

THIRD EDITION

Essentials of Health Behavior

Social and Behavioral Theory in Public Health

Mark Edberg, PhD

Associate Professor, The George Washington University Milken Institute School of Public Health





World Headquarters Jones & Bartlett Learning 5 Wall Street Burlington, MA 01803 978-443-5000 info@jblearning.com www.jblearning.com

Jones & Bartlett Learning books and products are available through most bookstores and online booksellers. To contact Jones & Bartlett Learning directly, call 800-832-0034, fax 978-443-8000, or visit our website, www.jblearning.com.

Substantial discounts on bulk quantities of Jones & Bartlett Learning publications are available to corporations, professional associations, and other qualified organizations. For details and specific discount information, contact the special sales department at Jones & Bartlett Learning via the above contact information or send an email to specialsales@jblearning.com

Copyright © 2020 by Jones & Bartlett Learning, LLC, an Ascend Learning Company

All rights reserved. No part of the material protected by this copyright may be reproduced or utilized in any form, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without written permission from the copyright owner.

The content, statements, views, and opinions herein are the sole expression of the respective authors and not that of Jones & Bartlett Learning, LLC. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not constitute or imply its endorsement or recommendation by Jones & Bartlett Learning, LLC and such reference shall not be used for advertising or product endorsement purposes. All trademarks displayed are the trademarks of the parties noted herein. *Essentials of Health Behavior: Social and Behavioral Theory in Public Health, Third Edition* is an independent publication and has not been authorized, sponsored, or otherwise approved by the owners of the trademarks or service marks referenced in this product.

There may be images in this book that feature models; these models do not necessarily endorse, represent, or participate in the activities represented in the images. Any screenshots in this product are for educational and instructive purposes only. Any individuals and scenarios featured in the case studies throughout this product may be real or fictitious, but are used for instructional purposes only.

This publication is designed to provide accurate and authoritative information in regard to the Subject Matter covered. It is sold with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional service. If legal advice or other expert assistance is required, the service of a competent professional person should be sought.

16099-4

Production Credits

VP, Product Management: David D. Cella Director of Product Management: Michael Brown Product Manager: Sophie Fleck Teague

Product Specialist: Carter McAlister

Production Manager: Carolyn Rogers Pershouse

Vendor Manager: Molly Hogue

Associate Production Editor: Jamie Reynolds Senior Marketing Manager: Susanne Walker

Manufacturing and Inventory Control Supervisor: Amy Bacus

Composition: codeMantra U.S. LLC

Library of Congress Cataloging-in-Publication Data

Names: Edberg, Mark Cameron, 1955-author.

Title: Essentials of health behavior: social and behavioral theory in public health/Mark Edberg, MA, PhD, Associate Professor, Department of Prevention and Community Health, Milken Institute School of Public Health, with secondary appointments in the Department of Anthropology and Elliot School of International Affairs,

The George Washington University, Washington, DC.

Description: Third edition. | Burlington, MA: Jones & Bartlett Learning, [2018] |

Includes bibliographical references and index.

Identifiers: LCCN 2018016319 | ISBN 9781284145359 (paperback) Subjects: LCSH: Social medicine. | Health behavior. | Public health. |

BISAC: EDUCATION/Counseling/General.

Classification: LCC RA418 .E326 2018 | DDC 362.1—dc23 LC record available at https://lccn.loc.gov/2018016319

6048

Printed in the United States of America 22 21 20 19 18 10 9 8 7 6 5 4 3 2 1

Project Management: codeMantra U.S. LLC Cover Design: Kristin E. Parker Text Design: Kristin E. Parker

Director of Rights & Media: Joanna Gallant Rights & Media Specialist: John Rusk

Media Development Editor: Shannon Sheehan Cover Image (Title Page, Part Opener, Chapter Opener):

Cover image (Title Page, Part Opener, Chapter Opener)

© Corey Jenkins/Image Source/Getty Images Printing and Binding: Bind-Rite Robbinsville Cover Printing: Bind-Rite Robbinsville This book is dedicated to my family for their support and tolerance; to all those at The George Washington University and at Jones & Bartlett Learning who are behind the Essential Public Health series; and, most importantly, to all those already working or planning to work on the front lines to help improve the lives and health of so many people in the United States and around the world. Your work is a testament to humanity at its best.

