Massage Therapy

Integrating Research and Practice

Critical thinking, best practices, and future directions to advance the profession

Trish Dryden • Christopher A. Moyer

Editors

MASSAGE THERAPY

INTEGRATING RESEARCH AND PRACTICE

| Color | Colo

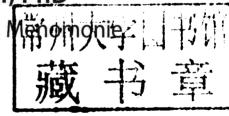
Trish Dryden, MEd, RMT

Centennial College, Toronto

Christopher A. Moyer, PhD

University of Wisconsin-Stout, Menomine.

Editors





Library of Congress Cataloging-in-Publication Data

Massage therapy: integrating research and practice / Trish Dryden, Christopher A. Moyer, editors.

p.; cm.

Includes bibliographical references and index.

ISBN 978-0-7360-8565-6 (hard cover) -- ISBN 0-7360-8565-3 (hard cover)

I. Dryden, Trish, 1954- II. Moyer, Christopher A., 1970-

[DNLM: 1. Massage. 2. Evidence-Based Practice. WB 537]

615.8'22--dc23

2011047784

ISBN-10: 0-7360-8565-3 (print) ISBN-13: 978-0-7360-8565-6 (print)

Copyright © 2012 by Trish Dryden and Christopher A. Moyer

All rights reserved. Except for use in a review, the reproduction or utilization of this work in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including xerography, photocopying, and recording, and in any information storage and retrieval system, is forbidden without the written permission of the publisher.

The web addresses cited in this text were current as of November 9, 2011, unless otherwise noted.

Acquisitions Editor: Myles Schrag; Developmental Editor: Kevin Matz; Assistant Editors: Steven Calderwood, Anne Cole, and Melissa J. Zavala; Copyeditor: Joy Wotherspoon; Indexer: Michael Ferreira; Permissions Manager: Dalene Reeder; Graphic Designer: Fred Starbird; Graphic Artist: Denise Lowry; Cover Designer: Keith Blomberg; Photographs (interior): © Human Kinetics, unless otherwise noted; Photo Asset Manager: Laura Fitch; Photo Production Manager: Jason Allen; Art Manager: Kelly Hendren; Associate Art Manager: Alan L. Wilborn; Illustrations: © Human Kinetics; Printer: Thomson-Shore, Inc.

Printed in the United States of America 10 9 8 7 6 5 4 3 2 1

The paper in this book is certified under a sustainable forestry program.

Human Kinetics

Website: www.HumanKinetics.com

United States: Human Kinetics, P.O. Box 5076, Champaign, IL 61825-5076

800-747-4457

e-mail: humank@hkusa.com

Canada: Human Kinetics, 475 Devonshire Road Unit 100, Windsor, ON N8Y 2L5

800-465-7301 (in Canada only) e-mail: info@hkcanada.com

Europe: Human Kinetics, 107 Bradford Road, Stanningley, Leeds LS28 6AT, United Kingdom

+44 (0) 113 255 5665 e-mail: hk@hkeurope.com

Australia: Human Kinetics, 57A Price Avenue, Lower Mitcham, South Australia 5062

08 8372 0999

e-mail: info@hkaustralia.com

New Zealand: Human Kinetics, P.O. Box 80, Torrens Park, South Australia 5062

0800 222 062

e-mail: info@hknewzealand.com

E4900

Foreword

The future of the massage therapy profession depends on the ability of massage therapists—not just professional researchers—to understand the importance of high-quality research and to embrace how it can influence their work. This will allow our profession to grow in effectiveness and allow us to create stronger connections with other health care providers. But research has always seemed hopelessly abstract and disconnected from the daily needs of a massage practice. Further, research literacy has never been a standard part of core curriculum in massage therapy education. One reason for this vacuum is that we have lacked resources that demonstrate how to weave research findings and clinical practice together.

Here is a book that begins to fill that vacuum. I believe it has the potential to change our whole profession.

My work with the Massage Therapy Foundation has made me a spokesperson for massage therapy research, but I never hide the fact that my background is not in the sciences. My education in research methodology and statistical analysis has been . . . let's call it haphazard. I reluctantly entered this world only because it became clear that the massage therapy profession would hit an intractable and unpleasant dead end without the ability to communicate in a research-based, evidence-informed context. Slowly, slowly, I have learned to speak this language and to appreciate all that this way of thinking has to offer. For this, I owe a debt of gratitude to many people, several of whom are contributors to this text.

