

Health Behavior Theory *for Public Health*

PRINCIPLES, FOUNDATIONS, AND APPLICATIONS

Ralph J. DiClemente, PhD

Charles H. Candler Professor
Rollins School of Public Health
Emory University
Atlanta, GA

Laura F. Salazar, PhD

Associate Professor
Institute of Public Health
Georgia State University
Atlanta, GA

Richard A. Crosby, PhD

DDI Endowed Professor
Department of Health Behavior
College of Public Health
University of Kentucky
Lexington, KY



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

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Production Credits

Publisher: Michael Brown
Managing Editor: Maro Gartside
Editorial Assistant: Chloe Falivene
Associate Production Editor: Cindie Bryan
Senior Marketing Manager: Sophie Fleck Teague
Manufacturing and Inventory
Control Supervisor: Amy Bacus
Composition: Circle Graphics, Inc.

Cover Design: Kate Ternullo
Photo Researcher: Sarah Cebulski
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Printing and Binding: Malloy, Inc.
Cover Printing: Malloy, Inc.

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Library of Congress Cataloging-in-Publication Data

DiClemente, Ralph J.

Health behavior theory for public health : principles, foundations, and applications / Ralph J. DiClemente, Laura F. Salazar, Richard A. Crosby.

p. ; cm.

Includes bibliographical references and index.

ISBN-13: 978-0-7637-9753-9 (pbk.)

ISBN-10: 0-7637-9753-7 (pbk.)

1. Health behavior. 2. Public health. I. Salazar, Laura Francisca, 1960- II. Crosby, Richard A., 1959- III. Title. [DNLM: 1. Health Behavior. 2. Public Health. 3. Health Promotion. 4. Models, Theoretical. WA 100] RA776.9.D55 2013 614.4—dc23

2011023109

6048

Printed in the United States of America

15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

Dedications

To my beautiful daughter Sahara and lovely wife Gina, who provide daily inspiration, and to my students, the change agents of tomorrow. RJD

To my parents, both medical professionals, who inspired me to care about people's health, and ultimately, the public's health. LFS

To all of my past graduate students who have excelled in public health practice and research—your efforts are making a difference. RAC

To Dr. Larry Green—a giant in the field of health promotion and a true ecological thinker. We appreciate your work and the support you have given us in our efforts. RJD, LFS, RAC

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Foreword

“In theory, there is no difference between theory and practice.
But, in practice, there is.”
—Jan L.A. van de Snepscheut

Public health practitioners and academics have each taken a share of the blame for the gap between theory and practice. The blame heaped on academics is that their theories are too often narrowly focused on the psychological variables associated with individual health behavior, and too seldom tested in situations or with people like those typically already seen in public health. The blame accorded to practitioners, program planners, and policymakers is that they do not know theory and do not use it effectively in practice.

A parallel set of accusatorial attributions are pinned on practitioners and researchers for the gap between evidence and practice: the practitioners don't seem to use the evidence for what works, and the researchers don't seem to produce evidence about interventions that are seen as relevant, useful, and actionable in the typical situations of most practitioners. “Natural” experiments, or evaluations of real-time, real-place, real-population programs, rather than “unnatural” experimental trials designed to test theories, have been seen as more relevant to practitioners, program planners, and policymakers. The tests of theories in highly controlled experimental trials that control optimally for threats to internal validity are seen often by those working in the fields of practice to lack external validity or generalizability to their varied circumstances. This book encourages the use and evaluation of theory in the context and the process of planning and implementing programs and interventions.

As the fields of public health face the changing challenges and threats to maintaining and improving the health of populations, they are blessed on one hand with a growing pool of evidence for “what works.” But alas, the evidence is too often limited in its relevance to the specific population and circumstances in which it would be applied. Policymakers, program planners,

and practitioners must confront the gap between the evidence for “what *can* work” or “what *did* work (under controlled trial conditions)” and “what *will most likely* work” in their particular population and set of conditions. This is where theory comes to the rescue as a complement to and interpreter of the evidence. Theory enables the user of evidence to examine the assumptions and conditions under which the evidence of cause–effect or effectiveness was generated, and to decide whether those assumptions and conditions apply to the setting and population in which the evidence would be applied.

