochemical Bases of Pain and Its Inhibition 206
- Clinical Issues in Pain Management 207**
  - Acute and Chronic Pain 207
  - Pain and Personality 209
- Pain Control Techniques 209**
  - Pharmacological Control of Pain 210
  - Surgical Control of Pain 210
  - Sensory Control of Pain 211
  - Biofeedback 211
  - Relaxation Techniques 211
  - Distraction 212
  - Coping Skills Training 213
  - Cognitive Behavioral Therapy 214
- Pain Management Programs 214**
  - Initial Evaluation 215
  - Individualized Treatment 215
  - Components of Programs 215
  - Involvement of Family 215
  - Relapse Prevention 215
  - Evaluation of Programs 215

## PART 5

MANAGEMENT OF CHRONIC AND TERMINAL  
HEALTH DISORDERS 217

## CHAPTER 11

Management of Chronic Health  
Disorders 218

## Quality of Life 220

- What Is Quality of Life? 220
- Why Study Quality of Life? 220

## Emotional Responses to Chronic Health Disorders 221

- Denial 221
- Anxiety 222
- Depression 222

## Personal Issues in Chronic Health Disorders 223

- B O X 11.1** A Future of Fear 223
- The Physical Self 223
- The Achieving Self 224
- The Social Self 224
- The Private Self 224

## Coping with Chronic Health Disorders 224

- Coping Strategies and Chronic Health Disorders 224
- Patients' Beliefs About Chronic Health Disorders 225

- B O X 11.2** Chronic Fatigue Syndrome and Other  
Functional Disorders 226

## Comanagement of Chronic Health Disorders 227

- Physical Rehabilitation 227
- B O X 11.3** Epilepsy and the Need for a Job  
Redesign 228
- Vocational Issues in Chronic Health Disorders 228
- Social Interaction Problems in Chronic Health  
Disorders 228
- B O X 11.4** Who Works with People with Chronic  
Health Disorders? 229
- Gender and the Impact of Chronic Health  
Disorders 232
- Positive Changes in Response to Chronic Health  
Disorders 232
- When a Child Has A Chronic Health Disorder 232

Psychological Interventions and Chronic Health  
Disorders 234

- Pharmacological Interventions 234
- Individual Therapy 234
- Relaxation, Stress Management, and Exercise 235
- Social Support Interventions 236
- B O X 11.5** Help on the Internet 236
- Support Groups 237

## CHAPTER 12

Psychological Issues in Advancing and  
Terminal Illness 239

## Death Across the Life Span 240

- Death in Infancy and Childhood 240
- Death in Adolescence and Young Adulthood 243
- Death in Middle Age 244
- Death in Old Age 244
- B O X 12.1** Why Do Women Live Longer Than  
Men? 245

## Psychological Issues in Advancing Illness 246

- Continued Treatment and Advancing Illness 246
- B O X 12.2** A Letter to My Physician 247
- Psychological and Social Issues Related to  
Dying 247
- B O X 12.3** Ready to Die: The Question of Assisted  
Suicide 248
- The Issue of Nontraditional Treatment 249

## Are There Stages in Adjustment to Dying? 249

- Kübler-Ross's Five-Stage Theory 249
- Evaluation of Kübler-Ross's Theory 250

## Psychological Issues and the Terminally Ill 251

- Medical Staff and the Terminally Ill Patient 251
- Counseling with the Terminally Ill 253
- The Management of Terminal Illness in Children 253

## Alternatives to Hospital Care for the Terminally Ill 253

- Hospice Care 253
- Home Care 254

## Problems of Survivors 254

- B O X 12.4** Cultural Attitudes Toward Death 255
- The Survivor 255
- Death Education 257

## CHAPTER 13

Heart Disease, Hypertension, Stroke,  
and Type II Diabetes 259

## Coronary Heart Disease 260

- What Is CHD? 260
- Risk Factors for CHD 260
- Stress and CHD 261
- Women and CHD 263
- Personality, Cardiovascular Reactivity, and CHD 264

- B O X 13.1** Hostility and Cardiovascular Disease 265
- Depression and CHD 266
- Other Psychosocial Risk Factors and CHD 267
- Management of Heart Disease 267
- B O X 13.2** Picturing the Heart 269
- Prevention of Heart Disease 271

### **Hypertension 272**

- How Is Hypertension Measured? 272
- What Causes Hypertension? 272
- Treatment of Hypertension 274
- The Hidden Disease 275

### **Stroke 275**

- Risk Factors for Stroke 276
- Consequences of Stroke 277
- Rehabilitative Interventions 277

### **Type II Diabetes 278**

- Health Implications of Diabetes 280
- Psychosocial Factors in the Development of Diabetes 280
- The Management of Diabetes 281
- B O X 13.3** Stress Management and the Control of Diabetes 281