Contents

Prologueix	The Context of Theory in Western Tradition27
Prefacexi	Antecedents29
Acknowledgmentsxiii	Chapter Questions33
About the Author xv	References
About the Author	Chantan A. Individual Haalth Dahavian
	Chapter 4 Individual Health Behavior
SECTION I On Health and	Theories 35
Behavior—An Introduction 1	What Are We Talking About?35
	The Health Belief Model
Chapter 1 Introduction: Links Between	The Theory of Planned Behavior
Health and Behavior 3	(Formerly Known as the Theory of Reasoned Action)39
The Setting: Daily Life	Two Models of Behavior Change in Stages:
The Questions4	The Transtheoretical Model and the
The Complex Social-Ecological Web 5	Precaution Adoption Process Model43
In This Text	A Few More Individual-Level Theories
Chapter Questions8	for Your Reference49
Your Thoughts8	Chapter Questions49
References8	References
Chapter 2 Health Issues and Behavior 9	Chapter 5 Social, Cultural, and
	Environmental Theories (Part I) 51
Obesity9	What Are We Talking About?51
Youth Violence	Social Cognitive Theory, Formerly Known
HIV/AIDS	as Social Learning Theory52
Behaviors, Theories, and Interventions	Using SCT
Chapter Questions	Social Network Theory56
References	Social Process Theories and Approaches:
	Diffusion of Innovations and
SECTION II On the Roots of	Social Marketing59
Behavior—A Multidisciplinary	Chapter Questions
Survey 23	References
,	Chapter 6 Social, Cultural, and
Chapter 3 Social-Behavioral Theory	Environmental Theories (Part II)65
and Its Roots 25	Communications Theory
Thinking About Theory25	Community and Organizational Change

vi Contents

Political Economy74	SECTION III Putting Theory into Practice 115
Anthropology and Cultural Theory: Behavior as Adaptation, Behavior	Practice 115
as Meaningful and Symbolic75	Chapter 10 Communities and Populations
Chapter Questions	as the Focus for Health
References	Promotion Programs 117
Chapter 7 Multilevel Theories 81	Community Intervention or Intervention in a Community?
Now What Are We Talking About?81	Community Intervention and the
The Granddaddy: Urie Bronfenbrenner's	Complexity of Communities
Ecological Systems Theory82	Communities as Experts
Flay's Theory of Triadic Influence	Population-Based Health Promotion
The Integrated Behavior Model89	Tailoring
Examples of Other Multilevel Models91	Sustainability
Chapter Questions92	Chapter Questions
References93	References
Chapter 8 The New Frontier—Behavioral	Chapter 11 Application of Theory:
Epigenetics or How Nurture	Schools and Worksites 127
Shapes Nature and Vice Versa 95	Settings for Intervention
Philosophy Again: The Nature—	Schools
Nurture Debate96	Workplace Settings
Nature–Nurture and Advances	Chapter Questions
in Genetic Science	References
The Emerging Science of Epigenetics	Chanter 12 Application of Theory
The Real-World Implications: How Does This Affect Health Behavior?	Chapter 12 Application of Theory:
Epigenetics and Plasticity99	Communications Campaigns 139
Implications for Intervention	Communicating Through the Public Media 139
Chapter Questions	Communications Campaigns
References	Health Behavior Theory and Communications
	Campaigns/Mass Media Campaigns
Chapter 9 Doing Something About It:	Program Examples
The Ecological Perspective	References
and the Move from Theory	Neithers
to Practice 103	Chapter 13 Application of Theory:
Where Do You Start? Picking Your Battles 104	Global Health149
Planning Approaches—A Sampler 104	The Setting: Health in the
Chapter Questions	Global Context
References	The Global Health System

	Contents vii
Theory and Its Application152Program Examples157Chapter Questions159References159	On Evaluation Methods.181What Kinds of Outcome or Impact?184Chapter Questions.184References185
Chapter 14 Application of Theory: High-Risk and Special Populations 161	SECTION IV Current Trends 187
Applying Behavioral Theory to High-Risk Populations and Contexts	Chapter 16 Culture, Diversity, and Health Disparities: Are Current Theories Relevant?
It Relate to Theory? 175	Behavioral Theory in Public Health: A Brief Introduction 201
ntroduction	The Possibilities
Types of Evaluation	Glossary 207
Jsing a "Logic Model" to Set Up an Evaluation	Index

Prologue

Essentials of Health Behavior was one of the first books in the Essential Public Health series, which now includes over 20 books. It set a standard for the series. Dr. Edberg's writing engages students as he takes them on a journey connecting theory and practice while reassuring them every step of the way. The Third Edition continues in this tradition with its emphasis on making theory come to life using stories and scenarios. In addition to updates throughout the text, a new chapter on behavioral epigenetics has been added to the Third Edition. Epigenetics is a new area of health behavior that looks at the interaction between socialenvironmental influences, genetic expression, and their potential impacts on behavior.