Theories have already put a variety of evidence to the test of generalizability because the degree of generalizability is what qualifies a declared relationship between causes and effects, or interventions and outcomes, as a theory. A theory is the most generalizable statement that can be made about a relationship. It is, therefore, a valuable tool or set of tools (or “toolbox,” as this book characterizes it, because several theories may pertain to the causal or intervention relationship in question and several principles in their application may apply) for the practitioner to query the relevance and appropriate fit of evidence to the local situation.

Now, returning to the critique of many theories imported from the behavioral sciences into public health as too narrow, it becomes a matter for practitioners in planning programs of using or blending multiple theories, just as they must use more than one source of evidence. The now fully entrenched ecological approach to public health program planning has forced the recognition that most theories and most evidence apply to one level of influence among the several that bear on a particular health problem or goal for a community. To plan programs addressing the more complex issues of our time, such as obesity, tobacco control and other substance abuse, HIV/AIDS, and disaster preparedness, multiple theories must be brought to bear on the multiple levels of influence.

The development of social and behavioral sciences in schools of public health and in the U.S. Public Health Service came at a time when the most accessible behavioral scientists interested in health behavior were psychologists. The health belief model, for example, was developed in research conducted by U.S. Public Health Service psychologists (Hochbaum, Rosenstock, Kegeles, Leventhal, et al.) recruited to the division of public health education by Mayhew Derryberry in the 1950s. Psychologists, including some of these listed previously, took up many of the initial behavioral science professorships in schools of public health in the 1960s and dominated most of the departments of health behavior and health education for at least two decades after that. Today, increasing numbers of sociologists, economists, political scientists, and anthropologists have brought their theories to public health, so that the array of theories and their utility in broader community health or population health interventions has helped health promotion to rehabilitate the ecological approach of integrating interventions on several levels, from individual behavior, to family, organizational, and community behavior, including policies, regulations, social norms, environmental and economic inducements, facilitators, or constraints.

Ironically, the ecological approach was one of the earliest conceptualizations of public health to distinguish it from clinical medicine. Public health’s ecological foundation in the era of 19th century communicable-disease control (before there were vaccines) required broad sanitary reforms at the community level, the neighborhood level, the workplace, and the home, as well as in individual behavior. With vaccines and antibiotics, multi-level intervention seemed to fade

into the background of the great era of communicable-disease control. Health promotion, or the “New Public Health” (as noted in the first chapter), has rescued those ecological roots from the obscurity of the magic-bullet immunization era of medicalizing public health. This was an era when the downward slope of communicable diseases crossed the upward slope of the chronic diseases in mid-century and HIV/AIDS in the 1980s, for which there were no magic medical bullets.

In this book, the authors have introduced theory not by starting with the theories themselves, but by starting with the public health, ecological, and behavioral contexts and the planning process in which the theories would be called upon. They return in the end of the book, after describing seven theoretical or conceptual perspectives, to the question of how to apply the theories in research and practice of public health. Their emphasis on evaluation and research in public health, not research merely to test theories on public health, supports the notion that if we want more theory-based practice, we need more practice-based theory. This would complement and synergize with the companion notion that if we want more evidence-based practice we need more practice-based evidence.

Lawrence W. Green, DrPH, ScD(Hon), FAAHB, FSBM
University of California at San Francisco

Prologue

Meeting the very difficult challenges inherent in changing health behavior requires theories of health behavior to assist in the process. These theories should be viewed as the tools of the trade that you will learn about in this textbook. Before you begin this learning process, it is important that you understand a basic principle: learning about each and every tool of the trade is essential to the ultimate success of any public health program you may design and implement. In many ways, your work in changing health behavior is similar to that of a highly skilled craftsperson. You will be crafting interventions and it is unlikely that any two programs will be “built” in the same way. This is true because even if you plan to change the same behavior in a subsequent program, the population served by that program is bound to be markedly different than the population originally served by the same program. So, think of yourself as a craftsperson who can effectively assess the needs of any population relative to their long-term adoption of health-protective behaviors. Your theory “toolbox” will facilitate this assessment and it will also allow you to develop an effective intervention approach.

