

Manipulating practices

A critical physiotherapy reader

Barbara E. Gibson, David A. Nicholls, Jenny Setchell
and Karen Synne Groven (eds.)



Manipulating practices

A critical physiotherapy reader

Barbara E. Gibson, David A. Nicholls, Jenny
Setchell and Karen Synne Groven (eds.)

Manipulating practices

A critical physiotherapy reader

ÇAPPELEN DAMM AKADEMISK

© Barbara E. Gibson, David A. Nicholls, Jenny Setchell and Karen Synne Groven (2018). The authors have copyright to their individual chapters.

This work is protected under the provisions of the Norwegian Copyright Act (Act No. 2 of May 12, 1961, relating to Copyright in Literary, Scientific and Artistic Works) and published Open Access under the terms of a Creative Commons CC-BY 4.0 License (<http://creativecommons.org/licenses/by/4.0/>). This license allows third parties to freely copy and redistribute the material in any medium or format as well as remix, transform or build upon the material for any purpose, including commercial purposes, provided the work is properly attributed to the author(s), including a link to the license, and any changes that may have been made are thoroughly indicated. The attribution can be provided in any reasonable manner, however, in no way that suggests the author(s) or the publisher endorses the third party or the third party's use of the work. The attribution must include:

ISBN 978-82-02-55001-1

Third parties are prohibited from applying legal terms or technological measures that restrict others from doing anything permitted under the terms of the license. Note that the license may not provide all of the permissions necessary for an intended reuse; other rights, for example publicity, privacy, or moral rights, may limit third party use of the material.

This book is made possible with support from the University of Oslo as main founder; with additional contributions from Oslo and Akershus University College of Applied Sciences, the University of Melbourne, the University of Western Cape, the Western Norway University College of Applied Sciences, Holland Bloorview Kids Rehabilitation Hospital/Bloorview Children's Hospital Foundation, the University of Toronto and Auckland University of Technology.

Typesetting: Datapage India (Pvt.) Ltd.

Cover Design: Cappelen Damm Akademisk

Cover photo: Shutterstock/license agreement from Auckland University of Technology

Cappelen Damm Akademisk/NOASP
noasp@cappelendam.no

Contents

Preface

Introduction 14

Working against the grain: Criticality for an otherwise

physiotherapy 14

Barbara E. Gibson, David A. Nicholls, Jenny Setchell and Karen Synne Groven

Introduction 15

Why this book and why now? 16

Critically-informed thinking (and doing) 19

Overview of chapters 23

References 28

Plateau 1 Critical openings 33

Chapter 1 Post-critical physiotherapy ethics: A commitment

to openness 35

Barbara E. Gibson

Introduction 36

Mainstream bioethics 37

An ethics of openness 41

Quinn and the trampoline 44

Becoming 46

Conclusion as opening 50

Acknowledgements 51

References 52

Chapter 2 What can critical theory do for the moral practice of physiotherapy?.....	55
<i>Anna Ilona Rajala</i>	
Introduction	56
Modernity and moral theory	60
The objective of morality.....	63
Towards a materialist view of morality.....	65
Critique and resistance in Adorno’s philosophy.....	67
Critical theory as resistance in physiotherapy.....	70
Conclusions	72
Acknowledgments	74
References.....	74
Chapter 3 Reconceptualising causation in evidence-based physiotherapy.....	78
<i>Roger Kerry</i>	
Introduction	79
Why causation?	81
A Humean account of causation for EBM.....	84
Summary of the problems with Hume.....	90
Causal dispositionalism as a way forward for evidence-based health care.....	92
Causal content	94
Epistemology.....	95
Individual decision-making.....	96
The inferential gap	96
Conclusion	97
References.....	98
Chapter 4 New materialism and physiotherapy	101
<i>David A. Nicholls</i>	
Background	102
Key principles.....	103
Thing-power	104
The challenge to traditional hierarchies	105
The appeal of monism and opposition to binaries	108
Agency	110
Intermingling and becoming.....	111

How might new materialism relate to physiotherapy?	112
Physiotherapists could retain their affinity for the biological sciences	113
Movement and becoming	114
Connecting physiotherapy to a greater social purpose	116
A new methodology to understand the complexity of physiotherapy	117
Conclusion	118
References	118

Plateau 2 Practicing differently 123

Chapter 5 Performative acts of physiotherapy 125

Blaise Doran and Jenny Setchell

Introduction	126
Keith Johnstone's "Impro"	128
Johnstone's concept of status	131
Status and performativity	132
The fundamental components of status transactions	137
Physical control	140
Vocal and verbal control	142
Touch	144
Status as communicated by the environment	145
Conclusions	146
References	147

Chapter 6 A critical perspective on stigma in physiotherapy: The example of weight stigma 150

Jenny Setchell and Ukachukwu Abaraogu

Introduction	151
Stigma	153
Physiotherapy	158
Positivism	161
Bodies, visibility and normality	163
Professional reflexivity	165
Conclusion	166
Acknowledgments	167
References	168

Chapter 7 The desire for “hands-on” therapy - a critical analysis of the phenomenon of touch..... 174

Fiona Moffatt and Roger Kerry

Introduction	175
A short history of touch.....	176
Touch and the therapeutic context	177
Touch as a consumer health technology.....	181
Consuming touch: body work as part of the body project.....	183
The crisis of evidence - a catalyst for change?	185
Navigating the future of physiotherapeutic touch.....	187
Conclusion	189
References.....	190

Chapter 8 Equine-facilitated physiotherapy - devised encounters with daring and compassion 194

Tobba Therkildsen Sudmann

Introduction	195
The Scandinavian approach to equine-facilitated physiotherapy.....	196
Rider’s and horse’s rhythm, balance and suppleness.....	198
Interaction and improvisation	200
Three patient ideal types.....	202
Ava (16): “Everything is about feeling safe”	203
Benjamin (32): “I’ve been thinking about riding ever since my last mount”	204
Charlotte (48): “It’s a revelation!”.....	204
Encountering daring and compassion.....	205
Devising for equine facilitated physiotherapy	208
Concluding remarks.....	211
References.....	213

Plateau 3 Rethinking education..... 219

Chapter 9 Unbinding physiotherapy knowledge. Critical disability studies’ epistemology: moving towards a socially-just physiotherapy profession..... 221

Karen Yoshida

Introduction	222
I: Positionality and background to this chapter	225

II: Afro-centric feminist epistemology (Collins).....	226
Concrete experience as a criterion of meaning.....	228
Use of dialogue to assess knowledge claims.....	229
The ethics of caring - talking with the heart.....	230
The ethics of personal accountability.....	231
III: The shaping of a critical disability studies epistemology.....	231
“Lived” experiences as an essential criterion of meaning.....	232
Use of dialogue to assess knowledge claims.....	235
The ethics of caring - “talking from the heart”.....	236
The ethics of personal accountability - one’s relationship to disability.....	237
Conclusion.....	238
References.....	239

**Chapter 10 A Baradian approach to evidence-based
practice in physiotherapy education..... 242**

Tone Dahl-Michelsen and Karen Synne Groven

Introduction.....	243
Conflicting logics behind the evidence-based practice model.....	245
Approaching evidence-based physiotherapy through Barad.....	247
Apparatus of analysis.....	249
Encountering physiotherapy through a Baradian lens.....	250
Celine’s story.....	251
Linda’s story.....	254
Thinking beyond traditional evidence-based practice in physiotherapy education.....	257
Acknowledgments.....	260
References.....	260

**Chapter 11 A critical pedagogy for online learning
in physiotherapy education..... 263**

Michael Rowe

“Intellectual dead zones”: Challenges in higher education.....	264
Command and control: The Learning Management System.....	267
Critical pedagogy: Teaching as the practice of freedom.....	270
A personal learning environment: Creating space for the student’s voice.....	273
Conclusion.....	276
References.....	278