Dr. Edberg's writing allows students to understand these complex theories in ways that relate to their lives. From cigarette smoking, to eating habits, to our daily routine, our everyday behaviors affect our health in ways that we often fail to appreciate or even notice. Beyond our individual behaviors, there are larger social and population forces at play in all of our lives, which serve to mold and further reinforce our individual behavior.

Essentials of Health Behavior skillfully combines an emphasis on individual behavior with a clear focus on the social factors that influence the "big picture," population health perspective. Mark Edberg's approach grounds the practical everyday behaviors within key theories of human behavior drawn from the social sciences. Building on this understanding of health behavior, Essentials of Health Behavior examines a range of methods for changing behavior and applies these methods to programs in health promotion and disease prevention.

Dr. Edberg brings to his writing the lessons of extensive teaching experience at both the undergraduate and graduate levels—at The George Washington

University Milken Institute School of Public Health and its Columbian College of Arts and Sciences, he has taught health behavior theory and qualitative research courses, and courses that focus on the impact of culture on health—as well as his training and experience as an anthropologist and social researcher with a public health focus. As an anthropologist, he has a unique understanding of the impact culture and social organization have on individual behavior.

Essentials of Health Behavior can be used in social and behavioral sciences as well as in the public health curriculum looking at the many factors that affect health behavior. Health behavior is a key building block for curriculum in health education. In addition, health professions educators in the clinical disciplines are increasingly coming to appreciate that good outcomes rest on understanding the social and economic factors that affect individual behavior.

As the behavioral and social sciences become more integrated in preparing for the clinical professions, the Third Edition of *Essentials of Health Behavior* provides a structured curriculum designed to fulfill these needs. The recent revision of the Medical College Admissions Test (MCAT) now includes as one of its four sections Psychological, Social, and Biological Foundations of Behavior. *Essentials of Health Behavior* is an excellent text for addressing many of these issues and making health behavior more relevant to premedical students.

Students in a wide range of disciplines will benefit from *Essentials of Health Behavior*. They will take away key concepts that will serve them well for many years to come. They will find themselves engaged in a voyage of discovery and enjoying the journey.

Richard Riegelman, MD, MPH, PhD Series Editor—Essential Public Health

Preface

Health promotion, education, and prevention programs ultimately focus on *changing health behavior*. But what do we mean when we say "health behavior?" Is health-related behavior really something different than any other behavior? There is no reason to think it is. To help us understand it, we can draw from the fascinating, multidisciplinary, and ongoing quest to try and understand *human behavior* in general. That, of course, is a big task, and no book can cover that in any adequate way. What we can do is provide an introduction to the kinds of theoretical approaches that are used or could be used in developing and implementing health promotion programs and show how such approaches are applied to real-life settings.

It is my hope that combining these elements together in one book will fill an important gap for undergraduate programs in public health and will provide an important piece of the foundation necessary for understanding the field. It is important that students in public health have a solid grounding in social/behavioral theory, and it is particularly important that they gain a general understanding in this subject area before they proceed to a graduate program or move to direct involvement in prevention and health education programs that apply such theory. Why? Because proper use of theory in public health means, in part, the ability to place particular theoretical approaches in context, to have some sense of their origins, their underlying assumptions, their strengths and weaknesses, and the programs and situations for which they might or might not be most applicable.

More and more, public health interventions and their evaluations are guided by theoretical frameworks. Program goals, program components, and the types of data used as evidence of program success are, thus, built on specific theoretical underpinnings. Without at least a general background, application of theory can all too easily become formulaic and inappropriate form without substance. A key aim of this book, in that sense, is to provide the groundwork for understanding, assessing, and effectively applying theory.

In that spirit, *Essentials of Health Behavior* is designed to:

- 1. Introduce students to the relationship between behavior and a selection of major health issues.
- 2. Provide an introductory background to the kinds of social and behavioral theories that guide our understanding of health-related behavior and that form the background for health promotion and prevention efforts.
- 3. Explore some of the ways in which these theories and approaches are used in applied health promotion efforts.

In the first section, we will introduce the relationship of behavior to health, review a sample of current and ongoing health problems (domestic and international), and, in a broad sense, discuss the relationship of behavior to those health problems. In the second section, we will provide a context from which to understand theory, and survey theoretical perspectives from psychology, social psychology, sociology, anthropology, ecology and other disciplines that offer explanations of human behavior, keeping in mind that health behavior is one domain of human behavior in general—thus linking the field of health promotion and prevention to the broader context of social/behavioral theory. The second section then goes on to outline and explain the range of social and behavioral theories used in health promotion across social-ecological levels, from individual-level theories all the way out to theories that address socioeconomic, cultural and political context, as well as a brief, new introduction to the emerging field of behavioral epigenetics. The third section will introduce students to theory-based program planning and application, providing real-world examples across a range of settings-including community, school, and workplace programs, global health, mass media/communications, and programs targeting special populations. This section will also show how theory links program design, implementation, and evaluation. In the fourth section, current issues in the applied field of health behavior/health promotion will be

xii Preface

reviewed, and we will present some of the occupational and career possibilities for which material in the book is relevant.