Imagine my delight, then, to be invited to write the foreword for *Massage Therapy: Integrating Research and Practice*. This groundbreaking work would have made my entrance into the world of evidence-informed practice so much easier. The chapters on qualitative and quantitative research alone explained several years' worth of confusions that I have accumulated since I began trying to sort out research language. This is a technical manual that will be useful to those who are comfortable in the research world. The text will also be inviting to people who may be hesitant or nervous about climbing this learning curve.

This book does five crucial things:

- 1. It makes the compelling case that research literacy is a necessary skill even among entry-level massage therapists.
- 2. It introduces key concepts in a way that is both simple and accurate. As a teacher of a complex topic, I know how often the tipping point between simplicity and accuracy is narrow indeed.
- 3. It emphasizes the application of research by giving clear examples of tying published findings to everyday practice scenarios.
- 4. By emphasizing the practical application of research findings, it acknowledges the importance of the feedback loop that must exist between clinicians and researchers.
- It lays the groundwork for its own future development as the mass of evidence about massage therapy continues to grow.

I am thrilled to welcome *Massage Therapy: Integrating Research and Practice* to the resources that are available for students and practitioners of massage. And I am jealous of the newest generation of massage therapists who will have this guide into a part of their education that defines the future of our profession.

Ruth Werner, President Massage Therapy Foundation

Preface

assage therapy is a rapidly growing profession. The United States Department of Labor (2011) predicts that employment of massage therapists is expected to increase by 19% from 2008 (122,400) to 2018 (145,600), faster than the average for all occupations. Similar growth can be expected in Canada and other nations.

Paralleling this growth is a substantial increase in the number of research studies that examine its value for promoting human health and well-being. Increasingly, health care practitioners, educators, and researchers are faced with a dilemma: How does one keep up? Massage therapy research tends to be scattered across a range of journals in the medical and behavioral sciences, making merely finding the latest articles challenging and time consuming. Once they are found, making sense of those articles—for example, determining which ones are sound and which ones are flawed—usually requires a background in scientific research that may not have been part of a practitioner's training.

Despite these obstacles, every professional therapist working today needs to have some understanding of the research process and knowledge of the latest findings, which confirm (and, occasionally, disconfirm) current practices, promote innovation and progress, and help ensure that therapy is delivered in ways that are optimally safe and effective. The research process is slowly transforming the massage therapy profession from one that has been largely based on tradition to one that is increasingly based on evidence. In the future, the profession's answer to questions that take the form of "Why do massage therapists do X?" will less frequently be "Because that's what we've always done." Increasingly, the answer will need to be "Because we have evidence that X works." This is a profound change.

Massage Therapy: Integrating Research and Practice was produced in recognition of this change and as a tool for advancing the development of evidence-informed practice. With this in mind, our goal was straightforward: to produce the best single source of the latest research with relevance to the practice of massage therapy. By compiling this information in a single book, we present readers with a synthesis of information from diverse fields, including kinesiology, medicine, nursing, physical therapy, and psychology. We strived to do this in a way that is clear and concise, without resorting to oversimplification.

Note that this book does not require you to begin on the first page and end with the last page (though there would be no harm in doing so). Rather, we have organized the book into 23 topic-specific chapters that can be read either individually or in any order, depending on your interests and current needs. Feel free to skip around. Without knowing what order you will choose for yourself, we can confidently say this: The reader who takes in all of these chapters will cover a lot of ground and will learn the most up-to-date information available on these topics. This is because each chapter has been authored by experts carefully selected for their specific knowledge, experience, and ability to synthesize the best evidence with implications for clinical practice and future research. For example, the chapters in part III represent those populations and conditions for which there is now enough substantive evidence to warrant a full discussion in this book. In future editions, it is our intention to not only update and expand those chapters as new evidence becomes available but also to add chapters covering other populations and conditions as scientific examination of massage therapy expands.

We expect this book to be indispensible to both students and current practitioners of massage therapy. For both of these groups, knowledge of the information contained in these pages will ensure that they bring to their practice the most accurate information currently available. It will also allow them to ground their practice in the latest research findings. Just as important, this knowledge also will greatly assist aspiring and practicing massage therapists to work collaboratively with other health care practitioners. This trend toward interprofessionalism is already well underway, and it is likely to become increasingly important as the profession continues to progress. For that reason, we also expect this book to be a valuable resource to other health care practitioners, educators, and researchers who are interested in learning more about massage therapy and the development of patient-centered, evidence-informed, integrative health care.