Plateau 4 Researching practices..... 283**Chapter 12 Physiotherapy at the intersection between standardization and individual adaptation 285***Wenche S. Bjorbækmo and James A. Shaw*

Introduction	286
Prevailing and prominent perspectives of the knowledge at stake in physiotherapy	288
Evidence-based practice (EBP).....	288
EBM, its transmission, and evidence-based physiotherapy.....	289
Epistemology in EBHC	291
Methodology	293
Phenomenological perspective.....	294
Method	295
The phenomenon of practising evidence-based physiotherapy.....	296
First example	297
Second example.....	300
Discussion and conclusion: What this study revealed.....	302
Acknowledgements	304
References.....	305

Chapter 13 Communication in physiotherapy: challenging established theoretical approaches..... 308*Amy Hiller and Clare Delany*

Introduction	309
Communication is integral to physiotherapy practice.....	310
Two studies of communication in physiotherapy	311
Key features of biopsychosocial and patient-centred theoretical approaches to communication.....	321
Does communication in physiotherapy practice align with the biopsychosocial and patient-centred approaches?	322
Why is there a discrepancy between communication theory and communication in practice?	323
Conclusions	326
References.....	327

Chapter 14 What's in a number? Progress and body shame in lifestyle programs for adolescents	334
<i>Karen Synne Groven, Nicole M. Glenn and Jenny Setchell</i>	
Introduction	335
Critical embodiment perspective.....	337
Context.....	339
Alva's story: I do not regard myself as overweight	341
Hannah's story: The scale never lies	345
The meaning of numbers	347
References.....	352
Chapter 15 Using narrative perspectives in the clinical setting of physiotherapy. Why and how?	356
<i>Birgitte Ahlsen and Kari Nyheim Solbrække</i>	
Introduction	357
Part one: Theories on illness narratives and gender.....	359
The illness narrative.....	359
Gender.....	361
Part two: Unpacking gendered aspects of men's narratives of recovery from chronic pain	364
"Blows to the head" and "backs that lock"	365
Social and emotional disruptions and losses	367
Recovery as a rebuilding of body, self and social connections.....	371
Conclusion	374
References.....	375
Biographies.....	378

Preface

We would like to acknowledge the University of Oslo open access fund, for their generosity in providing significant financing for this book. Without their support, this book would not be possible in its open access form. In addition, we would like to thank the Institute of Health and Society, University of Oslo for their encouragement and for their generosity in financing the book's launch. We are also grateful to the authors for their exciting chapters, which surprised and delighted beyond our expectations, and we thank their institutions for their financial and other supports.

Several people helped to make this book possible. We would like to thank Nikki Petty for her early editorial support for the book, and our colleagues who formed the original scoping and proposal committee: Wenche Bjorbækmo, Ian Edwards, Naomi Eisenberg, Ralph Hammond, Lester Jones, Penny Moss, Ana Luiza Oliveira, Nicholas Pollard, Jeanette Praestgaard, Anna Rajala, Veronika Schoeb, Abaraogu Ukachukwu, Kate Waterworth and Nicky Wilson. Thanks also go to Franziska Trede and Karen Whalley-Hammell for consulting on the project. We owe a debt of gratitude to the multiple anonymous peer reviewers who gave generously of their time and expertise to develop the chapters, and to The Executive Committee of the Critical Physiotherapy Network for their help and guidance. Many, many thanks to Ingrid Eitzen, our tireless Editor at Cappelen Damm Akademisk, for her patience and enthusiasm.

Finally, the editors would like to thank our families, partners, and friends for their unwavering support and encouragement.

INTRODUCTION

Working against the grain: Criticality for an otherwise physiotherapy

Barbara E. Gibson | Department of Physical Therapy, University of Toronto / Bloorview Research Institute, Holland Bloorview Kids Rehabilitation Hospital

David A. Nicholls | School of Public Health and Psychosocial Studies, Auckland University of Technology

Jenny Setchell | Bloorview Research Institute, Holland Bloorview Kids Rehabilitation Hospital / School of Health and Rehabilitation Sciences, The University of Queensland

Karen Synne Groven | Institute of Health and Society, University of Oslo / Department of Physiotherapy, Oslo and Akershus College of Applied Sciences

Abstract

In this opening chapter, we make the case for the need for a book on critical physiotherapy at this moment in history, provide a brief sketch of the meaning and practice of critical thinking, and suggest some possible alternative pathways for reading the book.

Introduction

This is the first book of its kind devoted to a critical examination of the discipline, profession, and practice of physiotherapy. Like all critical work, its aim, *our* aim as editors and authors, is transformation.

We do not aim to provide a neutral or objective reading of physiotherapy. Instead, we want to shake things up, perturbate, instigate, revolutionize, manipulate. Our title, *Manipulating Practices*, with its multiple meanings conveys our commitment to extending, rethinking, and reshaping the ossified ways physiotherapy is understood, practiced, taught, and researched. Etymologically, “manipulation” in its earliest form simply referred to a “handful” of something, and by 1828 was understood as the skillful handling of objects or persons. In physiotherapy, manipulation refers to a therapeutic technique of applying a manual thrust to a joint at end range of motion (Rubinstein, van Middelkoop, Assendelft, de Boer, & van Tulder, 2011). The term “manipulative physiotherapy” has also come to be used as an umbrella term for a range of hands-on therapeutic skills. In contemporary usage, manipulation can also have a negative connotation, referring to unfairly influencing another. In all of these usages, manipulating has always been about the hands, about metaphorically or physically touching others in order to make a change. In this book, we interrogate the narrow range of outcomes that dominate the physiotherapy landscape, to manipulate practice and theory towards a more expansive vision for the profession. The manipulations you will find in these chapters are handfuls of clay, molded into temporary forms that can be taken away and refashioned for other purposes. The reader is invited to handle the material in whatever ways deemed useful to influence positive change in the profession and the world.

In this introductory chapter, we first outline why this book is vitally important at this moment in the history of the profession before providing a brief sketch of “criticality” and its application to physiotherapy. We conclude with a discussion of the chapters and suggest a number of pathways for navigating the book.

Why this book and why now?

To date, physiotherapists have been relatively slow to engage in the kinds of professional self-scrutiny that have become increasingly

common in medicine, nursing, occupational therapy, psychology and elsewhere in the last half-century. What is more, few from outside the profession have shown much interest in physiotherapy's practices, its particular approach to the body, or its role as an agent of change in healthcare history. It is only in the last decade that we have seen the emergence of scholarship critically analysing why physiotherapy is what it is, what it does, where it came from and how it might have navigated its way to becoming one of the largest and most established orthodox health professions in the world.

Perhaps the origins of this newfound interest in physiotherapy's professional self-scrutiny can be traced to two significant events. The first might be broadly termed the professionalization of physiotherapy education. This process, which began in earnest in the 1980s, ushered in changes to a curriculum that for 35 years had remained largely unchanged. Professionalization made it possible for educators and students to develop capabilities in subjects that had for a long time been marginalized in favour of developing technical competencies (Dahl-Michelsen, 2015; Higgs, Hunt, Higgs, & Neubauer, 1999; Hunt, Adamson, Higgs, & Harris, 1998; Lindqvist, Engardt, & Richardson, 2010). New fields of study like ethics, the humanities, social sciences, and research increased interest in the idea that physiotherapy had a culture and a history of its own that was worth studying (Higgs, Refshauge, & Ellis, 2001; Trede, Higgs, Jones, & Edwards, 2003). While past preferences for content-heavy, didactic and "hands-on" learning still persist, the professionalization of physiotherapy education instigated a move towards more critical and analytical forms of learning.