## **CHAPTER 14**

### **Psychoneuroimmunology and Immune-Related Disorders 284**

#### **Psychoneuroimmunology 285**

- The Immune System 285
- Assessing Immune Functioning 285
- Stress and Immune Functioning 285
- B O X 14.1** Autoimmune Disorders 287

- Negative Affect and Immune Functioning 287
- Stress, Immune Functioning, and Interpersonal Relationships 288
- Coping and Immune Functioning 288
- Interventions to Improve Immune Functioning 289

### **HIV Infection and AIDS 290**

- A Brief History of HIV Infection and AIDS 290
- HIV Infection and AIDS in the United States 291
- The Psychosocial Impact of HIV Infection 292
- Interventions to Reduce the Spread of HIV Infection 293
- Coping with HIV+ Status and AIDS 296
- Psychosocial Factors That Affect the Course of HIV Infection 297

### **Cancer 298**

- Why Is Cancer Hard to Study? 299
- Who Gets Cancer? A Complex Profile 299
- Psychosocial Factors and Cancer 299
- Psychosocial Factors and the Course of Cancer 301
- Adjusting to Cancer 301
- Psychosocial Issues and Cancer 302
- Post-traumatic Growth 302
- Interventions 303
- Therapies with Cancer Patients 304

### **Arthritis 304**

- Rheumatoid Arthritis 305
- Osteoarthritis 306

### **Type I Diabetes 306**

- Special Problems of Adolescent Diabetics 307

## **PART 6**

### **TOWARD THE FUTURE 311**

## **CHAPTER 15**

### **Health Psychology: Challenges for the Future 312**

#### **Health Promotion 314**

- A Focus on Those at Risk 314
- Prevention 314
- A Focus on Older Adults 314
- Refocusing Health Promotion Efforts 315
- Promoting Resilience 315
- Health Promotion and Medical Practice 316
- Health Disparities 316

#### **Stress and Its Management 318**

- Where Is Stress Research Headed? 318

#### **Health Services 319**

- Building Better Consumers 319

#### **Management of Serious Illness 320**

- Quality-of-Life Assessment 320
- The Aging of the Population 320

#### **Trends in Health and Health Psychology 321**

- The Research of the Future 321
- The Changing Nature of Medical Practice 321

Systematic Documentation of Cost Effectiveness  
and Treatment Effectiveness 322  
International Health 324

**Becoming a Health Psychologist 325**

Undergraduate Experience 325  
Graduate Experience 325  
Postgraduate Work 326  
Employment 326

GLOSSARY 328

REFERENCES 338

NAME INDEX 412

SUBJECT INDEX 438

When I wrote the first edition of *Health Psychology* over 30 years ago, the task was much simpler than it is now. Health psychology was a new field and was relatively small. In recent decades, the field has grown steadily, and great research advances have been made. Chief among these developments has been the use and refinement of the biopsychosocial model: the study of health issues from the standpoint of biological, psychological, and social factors acting together. Increasingly, research has attempted to identify the biological pathways by which psychosocial factors such as stress may adversely affect health and potentially protective factors such as social support may buffer the impact of stress. My goal in the tenth edition of this text is to convey this increasing sophistication of the field in a manner that makes it accessible, comprehensible, and exciting to undergraduates.

Like any science, health psychology is cumulative, building on past research advances to develop new ones. Accordingly, I have tried to present not only the fundamental contributions to the field but also the current research on these issues. Because health psychology is developing and changing so rapidly, it is essential that a text be up to date. Therefore, I have not only reviewed the recent research in health psychology but also obtained information about research projects that will not be available in the research literature for several years. In so doing, I am presenting a text that is both current and pointed toward the future.

A second goal is to portray health psychology appropriately as being intimately involved with the problems of our times. The aging of the population and the shift in numbers toward the later years has created unprecedented health needs to which health psychology must respond. Such efforts include the need for health promotion with this aging cohort and an understanding of the psychosocial issues that arise in response to aging and its associated chronic disorders. Because AIDS is a leading cause of death worldwide, the need for health measures such as condom use is readily apparent if we are to halt the spread of this disease. Obesity is now one of the world's leading health problems, nowhere more so than in the United States. Reversing this dire trend that threatens to shorten life expectancy worldwide is an important current goal of health psychology. Increasingly, health psychology is an international undertaking, with researchers from around the world providing insights into the problems that affect both developing and developed countries. The tenth edition includes current research that reflects the international focus of both health problems and the health research community.

Health habits lie at the origin of our most prevalent disorders, and this fact underscores more than ever the importance of modifying problematic health behaviors such as smoking and alcohol consumption. Increasingly, research documents the importance of a healthy diet, regular exercise, and weight control among other positive health habits for maintaining good health. The at-risk role has taken on more importance in prevention, as breakthroughs in genetic research have made it possible to identify genetic risks for diseases long before disease is evident. How people cope with being at risk and what interventions are appropriate for them represent important tasks for health psychology research to address.

