

# Health Psychology

A CULTURAL APPROACH

3e

REGAN A.R. GURUNG



THIRD EDITION

# Health Psychology

## A Cultural Approach

**Regan A. R. Gurung**

*University of Wisconsin, Green Bay*



Australia • Brazil • Japan • Korea • Mexico • Singapore • Spain • United Kingdom • United States

This is an electronic version of the print textbook. Due to electronic rights restrictions, some third party content may be suppressed. Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. The publisher reserves the right to remove content from this title at any time if subsequent rights restrictions require it. For valuable information on pricing, previous editions, changes to current editions, and alternate formats, please visit [www.cengage.com/highered](http://www.cengage.com/highered) to search by ISBN#, author, title, or keyword for materials in your areas of interest.



***Health Psychology: A Cultural Approach,***  
**Third Edition**

**Regan A. R. Gurung**

Publisher: Jon-David Hague

Developmental Editor: Ken King

Assistant Editor: Paige Leeds

Editorial Assistant: Amelia Blevins

Media Editor: Mary Noel

Brand Manager: Elisabeth Rhoden

Market Development Manager:

Christine Sosa

Manufacturing Planner: Karen Hunt

Rights Acquisitions Specialist: Dean  
Dauphinais

Art and Design Direction, Production  
Management, and Composition:  
PreMediaGlobal

Cover Image: © Bharati Chaudhuri/  
Getty Images

© 2014, 2010 Wadsworth, Cengage Learning

ALL RIGHTS RESERVED. No part of this work covered by the copyright herein may be reproduced, transmitted, stored, or used in any form or by any means graphic, electronic, or mechanical, including but not limited to photocopying, recording, scanning, digitizing, taping, Web distribution, information networks, or information storage and retrieval systems, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the publisher.

For product information and technology assistance, contact us at  
**Cengage Learning Customer & Sales Support, 1-800-354-9706.**

For permission to use material from this text or product,  
submit all requests online at **[www.cengage.com/permissions](http://www.cengage.com/permissions).**

Further permissions questions can be e-mailed to  
**[permissionrequest@cengage.com](mailto:permissionrequest@cengage.com).**

Library of Congress Control Number: 2012956434

Student Edition:

ISBN-13: 978-1-285-06211-2

ISBN-10: 1-285-06211-6

Loose-leaf Edition:

ISBN-13: 978-1-285-06212-9

ISBN-10: 1-285-06212-4

**Wadsworth**

20 Davis Drive  
Belmont, CA 94002-3098  
USA

Cengage Learning is a leading provider of customized learning solutions with office locations around the globe, including Singapore, the United Kingdom, Australia, Mexico, Brazil, and Japan. Locate your local office at:  
**[www.cengage.com/global](http://www.cengage.com/global).**

Cengage Learning products are represented in Canada by  
Nelson Education, Ltd.

To learn more about Wadsworth, visit **[www.cengage.com/wadsworth](http://www.cengage.com/wadsworth)**

Purchase any of our products at your local college store or at our  
preferred online store **[www.cengagebrain.com](http://www.cengagebrain.com).**



*May all our children Live54218: eat healthy, hydrate,  
limit screen time, get physical activity, and sleep well.*

# BRIEF CONTENTS

PREFACE xv

ABOUT THE AUTHOR xxi

- 1 Health Psychology: Setting the Stage 1**
  - 2 Cultural Approaches to Health 33**
  - 3 Essential Physiology 65**
  - 4 Stress Across Cultures 100**
  - 5 Coping and Social Support 141**
  - 6 Increasing Healthy Behaviors 176**
  - 7 Living Healthy: Eat Well, Be Active and  
Smoke-Free, and Minimize Drinking 207**
  - 8 Factors Surrounding Illness 244**
  - 9 Pain 271**
  - 10 Chronic Illness, Terminal Illness, and Death 301**
  - 11 Psychoneuroimmunology and HIV 335**
  - 12 Culture and Cancer 362**
  - 13 Culture and Cardiovascular Disease 397**
  - 14 Controversies and the Future of Health  
Psychology 422**
- APPENDIX: ANSWER KEY FOR TEST YOURSELF  
QUESTIONS 445  
GLOSSARY 447  
REFERENCES 455  
NAME INDEX 533  
SUBJECT INDEX 561

# CONTENTS

PREFACE xv

ABOUT THE AUTHOR xxi

## **1 Health Psychology: Setting the Stage 1**

What Is Health? 6

Cross-Cultural Definitions of Health 7

Common Rubrics for Health 8

Why Is Culture Important? 9

Dimensions of Culture 10

Defining Culture 10

Context and Level of Analysis 12

Two Major “Cultures” 12

Advancing Cultural Competence 14

Some Important Warnings 16

Health Psychology’s Biopsychosocial Approach 18

The Evolution of Health Psychology 18

What Is Health Psychology? 23

Main Areas in Health Psychology 24

A Research Primer 25

Major Research Designs 25

Correlational Studies 25

A Note on Statistics 26

Experimental and Quasi-Experimental Designs 27

Cross-Sectional and Longitudinal Designs 28

Other Key Terms 28

**FOCUS ON CURRENT ISSUES Profile of a Multicultural America 29**

Summary 30

Test Yourself 31



Key Terms, Concepts, and People 32  
Essential Readings 32

## **2 Cultural Approaches to Health 33**

Varieties of World Medicine 36  
Western Biomedicine 37  
    Greek Roots 38  
    Technological Innovations 38  
Traditional Chinese Medicine 40  
    Sources of Illness 41  
    Treatment 43  
Ayurveda: Traditional Indian Medicine 46  
    Sources of Illness 47  
    Treatment 48  
Curanderismo and Spiritualism 49  
    Sources of Illness 50  
    Treatment 51  
American Indian Medicine 52  
    Sources of Illness 52  
    Treatment 53  
African American Beliefs 55  
Are Complementary and Alternative Approaches Valid? 56  
**FOCUS ON APPLICATIONS Acupuncture 61**  
Summary 63  
Test Yourself 63  
Key Terms, Concepts, and People 64  
Essential Readings 64

## **3 Essential Physiology 65**

Biological Development 67  
    The Prenatal Period 67  
    Infancy and Early Childhood 70  
    Adolescence 70  
    Adulthood and Aging 71  
The Nervous System 73  
    The Central Nervous System 73  
    The Peripheral Nervous System 75  
The Endocrine System 75  
    Key Components and Mechanics 76  
The Circulatory System 78  
    Key Components 78  
    The Mechanics of Circulation 79  
    A Biological Primer 81  
The Digestive System 82

Key Components and Mechanics	82
A Note on the Renal/Urinary System	84
The Physiology of Immunity	85
The Process of Defense	87
Nonspecific or Natural Immunity	88
Acquired Immunity	89
Measures of Immune Response	91
The Respiratory System	92
Key Components and Mechanics	92
What About Culture?	94
<b>FOCUS ON APPLICATIONS</b> The Games We Play (Can Have Physiological Implications)	96
Summary	97
Test Yourself	98
Key Terms, Concepts, and People	99
Essential Readings	99