New to the Second Edition

In the *Second Edition*, data and other information were updated throughout, with additional applied examples of theoretical applications. A new chapter on multilevel theory was added because of the growing recognition that complex community contexts require interventions that address multiple levels.

New to the Third Edition

For the *Third Edition*, data and other information have again been updated throughout, with additional applied examples of theoretical applications. Information about several new or additional theories has been added to chapters on individual theory and multilevel theory. Significantly, a new chapter on behavioral epigenetics has been added to the *Third Edition*. This is a brand-new area of theory that seeks to examine the interaction between social–environmental influences and genetic expression, and the potential impacts on behavior.

○ Corey Jenkins/Image Source/Getty Images

Acknowledgments

One can never attempt to do a book alone, and with that in mind, I am deeply grateful to a number of individuals who provided invaluable support and assistance in preparing this book:

- Richard Riegelman, MD, MPH, PhD, for his leadership in compiling the series and for shepherding everyone through the process.
- For the *Third Edition*, Tigest Mekonnen, MPH candidate, and Ichhya Pant, MPH/DrPH candidate, for able assistance in updating the data and intervention examples throughout. I also want to acknowledge students in the doctoral social/behavioral theory seminar in the Department of Prevention and Community Health, who, as always, are working with recent theory and application, and raising questions that push me to seek additional answers.
- For the *Second Edition*, Natalie Terens, MPH, for thorough and timely help in preparing the manuscript.
- From the *First Edition* and carried into this revised edition, input and expert critique from Kristen Corey, PhD (Chapter 2); Deborah Galvin, PhD, and Julia Lear, PhD (Chapter 10); Lorien Abroms, PhD (Chapter 11); and Laurie Krieger, PhD (Chapter 12).
- The Department of Prevention and Community Health, Milken Institute School of Public Health at The George Washington University, for overall support and expertise.

And, of course, thanks to my wife Haykham and children Eleazar and Jordana for their tolerance and support across all three editions.

© Corey Jenkins/Image Source/Getty Images

About the Author

Mark Edberg, PhD, MA, is Associate Professor in the Department of Prevention and Community Health at The George Washington University Milken Institute School of Public Health, with secondary appointments in the Department of Anthropology and Elliott School of International Affairs. Dr. Edberg is an applied and academic anthropologist with more than 25 years of experience in social research, interventions, evaluation, strategic planning for agencies, and communication, primarily in public health, in both domestic and global contexts. Key areas of focus have been high-risk and marginalized populations, social determinants of health, health disparities, minority health, at-risk youth, prevention of youth violence, prevention of HIV/AIDS and sexually transmitted infections, substance abuse, general issues of poverty and health, and theory development. He currently directs a health disparities research center (Avance Center for the Advancement of Immigrant/Refugee Health) that has been funded by the National Institute on Minority Health and Health Disparities as well as the Centers for Disease Control and Prevention (CDC), and he has directed other research and interventions funded by CDC, National Institute on Drug Abuse, U.S. Office of Minority Health, the Substance Abuse and Mental Health Services Administration, the Administration on Children, Youth, and Families, and other U.S. Department of Health and

Human Services agencies. Globally, he has worked with the Gates Foundation in Ethiopia, with UN International Children's Emergency Fund (UNICEF) in the Latin America-Caribbean regional office and in Belize, and, as Director of the Center for Social Well-Being and Development, he has worked on projects for UNICEF in Belize, South Africa, Indonesia, Ghana, and Jamaica. Previously, he has provided consulting and support for the Organization of American States, U.S. Agency for International Development, Urban Institute, and local governments. Dr. Edberg teaches graduate courses in social/behavioral theory, qualitative research methods, and culture and health, as well as courses in the Anthropology Department. He has published numerous journal articles, and his recent books include an edited volume (and chapter) on youth violence and economic factors; a book on culture, health, and diversity; this textbook on social and behavioral theory in public health; an accompanying reader; and a book documenting his U.S.-Mexico border research on narcocorridos and the narcotrafficker persona (and implications for popular understanding of risks for violence, HIV/AIDS, and other issues). He is also a recipient of the Praxis Award for excellence in applied anthropology, a Salzburg Global Seminar Fellowship, a Fulbright Senior Specialist award, and is a Fellow of the Society for Applied Anthropology.