Health psychology is both an applied field and a basic research field. Accordingly, in highlighting the accomplishments of the field, I present both the scientific



progress and its important applications. Chief among these are efforts by clinical psychologists to intervene with people to treat biopsychosocial disorders, such as post-traumatic stress disorder; to help people manage health habits that have become life threatening, such as eating disorders; and to develop clinical interventions that help people better manage their chronic illnesses.

Finding the right methods and venues for modifying health continues to be a critical issue. The chapters on health promotion put particular emphasis on the most promising methods for changing health behaviors. The chapters on chronic diseases highlight how knowledge of the psychosocial causes and consequences of these disorders may be used to intervene with people at risk—first, to reduce the likelihood that such disorders will develop, and second, to deal effectively with the psychosocial issues that arise following diagnosis.

The success of any text depends ultimately on its ability to communicate the content clearly to student readers and spark interest in the field. In this tenth edition, I strive to make the material interesting and relevant to the lives of student readers. Many chapters highlight news stories related to health. In addition, the presentation of material has been tied to the needs and interests of young adults. For example, the topic of stress management is tied directly to how students might manage the stresses associated with college life. The topic of problem drinking includes sections on college students' alcohol consumption and its modification. Health habits relevant to this age group—tanning, exercise, and condom use, among others—are highlighted for their relevance to the student population. By providing students with anecdotes, case histories, and specific research examples that are relevant to their own lives, they learn how important this body of knowledge is to their lives as young adults.

Health psychology is a science, and consequently, it is important to communicate not only the research itself but also some understanding of how studies were designed and why they were designed that way. The explanations of particular research methods and the theories that have guided research appear throughout the book. Important studies are described in depth so that students have a sense of the methods researchers use to make decisions about how to gather the best data on a problem or how to intervene most effectively.

Throughout the book, I have made an effort to balance general coverage of psychological concepts with coverage of specific health issues. One method of doing so is by presenting groups of chapters, with the initial chapter offering general concepts and subsequent chapters applying those concepts to specific health issues. Thus, Chapter 3 discusses general strategies of health promotion, and Chapters 4 and 5 discuss those issues with specific reference to particular health habits such as exercise, smoking, accident prevention, and weight control. Chapters 11 and 12 discuss broad issues that arise in the context of managing chronic health disorders and terminal illness. In Chapters 13 and 14, these issues are addressed concretely, with reference to specific disorders such as heart disease, cancer, and AIDS.

Rather than adopt a particular theoretical emphasis throughout the book, I have attempted to maintain a flexible orientation. Because health psychology is taught within all areas of psychology (for example, clinical, social, cognitive, physiological, learning, and developmental), material from each of these areas is included in the text so that it can be accommodated to the orientation of each instructor. Consequently, not all material in the book is relevant for all courses. Successive chapters of the book build on each other but do not depend on each

other. Chapter 2, for example, can be used as assigned reading, or it can act as a resource for students wishing to clarify their understanding of biological concepts or learn more about a particular biological system or illness. Thus, each instructor can accommodate the use of the text to his or her needs, giving some chapters more attention than others and omitting some chapters altogether, without undermining the integrity of the presentation.

## ■ NEW TO THIS EDITION

- Coverage of qualitative methods, such as how interviews and personal narratives can enrich our understanding of health experiences (Chapter 1)
- Discussion of Alzheimer's disease, its toll, and its increasing importance as a disease of an aging population (Chapter 2)
- New section on the self-regulation of health behaviors, including the impact of self affirmation on health behavior change (Chapter 3)
- Coverage of perceived barriers to health behavior change, one of the most important reasons why people do not practice better health habits (Chapter 3)
- Coverage of the post childbirth period as a teachable moment (Chapter 3)
- Discussion of the health risks of being sedentary and sitting for long periods of time (Chapters 4, 13)
- Expanded coverage of vaccinations and ways to overcome resistance to getting children vaccinated for major diseases (Chapter 4)
- Coverage of new research on sleep and health (Chapter 4)
- Enhanced coverage of eating disorders, including binge eating disorder (Chapter 5)
- Coverage of the newest research on the obesity epidemic (Chapter 5)
- New research on stress in childhood and adolescence (Chapter 6)
- Expanded coverage on the effects of prejudice and discrimination on health (Chapter 6)
- Expanded coverage of how mindfulness meditation can aid coping with stress (Chapter 7)
- Coverage of dyadic coping, namely how partners can shape each other's biological and psychological responses to stress (Chapter 7)
- Discussion of how people are using probiotics to enhance the microbiome of the gut and its potential effects on health (Chapter 9)
- Coverage of the epidemic of opioid and heroin abuse and their effects on health and on suicide (Chapters 10, 12)
- Change in orientation from disease and illness to health and chronic health disorders (Chapters 3, 11)
- Discussion of the startling increase in the death rate of middle-aged adults and the reasons why (Chapter 12)
- Intervening in childhood and adolescence to forestall chronic health disorders in middle age (Chapter 13)
- Discussion of psychosocial factors in the development of Type II Diabetes (Chapter 12)
- Coverage of post-traumatic growth (Chapter 14)
- Use of technology and the Internet to improve health and to assess and intervene in the course of chronic health disorders (Chapters 1, 3, 13, 15)
- Impact of changes in healthcare coverage in the United States (Chapter 15)
- The changing face of health psychology (Chapter 15)