## **4 Stress Across Cultures 100**

What Is Stress?	101
Stress over Time	103
Main Theories of Stress	105
Cannon's Fight-or-Flight Theory	105
Taylor et al.'s Tend-and-Befriend Theory	107
Selye's General Adaptation Syndrome	109
Lazarus' Cognitive Appraisal Model	111
Factors Influencing Our Appraisals	113
The Role of Culture in Appraisal	114
Stress and Psychopathology: The Diathesis-Stress Model	116
Culture as a Critical Stressor	116
Perceived Discrimination	117
Stress and Genes	119
Measuring Stress	120
Different Varieties of Stressors	126
Relationship Stress	126
Work Stress	128
Environmental Stress	130
Consequences of Stress	131
Post-Traumatic Stress Disorder	135
<b>FOCUS ON CURRENT ISSUES</b> Stress Really Can Kill: The Baskerville Effect, Culture, and Stress	136
Summary	138
Test Yourself	138
Key Terms, Concepts, and People	139
Essential Readings	140

## **5 Coping and Social Support 141**

- What Is Coping? 142
- Moderators versus Mediators 143
- The Structure of Coping 145
  - What Is the Best Way to Cope? 147
- Who Copes Well? 148
- Personality and Coping 149
- Coping and Culture 152
  - Ethnic Identity 153
  - Acculturation 154
- Social Support 155
  - Types of Social Support 156
- Cultural Variables in Social Support 158
- Theories of Social Support Change 161
- Common Measures of Coping 162
  - Ways of Coping Questionnaire 163
  - The COPE 163
  - New Developments in Coping Research 164
- Keys to Coping with Stress 165
  - Relaxation-Based Approaches 165
  - Cognitive-Behavioral Approaches 169
- FOCUS ON CURRENT ISSUES May God Help You 171**
- Summary 173
- Test Yourself 173
- Key Terms, Concepts, and People 174
- Essential Readings 175

## **6 Increasing Healthy Behaviors 176**

- What Are Healthy Behaviors? 177
  - The Healthy People Programs 179
- What Determines Health Behaviors? 179
  - Biological Factors 180
  - Psychological Factors 182
  - Social Factors 183
- Changing Health Behaviors 184
  - The Importance of Theory 185
  - Key Theories of Health Behavior Change 185
- Transtheoretical Model 185
- The Health Belief Model 188
  - Culture and the Health Belief Model 191
- Theory of Planned Behavior 192
  - Culture and the Theory of Planned Behavior 192
- Additional Theories of Health Behavior Change 194
- Comparing the Models and Their Limitations 195



Changing Behaviors: Interventions 196  
 Top Ten Prescriptions 197

**FOCUS ON APPLICATIONS** You Know You Want To...: Reducing Smoking  
 in College 202

Summary 204

Test Yourself 205

Key Terms, Concepts, and People 206

Essential Readings 206

## **7 Living Healthy: Eat Well, Be Active and Smoke-Free, and Minimize Drinking 207**

Eat Well 209

What Should We Be Eating? 210

Development of Food Preferences 213

Obesity 214

Eating Disorders 220

Culture and Eating Disorders 220

Physical Activity 221

Cultural Variations in Physical Activity 224

Physical Consequences of Physical Activity 224

Psychological Consequences of Physical Activity 225

Smoking and Drinking 226

Tobacco Use 226

Cultural Variations in Smoking 227

Why Do People Smoke? 228

Psychological Causes of Addiction 230

Physiological Consequences of Smoking 231

Drinking 235

Who Drinks, How Much, and Why? 235

Consequences of Alcohol Abuse 237

**FOCUS ON APPLICATIONS** The Truth about the “Freshman 15” 239

Summary 241

Test Yourself 242

Key Terms, Concepts, and People 243

Essential Readings 243

## **8 Factors Surrounding Illness 244**

Culture and Illness Behaviors 246

The Role of Acculturation 247

The Commonsense Model of Illness Behavior 247

Recognizing Symptoms 249

The Confirmation Bias 249

Attributions and Misattributions 250

Personality 251

- Seeking Treatment 253
  - The Role of Culture 253
  - Understanding Delays 254
  - The Hospital Setting 256
  - Staff Relations 258
- Adherence to Treatment 259
- Patient-Practitioner Interactions 261
  - Communication 262
  - Cultural Stereotyping 264
  - Cultural Competency 265
- FOCUS ON APPLICATIONS** *When the Spirit Catches You, Cultures Clash* 267
- Summary 268
- Test Yourself 269
- Key Terms, Concepts, and People 270
- Essential Readings 270

## **9 Pain 271**

- Key Definitions 272
- Cultural Variations in the Experience of Pain 273
  - Sex Differences 273
  - Ethnic Differences 274
- Typologies and Biology of Pain 277
- Measuring Pain 278
  - Basic Pain Measures 279
    - The McGill Pain Questionnaire (MPQ) 280
    - The Multidimensional Pain Inventory (MPI) 280
    - The Short Form with 36 Questions (SF-36) 280
    - Ecological Momentary Assessment (EMA) 283
    - Other Measures 283
- Theories of Pain 283
  - Early Physiological and Psychological Approaches 283
  - Biopsychological Theories of Pain 285
  - The Gate Control Theory of Pain 286
- The Psychology of Pain 288
  - Psychological Factors and Pain 288
- Pain Management Techniques 290
  - Physiological Treatments 291
    - Chemical 291
    - Acupuncture 292
    - Surgery 293
    - Other Physiology-Related Methods 293
  - Psychological Treatments 294
    - Psychological States and Cognitive Styles 294
    - Distraction 294
    - Hypnosis 294

General Cognitive Methods	295
What You See Matters	295
Self-Management of Chronic Pain	296
<b>FOCUS ON APPLICATIONS A Hospital Case Study</b>	<b>297</b>
Summary	298
Test Yourself	299
Key Terms, Concepts, and People	300
Essential Readings	300

## **10 Chronic Illness, Terminal Illness, and Death 301**

Prevalence Rates of Chronic Illnesses	303
Coping with Chronic Illnesses	304
Goals of Treatment	305
Quality of Life	305
Biopsychosocial Components of Adjustment	308
Biological Issues	309
Psychological Issues	309
Psychological Aspects of Coping	309
Psychological Responses to Chronic Illness	310
Culture and Chronic Illness	312
Family and Neighborhoods	313
Culture and Ethnicity	314
Social Support	316
Interventions	317
Coping with Terminal Illness	319
The Role of Religion	319
Death	321
Death across the Lifespan	321
The Path to Death	322
Facilitating Death	323
Are There Stages?	326
Cultural Variations in Death and Dying	326
Sex, Gender, and Death	328
<b>FOCUS ON APPLICATIONS: Hospice</b>	<b>329</b>
Summary	332
Test Yourself	333
Key Terms, Concepts, and People	333
Essential Readings	334

## **11 Psychoneuroimmunology and HIV 335**

Psychoneuroimmunology	336
Behavioral Conditioning and Immunity	337
Stress and Immunity	338