The second significant event occurred with the neoliberal economic and political reforms that gathered momentum in the 1970s and continue across the world. These reforms introduced new

managerialism and accountability to healthcare and education. They promoted individual responsibilities over social welfarism and marked the beginning of a lengthy project to reduce the size and influence of central government in people's lives. Having relied on public healthcare, legislative support and funding for over 40 years, the physiotherapy profession in many countries was forced to face up to greater competition with other practitioners, and the slow decline of public health systems and structures that had once sustained it. Governments and private funders alike demanded greater accountability and assurances that increasingly took the form of "evidence-based practice", standardized outcomes, and indicators of efficient use of resources. Concurrent with these two events (professionalization and neoliberal reform), physiotherapists were increasingly pursuing graduate degrees. Some of these scholars breached disciplinary boundaries to ask questions about the nature of physiotherapy practice and its professional identity (Nicholls, 2017).

Although attempts to locate physiotherapy's professional identity can be traced back to acts of protective legislation and early contests over terminology (for example, the debates described by Murphy (1995)), between American doctors and therapists over the right to be called "physiotherapists" the earliest efforts to define a distinctive physiotherapy "identity" may well have been Helen Hislop's 1975 Mary McMillan lecture (Hislop, 1975), in which she codified physical therapy as a "pathokinesiological" profession. Others followed, attempting to look to broader, more humanistic, and political influences to define the profession's scope of practice and the paradigmatic assumptions underpinning research, education and practice (Broberg et al., 2003; Cott et al., 1995; Heap, 1995; Higgs, Refshauge, & Ellis, 2001; Nicholls & Cheek, 2006; Ottosson, 2015; Noronen & Wikstrom-Grotell, 1999; Parry, 1995; Richardson, 1993; Tyni-Lenné, 1989; Wikström-Grotell, Broberg, Ahonen, & Eriksson, 2013). In the last 15 years, there has even been interest from scholars outside of

the profession, who have begun to examine the profession's practices, boundaries, history and competitive tensions (Abrams, 2014; Carden-Coyne, 2008; Dew, 2003; Fournier, 2002; Linker, 2005).

What this emerging literature reveals is that, until recently, the physiotherapy profession has left its culture, identity and fundamental principles largely unexamined. Moreover, this disregard inheres in the profession's practices. The profession's fundamentally unquestioned need to legitimise itself as "scientific" by adhering to the notion of the body-as-machine (Nicholls & Gibson, 2010), has allowed it to sideline the many "other" ways people experience and engage with health and wellbeing (Nicholls et al., 2016). The myriad cultural, economic, existential, geographical, historical, philosophical, political, social and spiritual dimensions of health and healthcare have been largely bypassed by physiotherapy (Setchell, Nicholls, & Gibson, 2017). The result may be that the profession has achieved greater professional security and clarity of purpose, but it has also resulted in a profession that lacks the tools to respond to the changing economy of healthcare in the 21st century (Nicholls & Larmer, 2005). Moreover the enduring emphasis on bioscientific principles and "evidenced-based practice" sustains care approaches that may at best only partially meet the needs of the people physiotherapists are meant to serve, and may even be harmful.

Physiotherapy is undergoing a relatively rapid period of transition towards examining and addressing some of the blind spots of the past. A widening circle of physiotherapists are feeding ideas from sociology, philosophy, and theory into their curricula, daily practices, research and scholarship. This book is an expression and extension of that growing awareness. Imagined and produced by a group from within the Critical Physiotherapy Network (CPN) – an organization of over 600 members in more than 40 countries – the book reflects some of the diversity of interests and approaches now being explored by physiotherapists. Moreover, it connects physiotherapists with a wider, established

community of critical scholars in fields like disability and gender studies, physical culture, critical race theory, political science and cultural studies to ask questions about how, for example, disability, health, wellness, identity, social justice, and diversity are understood and addressed within physiotherapy and healthcare more broadly. Since its inception in 2014, the CPN (www.criticalphysio.net) has sought to be a “positive force for an otherwise physiotherapy”. Its objectives include:

- Actively exploring the world beyond the current boundaries of physiotherapy practice and thought
- Challenging physiotherapy to critically examine its position on alterity and otherness, abnormality, deviance, difference and disability
- Developing a culture and appreciation for the exploration of all views that deviate from conventional thought and practice in physiotherapy.

This book echoes and extends the objectives of the CPN in actively embracing ideas that promote thinking against the grain. It can be read as a sustained argument to challenge physiotherapists and others to embrace a plurality of ideas, practices, objects, systems and structures that challenge contemporary physiotherapy. The book aims to promote another key objective of the CPN: *to support critically-informed thinking through engagement with ideas from diverse disciplines uncommon in mainstream physiotherapy.*

Critically-informed thinking (and doing)

Each chapter in the book is an application of critical thinking to an aspect of physiotherapy practice, research, and/or education. Critical thinking has its origins in the critical theories that first emerged in early 20th century Germany as part of the Frankfurt School (Agger, 2006). In contemporary usage, “critical” refers to

any approach which inquires “against the grain”, “makes the familiar strange” or imagines how “things could be otherwise”. It does *not*, however, encompass any and all forms of critique (a common misperception). Rather research and practice in the critical tradition are explicitly aimed at understanding how different forms of *power* operate, exposing both helpful and harmful effects, and looking to possibilities to address harms and injustices (Kincheloe, McLaren, & Steinberg, 2011). Critical approaches are thus inherently emancipatory, but can be understood as a continuum of approaches, each of which varies significantly in how it understands and approaches this goal. On one end of this continuum are materialist/Marxist approaches and anti-oppression traditions, while at the other end are the relational approaches inherent in poststructuralism and posthumanism. This range of traditions is evident across the different chapters of the book. The poles are not fixed and between them is a wealth of established and emerging methodologies and theories. Nevertheless, the common element remains: critical approaches are concerned with the operation of power.

All of the chapters in the book examine the role of power in shaping how health phenomena are understood and addressed. Importantly, in critical work, power is understood as having many forms. Citing Lukes (1974), Eakin and colleagues (1994) discuss three dimensions of power. The first of these is *overt* power, that is, the power that one group holds over another, often understood in terms of power imbalances, hierarchies, or dynamics. This is the most obvious and nameable kind of power. It includes the power the state holds over its citizenry and the obvious ways that dominant groups oppress and marginalize other groups in particular times and places. Examples include oppressive government regimes and laws prohibiting homosexuality or certain religious practices. The second dimension of power is less overt and

more *subtle* wherein the operation of power is recognized but remains unaddressed. Systemic racism that is inherent in hiring practices is an example. An organization or society may recognize that these inequities exist, but the reasons for that inequity may be explained away, or diffused, through negotiation or co-optation (Eakin et al., 1994).

The third dimension of power is *covert*. Covert forms of power are those deeply entrenched and pervasive ideas about the world and how to understand it. In other words, covert power takes the form of assumptions regarding what is “implicitly” true and therefore remains largely unexamined. This power is very different from the kind of power that individuals and groups wield over others. Rather it has invaded our collective psyches, embodied in our everyday practices as “obvious”, “natural”, or “just the way things are”. Enacting these truths may or may not be problematic, but as Foucault (1983) famously said, it is “not that everything is bad, but that everything is dangerous”. The danger comes in unexamined assumptions. We cannot assess the potentially negative or positive effects an idea exerts without questioning the putative truths contained within that idea. Thus, much critical work focuses on examining covert forms of power, their various hidden and/or unintended effects and the possibilities for thinking and doing differently. Exposing and addressing the operation of covert forms of power in physiotherapy is a central aim of this book.

The exposure of taken-for-granted truths and how they operate can be a catalyst for radical change in physiotherapy. There are many examples of societal shifts that have begun because of small groups of people challenging ingrained assumptions. Most of these movements are ongoing - always considering how things might be otherwise. This *openness to change* is also a hallmark of criticality – it is comfortable with, even perhaps insists on, doubt.

Said differently, a critical stance requires a sustained concern about the dangers of complacency, remaining dynamic and never settled. As an example, the status of women as inferior to men was historically attributed to biological differences. This long held assumption has been largely abandoned in many societies but persists in others. Critical feminist work at one end of the criticality continuum looks to expose how and why these assumptions persevere and the material effects on women (a critical materialist approach, e.g., Millet, 1970). Poststructural strains of critical work, at the other end of the continuum, may look even deeper into the separation of people into two genders, question the logics of these categorizations and/or problematize notions of biological essentialism (e.g., Butler, 2011). While, as the example indicates, there exists a rich diversity of critical approaches and theories, all share in common a commitment to making the familiar strange towards opening up possibilities for change.