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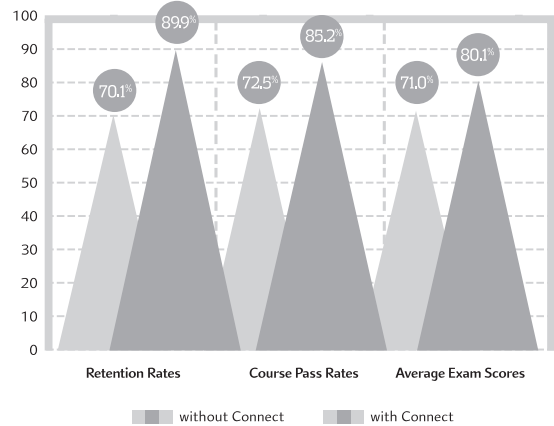
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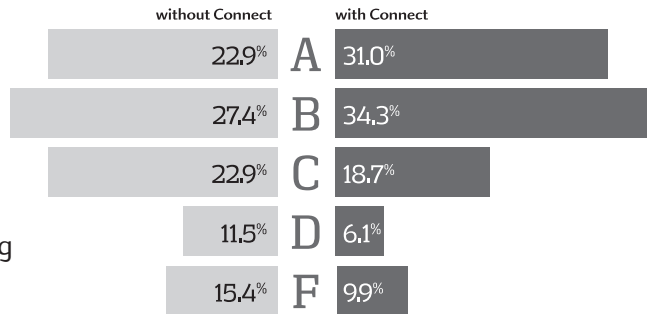
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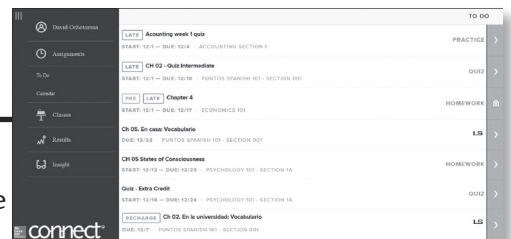
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# Introduction to Health Psychology



# What Is Health Psychology?



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## CHAPTER OUTLINE

### **Definition of Health Psychology**

*Why Did Health Psychology Develop?*

### **The Mind-Body Relationship: A Brief History**

#### **The Rise of the Biopsychosocial Method**

*Psychosomatic Medicine*

*Advantages of the Biopsychosocial Model*

*Clinical Implications of the Biopsychosocial Model*

*The Biopsychosocial Model: The Case History of Nightmare Deaths*

#### **The Need for Health Psychology**

*Changing Patterns of Illness*

*Advances in Technology and Research*

*Expanded Health Care Services*

*Increased Medical Acceptance*

#### **Health Psychology Research**

*The Role of Theory in Research*

*Experiments*

*Correlational Studies*

*Prospective and Retrospective Designs*

*The Role of Epidemiology in Health Psychology*

*Methodological Tools*

#### **What Is Health Psychology Training For?**

“Life span may be as wide as your smile: The bigger the smile, the longer the life” (March 29, 2010)

“Epidemic of drug overdose deaths ripples across America” (January 20, 2016)

“Vaccination is a social responsibility” (February 4, 2015)

“Smartphone apps help people quit smoking” (January 23, 2015)

“Risk of concussions from youth sports” (December 25, 2015)

Every day, we see headlines about health. We are told that smoking is bad for us, that we need to exercise more, and that we’ve grown obese. We learn about new treatments for diseases about which we are only dimly aware, or we hear that a particular herbal remedy may make us feel better about ourselves. We are told that meditation or optimistic beliefs can keep us healthy or help us to get well more quickly. How do we make sense of all these claims? Health psychology addresses important questions like these.

## ■ DEFINITION OF HEALTH PSYCHOLOGY

**Health psychology** is an exciting and relatively new field devoted to understanding psychological influences on how people stay healthy, why they become ill, and how they respond when they do get ill. Health psychologists both study such issues and develop interventions to help people stay well or recover from illness. For example, a health psychology researcher might explore why people continue to smoke even though they know that smoking increases their risk of cancer and heart disease. Understanding this poor health habit leads to interventions to help people stop smoking.

Fundamental to research and practice in health psychology is the definition of health. Decades ago, a forward-looking World Health Organization (1948) defined **health** as “a complete state of physical, mental, and social well-being and not merely the absence of disease or infirmity.” This definition is at the core of health psychologists’ conception of health. Rather than defining health as the absence of illness, health is recognized to be an achievement involving balance among physical, mental, and social well-being. Many use the term **wellness** to refer to this optimum state of health.