- HIV and AIDS 339
  - The History of AIDS 342
  - The Difference between HIV and AIDS 344
- Physiological Correlates of HIV/AIDS 344
- Psychological Correlates of HIV/AIDS 346
  - Psychological Factors Influencing Progression 348
- Cultural Variations in AIDS 349
  - Women and AIDS 349
  - Ethnicity and AIDS 350
  - Other Cultural Issues 351
- Health Psychological Models Relating to HIV/AIDS 352
  - Psychological Interventions for Those with HIV 356
- FOCUS ON APPLICATIONS** Yoga and Coping with Illnesses Such as AIDS 357
- Summary 359
- Test Yourself 360
- Key Terms, Concepts, and People 361
- Essential Readings 361

## **12 Culture and Cancer 362**

- Prevalence of Cancer 364
- What Is Cancer? 365
  - Types of Cancer 366
- Cultural Variations in the Incidence of Cancer 367
  - Cultural Differences in Beliefs and Knowledge about Cancer 371
- Developmental Issues in Cancer 372
- Physiological Correlates of Cancer 373
- Psychological Correlates of Cancer 374
  - Psychological Factors in Cancer Incidence 374
  - Psychological Responses to Cancer Diagnosis 375
  - Psychological Factors in Cancer Progression and Coping 376
    - Personality 376
    - Social Support 376
    - Finding Meaning 377
- Cancer, Stress, and Immunity 378
- Health Behaviors and Cancer 379
  - Tobacco Use 380
  - Diet 381
  - Physical Activity 384
  - Sun Exposure 384
- Treatment Options 385
  - Surgery 385
  - Chemotherapy 386
  - Radiation Therapy 386
  - Other Treatments 387

Behavioral Interventions	388
Aiding Prevention: Increasing Screening Behaviors	388
Cultural Differences in Screening	390
Inhibiting Progression and Helping Patients Cope	391
<b>FOCUS ON APPLICATIONS Increasing Cancer Screening</b>	<b>393</b>
Summary	395
Test Yourself	395
Key Terms, Concepts, and People	396
Essential Readings	396

## **13 Culture and Cardiovascular Disease 397**

Prevalence of Cardiovascular Diseases	398
What Is Cardiovascular Disease?	399
Cultural Variations in the Incidence of Cardiovascular Disease	401
Developmental Issues in Cardiovascular Disease	404
Physiological Correlates of Cardiovascular Disease	405
Psychological Correlates of Cardiovascular Disease	407
Stress	409
Health Behaviors and Cardiovascular Disease	411
Tobacco Use	411
Diet	412
Physical Activity	414
Treatment Options	414
Surgery	415
Behavioral Interventions	416
<b>FOCUS ON APPLICATIONS The Lifestyle Heart Trial</b>	<b>417</b>
Summary	420
Test Yourself	420
Key Terms, Concepts, and People	421
Essential Readings	421

## **14 Controversies and the Future of Health Psychology 422**

Ongoing and Current Controversies	423
How Important Are Health Behaviors Really?	423
Who Can Be Called a Medical Psychologist?	424
The Issue of Professional Status	425
Setting Diagnostic Criteria	425
Looking to the Future	426
A Greater Focus on Sociocultural Issues	426
A Focus on Developmental Issues and the Lifespan	428

A Focus on the Evidence	429
Fine-Tuning the Biopsychosocial Model	430
Technological Innovations	431
Tools for the Delivery of Health Care	431
Technology’s Role in Training Health Psychologists	432
Technology and Health Information	433
Interventions	434
Enhanced Training	435
Related Developments	435
Biopsychocultural Health Psychology	439
FOCUS ON APPLICATIONS Careers and Graduate Training in Health Psychology	439
Summary	441
Test Yourself	442
Key Terms, Concepts, and People	443
Essential Readings	443
APPENDIX: ANSWER KEY FOR TEST YOURSELF QUESTIONS	445
GLOSSARY	447
REFERENCES	455
NAME INDEX	533
SUBJECT INDEX	561



## PHILOSOPHY

Culture is more important now than it has ever been. The 2012 presidential race often evoked cultural dimensions—both religion and race. World politics is rife with the clashing of cultural factions. Shias and Shiites in the Middle East. Hindus and Muslims in India. Caste and tribal genocide in Africa. Through this all, the disparities between different cultural groups—especially the rich and the poor—relate to significant health disparities. There are significant differences in health behaviors and the incidence in illnesses such as coronary heart disease and cancer across ethnic groups. These cultural differences are crucial to acknowledge and catalyzed me to present an introduction to health psychology with a cultural approach. In this third edition, I have had a chance to further fine-tune the cultural focus and explain more thoroughly how culture is an important predictor of health. I took the opportunity to utilize a more applied approach to make the material even more relevant to readers' everyday lives. I also include more of the controversies in the field as well as a greater focus on clinical health psychology. Of course, with the multitude of new and exciting research in the field published monthly, this third edition offers an opportunity to update you and keep you informed.

We often discount the importance of culture, perhaps because we rarely acknowledge its many dimensions. For example, what do your mother, your best friends, and God have in common? They each constitute the major socialization forces of culture. Take parents for example. Whether we do something because they told us to (“Eat your greens!”) or exactly because they told us *not to* (“Don’t smoke!”), parents have a strong influence on us. In the same way, if our friends exercise, we are more likely to exercise also. As another example, consider religions, which have different prescriptions for what individuals should or should not do. Muslims cannot eat pork or drink alcohol. Hindus cannot eat beef. Unfortunately, textbooks often limit discussions of culture to race or ethnicity, when a broader discussion is required to fully understand the precedents of health and health behaviors. Culture is not just race or ethnicity; it also includes religion, age, gender, family values, the region of the country in which one was raised, and many other features. Understanding the dynamic interplay of the cultural forces acting on us can greatly enhance how we face the world and how we optimize our way of life.

## THIS EDITION

The goals of this third edition are to examine how you can study the areas of health, illness, and medicine from a psychological and cultural perspective and to introduce the main topics and issues in the area of health psychology. This is in combination with providing training to judge the scientific quality of research on psychology and medicine. I begin by describing what health psychology is all about, emphasizing the importance of cultural competence, and highlighting research methods. I build on these basics with a revealing chapter on cultural variations in health beliefs and behaviors (how do shamans, acupuncture, yoga, and sweat lodges fit into health?). Our physiology is an important determinant of health. Chapter 3 describes essential physiological systems and processes that will aid your understanding of the different topics discussed later in the book. I then unravel the mysteries of stress and the ways to cope. In Chapters 4 and 5, I discuss the theories explaining stress and the many practical ways to alleviate it. Armed with tools to make everyday life stress-free, I turn to another common aspect: health behaviors that many of us do (or try to do more often) and those we try not to do. Chapter 6 describes some of the ways we can change health behaviors, and Chapter 7 describes some of the behaviors in detail. The second half of the book turns to topics relating to sickness, such as factors that surround illness (such as adherence and patient-practitioner interactions; Chapter 8), pain (Chapter 9), and chronic illnesses, terminal illness, and death (Chapter 10), before examining some of the major health concerns and illnesses plaguing society today—HIV, cancer, and cardiovascular disease (Chapters 11 to 13). Finally, I identify the major challenges faced by those in the field of health psychology (and provide some avenues for future exploration and training in this area).