What does this mean for physiotherapy? Critical work has been gaining momentum in healthcare and research over the last two decades, and this in turn has influenced an emergent group of physiotherapy scholars, many of whom have authored chapters in this compilation. Critical physiotherapists have critiqued (or “problematized”) a range of assumptions and practices that pervade healthcare and physiotherapy including, for example, how we understand and address movement (Bjorbækmo, 2010; Wikstrom-Grotell & Eriksson, 2012), disability (Gibson, 2006), weight stigma (Groven & Engelsrud, 2016; Rugseth & Standal, 2015; Setchell, Watson, Gard, & Jones, 2016), the body (Hay, Connelly, & Kinsella, 2016; Jorgenson, 2000; Nicholls & Gibson, 2010; Setchell et al., 2017), practices of touch (Bjorbækmo & Mengshoel, 2016; Nicholls & Holmes, 2012), communication (Parry, 2004), and ethical reasoning (Edwards & Delaney, 2008). There are critical histories of physiotherapy (Nicholls, 2017; Ottosson, 2015; Owen, 2014),

critical pedagogies (Rowe, Bozalek, & Frantz, 2013; Trede, Higgs, Jones, & Edwards, 2003), and critical explorations of gender (Dahl-Michelsen, 2014; Hammond, 2009; Sudmann, 2009) and culture (Ihle & Sudmann, 2014; Nixon et al., 2015). This book builds on this emerging corpus of critical scholarship to explore the possibilities inherent in new ways of thinking, knowing, teaching, researching and doing physiotherapy.

Overview of chapters

Planning a chapter order for this collection was an interesting project in itself. We could have randomly organized chapters, or grouped those with similar philosophical underpinnings, topic areas, or other analogous features. We decided to organize the chapters in a malleable way, following in the footsteps of authors such as Marg Sellers (2013) who take a philosophical approach to book structuring. Sellers drew on the work of postmodern philosophers Gilles Deleuze and Félix Guattari (1987) to organize her book on young children's interrelationships with education curriculum development. Drawing inspiration from her, we invite the reader to engage with the book using a number of possible pathways depending on interests. The book is ordered according to what Deleuze and Guattari term "plateaus", or areas of intensity and commonality, with the chapters grouped into four such plateaus including theory (*critical openings*), practice (*practicing differently*), pedagogy (*rethinking education*) and research (*researching practices*). Like Deleuze and Guattari's conceptualization of plateaus as dynamic and without rigidly defined internal structurings, each grouping can be considered unbounded. Almost any chapter could have been allocated to any plateau – certainly they all have theoretical components and pertain to practice. In grouping them as we

have, we provide only one of many possible pathways through the book. Following a brief overview of chapters as presented in these plateaus, we suggest two other possible pathways.

The first plateau, *Critical openings*, contains four chapters that engage with social theory and philosophy to challenge some of the fundamental assumptions underlying physiotherapy thinking and practice. It begins with Barbara Gibson's chapter that draws on critical and postmodern theories to offer an "ethics of doubt" that seeks to dismantle binaries such as normal/abnormal and health/illness in physiotherapy, and works against adherence to universal rules promulgated in traditional bioethics. Anna Ilona Rajala's chapter which follows also focuses on physiotherapy ethics. She begins with a provocative question: "Ethics, morals, theory. Who cares, right?". Rajala works from the ideas of critical theorist Theodor Adorno to discuss how, far from being an irrelevant intellectual triviality, moral theories are an important *practice* – suggesting that striving for morality in physiotherapy requires acting to consider the specific, individual and localised. Roger Kerry's chapter shifts to analytical philosophy in considering the assumptions underlying causation in evidence based practice (EBP), a topic that is further addressed in a number of chapters throughout the book. He argues that EBP's Humean framings assume that cause can only be determined in particular, controlled conditions, and that problems arise when trying to apply this constrained framing in clinical decision-making. In the final chapter of this plateau, David Nicholls introduces the philosophies of "new materialism" to map out radical new possibilities for understanding and practicing physiotherapy. Nicholls suggests that new materialism provides a bold new vision for physiotherapy by challenging contemporary modernist assumptions including the separation of nature and culture, and the supremacy of "the human" over other animals and things.

The *Practicing differently* plateau showcases critical writings that offer insights into how physiotherapists practice and how “things could be otherwise”. In the opening chapter, Blaise Doran and Jenny Setchell draw on their experiences working in the performing arts to demonstrate the applications of creative performance theories and techniques to the *doing* of physiotherapy. They blend Keith Johnstone’s “impro” theatre techniques with Judith Butler’s theories of performativity to discuss potential problems with the “archetypal physiotherapist” in clinical interactions. Following this is another chapter from Setchell, who together with Ukachukwu Abaragou, interrogates the dearth of attention in physiotherapy to culture and politics. Drawing on post-structuralism, they explore how sociopolitical forces organize health practices and people’s experiences of health, including stigma and discrimination. Touch is another theme explored across the book, and in Chapter 7, Fiona Moffatt and Roger Kerry work to reconceptualize how touch is understood, researched, and addressed in physiotherapy practice. Finally, Tobba Therkildsen Sudmann (2009) takes readers on a critical hermeneutic exploration of hippotherapy; highlighting the embodied, affective, social, and political connections between horses, riders and physiotherapists.

Rethinking education shifts the focus to pedagogy, with each of the three chapters in this plateau scrutinizing physiotherapy education through a distinctively critical lens. Karen Yoshida explores Collins’, and bell hooks’¹ Afro-centric feminist epistemology to argue for resistance of masculinist, Euro-centric approaches to knowledge generation through active dialogue that emphasizes connectiveness to others. Subsequently, Tone Dahl-Michelsen and Karen Synne Groven draw from the new materialism of Karen Barad to reconsider EBP as an entanglement between

1 bell hooks does not capitalize her name

different types of knowledge that are never fixed but instead are always “becoming”. In complicating how knowledge is produced, their work provides fresh insights into how to assist students in working with the complexities of practice. In the plateau’s final chapter, Michael Rowe draws from the critical pedagogies of Paolo Freire and Henry Giroux to argue for a move away from linear, top-down approaches to learning and teaching. Using the example of digital technologies, he reasons that the thoughtful facilitation of personal learning networks enables creative inquiry, preparing students to engage with the complex and networked nature of contemporary life.

The final plateau, *Researching practices*, highlights critical empirical work across a spectrum of substantive issues to provide nuanced insights into how physiotherapists might practice differently. First, Wenche Bjorbækmo and Jay Shaw present an observational study of clinical care in which they draw on the work of Maurice Merleau-Ponty to demonstrate how physiotherapists manage apparently contradictory needs for both standardization and individualization. In considering the embodied nature of practice, they further extend the problematization of EBP found in earlier chapters. Amy Hiller and Claire Delany’s chapter also looks closely at physiotherapy-client interactions, and returns to the theme of touch. The authors use data from video-recorded physiotherapy sessions to discuss how, despite common rhetoric, most interactions are professional-centred rather than client-centred. Within these encounters, they describe moments of disruption enacted through non-verbal communication such as touch. Next, Karen Synne Groven, Nicole Glenn and Jenny Setchell use Luna Dolezal’s phenomenology of shame and a post-structuralist reading of fatness to analyze the unspoken problematic consequences of weight and fitness testing in research with adolescents involved in a weight loss program. This final plateau concludes with Birgitte

Ahlsen and Kari Nyheim Solbrække's chapter outlining research conducted with men who have chronic muscle pain. They discuss how narrative interviews and a sensitivity to gender norms can help facilitate a better understanding of how people construct their illness stories, and conclude with a call for more individualized care.