Health psychologists focus on *health promotion and maintenance*, which includes issues such as how to get children to develop good health habits, how to promote regular exercise, and how to design a media campaign to get people to improve their diets.

Health psychologists study the psychological aspects of the *prevention and treatment of illness*. A health psychologist might teach people in a high-stress occupation how to manage stress effectively to avoid health risks. A health psychologist might work with people who are already ill to help them follow their treatment regimen.

Health psychologists also focus on *the etiology and correlates of health, illness, and dysfunction*. **Etiology** refers to the origins or causes of illness. Health psychologists especially address the behavioral and social factors that contribute to health, illness, and dysfunction, such as alcohol consumption, smoking, exercise, the wearing of seat belts, and ways of coping with stress.

Finally, health psychologists analyze and attempt to improve *the health care system and the formulation of health policy*. They study the impact of health institutions and health professionals on people’s behavior to develop recommendations for improving health care.

In summary, health psychology examines the psychological and social factors that lead to the enhancement of health, the prevention and treatment of illness, and the evaluation and modification of health policies that influence health care.

## Why Did Health Psychology Develop?

To many people, health is simply a matter of staying well or getting over illnesses quickly. Psychological and social factors might seem to have little to contribute. But consider some of the following puzzles that cannot be understood without the input of health psychology:

- When people are exposed to a cold virus, some get colds whereas others do not.
- Men who are married live longer than men who are not married.
- Throughout the world, life expectancy is increasing. But in countries going through dramatic social upheaval, life expectancy can plummet.
- Women live longer than men in all countries except those in which they are denied access to



health care. But women are more disabled, have more illnesses, and use health services more.

- Infectious diseases such as tuberculosis, pneumonia, and influenza used to be the major causes of illness and death in the United States. Now chronic diseases such as heart disease, cancer, and diabetes are the main causes of disability and death.
- Attending a church or synagogue, praying, or otherwise tending to spiritual needs is good for your health.

By the time you have finished this book, you will know why these findings are true.

## ■ THE MIND-BODY RELATIONSHIP: A BRIEF HISTORY

During prehistoric times, most cultures regarded the mind and body as intertwined. Disease was thought to arise when evil spirits entered the body, and treatment consisted primarily of attempts to exorcise these spirits. Some skulls from the Stone Age have small, symmetrical holes that are believed to have been made intentionally with sharp tools to allow the evil spirit to leave the body while the shaman performed the treatment ritual.

The ancient Greeks were among the earliest civilizations to identify the role of bodily factors in health and

illness. Rather than ascribing illness to evil spirits, they developed a humoral theory of illness. According to this viewpoint, disease resulted when the four humors or circulating fluids of the body—blood, black bile, yellow bile, and phlegm—were out of balance. The goal of treatment was to restore balance among the humors. The Greeks also believed that the mind was important. They described personality types associated with each of the four humors, with blood being associated with a passionate temperament, black bile with sadness, yellow bile with an angry disposition, and phlegm with a laid-back approach to life. Although these theories are now known not to be true, the emphasis on mind and body in health and illness was a breakthrough at that time.

By the Middle Ages, however, the pendulum had swung to supernatural explanations for illness. Disease was regarded as God’s punishment for evil-doing, and cure often consisted of driving out the evil forces by torturing the body. Later, this form of “therapy” was replaced by penance through prayer and good works. During this time, the Church was the guardian of medical knowledge, and as a result, medical practice assumed religious overtones. The functions of the physician were typically absorbed by priests, and so healing and the practice of religion became virtually indistinguishable.

Beginning in the Renaissance and continuing into the present day, great strides were made in understanding the technical bases of medicine. These



*Sophisticated, though not always successful, techniques for the treatment of illness were developed during the Renaissance. This woodcut from the 1570s depicts a surgeon drilling a hole in a patient’s skull, with the patient’s family and pets looking on.*

Courtesy National Library of Medicine Prints and Photographs

advances include the invention of the microscope in the 1600s and the development of the science of autopsy, which allowed medical practitioners to see the organs that were implicated in different diseases. As the science of cellular pathology progressed, the humoral theory of illness was put to rest. Medical practice drew increasingly on laboratory findings and looked to bodily factors rather than to the mind as bases for health and illness. In an effort to break with the superstitions of the past, practitioners resisted acknowledging any role for the mind in disease processes. Instead, they focused primarily on organic and cellular pathology as a basis for their diagnoses and treatment recommendations.

The resulting **biomedical model**, which has governed the thinking of most health practitioners for the past 300 years, maintains that all illness can be explained on the basis of aberrant somatic bodily processes, such as biochemical imbalances or neurophysiological abnormalities. The biomedical model assumes that psychological and social processes are largely irrelevant to the disease process. The problems with the biomedical model are summarized in Table 1.1.