Whether you are a veteran massage therapist, an aspiring student of massage therapy, or the practitioner of another health modality who wishes to learn more about massage therapy, the following chapters will present you with the best evidence for this safe and effective health intervention.

INSTRUCTOR RESOURCES

Massage Therapy: Integrating Research and Practice includes an ancillary test package as an aid for instructors. The test package includes more than 200 questions, including multiple choice, true or false, and short answer/essay questions. Instructors can access the test package at

www.HumanKinetics.com/MassageTherapy

REFERENCE

United States Department of Labor, Bureau of Labor Statistics. 2011. Occupational Outlook Handbook, 2010-11. www.bls.gov/oco/ocos295.htm.

Acknowledgments

Working with Christopher Moyer is an adventure and joy. Meticulous and caring, Chris is a wonderful colleague and friend and I look forward to our continued work together. I am also hugely indebted to Stacey Shipwright, Research Analyst at Centennial College, for her unwavering faith in the project, administrative support, and also for her wonderful chapter contribution. A huge thank you also goes to our principal editor from Human Kinetics, Kevin Metz, whose careful reading of the text, respectful questions, and helpful additions were invaluable, and to my many colleagues and friends at Centennial College, especially President Ann Buller and the executive team, for their mentorship and support.

I am deeply grateful to the chapter authors for their scholarship and contribution to increasing safe and effective client care and respectful, interprofessional practice. To my many clients over thirty years of practice, whose sharing of their healing journeys teaches me about the true value of compassionate touch and human connection; and to my many students, colleagues, dear friends and mentors who continue to ask the tough questions and challenge the answers.

Finally, and most importantly, I am grateful to my beloved family—my husband Lee, our children Bryn and Jesse, and my sister Diane—for their laughter and their love, and to my parents Betty and George, and my brother Derek—whose many gifts in life and in death—continue to inspire me.

Trish Dryden

There are many folks who supported me in the completion of this project. The love and support of my parents, Jack and Elaine, and my siblings, Stephen and Tatiana, is the foundation that makes any of my projects possible. I never could have completed this project without my friend and colleague Trish Dryden, whose intelligence, wit, and motivation make working with her a pleasure, and I feel lucky that the two of us both arrived at the idea for this book independently. Stacey Shipwright deserves thanks for providing Trish and myself with outstanding organization, planning, and coordination that helped us to make our idea a reality. I also want to thank each of the authors who contributed to this book's individual chapters; there is no way this book could have been created without your tremendous knowledge and dedication. I am also grateful to the Psychology Department at University of Wisconsin-Stout for granting me a course release that made completing this book a little easier, to the Massage Therapy Foundation who have been a terrific resource to me in many ways, and to Rosemary Chunco for being a good friend and an enthusiastic supporter of this book's mission.

Above all, thanks go to my wife, Jessica, who gives me love, support, and motivation. I never would have thought to undertake this project had I not first seen her complete three books of her own, and her advice was invaluable. Finally, I also want to acknowledge all the members, both past and present, of our pet family. Their love and companionship fills our lives with joy and meaning.

Christopher A. Moyer

Contributors

Carla-Krystin Andrade, PhD, PT

University of California

Amanda Baskwill, BEd, RMT

Humber College

Patricia J. Benjamin, PhD

Karen T. Boulanger, MS, CMT

The University of Iowa

Paul Clifford, BSc, RMT

Sir Sandford Fleming College

Trish Dryden, MEd, RMT

Centennial College

Paul Finch, PhD, DpodM

Conestoga College Institute of Technology

and Advanced Learning

Andrea D. Furlan, MD, PhD

Institute for Work and Health, University of

Toronto, Toronto Rehabilitation Institute

Stuart Galloway, PhD

University of Stirling

Kimberly Goral, MS, NCTMB

Boston University

Michael D. Hamm, LMP CCST

Cortiva Institute at Seattle

Bodhi G. Haraldsson, RMT

Massage Therapists Association of British

Columbia

Angus Hunter, PhD

University of Stirling

Marta Imamura, MD, PhD

University of São Paulo School of Medicine

Emma L. Irvin, BA

Institute for Work and Health, University of

Toronto, Toronto Rehabilitation Institute

Janet R. Kahn, PhD, LMT

University of Vermont, Integrated Healthcare

Integrative Consulting

Ania Kania, BSc, RMT

University of Calgary

Albert Moraska, PhD

University of Colorado at Denver

Christopher A. Moyer, PhD

University of Wisconsin-Stout

Douglas Nelson, LMT, NMT

MMT MidWest, Inc.