As we noted above, there are multiple alternative pathways through this book. No doubt readers will find their own pathways, but in Figure 1 we offer two other possibilities.

A) Chapters grouped by substantive topic

Topic	Chapters
Evidence Based Practice	3, 6, 10, 12
Ethics	1, 2
Disability	1, 9
Touch	7, 13
Obesity	6, 14
Performing arts	5, 8
Sociocultural context	4, 6, 8, 9, 14

B) Chapters grouped by philosophical approach

Philosophical approach	Chapters
Poststructuralism	1, 5, 7, 8, 9, 14
New Materialism	4, 10
Phenomenology	7, 12, 14
'Classic' critical theories (Adorno, Gadamer, Friere)	2, 8, 11
Analytical philosophy	3, 7
Symbolic interactionism	6
Narrative theory	13

Figure 1: Alternative pathways for reading the book

References

- Abrams, T. (2014). Flawed by Dasein? Phenomenology, ethnomethodology, and the personal experience of physiotherapy. *Human Studies*, 37(3), 431–446.
- Agger, B. (2006). *Critical social theories*. 2nd Edition. Herndon, VA: Paradigm Publishers.
- Bjorbækmo, W. S. (2010). “My own way of Moving”: The Movement Experiences of Children with disabilities. (Doctoral dissertation). University of Oslo, Oslo, Norway.
- Bjorbækmo, W. S. & Mengshoel, A. M. (2016). “A touch of physiotherapy” —the significance and meaning of touch in the practice of physiotherapy. *Physiotherapy theory and practice*, 32(1), 10–19.
- Broberg, C., Aars, M., Beckmann, K., Emaus, N., Lehto, P., Lähtenmäki, M. L., . . . Vandenberghe, R. (2003). A conceptual framework for curriculum design in physiotherapy education – an international perspective. *Advances in Physiotherapy*, 5(4), 161–168.
- Butler, J. (2011). *Gender trouble: Feminism and the subversion of identity*. New York: Routledge.
- Carden-Coyne, A. (2008). Painful bodies and brutal women: Remedial massage, gender relations and cultural agency in military hospitals, 1914–18. *Journal of War and Cultural Studies*, 1(2), 139–158. doi:10.1386/jwcs.1.2.139/1.
- Cott, C. A., Finch, E., Gasner, D., Yoshida, K., Thomas, S. G. & Verrier, M. C. (1995). The movement continuum theory of physical therapy. *Physiotherapy Canada*, 47(2), 87–95.
- Dahl-Michelsen, T. (2014). Sportiness and masculinities among female and male physiotherapy students. *Physiotherapy theory and practice*, 30(5), 329–337.
- Dahl-Michelsen, T. (2015). Curing and caring competences in the skills training of physiotherapy students. *Physiotherapy Theory and Practice*, 31(1), 8–16. doi:10.3109/09593985.2014.949946
- Deleuze, G. & Guattari, F. (1987). *A thousand plateaus — capitalism and schizophrenia*. Minneapolis: University of Minnesota Press.
- Dew, K. (2003). *Borderland practices: Regulating alternative therapies in New Zealand*. Dunedin, New Zealand: University of Otago Press.

- Eakin, J., Robertson, A., Poland, B., Coburn, D. & Edwards, R. (1996). Towards a critical social science perspective on health promotion research. *Health Promotion International*, 11(2), 157–165.
- Edwards, I. & Delany, C. (2008). Ethical reasoning. *Clinical Reasoning in the Health Professions*. (3rd ed.). (279–89). Oxford, United Kingdom: Butterworth-Heinemann.
- Foucault, M. (1983). “On the Genealogy of Ethics: An Overview of Work in Progress.” Afterword, in Hubert L. Dreyfus and Paul Rabinow. *Michel Foucault: Beyond Structuralism and Hermeneutics*. (2nd ed.). Chicago, Illinois: University of Massachusetts Press.
- Fournier, V. (2002). Amateurism, quackery and professional conduct. In M. Dent & S. Whitehead (eds.), *Managing professional identities: Knowledge, performativities and the ‘new’ professional* (116–137).
- Gibson, B. E. (2006). Disability, connectivity and transgressing the autonomous body. *Journal of Medical Humanities*, 27(3), 187–196.
- Groven, K. S. & Engelsrud, G. (2016). Negotiating options in weight-loss surgery. *Medicine, Health Care and Philosophy*, 19(3), 361–370.
- Hammond, J. A. (2009). Assessment of clinical components of physiotherapy undergraduate education: are there any issues with gender?. *Physiotherapy*, 95(4), 266–272.
- Hay, M. E., Connelly, D. M. & Kinsella, E. A. (2016). Embodiment and aging in contemporary physiotherapy. *Physiotherapy theory and practice*, 32(4), 241–250.
- Heap, R. (1995). Physiotherapy’s quest for professional status in Ontario, 1950–80. *Canadian Bulletin of Medical History/Bulletin Canadien D’histoire De La Médecine*, 12(1), 69–89.
- Higgs, J., Hunt, A., Higgs, C. & Neubauer, D. (1999). Physiotherapy education in the changing international healthcare and educational contexts. *Advances in Physiotherapy*, 1(1), 17–26.
- Higgs, J., Refshauge, K. & Ellis, E. (2001). Portrait of the physiotherapy profession. *Journal of Interprofessional Care*, 15(1), 79–89.
- Hislop, H. J. (1975). The not-so-impossible dream. *Physical Therapy*, 55(10), 1069–1080.
- Hunt, A., Adamson, B., Higgs, J. & Harris, L. (1998). University education and the physiotherapy professional. *Physiotherapy*, 84(6), 264–273.

- Ihle, R. & Sudmann, T. T. (2014). Health Encounters with Minority Patients. *FLEKS-Scandinavian Journal of Intercultural Theory and Practice*, 1(2).
- Jorgensen, P. (2000). Concepts of body and health in physiotherapy: The meaning of the social/cultural aspects of life. *Physiotherapy Theory and Practice*, 16(2), 105–115.
- Kincheloe, J. L., McLaren, P. & Steinberg, S. R. (2011). Critical pedagogy and qualitative research. *The SAGE handbook of qualitative research*, 163–177. Thousand Oaks, California: Sage.
- Lindquist, I., Engardt, M. & Richardson, B. (2010). Learning to be a physiotherapist: A metasynthesis of qualitative studies. *Physiotherapy Research International*, 15, 103–110.
- Linker, B. (2005). Strength and science: Gender, physiotherapy, and medicine in the United States, 1918–35. *Journal of Women's History*, 17(3), 106–132. doi:10.1353/jowh.2005.0034.
- Millett, K. (1970). *Sexual politics*. Chicago, Illinois: University of Illinois Press.
- Murphy, W. (1995). *Healing the generations: A history of physical therapy and the American Physical Therapy Association*. Lyme, Connecticut: Greenwich Publishing.
- Nicholls, D. A. (2017). *The end of physiotherapy*. London: Routledge.
- Nicholls, D. A., Atkinson, K., Bjorbaekmo, W. S., Gibson, B. E., Latchem, J., Oleson J., Ralls J. & Setchell, J. (2016). Connectivity An emerging concept for physiotherapy practice. *Physiotherapy Theory & Practice*, 32(3), 159–170.
- Nicholls, D. A. & Cheek, J. (2006). Physiotherapy and the shadow of prostitution: The Society of Trained Masseuses and the massage scandals of 1894. *Social Science & Medicine* (1982), 62(9), 2336–2348.
- Nicholls, D. A. & Gibson, B. E. (2010). The body and physiotherapy. *Physiotherapy Theory and Practice*, 26(8), 497–509.
- Nicholls, D. A. & Holmes, D. (2012). Discipline, desire, and transgression in physiotherapy practice. *Physiotherapy theory and practice*, 28(6), 454–465.
- Nicholls, D. A. & Larmer, P. (2005). Possible futures for physiotherapy: An exploration of the New Zealand context. *New Zealand Journal of Physiotherapy*, 33(2), 55–60.
- Nixon, S.A., Cockburn, L., Acheinegeh, R., Bradley, K., Cameron, D., Mue, P.N, ... Gibson, B.E. (2015), 'Using postcolonial perspectives to