**TABLE 1.1 | The Biomedical Model: Why Is It Ill-suited to Understanding Illness?**

- Reduces illness to low-level processes such as disordered cells and chemical imbalances
- Fails to recognize social and psychological processes as powerful influences over bodily states—assumes a mind-body dualism
- Emphasizes illness over health rather than focusing on behaviors that promote health
- Model cannot address many puzzles that face practitioners: why, for example, if six people are exposed to a flu virus, do only three develop the flu?

## ■ THE RISE OF THE BIOPSYCHOSOCIAL MODEL

The biomedical viewpoint began to change with the rise of modern psychology, particularly with Sigmund Freud's (1856–1939) early work on **conversion hysteria**. According to Freud, specific unconscious conflicts can produce physical disturbances that symbolize repressed psychological conflicts. Although this viewpoint is no longer central to health psychology, it gave rise to the field of psychosomatic medicine.

### Psychosomatic Medicine

The idea that specific illnesses are produced by people's internal conflicts was perpetuated in the work of

Flanders Dunbar in the 1930s (Dunbar, 1943) and Franz Alexander in the 1940s (Alexander, 1950). For example, Alexander developed a profile of the ulcer-prone personality as someone with excessive needs for dependency and love.

Dunbar and Alexander maintained that conflicts produce anxiety, which becomes unconscious and takes a physiological toll on the body via the autonomic nervous system. The continuous physiological changes eventually produce an organic disturbance. In the case of the ulcer patient, for example, repressed emotions resulting from frustrated dependency and love-seeking needs were thought to increase the secretion of acid in the stomach, eventually eroding the stomach lining and producing ulcers (Alexander, 1950).

Dunbar's and Alexander's work helped shape the emerging field of **psychosomatic medicine** by offering profiles of particular disorders believed to be psychosomatic in origin, that is, caused by emotional conflicts. These disorders include ulcers, hyperthyroidism, rheumatoid arthritis, essential hypertension, neurodermatitis (a skin disorder), colitis, and bronchial asthma.

We now know that all illnesses raise psychological issues. Moreover, researchers now believe that a particular conflict or personality type is not sufficient to produce illness. Rather, the onset of disease is usually due to several factors working together, which may include a biological pathogen (such as a viral or bacterial infection) coupled with social and psychological factors, such as high stress, low social support, and low socioeconomic status.

The idea that the mind and the body together determine health and illness logically implies a model for studying these issues. This model is called the **biopsychosocial model**. Its fundamental assumption is that health and illness are consequences of the interplay of biological, psychological, and social factors (Keefe, 2011).

### Advantages of the Biopsychosocial Model

How does the biopsychosocial model of health and illness overcome the disadvantages of the biomedical model? The biopsychosocial model maintains that biological, psychological, and social factors are all important determinants of health and illness. Both macrolevel processes (such as the existence of social support or the presence of depression) and microlevel processes (such as cellular disorders or chemical

imbalances) continually interact to influence health and illness and their course.

The biopsychosocial model emphasizes both health and illness. From this viewpoint, health becomes something that one achieves through attention to biological, psychological, and social needs, rather than something that is taken for granted (Suls, Krantz & Williams, 2013).

### Clinical Implications of the Biopsychosocial Model

The biopsychosocial model is useful for people treating patients as well. First, the process of diagnosis can benefit from understanding the interacting role of biological, psychological, and social factors in assessing a person's health or illness. Recommendations for treatment can focus on all three sets of factors.

The biopsychosocial model makes explicit the significance of the relationship between patient and practitioner. An effective patient-practitioner relationship can improve a patient's use of services, the efficacy of treatment, and the rapidity with which illness is resolved.

### The Biopsychosocial Model: The Case History of Nightmare Deaths

To see how completely the mind and body are intertwined in health, consider a case study that intrigued medical researchers for nearly 15 years. It involved the bewildering "nightmare deaths" among Southeast Asians.

Following the Vietnam War, in the 1970s, refugees from Southeast Asia, especially Laos, Vietnam, and Cambodia, immigrated to the United States. Around 1977, the Centers for Disease Control (CDC) in Atlanta became aware of a strange phenomenon: sudden, unexpected nocturnal deaths among male refugees from these groups. Death often occurred in the first few hours of sleep. Relatives reported that the victim began to gurgle and move about in bed restlessly. Efforts to awaken him were unsuccessful, and shortly thereafter he died. Even more mysteriously, autopsies revealed no specific cause of death.

However, most of the victims appeared to have a rare, genetically based malfunction in the heart's pacemaker. The fact that only men of particular ethnic backgrounds were affected was consistent with the potential role of a genetic factor. Also, the fact that the deaths seemed to cluster within particular families

was consistent with the genetic theory. But how and why would such a defect be triggered during sleep?

As the number of cases increased, it became evident that psychological and cultural, as well as biological, factors were involved. Some family members reported that the victim had experienced a dream foretelling the death. Among the Hmong of Laos, a refugee group that was especially plagued by these nightmare deaths, dreams are taken seriously as portends of the future. Anxiety due to these dreams, then, may have played a role in the deaths (Adler, 1991).