Each chapter prepares you with an outline of the topics covered as well as a clear preamble to the main topics of the chapter. Every chapter ends with a summary to help you review the major points and a list of the key terms, concepts, and people. Sections called “Synthesize, Evaluate, Apply” serve to break up the chapters into easy, manageable segments and allow you to test your knowledge. In addition, each chapter ends with ten multiple-choice questions to help further your comprehension. To help you learn, I provide the answers to these questions in the back of the book. Finally, I have provided a short list of *absolute must-reads*—a selection of essential readings comprising classic articles in the field or contemporary research studies regarding some of the material most cited by health psychologists. These are essentially the articles that are most likely to be used in any writing on the topic, and I think you will enjoy being involved in the field while reading them.

If you think I have missed something, if you have a suggestion for how this book can be improved, if you want to share a way that your culture has influenced your health, or even if you want to share that you really enjoyed learning about health psychology using this book (that’s my goal), you may contact me by email at [gurungr@uwgb.edu](mailto:gurungr@uwgb.edu).

## WHAT ELSE IS NEW?

Most importantly, I have ensured that you get to read the most updated information—there are over 1,000 new research articles cited (yes, I have been busy reading up on the literature for this revision). Additionally, as a testament to my commitment to providing you with a robust scientific introduction to the field,

I enforce the chapter discussions with relevant and interesting citations. Numerous changes have been made to this edition. The following are some examples:

### Chapter 1

- Expanded discussion of health disparities with more examples.
- Reorganization of the chapter to define culture sooner and in more detail.
- New Table 1.1 on Institute of Medicine (IOM) recommendations to reduce differences in the kinds and quality of health care received by United States racial and ethnic minorities and non-minorities.
- Table 1.3 updated to show 2012 publication examples.
- New Table 1.4 on recommendations for fostering cultural sensitivity in health care organizations and clinics.
- New Table 1.5, Key Cultural Domains from the Purnell Model of Cultural Competence with sample questions to ask to determine each.
- Expanded discussion of SES with special discussion of variations across ethnic groups in America.
- New section on cultural competence and how to advance it.
- Additional information and research on sex differences added with more cross-cultural examples.
- FOCUS section includes discussion of 2012 presidential race and relevance.
- All references to contemporary culture, population composition, and recent research updated.

### Chapter 2

- Addition of international examples and understandings of health and well-being.
- Expanded discussion of ethnic differences and variations in North America.
- Additional discussion of the role of religion in cultural approaches to health: expansion of Hindu and Muslim religions' philosophy of health and wellness.
- Addition of information related to special standards to report randomized controlled trials, CONSORT.
- Further empirical evidence added for the effectiveness of traditional Chinese medicine with discussion of special challenges for the use of the scientific method for testing some alternative medicines.
- Expansion of section on discussion of complementary and alternative medicines with more information on use and tests of effectiveness of different types.
- All references to contemporary culture and recent research updated.
- Greater detail added to tables and figures.

### Chapter 3

- Addition of material debunking the Mozart effect.
- Expanded treatment of asthma.
- Inclusion of more examples of cultural differences.

### Chapter 4

- Incorporated *Stress in America* 2012 data.
- Modified section on Taylor et al.'s Tend-and-Befriend theory of stress to reflect new research.
- Expanded discussion of sex differences in stress, especially within different cultural groups.

- Expanded and updated section on the role of culture on appraisals.
- Expanded discussion of stress across cultures with new material on micro-aggressions and discrimination.
- New section on stress and genes.
- All references to contemporary culture and recent research updated.

### Chapter 5

- Heavily revised chapter taking into account new developments in coping research.
- Discussion of general structure of coping versus prior focus on style and strategies.
- Addition of recent research on coping in the military in Iraq and Afghanistan.
- Better examples of mediation and moderation of variables across cultures over the entire chapter.
- New material on personality and coping.
- New section covering recent research on coping.
- All references to contemporary culture and recent research updated.

### Chapter 6

- Entire focus of chapter reimagined to focus on healthy behaviors and what to do versus what not to do.
- Material presented in context of behavior versus a list of theories to increase accessibility and engagement.
- New expanded cultural examples.
- Additional material on how to change personal behaviors and section moved to front of chapter.
- New section on changing health behaviors.
- New section on the importance of theory to increase engagement.
- Reorganization of theories presented to start with most common and accessible.
- Expanded discussion of Healthy People programs and Healthy People 2020 program.
- Expanded discussion of pros and cons of models of health behavior change.
- Additional empirical examples added to discussion of interventions.
- All references to contemporary culture and recent research updated.

### Chapter 7

- Chapter title changed to increase readability and student interest.
- Material revised to provide direct tips and prescriptions for healthy behavior.
- Inclusion of MyPlate for nutrition guidelines.
- New material on cultural differences in food preference development.
- Financial burdens of obesity added.
- Additional examples of interventions aimed to change exercise, eating, and smoking.
- New material on genetic basis to addictions added.
- Additional discussion of cultural differences in physical activity.
- All references to contemporary culture and recent research updated.

**Chapter 8**

- New section on the role of acculturation.
- New section on the Commonsense Model of Illness Behavior.
- Expanded section on the role of culture.
- Expanded discussion of the role of culture in seeking treatment.
- Expanded coverage of cultural competency.
- New photos that are more relevant and better break up sections.

**Chapter 9**

- Additional definitions of pain from the International Association for the Study of Pain (IASP).
- Greater depth to biological basis pain added.
- Material on Initiative on Methods, Measurement, and Pain Assessment in Clinical Trials (IMMPACT) added.
- New measures of pain and patient-practitioner issues with pain management added such as numeric rating scales (NRS) a verbal rating scale (VRS), or the visual analog scale (VAS).
- New section on Ecological Momentary Assessment (EMA) of pain.
- New section on the role of hospital views in pain.
- All references to contemporary culture and recent research updated.
- Major reorganization of sections in the chapter to enable better flow and a more coherent discussion of topics.

**Chapter 10**

- Expanded definitions of chronic and acute pain added.
- Additional detail to cultural differences in life expectancy with new data.
- New information on life expectancy projections as well as cost to nation of chronic illnesses.
- Revised section on hospice to reflect new research.
- All references to contemporary culture and recent research updated.

**Chapter 11**

- All references to contemporary culture updated.
- Additional material on gender and HIV infection.
- Expanded discussion of the field of psychoneuroimmunology (PNI).
- Clear examples of research studies designed to help showcase cultural research in the field of PNI added.
- Extensive addition of recent research overwhelmingly from 2012.

**Chapter 12**

- All references to contemporary culture and recent research updated.
- Additional information on religion and cancer.
- Additional information on interventions.
- Extensive addition of recent research overwhelmingly from 2012.