Another important preliminary lesson is that each of the theories in your toolbox may, at first blush, appear to be distinctively different. As you read this textbook, rest assured that the theories you learn about each have a unique potential role in changing health behavior. Learning about and using only a few of the many theories is unlikely to lead to successful behavior change. Similarly, learning about theory in the absence of learning about core practices such as measurement, evaluation, and planning will not be a satisfying endeavor. As such, *Health Behavior Theory for Public Health* will provide you with a balanced professional education—one that teaches you about the essential spectrum of theoretical tools as well as the core practices.

This textbook will open by providing you with a firm foundation (Section I) for developing expertise in public health theory and related core practices. Please pay special attention to the concepts and terminology, as this added effort will certainly pay great dividends in your career. Section I is focused on health, public health, health behavior, and health promotion planning,

rather than theory per se. Indeed, you will learn in this section that there is much more to understanding and changing health behavior than simply being well-versed in theory.

Section II of this textbook provides you with the ability to gain a command of the theories and approaches most commonly applied in public health research and programs. We have taken great strides to present this material in a very straightforward manner and within the context of current relevant challenges in the field. As you finish this section you will see how theory “fits” into the larger scope of public health research and practice as described in Section I.

The textbook will close by providing you with a diverse set of application “tools” (Section III). These fairly advanced chapters were designed to bring all that you have learned in Section I and Section II into a more practical light. Here, you will learn about the essential tasks of measurement, evaluation, and translation. Again, we emphasize the point that understanding and changing health behavior is challenging and requires multiple skills beyond the ability to apply theory.

Finally, we invite you to use an evaluative eye as you read this textbook. By using this phrase, we are suggesting that you should avoid the academic trap of looking at ideas as being correct or incorrect. Instead, think of each new idea as an opportunity to indulge in critical thinking. When learning about various theories or core practices, you may want to ask yourself questions such as “Is this approach logical and can it be reasonably translated into practice?” Learn to think in terms that transcend the universal terms of correct or incorrect and challenge yourself to think about questions such as, “When would this approach work best and when would it work poorly?” Our goal for the next generation of public health professionals is for them to develop effective programs designed to avoid premature morbidity and mortality. We recognize that this work is as important as the work of traditional medical professionals and that effective public health programs can make a difference. We hope that this textbook will provide the necessary information and knowledge needed to guide this process.

Acknowledgment

We would like to extend a very heartfelt thank you to Dr. Delia Lang (Emory University) and Dr. Robin Vanderpool (University of Kentucky) for beta testing the draft chapters with their respective theory classes and for eliciting constructive feedback from their students. Both their feedback and that of their students were critical to the editing process and improved the book tremendously. We also thank all of the students! Dr. Seth Noar, in addition to his contributions, provided us astute commentary and is truly a theory guru. We would also like to thank Ms. Kelly King and Ms. April Young for their significant contributions to the editing effort. Both of them painstakingly read, reviewed, revised, and made suggestions that helped create a final product, of which we are very proud.

Contributors

John Acker, BA

Department of Psychology
University of Georgia

Michael T. Amlung, MS

Department of Psychology
University of Georgia

James G. Emshoff

EMSTAR Research, Inc.

James MacKillop, PhD

Department of Psychology
University of Georgia
Center for Alcohol and Addiction Studies
Brown University

Cara M. Murphy, BS

Department of Psychology
University of Georgia

Seth M. Noar, PhD

Associate Professor
School of Journalism and Mass
Communication
Lineberger Comprehensive Cancer Center
University of North Carolina at Chapel Hill

Rita K. Noonan, PhD

Behavioral Scientist
Centers for Disease Control & Prevention

Lara Ray, PhD

Department of Psychology
University of California, Los Angeles

Colleen A. Redding, PhD

Research Professor
Cancer Prevention Research Center
University of Rhode Island

James H. Walker, BA, BS

Emory University
Rollins School of Public Health