- consider rehabilitation with children with disabilities: The Bamenda-Toronto dialogue', *Disability and the Global South*, 2, 570–589.
- Noronen, L. & Wikstrom-Grotell, C. (1999). Towards a paradigm-oriented approach in physiotherapy. *Physiotherapy theory and practice*, 15(3), 175–184.
- Ottosson, A. (2015). One history or many herstories? Gender politics and the history of physiotherapy's origins in the nineteenth and early twentieth century. *Women's History Review*. doi:10.1080/09612025.2015.1071581
- Owen, G. (2014). *Becoming a practice profession: a genealogy of physiotherapy's moving/touching practices*. (Doctoral dissertation). Cardiff University.
- Parry, A. (1995). Ginger Rogers did everything Fred Astaire did backwards and in high heels. *Physiotherapy*, 81(6), 310–319.
- Parry, R. H. (2004). The interactional management of patients' physical incompetence: a conversation analytic study of physiotherapy interactions. *Sociology of health & illness*, 26(7), 976–1007.
- Richardson, B. (1993). Practice, research and education—What is the link?. *Physiotherapy*, 79(5), 317–322.
- Rowe, M., Bozalek, V. & Frantz, J. (2013). Using Google Drive to facilitate a blended approach to authentic learning. *British Journal of Educational Technology*, 44(4), 594–606.
- Rubinstein, S. M., van Middelkoop, M., Assendelft, W. J., de Boer, M. R. & van Tulder, M. W. (2011). Spinal manipulative therapy for chronic low-back pain. *Cochrane Database of Systematic Reviews*, 2(4).DOI: 10.1002/14651858.CD008112.pub2.
- Rugseth, G. & Standal, Ø. (2015). "My body can do magical things". The movement experiences of a man categorized as obese - a phenomenological study. *Phenomenology & Practice*, 9(1), 5–15.
- Sellers, M. (2013). *Young Children Becoming Curriculum: Deleuze, Te Whariki and curricular understandings*. London: Routledge.
- Setchell, J., Watson, B. M., Gard, M. & Jones, L. (2016). Physical Therapists' Ways of Talking About Overweight and Obesity: Clinical Implications. *Physical therapy*, 96(6), 865.
- Setchell, J., Nicholls, D. A. & Gibson, B. E. (2017). Objecting: Multiplicity and the practice of physiotherapy. *Health*, 1–20. (eprint) doi:10.1177/1363459316688519

- Sudmann, T. T. (2009). (En)gendering body politics. Physiotherapy as a window on health and illness. (Dissertation). University of Bergen, Bergen, Norway).
- Tyni-Lenné, R. (1989). To identify the physiotherapy paradigm: A challenge for the future, *Physiotherapy Practice*, 5(4), 169–170
- Trede, F., Higgs, J., Jones, M. & Edwards, I. (2003). Emancipatory practice: A model for physiotherapy practice? *Focus on health professional education: a multi-disciplinary journal*, 5(2), 1.
- Wikström-Grotell, C., Broberg, C., Ahonen, S. & Eriksson, K. (2013). From Ling to the academic era – an analysis of the history of ideas in PT from a Nordic perspective. *European Journal of Physiotherapy*, 15(4), 168–180.
- Wikström-Grotell, C. & Eriksson, K. (2012). Movement as a basic concept in physiotherapy–A human science approach. *Physiotherapy theory and practice*, 28(6), 428–438.

Plateau 1

Critical openings

CHAPTER 1

Post-critical physiotherapy ethics: A commitment to openness

Barbara E. Gibson | Department of Physical Therapy, University of Toronto / Bloorview Research Institute, Holland Bloorview Kids Rehabilitation Hospital

Abstract

This chapter sketches out the parameters for a (post-)critical physiotherapy ethics that reframes moral practice in terms of a commitment to openness. Dominant forms of contemporary bioethics tend to universalize the subject as a bearer of rights devoid of history, particularity, relationships, or social location. In the chapter, I build from critical and postmodern theories to examine ethical moments of radical openness towards disassembling habits of thought in physiotherapy. An open approach is not an ethics of adherence to universal rules or principles, but rather one that seeks to challenge ingrained norms, avoiding stasis and opening up new possibilities for practice by breaking down binary categories such as normal/abnormal, health/illness and self/other. My intent is not to provide a prescriptive set of rules for determining action, but to outline a method of analysis that can be

employed to understand the multiple effects of physiotherapy practices some of which are unintended, potentially harmful and largely obscured from view. The chapter includes a practice-based application to a case in children's rehabilitation.

Introduction

Consistent with the aims of this book, my intent in this chapter is to outline a *critical* approach to physiotherapy ethics. However, it would perhaps be more accurate to state that my task is to explicate how any critical work is concerned with ethics. Physiotherapists, like most health professionals, are trained in a narrow version of bioethics that emphasizes juridical rules and top down application of principles. This training may obscure the link between criticality and ethics. Criticality is by its definition emancipatory, dedicated to surfacing “the development and continuation of inequalities in society, especially for those members of society with particular social characteristics, including socio-economic status, gender, sexual orientation, cultural background and disability” (Calhoun, 1995). Thus, doing critical work is also doing the work of ethics (or more precisely, normative ethics) in that it seeks to understand and redress systemic harms perpetrated in contemporary life. The ethics of openness I propose draws from postmodern strands of critical work (“post-critical”) to illuminate some of the most entrenched ideas in physiotherapy towards building moral practices.

Ethics is concerned with questions of how people ought to act. It is not limited to specific acts and defined moral codes, but encompasses all actions, practices, ideas, and systems that may be harmful or helpful in various ways. It asks questions like: How should people act? What do people think is right? How do we take moral knowledge and put it into practice? And what does “right” even

mean? (Mastin, 2008). Critical ethics focuses these questions in particular ways, asking:

- What do people take for granted as right or true?
- How did they come to think this way?
- What are the unintended or hidden effects of current dominant modes of thinking and acting?
- What alternatives are available and what are the possible effects of implementing these?

In what follows, I sketch out the parameters of a post-critical “ethics of openness” for physiotherapy. First, I briefly review the dominant approaches to bioethics and why these are increasingly inadequate for informing practice. I then review some key parameters of post-critical theory, incorporating an example from children’s rehabilitation, to outline the implications for an open approach to physiotherapy ethics.

Mainstream bioethics

Mainstream bioethics¹ is grounded in dominant traditions of liberal humanism which emphasizes autonomy, independence and the rational application of abstract rules and principles. Consistent with this conceptual mooring is an emphasis on particular kinds of problems, many of which revolve around issues of choice and consent, access to treatment, fair processes and rational decision-making (Shildrick, 2005). Addressing ethical problems is achieved through rational deliberation of autonomous individuals who draw on principles or precedents to produce logical, objectively supportable actions (Murray & Holmes, 2009).

1 Bioethics is a sub-field of ethics oriented to the examination of ethical issues in health care, health science/research, and health policy

The most dominant ethical approaches used in healthcare training and practice rely on some version of consequentialism to putatively tabulate a balance sheet of “objective” risks and benefits to determine the best course of action. The weighing of options is guided by values and principles, most commonly the “Georgetown mantra” of Autonomy, Beneficence, Non-maleficence, and Justice (Beauchamp & Childress, 2013). The teaching and application of these frameworks usually takes the form of a review of facts, an assessment of how the principles apply, and deductive processes and debates directed at choosing what to do (see for example: Swisher, Arslanian & Davis, 2005; Enck, 2014; McDonald, Rodney & Starzomski, 2001). There is nothing inherently wrong with these frameworks that I have used in my own teaching to help students organize their thoughts and arguments. At a minimum, these approaches help to illuminate the ethical dimensions of an issue and mitigate over-reliance on regulation and law. Nevertheless, as I explore below, these approaches have limited utility in identifying and addressing the most deeply entrenched and pervasive social problems that are taken for granted as “just the way things are”.