**Chapter 13**

- All references to contemporary culture and recent research updated.
- Expanded information on international rates of cardiovascular disease.
- Expanded sections on cultural differences and the link between culture, biology, and cardiovascular disease.
- Extensive addition of recent research overwhelmingly from 2012.

### Chapter 14

- New section on ongoing and current controversies.
- New section on medical psychology.
- New section on professional status.
- New section on diagnostic criteria.
- New section on the role of technology in health care education.
- Additional information on tools for the delivery of health care.
- Additional information on careers in health psychology and prevalence of the course.
- New Table 14.1 featuring competencies for non-clinical health psychologists.
- All references to contemporary culture and recent research updated.

## ACKNOWLEDGMENTS

Together with those who fueled my passion for health psychology (acknowledged in my first edition, but Shelley Taylor, Christine Dunkel-Schetter, and Margaret Kemeny at UCLA in particular) and those who first helped me get this project off the ground (especially Michele Sordi), I am grateful to the wonderful students I have had the pleasure to teach using this book. They have helped me make this third edition even stronger. The many colleagues who used this book have also been wonderful resources, providing useful suggestions for improvement. I am also grateful to the increased efforts of community organizations in my home city of Green Bay, Wisconsin, for working to curb childhood obesity. The efforts of Jen Van Den Elzen and the LIVE54218 group (see [www.Live54218.org](http://www.Live54218.org)) ensured I walked the walk and put health psychological theories into practice.

Ken King, my editor at Cengage, has been a joy to work with on this revision. Thank you, Ken. I would also like to thank all the Cengage staff who worked behind the scenes in bringing this book to life and to Jon-David Hague for being passionate about learning.

A number of dedicated reviewers read draft chapters and the first edition and suggested insightful improvements. In particular, the following people provided invaluable comments: Lisa Armistead, Georgia State University; Lisa K. Comer, University of Northern Colorado; Sussie Eshun, East Stroudsburg University; Ephrem Fernandez, Southern Methodist University; Deborah Jones, Barry University; Scott F. Madey, Shippensburg University; Charlotte Markey, Rutgers University; Cathleen McGreal, Michigan State University; Deborah Fish Ragin, Montclair State University; Christy Scott, Tennessee State University; Elizabeth E. Seebach, Saint Mary's University of Minnesota; Aurora Sherman, Brandeis University; Holly Tatum, Colby-Sawyer College; Debra VanderVoort, University of Hawaii at Hilo; John M. Velasquez, University of the Incarnate Word; Susan Walch, University of West Florida; and Michael Wohl, Carleton University.

I am particularly grateful to my wife Martha Ahrendt for her patience during the entire process and my son and daughter for putting up with my distraction.

# ABOUT THE AUTHOR



**REGAN A. R. GURUNG** is the Ben J. and Joyce Rosenberg Professor of Human Development Psychology at the University of Wisconsin, Green Bay.

Born and raised in Bombay (now Mumbai), India, Dr. Gurung received a bachelor of arts in psychology at Carleton College (Minnesota) and master's and Ph.D. degrees in social and personality psychology at the University of Washington (Washington). He followed with three years at the University of California, Los Angeles, as a National Institute of Mental Health (NIMH) research fellow.

His early work focused on social support and close relationships, in which he studied how perceptions of support from close others influence relationship satisfaction. His later work investigated cultural differences in coping with stressors such as HIV infection, pregnancy, and smoking cessation. He continues to explore cultural differences in health and is heavily involved in pedagogical research directed toward improving teaching and student learning.

He has received numerous local, state, and national grants for his research in health psychology and social psychology regarding cultural differences in stress, social support, smoking cessation, body image, and impression formation. He has published articles in a variety of scholarly journals, including *Psychological Review* and *Personality and Social Psychology Bulletin*, and is a frequent presenter at national and international conferences. He is the author, co-author, or editor of nine other books, including a two-volume *Multicultural Approaches to Health and Wellness in America* (in press); *Evidence-Based Approaches to Teaching* (2012) and *Optimizing Teaching and Learning* (2009, with Beth Schwartz); *Easyguide to APA style* (2011, with Eric Landrum and Beth Schwartz), *Culture & Mental Health: Sociocultural Influences on Mental Health* (2009, with Sussie Eshun); *Getting Culture: Incorporating Diversity across the Curriculum* (2009, with Loreto Prieto); and *Exploring Signature Pedagogies: Approaches to Teaching Disciplinary Habits of Mind* (2009, with Nancy Chick and Aeron Haynie). Dr. Gurung is also a dedicated teacher and has interests in enhancing faculty development and student understanding. He is co-director of the University of Wisconsin System Teaching Scholars Program, has been a UW-Green Bay teaching fellow and a UW System teaching scholar, and is winner of the Founder's Award for Excellence in Teaching and the Founder's



Award for Excellence in Scholarship. He also has won the Carnegie Association's Wisconsin Professor of the Year (2010), the UW System Regent's Teaching Award (2011), and the UW Teaching at Its Best, Creative Teaching, and Featured Faculty awards. He has organized statewide and national teaching conferences and is an active member and past President of the Society for the Teaching of Psychology (APA-Division 2) and was elected fellow of the American Psychological Association. Dr. Gurung is also the current Chair of the Health Psychology (APA, Division 38) Education and Training committee.

When not reading, writing, or helping people stay calm, Dr. Gurung enjoys culinary explorations, travel, and rediscovering his fascination with LEGO.

# Health Psychology: Setting the Stage

## **What Is Health?**

### **Cross-Cultural Definitions of Health**

Common Rubrics for Health

### **Why Is Culture Important?**

Dimensions of Culture

Defining Culture

### **Context and Level of Analysis**

Two Major “Cultures”

### **Advancing Cultural Competence**

### **Some Important Warnings**

### **Health Psychology’s Biopsychosocial Approach**

The Evolution of Health Psychology

## **What Is Health Psychology?**

Main Areas in Health Psychology

### **A Research Primer**

Major Research Designs

FOCUS ON CURRENT ISSUES Profile of  
a Multicultural America

SUMMARY

TEST YOURSELF

KEY TERMS, CONCEPTS, AND PEOPLE

ESSENTIAL READINGS

**A**re you healthy? Sounds like a simple question to answer, right? Take a moment to consider it. What is your answer? If you are like most people, you probably think that you are reasonably healthy. Even if you do not think you are like most people, you may be more like most people than you know (most people do not think that they are like most other people). How did you arrive at your answer? Did you quickly drop down on the floor and see how many push-ups or sit-ups you could perform and how fatigued the exercises made you? Did you put down this book and time how long it took you to sprint to the corner and back? Maybe you put a finger on your wrist and took your pulse. More than likely, if you do not presently have a cold or other illness, if you have not recently stumbled and twisted an ankle, or if you do not have any other physical ailment, you probably answered the opening question with a statement like, “Yes, pretty healthy, I guess.”