Another vital set of clues came from a few men who were resuscitated by family members. Several of them said that they had been having a severe night terror. One man, for example, said that his room had suddenly grown darker, and a figure like a large black dog had come to his bed and sat on his chest. He had been unable to push the dog off and had become quickly and dangerously short of breath (Tobin & Friedman, 1983). This was also an important clue because night terrors are known to produce abrupt and dramatic physiologic changes.

Interviews with the survivors revealed that many of the men had been watching violent TV shows shortly before retiring, and the content of the shows appeared to have made its way into some of the frightening dreams. In other cases, the fatal event occurred immediately after a family argument. Many of the men were said by their families to have been exhausted from combining demanding full-time jobs with a second job or with night school classes to learn English. The pressures to support their families had been taking their toll.

All these clues suggest that the pressures of adjusting to life in the United States played a role in the deaths. The victims may have been overwhelmed by cultural differences, language barriers, and difficulties finding satisfactory jobs. The combination of this chronic strain, a genetic susceptibility, and an immediate trigger provided by a family argument, violent television, or a frightening dream culminated in nightmare death (Lemoine & Mougne, 1983). Clearly, the biopsychosocial model unraveled this puzzle.

## ■ THE NEED FOR HEALTH PSYCHOLOGY

What factors led to the development of health psychology? Since the inception of the field of psychology in the early 20th century, psychologists have made

important contributions to health, exploring how and why some people get ill and others do not, how people adjust to their health conditions, and what factors lead people to practice health behaviors. In response to these trends, the American Psychological Association (APA) created a task force in 1973 to focus on psychology's potential role in health research. Participants included counseling, clinical, and rehabilitation psychologists, many of whom were already employed in health settings. Independently, social psychologists, developmental psychologists, and community/environmental psychologists were developing conceptual approaches for exploring health issues (Friedman & Silver, 2007). These two groups joined forces, and in 1978, the Division of Health Psychology was formed within the APA. It is safe to say that health psychology is one of the most important developments within the field of psychology in the past 50 years. What other factors have fueled the growing field of health psychology?

### Changing Patterns of Illness

An important factor influencing the rise of health psychology has been the change in illness patterns in the United States and other technologically advanced societies in recent decades. As Table 1.2 shows, until the 20th century, the major causes of illness and death in the United States were **acute disorders**. Acute disorders are short-term illnesses, often result of a viral or bacterial invader and usually amenable to cure. The prevalence of acute infectious disorders, such as tuberculosis, influenza, measles, and poliomyelitis, has

declined because of treatment innovations and changes in public health standards, such as improvements in waste control and sewage.

Now, **chronic illnesses**—especially heart disease, cancer, and respiratory diseases—are the main contributors to disability and death, particularly in industrialized countries. Chronic illnesses are slowly developing diseases with which people live for many years and that typically cannot be cured but rather are managed by patient and health care providers. Table 1.3 lists the main diseases worldwide at the present time. Note how the causes are projected to change over the next decade or so.

Why have chronic illnesses helped spawn the field of health psychology? First, these are diseases in which psychological and social factors are implicated as causes. For example, personal health habits, such as diet and smoking, contribute to the development of heart disease and cancer, and sexual activity is critical to the likelihood of developing AIDS (acquired immune deficiency syndrome).

Second, because people may live with chronic diseases for many years, psychological issues arise in their management. Health psychologists help chronically ill people adjust psychologically and socially to their changing health state and treatment regimens, many of which involve self-care. Chronic illnesses affect family functioning, including relationships with a partner or children, and health psychologists help ease the problems in family functioning that may result.

Chronic illnesses may require medication use and self-monitoring of symptoms, as well as changes in

**TABLE 1.2 | What Are the Leading Causes of Death in the United States? A Comparison of 1900 and 2015, per 100,000 Population**

1900		2015	
Influenza and pneumonia	202.2	Heart disease	611.1
Tuberculosis, all forms	194.4	Cancer	584.9
Gastroenteritis	142.7	Chronic lower respiratory diseases	149.2
Diseases of the heart	137.4	Accidents (unintentional injuries)	130.6
Vascular lesions of the c.n.s.	106.9	Stroke	129.0
Chronic nephritis	81.0	Alzheimer's disease	84.8
All accidents	72.3	Diabetes	75.6
Malignant neoplasms (cancer)	64.0	Influenza and pneumonia	57.0
Certain diseases of early infancy	62.6	Nephritis, nephrotic syndrome, and nephrosis	47.1
Diphtheria	40.3	Intentional self-harm (suicide)	41.1

Source: Murphy, 2000; Centers for Disease Control and Prevention, September 2015.