Mainstream bioethics is not monolithic, however, and there are some alternatives to the rationalist project outlined above. Most notably, virtue ethics and its expression in narrative approaches to healthcare ethics are gaining some traction in professional education (Goodrich, Jean, Irvine & Boccher-Lattimore, 2005; Kinsella & Pitman, 2012). Virtue ethics as an approach has its basis in the virtuous traits that make up an individual’s character and is grounded in notions of practical wisdom or *phronesis* (Kinsella & Pitman, 2012). In healthcare, narrative approaches extend this tradition by drawing on patient stories to stimulate professional reflection and learning. They thus differ from more common approaches that assume a relatively context-free application of universally derived principles exercised by rational agents. Murray and Holmes (2009)

note, however, that virtue ethics is rarely taken seriously in clinical environments.

Rationalistic approaches to bioethics are consistent with contemporary liberal humanism that has its roots in 17th century enlightenment philosophy. Rene Descartes' now famous declaration "I think therefore I am" separated mind and body into two distinct substances, each with a different essential nature (Mehta 2011). The body was viewed as a physical material object, while the mind was positioned as the locus of knowledge. This separation of a thinking-mind from a sensate-body grounds the rational autonomous subject of modern medicine and bioethics.

Principlism provides the most compelling example of the dominance of Enlightenment reasoning in bioethics. Originally proposed by Beauchamp and Childress in 1985, and now the subject of seven editions of the *Principles of Biomedical Ethics* (Beauchamp & Childress, 2013), principlism espouses that all persons share a common morality that derives from certain transhistorical and transcultural principles that are putatively immanent across humankind. A stable, individuated, autonomous subject - disembodied and devoid of history, culture or context - is presumed to engage in logico-deductive processes in applying principles to produce ethical judgements. This tendency to universalize subjects both as moral agents and as objects of power has been criticized for reflecting neoliberal assumptions of individualism and future-oriented decision-making that are foreign to many cultures and groups (Kelly, 2003). Although there has been a shift to recognizing notions of "interdependence" in mainstream bioethics including principlism (Beauchamp & Childress, 2013), the valorisation of autonomy and individualism persists.

Mainstream bioethics has been the subject of criticism on several fronts from diverse disciplines. The most sustained and influential critique of these comes from feminist scholars who have long

noted bioethics' reluctance to engage with issues of power and privilege. Power-focused ethical work, they suggest, exposes actions and practices that perpetuate pervasive patterns of marginalization and oppression. Such an ethics views situated relations and hierarchies as integral to the understanding of any moral context, raising questions about the social basis for decisions at all levels (Sherwin, 1998; 2008). Critical strands of feminist ethics are concerned with how oppressive social arrangements become internalized by individuals or groups and misrecognized as "natural". Ethical deliberation is concerned with illuminating the forces of oppression that act on persons and by doing so contributing to social change. Sherwin (2008) uses the example of prenatal testing, suggesting that the traditional bioethical focus on consent (competence, disclosure, understanding, and voluntariness) is silent regarding the broader political question of why a woman may want to avoid the birth of a child with a disability. Such an expanded ethics would not only attend to the requirements of consent, but also consider, for example, the social assumptions regarding disability and quality of life that mediate how choices are constructed and weighed. Moreover, feminist and other forms of critical bioethics emphasize the political and historical situatedness of problems and people (Kelly, 2003). They acknowledge that the particulars of gender, race, and disability, for example, are not neutral in bioethical deliberation, but shape how problems are constructed and addressed, which problems receive attention and by whom (Kelly, 2003).

Emergent postmodern strands of critical bioethics extend power-focused feminist critiques by looking beyond the material organization of power hierarchies toward problematizing the epistemological assumptions that ground medicine and liberal humanism more broadly. Until relatively recently, most critical approaches to bioethics have adopted primarily historical-materialist views of power expressed in identity politics. As Shildrick (2005) notes,

this ethics of *distinction* persists in presupposing an independent subject as a bearer of individual (or group) rights. Rights are held by the body-contained-self protecting it from incursion from the outside, marking its independence from others and emphasizing its separation and distinct interests. The divisions of people by gender, race, disability and other identity categories reproduce this separation. Postmodernism challenges these divisions by positing irreducible differences and connections amongst all persons (Gibson, 2006; Price & Shildrick, 1998; Shildrick, 2000). A radical postmodern ethic thus reconfigures the relationship between self and other in terms of shared vulnerabilities, a becoming-with-others where categorizations and bodily boundaries are blurred. This blurring of subjectivities is a radical departure from liberal humanism and its conciliatory notions of “interdependence” that creates a space for different ways of understanding and approaching bioethical challenges and responsibilities.

It is here that I situate my discussion of a post-critical ethics of openness for physiotherapy. The ethical approach I sketch out in the remainder of this chapter is largely based on the work of Margrit Shildrick and her “post-conventional” critique of mainstream bioethics (Shildrick, 1997; 2005). I have written about this elsewhere, most notably in my book *Rehabilitation: a post-critical approach* (2016). In the remainder of this chapter, my goal is to explicitly apply these ideas to physiotherapy, towards disassembling habits of thought and providing a methodology for identifying the hidden, less obvious, sources of harm perpetrated in quotidian practices. In so doing, I re-examine the “good” that physiotherapy can offer.

An ethics of openness

The ethics of openness I describe draws from both postmodern and critical theories and their shared critiques of the dominance of the

Enlightenment philosophy in contemporary life (Agger, 1991). The rational scientific project is deeply ingrained in the liberal humanism of western societies and finds expression in the health sciences, including physiotherapy, which have relegated other modes of understanding to the margins (Gibson, 2016b). Biomedical sciences assume a positivist epistemology (way of knowing), wherein a stable reality can be discovered through scientific observation and hypothetico-deductive reasoning. Said differently, phenomena such as health, disability, or quality of life are assumed to pre-exist their discovery and it is the task of science to reveal their objective properties (Mehta, 2011).

Post-critical approaches reject the notion of stable objective truths and instead assert that all knowledge is perspectival and relational. Simply put, knowledge is *produced by people* rather than existing “out there” waiting to be discovered. It is thus always subject to historical, cultural, political and other contextual contingencies that influence how the world is interpreted. “Disability”, for example, is one way of understanding and labelling particular kinds of observed human characteristics, but the kinds of differences that are made relevant, and the category itself, are historically produced human constructions that are always open to revision. Moreover, post-critical approaches are concerned with how power shapes knowledge, that is, what (and whose) interpretations persist and why. Power is not limited to an examination of the power one group exerts over another (as with power-focused feminist ethics), but includes the hidden, less obvious ways that the taken-for-granted goes unexamined and the ensuing consequences (Eakin, Robertson, Poland, Coburn, & Edwards, 1996).

So far, I have identified a number of post-critical ideas that have relevance for a reconsidered physiotherapy ethics: an examination of power in terms of the taken-for-granted, a critique of the separation of mind/body and other dualisms, and a relational

epistemology that acknowledges the constructed nature of knowledge. Collectively these ideas suggest that a post-critical bioethics is less concerned with adherence to universal rules or principles, but rather continually challenging ingrained norms and assumptions towards opening up new possibilities for practice (Shildrick, 1997). Such an approach can be mobilized to scrutinize unreflective assumptions that organize physiotherapy practices, not necessarily to discard them, but to appreciate more fully the range of their effects towards a deeper ethical engagement.