---

For most people living in the United States, basic indicators of good health include the absence of disease, injury, or illness, a slow pulse, the ability to perform many physical exercises, or the ability to run fast. You may be surprised to learn that these all represent only one general way of being healthy, the one supported by Western medicine and as seen on television in such popular shows as *Grey’s Anatomy* or *C.S.I.* The definition of what is healthy varies from person to person and is strongly influenced by his or her way of thinking and his or her upbringing. For some, being happy signifies good health. For others, being spiritually satisfied signifies good health. Are some people right and others wrong? What are the best ways to measure health and what are the different factors that influence how healthy we will be? In particular, what are the psychological and sociocultural factors that influence health?

The United States is a diverse nation with approximately 315 million citizens (Census Bureau, 2012). Not all Americans are similarly healthy (Braveman, 2006; Eshun & Gurung, 2009). For example, death rates for African Americans are significantly higher than those of Americans overall due to heart disease, cancer,



© Andrius/Shutterstock.com

### Different Pictures of Health

These individuals may seem healthy to the naked eye. It is important to also look beyond mere physiological health and the lack of disease and consider mental, spiritual, and emotional health.

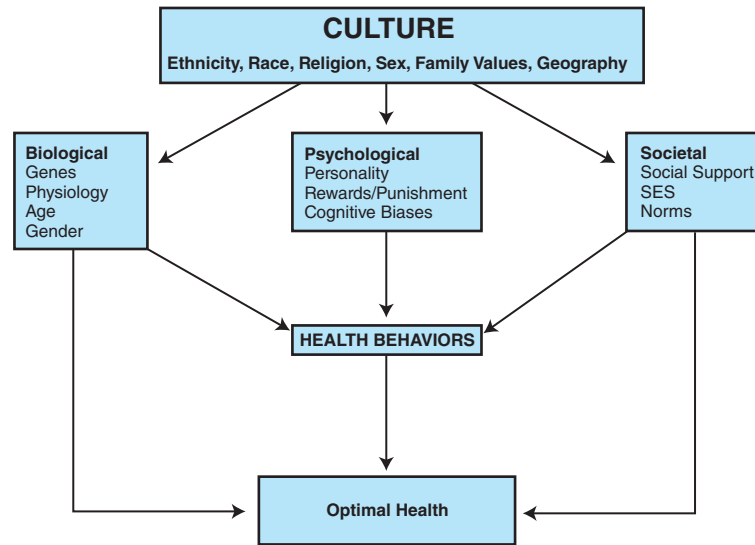
---

diabetes, HIV, and homicide (Gourdine, 2011). Corresponding to such differences, the U.S. health care system has been making active attempts to broaden approaches toward health care in order to fulfill the needs of the diverse population (Schooler & Baum, 2000) and advance cultural competence (Purnell, Davidhizar, Giger, Strickland, Fishman, & Allison, 2011). There are critical cultural variations in the conceptualization, perception, health-seeking behaviors, assessment, diagnosis, and treatment of abnormal behaviors and physical sickness.

Many Americans also have different answers to questions about health. For example, ask a child what being “healthy” is, and it is almost certain that his or her answer will be different from that of an older person. Someone earning less than \$13,000 a year will probably answer differently than someone making more than \$100,000 a year. A Catholic will probably answer differently than a Buddhist. Essentially, a person’s cultural background makes a substantial difference in how he or she answers. Furthermore, our many different actions influence our health—things that often vary by culture as well. The amount of carbonated beverages that you drink can make a difference; younger people tend to drink more of these types of beverages than older people do. What you eat, including the amount of fast food you eat, makes a difference too. As with beverage consumption, some cultural groups tend to eat more fast food than other groups.

In fact, the answer to the simple question, “Are you healthy?” can vary according to where you live, how old you are, what your parents and friends think constitutes health, what your religious or ethnic background is, and what a variety of other factors indicate about you (Gurung, 2012). If you live in California, where the sun shines most of the time, your health habits are probably different than if you live in Wisconsin, where it is often chilly (Nelson et al., 2002). Though both states are leading producers of dairy products in the United States, statistically, Wisconsinites tend to weigh significantly more than Californians (Is it too much cheese? Is it the lack of sun?). Factors such as where you live, your age, or your ethnicity, interact with others to influence what you do and how healthy you will be. “Culture” is the term that adequately captures all these different elements that influence health. Thus, the focus of this book is on how our cultural backgrounds influence our health, shape healthy behaviors, prevent illness, and enhance our health and well-being.

The schematic diagram in Figure 1.1 provides a map for the course we will take in this book. Notice how many different pathways can determine health and how culture is often the basis of biological, psychological, and societal differences. In fact, many of the health disparities, “differences in health that are not only unnecessary and avoidable, but in addition, are considered unfair and unjust” (Whitehead, 1992, p. 433), are due to cultural factors (Braveman, 2006; National Research Council, 2004). There are many examples of disparities: e.g., African Americans’ heart disease death rates are more than 40 percent higher than for European Americans (U.S. Department of Health and Human Services, 2010). The suicide rate among American Indians is 2.2 times higher than the national average, and those living below the level are significantly more depressed than those higher in **socioeconomic status** (SES) (Pratt & Brody, 2008). In general, health care, mental health, and disease incidence vary significantly across cultural groups (Kazak, Bosch, & Klonoff, 2012). The Institute of Medicine performed an assessment on the differences in the kinds and quality of health care received by American racial and ethnic minorities and non-minorities and recommended specific actions (American Medical Association, 2012). See Table 1.1 for the full recommendations. Consequently, this book takes a cultural approach to discussing health psychology.



© Cengage Learning

**FIGURE 1.1** Health and Its Correlates

Our cultural backgrounds, our biology, and our health behaviors all influence whether we will be healthy or not.

**TABLE 1.1**

**Institute of Medicine (IOM) Recommendations to Reduce Differences in the Kinds and Quality of Health Care Received by United States Racial and Ethnic Minorities and Non-Minorities**

Recommendations
<b>General Recommendations</b>
<b>Recommendation 2-1:</b> Increase awareness of racial and ethnic disparities in health care among the general public and key stakeholders.
<b>Recommendation 2-2:</b> Increase health care providers’ awareness of disparities.
<b>Legal, Regulatory, and Policy Interventions</b>
<b>Recommendation 5-1:</b> Avoid fragmentation of health plans along socio-economic lines.
<b>Recommendation 5-2:</b> Strengthen the stability of patient-provider relationships in publicly funded health plans.
<b>Recommendation 5-3:</b> Increase the proportion of underrepresented U.S. racial and ethnic minorities among health professionals.
<b>Recommendation 5-4:</b> Apply the same managed care protections to publicly funded HMO enrollees that apply to private HMO enrollees.
<b>Recommendation 5-5:</b> Provide greater resources to the U.S. DHHS Office for Civil Rights to enforce civil rights laws.
<b>Health Systems Interventions</b>
<b>Recommendation 5-6:</b> Promote the consistency and equity of care through the use of evidence-based guidelines.
<b>Recommendation 5-7:</b> Structure payment systems to ensure an adequate supply of services to minority patients, and limit provider incentives that may promote disparities.
<b>Recommendation 5-8:</b> Enhance patient-provided communication and trust by providing financial incentives for practices that reduce barriers and encourage evidence-based practice.
<b>Recommendation 5-9:</b> Support the use of interpretation services where community need exists.
<b>Recommendation 5-10:</b> Support the use of community health workers.
<b>Recommendation 5-11:</b> Implement multidisciplinary treatment and preventive care teams.