Janice E. Post-White, PhD, RN, FAAN

University of Minnesota School of Nursing

Cynthia J. Price, PhD, LMT

University of Washington

Stacey Shipwright, BA, RMT

Centennial College

Diana L. Thompson, LMP

Hands Heal

Marja Verhoef, PhD

University of Calgary

Joan M. Watt, MA, MCSP, MSMA

University of Stirling

Contents

Acknowledgments xiii

Foreword ix

Preface xi	Contributors xv	1	
元以下 自己生 3000000000000000000000000000000000000	ISTORICAL DEVE	ELOPMENT ND	1
Chapter 1			
Cycles of B Early Chan Early Mass Two Paths Physiother Latest Cycl Momentur Summary Critical Thi	oom and Bust npions of Massage age Studies for Massage apy and Massage e of Massage Research m for the Future nking Questions	3 4 4 5 7 7 9 11 12	
Chapter 2	Evidence-Based and C Approaches in Massa Carla-Krystin Andrade, PhD, F Paul Clifford, BSc, RMT	age	15
Evidence-E Outcome-I Integrating and Evid Practical Is Approa Directions Summary Critical Thi	eed Evidence, Outcomes, and Clinic Based Practice Based Massage g Clinical Decision Making, Outcom dence-Based Practice sues in Adopting Evidence-Based a ches in Massage for Future Research	22 and Outcome-Based	
PART II	RESEARCH METH	IODS	29
	Christopher A. Moyer, PhD Kimberly Goral, MS, NCTMB quantitative Methods?	th Methods	31

Common	n Quantitative Research Designs to Examine MT	
Summary	y	
Critical Th	hinking Questions	
Reference	es	
Chapter 4	Qualitative Research Methods	. 45
•	Carla-Krystin Andrade, PhD, PT	
	Paul Clifford, BSc, RMT	
Why Do V	We Need Qualitative Research?	
Understa	anding Qualitative Research	
Qualitativ	ve Research Methodologies	
	ve Data Collection Methods	
	ng the Trustworthiness of Qualitative Research 51	
	Qualitative Research Articles	
	ualitative Research Methods in Massage Therapy	
	ons for Massage Therapy	
,	hinking Questions	
	es	
_		
Chapter 5	Mixed Methods Research	. 59
Reasons f	for Using a Mixed Methods Research Design	
Mixed Me	ethods Designs 60	
Conducti	ing Mixed Methods Research	
Application	ions of Mixed Methods Research	
	stems Research	
	y	
	hinking Questions	
Reference	es	
PART III	POPULATIONS AND CONDITIONS	. 71
Chapter 6	Pediatrics	. 73
	Stacey Shipwright, BA, RMT	
	f Massage Therapy on Pediatric Populations	
	ng Massage Therapy Effects	
	endations for Massage Therapy Practice	
	ns for Future Research	
	dy	
	es	
		0.5
Chapter 7	Pregnancy and Labor	. 85
	Amanda Baskwill, BEd, RMT	
	f Massage Therapy on Pregnancy	
	f Massage Therapy on Labor	
	ng Massage Therapy Effects	
Kecomme	endations for Massage Therapy Practice	

Directions for Future Research Case Study Summary References	. 88 . 89
Chapter 8 Athletes	, 91
Joan M. Watt, MA, MCSP, MSMA The Varied Nature of Sport Massage Effects of Massage Therapy on Athletes Explaining Massage Therapy Effects Recommendations for Massage Therapy Practice Directions for Future Research Case Study Summary References	. 92 . 95 . 96 . 97 . 98
Chapter 9 Massage and Older Adults Diana L. Thompson, LMP	103
Effects of Massage Therapy on Older Adult Populations Explaining Massage Therapy Effects Recommendations for Massage Therapy Practice Directions for Future Research Case Study. Summary References.	107 108 109 110 110
Chapter 10 Headache	115
Headache Types Secondary Issues for Headache Sufferers Causes of Headache Effects of Massage Therapy on Headache Explaining Massage Therapy Effects Recommendations for Massage Therapy Practice Directions for Future Research Case Study. Summary References	118 118 120 121 122 122 122 123
Chapter 11 Neck and Shoulder Pain	129
Bodhi G. Haraldsson, RMT Classification of Neck Pain	129
Epidemiology of Neck and Shoulder Pain Effects of Massage Therapy on Neck and Shoulder Pain Explaining Massage Therapy Effects Recommendations for Massage Therapy Practice Directions for Future Research	130 130 131 131