**TABLE 1.3 | What Are the Worldwide Causes of Death?**

2014		2030	
Rank	Disease or Injury	Projected Rank	Disease or Injury
1	Ischemic heart disease	1	Ischemic heart disease
2	Stroke	2	Cerebrovascular disease
3	Chronic obstructive pulmonary disease	3	Chronic obstructive pulmonary disease
4	Lower respiratory infections	4	Lower respiratory infections
5	Trachea bronchus, lung cancers	5	Road traffic accidents
6	HIV/AIDS	6	Trachea, bronchus, lung cancers
7	Diarrhoeal diseases	7	Diabetes mellitus
8	Diabetes mellitus	8	Hypertensive heart disease
9	Road injury	9	Stomach cancer
10	Hypertensive heart disease	10	HIV/AIDS

Source: World Health Organization, May 2014.

behavior, such as altering diet and getting exercise. Health psychologists develop interventions to help people learn these regimens and promote adherence to them.

### Advances in Technology and Research

New medical technologies and scientific advances create issues that can be addressed by health psychologists. Just in the past few years, genes have been uncovered that contribute to many diseases including breast cancer. How do we help a college student whose mother has just been diagnosed with breast cancer come to terms with her risk? If she tests positive for a breast cancer gene, how will this change her life? Health psychologists help answer such questions.

Certain treatments that prolong life may severely compromise quality of life. Increasingly, patients are asked their preferences regarding life-sustaining measures, and they may require counseling in these matters. These are just a few examples of how health psychologists respond to scientific developments.

### Expanded Health Care Services

Other factors contributing to the rise of health psychology involve the expansion of health care services. Health care is the largest service industry in the United States, and it is still growing rapidly. Americans spend more than \$3 trillion annually on health care (National Health Expenditures, 2014). In recent years, the health care industry has come

under increasing scrutiny, as substantial increases in health care costs have not brought improvement in basic indicators of health.

Moreover, huge disparities exist in the United States such that some individuals enjoy the very best health care available in the world while others receive little health care except in emergencies. Prior to the Affordable Care Act (known as Obamacare), 49.9 million Americans had no health insurance at all (U.S. Census Bureau, 2011). Efforts to reform the health care system to provide all Americans with a basic health care package, similar to what already exists in most European countries, have resulted.

Health psychology represents an important perspective on these issues for several reasons:

- Because containing health care costs is so important, health psychology's main emphasis on prevention—namely, modifying people's risky health behaviors before they become ill—can reduce the dollars devoted to the management of illness.
- Health psychologists know what makes people satisfied or dissatisfied with their health care (see Chapters 8 and 9) and can help in the design of a user-friendly health care system.
- The health care industry employs millions of people. Nearly every person in the country has direct contact with the health care system as a recipient of services. Consequently, its impact is enormous.



*In the 19th and 20th centuries, great strides were made in the technical basis of medicine. As a result, physicians looked more and more to the medical laboratory and less to the mind as a way of understanding the onset and progression of illness.*

© image 100/AGE Fotostock RF

For all these reasons, then, health care delivery has a substantial social and psychological impact on people, an impact that is addressed by health psychologists.

### Increased Medical Acceptance

Another reason for the development of health psychology is the increasing acceptance of health psychologists within the medical community. Health psychologists have developed a variety of short-term behavioral interventions to address health-related problems, including managing pain, modifying bad health habits such as smoking, and controlling the side effects of treatments. Techniques that may take a few hours to teach can produce years of benefit. Such interventions, particularly

those that target risk factors such as diet or smoking, have contributed to the decline in the incidence of some diseases, especially coronary heart disease.

To take another example, psychologists learned many years ago that informing patients fully about the procedures and sensations involved in unpleasant medical procedures such as surgery improves their adjustment (Janis, 1958; Johnson, 1984). As a consequence of these studies, many hospitals and other treatment centers now routinely prepare patients for such procedures.

Ultimately, if a health-related discipline is to flourish, it must demonstrate a strong track record, not only as a research field but as a basis for interventions as well. Health psychology is well on its way to fulfilling both tasks.

## ■ HEALTH PSYCHOLOGY RESEARCH

Health psychologists make important methodological contributions to the study of health and illness. The health psychologist can be a valuable team member by providing the theoretical, methodological, and statistical expertise that is the hallmark of good training in psychology.

### The Role of Theory in Research

Although much research in health psychology is guided by practical problems, such as how to ease the transition from hospital to home care, about one-third of health psychology investigations are guided by theory (Painter, Borba, Hynes, Mays, & Glanz, 2008). A **theory** is a set of analytic statements that explain a set of phenomena, such as why people practice poor health behaviors. The best theories are simple and useful. Throughout this text, we will see references to many theories, such as the theory of planned behavior that predicts and explains when people change their health behaviors (Chapter 3).

The advantages of theory for guiding research are several. Theories provide guidelines for how to do research and interventions (Mermelstein & Revenson, 2013). For example, the general principles of cognitive behavior therapy can tell one investigator what components should go into an intervention with breast cancer patients to help them cope with the aftermath of surgery, and these same principles can help a different investigator develop a weight loss intervention for obese people.