(continues)

TABLE 1.1 (continued)

### Institute of Medicine (IOM) Recommendations to Reduce Differences in the Kinds and Quality of Health Care Received by United States Racial and Ethnic Minorities and Non-Minorities

Recommendations
<p><b>Patient Education and Empowerment</b></p> <p><b>Recommendation 5-12:</b> Implement patient education programs to increase patients' knowledge of how to best access care and participate in treatment decisions.</p>
<p><b>Cross-Cultural Education in the Health Professions</b></p> <p><b>Recommendation 6-1:</b> Integrate cross-cultural education into the training of all current and future health professionals.</p>
<p><b>Data Collection and Monitoring</b></p> <p><b>Recommendation 7-1:</b> Collect and report data on health care access and utilization by patients' race, ethnicity, socioeconomic status, and where possible, primary language.</p> <p><b>Recommendation 7-2:</b> Include measures of racial and ethnic disparities in performance measurement.</p> <p><b>Recommendation 7-3:</b> Monitor progress toward the elimination of health care disparities.</p> <p><b>Recommendation 7-4:</b> Report racial and ethnic data by OMB categories, but use subpopulation groups where possible.</p>
<p><b>Research Needs</b></p> <p><b>Recommendation 8-1:</b> Conduct further research to identify sources of racial and ethnic disparities and assess promising intervention strategies.</p> <p><b>Recommendation 8-2:</b> Conduct research on ethical issues and other barriers to eliminating disparities.</p>

Source: Reprinted with permission from "Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care, 2003," by the National Academy of Sciences, Courtesy of the National Academies Press, Washington, D.C.

To begin, I discuss the dissimilar ways we define and measure health and culture. Next, the discussion introduces you to the field of health psychology and provides an overview of what health psychology covers. Finally, the chapter concludes with a profile of a multicultural America. We look at how each of us is "multicultural," especially focusing on differences in family structure, and how sociodemographic variables such as gender and income level are critical aspects of culture.



© Comstock Images/Alamy Limited



© BananaStock/Alamy Limited

#### Key Health Behaviors

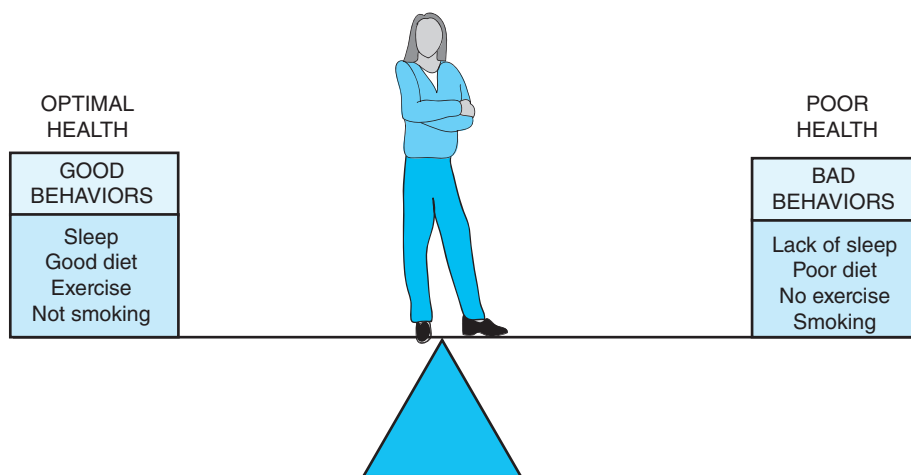
Getting six to eight hours of sleep, being physically active, eating a nutritional meal, and not smoking are all important health behaviors that can prolong life.

## WHAT IS HEALTH?

Newspaper headlines scream the latest health findings almost every day. Drinking soda can give you gout (Choi & Curhan, 2008); barefoot running may be better for you (Daoud, Geissler, Wang, Saretsky, Daoud, & Lieberman, 2012); diets are not the answer to the obesity crisis (Mann et al., 2007). Not only do news agencies report on countless research every day, but much of the information presented is contradictory. Much of the media blitz capitalizes on the fact that people, in general, seem to be paying more attention to attaining healthier lifestyles. Supermarket shelves overflow with supplements to enhance one's quality of life, and bookstores brim with recommendations on how to live better. The answer to the question, "What is health?" depends on who you ask. Let's start with the **WHO** (World Health Organization). This organization defines **health** as a state of complete physical, mental, and social well-being (WHO, 2012).

As you can see, this is a general definition and encompasses almost every aspect of life. One aspect that could be added is "spiritual." Definitions such as this one are relatively common when we look at books or magazines that cover health in a nonspecific way. One way to see health is as a continuum with optimal health (broadly defined) at one end and poor health at the other, sitting on two ends of a great big teeter-totter (Figure 1.2). The number of healthy things we do in life determines our relative position (closer to optimal health or closer to death) at a particular moment in time. The healthy things we do (e.g., eat and sleep well, exercise, and take time to relax) make the optimal health side of the teeter-totter heavier. The unhealthy things we do (e.g., get stressed, smoke, and drink excessively) make us tilt toward the poor health side of the balance.

This imagery also captures how we sometimes rationalize some unhealthy behaviors by practicing some healthy behaviors to ensure the teeter-totter is leaning in the right direction and we are moving toward the optimal end of the



**FIGURE 1.2** Health Is a Continuum

The sum of the different health behaviors we perform influence where we stand on the balance of health. This is a dynamic process, and although good health behaviors can compensate for some bad ones, you can optimize your health by loading the balance in your favor by practicing as many healthy behaviors as possible.



spectrum. Of course, this analogy can only go so far: If you have smoked for 20 or 30 years, it will be quite difficult to compensate the balance. Furthermore, it is difficult to compare the extent to which different behaviors translate into longevity. Just because you do not smoke does not mean that you can drink excessively. Just because you may exercise a lot does not mean you can afford to avoid a nutritional diet. Keeping your life tilted toward optimal health is a daily challenge and a dynamic process.

## CROSS-CULTURAL DEFINITIONS OF HEALTH

In Western medical circles, health is commonly defined as “the state in which disease is absent” (Galanti, 2008). Of course, this definition focuses primarily on the physical or biological aspect of life and correspondingly, this approach taken by Western medicine is often referred to as the **biomedical approach** to health. Non-western societies have a different understanding of health. For example, in **traditional Chinese medicine** (TCM), health is the balance of yin and yang, the two complementary forces in the universe (Kaptchuk, 2000; Liao, 2011). Yin and yang are often translated into hot and cold (two clear opposites), referring to qualities and not temperatures. To be healthy, what you eat and drink and the way you live your life should have equal amounts of hot qualities and cold qualities. Balancing hot and cold is a critical element of many different cultures (e.g., Chinese, Indian, and even Mexican), although the foods that constitute each may vary across cultures. Some “hot” foods include beef, garlic, ginger, and alcohol. Some “cold” foods include honey, most greens, potatoes, and some fruits (e.g., melons, pears). This book covers a complete description of diverse approaches to health in Chapter 2.