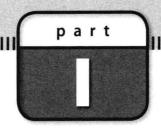
Case Study. 133 Summary 134 References 134
Chapter 12 Low Back Pain
Effects and Safety of Massage Therapy for Low Back Pain 139 Explaining Massage Therapy Effects 142 Recommendations for Massage Therapy Practice 143 Directions for Future Research 144 Case Study 145 Summary 146 References 147
Chapter 13 Anxiety and Depression
Anxiety and Depression: Overview
Chapter 14 Massage for Adults With a History of Sexual Trauma . 165 Cynthia J. Price, PhD, LMT
Overview of Sexual Trauma
Chapter 15 Scars
Ania Kania, BSc, RMT
Overview of the Condition: Scar Tissue 173 Effects of Massage Therapy in the Treatment of Scar Tissue 175 Explaining Massage Therapy Effects 177 Recommendations for Massage Therapy Practice 177 Directions for Future Research 181 Case Study 181 Summary 182 References 183

Chapter 16 Fibromyalgia
Theorized Causes of FMS
References
Chapter 17 Cancer
Janice E. Post-White, PhD, RN, FAAN
Effects and Safety of Massage Therapy in Cancer Care 195 Explaining Massage Therapy Effects 200 Recommendations for Massage Therapy Practice 201 Directions for Future Research 202
Case Study 202
Summary
References 203
PART IV CONNECTING RESEARCH AND PRACTICE 209 Chapter 18 Integrating Massage Therapy Research
and Education
Ensuring Safety, Building Capacity
Teaching Research Literacy and Evidence-Based Practice (EBP) 214
Interprofessional Education for an Integrated Health Care System 217
Conducting Research in Massage Therapy Educational Institutions 217
Summary
Critical Thinking Questions 218
References 218
Chapter 19 Integrating Research in Clinical Practice
Evidence-Based Practice Versus Humanistic Client Care
What Is Best Evidence?
Accessing and Using Research to Help Your Clients
Comparative Research
Recommendations for Massage Therapists
Summary
Critical Thinking Questions 230
References 230
Chapter 20 Clinical Case Reports
The Value of Case Reports
What Is a Case Report?

	Preparing a Case Report	255
	Chapter 21 Writing Journal Articles	233
	Types of Journal Article 255 Choice of Journal 256 Writing the Paper 257 Writing Style 260 Summary 260 Critical Thinking Questions 261 References 261	
PA	RT V FUTURE DIRECTIONS	263
C	Chapter 22 Attitudes, Beliefs, and Expectations	
	in Massage Therapy Karen T. Boulanger, MS, CMT Christopher A. Moyer, PhD Attitudes, Beliefs, and Expectations Defined and Differentiated 265 Influential Models Not Yet Applied to Massage Therapy 266 Existing Research 267 Directions for Future Research 270 Summary 270 Critical Thinking Questions 270	265
	References	
C	Chapter 23 Directions and Dilemmas	
	in Massage Therapy Research: A Workshop Report From the 2009 North American Research Conference on Complementary and Integrative Medicine Christopher A. Moyer, PhD Trish Dryden, MEd, RMT Stacey Shipwright, BA, RMT	273
	Method	
	Results 279 Summary 287 Critical Thinking Questions 288 References 288 Appendix 292	

Index 295

About the Editors 303



HISTORICAL DEVELOPMENT AND BACKGROUND

To understand the current state of massage therapy research and practice, and where they are headed, we must first put their origins in context. The chapters presented here illustrate the long and interesting history of massage therapy, and connect it with the modern shift toward evidence-based and outcome-based approaches in healthcare.

The chapters in Part I begin with an overview of the history and development of research in massage over the past 150 years and conclude by outlining a step by step clinical decision-making process on integrating research and practice.