Other cultures also believe that health is the balance of different qualities (Table 1.2) (Galanti, 2008). Similarly, ancient Indian scholars and doctors defined health as the state in which “the three main biological units—enzymes, tissues, and excretory functions—are in harmonious condition and when the mind and senses are cheerful.” Referred to as **Ayurveda**, or “Knowledge of Life,” this ancient system of medicine focuses on the body, the sense organs, the mind, and the soul (Chopra & Doiphode, 2002; Svoboda, 2004). Another way

**TABLE 1.2**  
Some Cross-Cultural Definitions of Health

Culture	Definition
Western	Absence of disease
Chinese	Balance of yin and yang Balance of hot and cold
Indian	Balance of mind, body, and spirit
Mexican	Balance of body types and energies
American Indian	Spiritual, mental, and physical harmony Harmony with nature
Hmong	Preventing soul loss
Ethiopian	Preventing spirit possession

of looking at health is the approach of Mexican Americans, the largest ethnic group in the United States. Mexican Americans believe that there are both natural biological causes for illness (similar to Western biomedicine) and spiritual causes (Rothschild et al., 2012; Trotter & Chavira, 1997). Though Mexican American patients may go to a Western doctor to cure a biological problem, only *curanderos*, or healers, can be trusted to cure spiritual problems.

American Indians do not even draw distinctions between physical, spiritual, and social entities or between religion and medicine (Cohen, 2003). Instead, most tribes (especially the Navajo) strive to achieve a balance between human beings and the spiritual world (Alvord & Van Pelt, 2000). The trees, the animals, the earth, the sky, and the winds are all players in the same game of life. Most of the world's cultures use a more global and widespread approach to assessing health instead of just looking at whether or not disease is absent to determine health (as the biomedical model and most Western approaches do). We will discuss each of these different approaches to health in more detail in the next chapter.

### SYNTHESIZE, EVALUATE, APPLY

- How has our view of the mind-body connection changed over time?
- What is the best way to view health? What do you feel is the best definition?
- How do different cultures vary in their definition of health?

### Common Rubrics for Health

Regardless of which one we consider, each definition of health is broad and ambiguous. How can we measure mental, spiritual, and social health? Does simply the absence of physical problems or disease equate to health? Can anyone even measure a balanced yin and yang? The answer is no, not really, or at least not by any measure that we know of or use in the United States or in the scientific community and not in a way on which we can all agree. To understand what keeps us healthy, it is important to start with a good measurement of health. As you learn about the field of health psychology, you will see that although most researchers will use a common understanding and relatively broad definition of health to guide their general thinking (e.g., a general state of well-being), every researcher uses a different specific measure of health to help understand what makes us healthy.

Take a quick look at the major research journals that report on health psychological research, and you will see that different studies use slightly different measures. The main categories of measures vary with each journal. For example, *Health Psychology* is the leading journal in the field and publishes the results of studies on the topic of health psychology. This journal features many studies that define health in terms of the extent to which health-improving behaviors are practiced (e.g., how much did the participants in the study exercise in a week?) or in terms of psychological well-being (e.g., what were the participants' scores on the Profile of Mood States, a common measure of mood?). You will also see many studies that assess the extent to which health-diminishing behaviors are practiced. For example, how much does a person smoke? What predicts the amount of alcohol consumed?

Other journals, such as *The Annals of the Society for Behavioral Medicine* and *Psychosomatic Medicine*, measure many specific physiological outcomes. For example, what are the levels of immune cells in the blood? Table 1.3 shows sample contents from the three major journals. The bottom line is that we

**TABLE 1.3**  
Sample Contents from the Major Health Psychology Journals

<i>Health Psychology</i> (2012, Volume, 31)	<i>Annals of Behavioral Medicine</i> (2012, Volume 43)	<i>Psychosomatic Medicine</i> (2012, Volume 74)
<ul style="list-style-type: none"> <li>• Chronic stress, daily stressors, and circulating inflammatory markers</li> <li>• An application of the theory of planned behavior—a randomized controlled food safety pilot intervention for young adults</li> <li>• Differential cognitive effects of cycling versus stretching/coordination training in middle-aged adults</li> <li>• Higher physical fatigue predicts adherence to a 12-week exercise intervention in women with elevated blood pressure</li> </ul>	<ul style="list-style-type: none"> <li>• Non-adherence to immunosuppressive medications in kidney transplantation: Intent vs. forgetfulness and clinical markers of medication intake</li> <li>• Stress, coping, and circadian disruption among women awaiting breast cancer surgery</li> <li>• Acute exercise improves physical sexual arousal in women taking antidepressants</li> <li>• AIDS-related stigma, HIV testing, and transmission risk among patrons of informal drinking places in Cape Town, South Africa</li> </ul>	<ul style="list-style-type: none"> <li>• Mood problems increase the risk of mortality in patients with lacunar infarcts: The SMART-MR study</li> <li>• Association between self-reported dental health status and onset of dementia: A 4-year prospective cohort study of older Japanese adults from the Aichi Gerontological Evaluation Study (AGES) project</li> <li>• Combining psychosocial data to improve prediction of cardiovascular disease risk factors and events: The National Heart, Lung, and Blood Institute-sponsored Women's Ischemia Syndrome Evaluation Study</li> <li>• Association of in vivo <math>\beta</math>-Adrenergic receptor sensitivity with inflammatory markers in healthy subjects</li> </ul>

determine if people are healthy by measuring a variety of aspects, such as: basic physiological levels of their bodies' various systems (e.g., blood pressure, heart rate, or cholesterol level); how much they practice healthy behaviors (e.g., exercising); their psychological well-being (e.g., levels of depression or optimism); and how well they practice “healthy” psychological ways (e.g., good coping skills).

## WHY IS CULTURE IMPORTANT?

One easy answer is to explain why there are significant differences in the health of European Americans and non-European Americans. However, that is not all.

What do your mother, your best friend, and your religion have in common? They each constitute a way that you learn about acceptable behaviors. Take parents, for example. Whether we do something because they told us to (e.g., “Eat your greens!”) or exactly because they told us not to (e.g., “Don't smoke!”), they have a strong influence on us. If our friends exercise, we will be more likely to exercise. Similarly, religions have different prescriptions for what individuals should and should not do. Muslims should not eat pork or drink alcohol. Hindus are prohibited from eating beef. Even where we live can determine our habits and can help predict the diseases we may die from as studied in detail by the area of health geography (Andrews, 2002; Greenhough, 2011). Parents, peers, religion, and geography are a few of the key determinants of our behaviors and are examples of what makes up our culture.