An ethics of openness is the normative expression of a post-critical epistemology, providing a methodology for identifying, analysing and addressing the ethical dimensions of physiotherapy practice. An open approach extends the range of “practice dilemmas” beyond individual patient-practitioner encounters to ask anew, What are we (physiotherapists) doing and why? In so doing, physiotherapists can develop an increased sensitivity to the multiple hidden effects of practice and their unintended harms. For example, all of the ways that health practitioners assess, label and treat bodily impairments contribute to sustaining ideas that disabled people’s bodies are problems that need to be fixed (Gibson, 2014; 2016a). While physiotherapy may be helpful in many ways that disabled people welcome, it also has this unintended effect that is rarely acknowledged. Physiotherapy ethics is traditionally more concerned with discussing risks and benefits of treatment, not with these broader harms that reflect and extend how disability and disabled people are viewed in society. A post-critical physiotherapy ethics thus aligns with postmodern approaches to disability studies in questioning how disability is understood and with what effects (Stiker, 1999; Shildrick, 2000; Goodley, Lawthorn & Runswick Cole, 2014; Gibson 2016c).

An ethics of openness is one of continually questioning the most every day, ingrained, accepted and “evidenced-based”

physiotherapy practices. Openness is about *doubt*, that is, doubting the unassailability of the accepted truths of physiotherapy and health care. Ingrained ideas, practices and principles are never settled but always open to revision. Moreover, it is perhaps those practices that appear devoid of ethical content that require the closest scrutiny. An ethics of openness, like all critical work, requires ongoing commitment to thinking against the grain.

Quinn and the trampoline

An example helps to elucidate how an ethics of openness can be mobilized in physiotherapy practice. In a recent Canadian study in a children's rehabilitation hospital (Setchell, Abrams, Thille, Mistry & Gibson, 2017) we conducted observations of outpatient clinical encounters between health professionals, children with muscular dystrophy and their parents. In the following excerpt from the data, a physiotherapist (QuinnPT) and a parent (Mom) are discussing the family's recent purchase of a trampoline for their eight year-old son (Cameron):

QuinnPT started with, "Okay, here's the thing," and Mom immediately made a face like she didn't want to hear anything bad about the trampoline. QuinnPT talked about how Cameron's ankles had rotated a bit. Mom jumped in and said that he wears his shoes, which provide support. QuinnPT said, "Not really support for his ankles." Mom said she did not want to deny him the trampoline because "he really loves it!" QuinnPT nodded, but then began to list some of the things she was concerned about such as the pressure on his ankles and compression fractures. She added that she appreciates that he liked it, but was very concerned about compression fractures. Mom looked a bit upset about this as she looked over at Cameron, who was playing with his book. QuinnPT then added with a sympathetic tone, "It's not an activity

I'd recommend, but it's up to you three (the family), and I appreciate where you're coming from." Mom nodded but she didn't look happy. QuinnPT then changed the subject...

The ethics of this scenario may not be immediately apparent, and/ or the “right thing” for the physiotherapist to do may seem relatively straightforward (even if challenging to execute). From a traditional bioethics approach, we could check off all the elements of a “valid” approach to client/family-centred decision making:

- Capacity: The young child is viewed as incapable of independent decision making, thus Quinn engages the parent as the substitute decision maker who is charged with determining what actions are in his best interests.
- Disclosure and Understanding: Quinn has acknowledged Mom's position but takes steps to ensure she is aware of the risks. Quinn educates Mom to ensure that she appreciates the potential consequences.
- Voluntariness: Quinn has assured Mom that the final decision rests with the family. She does not insist that they give up the trampoline.

Within traditional bioethics, we could view this as an issue of balancing an avoidance of harms (non-maleficence) with respecting the autonomous choices of the family. There may still be issues to quibble with, however, even from a traditional bioethics standpoint. For example, a frequent debate surrounds questions of if and how to engage children towards supporting their “emerging autonomy”. Moreover, more is going on in the example than an arid application of principles and rules, as is evident in Quinn's tone of sympathy and her affirmation that she appreciates where the family is “coming from”. It is often challenging when practitioners disagree

with patients and feel the weight of responsibility when advice is not followed. Ethical deliberation is thus often focused on debating the appropriate degree of persuasion and avoidance of “paternalism”. Approaching the example post-critically, however, reveals a different set of ethical questions.

I said above that an ethics of openness is an ethics of doubt. We can apply this thinking in the case at hand to examine what is taken for granted by the physiotherapist in terms of what is best for Cameron, and her assumed responsibilities towards him and his family. The excerpt provides a striking example of competing professional and personal *logics* (Mol, 2008). The physiotherapist constructs the trampoline as an object of risk around which a decision must be made. She weighs the harms and benefits according to the logics embedded in her profession, which include her responsibility to minimize health and safety risks. The logics of physiotherapy invariably will see fun as secondary to maintaining ankle alignment and reducing fracture risks. However, Mom, and presumably Cameron, do not approach the trampoline according to these same logics. While they likely share some of Quinn’s concern for safety, for them the trampoline engenders pleasure, opening a space wherein Cameron *becomes* playing-child rather than diseased-child. To further delineate this distinction and what it means for a physiotherapy ethics of openness, I need to briefly sketch out the postmodern notion of *becoming*.

Becoming

The critique of the separation of mind and body takes its most radical turn in the postmodern rejection of the individuation of subjects. Deleuze and Guattari (1983; 1987) re-imagine the subject as a continual “becoming” neither encased by skin and organs nor defined by static categories such as sick/well, disabled/able-bodied,

male/female, gay/straight or even person/thing (Massumi, 1992). Becoming is active. A temporarily produced subject is, in the next moment, broken down and reconfigured to become anew (Gibson, 2006). Deleuze and Guatarri reimagine the static individual of fixed identity in terms of *assemblages* that can be thought of as temporary collections of heterogeneous human and non-human elements that might include bodies, objects, ideas, animals, places etc. ad infinitum. Becoming-assemblages are never settled and thus defy categorization. Instead of a concern with what things “are” or are not there is an appreciation of movement, of a never settled “AND” that is “neither one thing nor the other, it is always between two things” (Deleuze, 1995). Becoming thus resists categorizations embedded in, for example, contemporary healthcare and physiotherapy, and asks us to consider how things might be otherwise.

Returning to the example, the notion of becoming can be mobilized to recognize and reconfigure the ethics of the encounter. “Cameron” is constructed in many ways according to different logics and commitments. None of these are more real or true than any others are, yet they incite very different actions. The Cameron of traditional bioethics is a rights-bearing individual with (emerging) autonomy. As a child (another identity category), he is deemed incapable of independent decision-making, thus an autonomous adult (Mom) is granted decisional authority. The child and adult are individuated – the adult of bioethics is *the* (singular) substitute decision maker. There is no collective assemblage here. Regardless of whom is consulted, some-*one* must decide. A *substitute* sovereign subject must be designated when the child-patient is incapable of independent, rational choice.

The Cameron of physiotherapy is a set of clinical symptoms, facts and problems to be addressed (muscular dystrophy-Cameron). As with traditional bioethics, he is not devoid of context or relationships; it is recognized that he is part of a family with unique circumstances

and preferences. Nevertheless, these are contingencies that inform decision making without altering the fundamental logics of clinical care. Physiotherapy constructs its object as one of (existing or potential) physical deficiencies addressed through adherence to a regime of specific actions (exercises, splints) and avoidances (trampoline). The imperatives of client and family-centred care guard against the imposition of professional power, but leave intact the individuated subject who is compelled to choose (Mol, 2008). Moreover, while in theory all choices of a capable decision maker are meant to be respected and upheld, in practice choices that do not conform to the logics of physiotherapy are heavily scrutinized. Mom's emphatic declaration that "he really loves it!" is an unacceptable rationale when the physiotherapist weighs it against the possible physical dangers presented. "Loving it" can never be a good enough reason within the algorithms of ethico-clinical decision-making. The response, deeply embedded in professional logics, is to assume the parent does not fully understand, that the thing to do is "educate" (convince/enlighten). The non-compliant parent produces a deep anxiety for the physiotherapist who is unable to persuade her do what is right. Quinn declares in frustration- "it's up to you" whilst making it clear that she disapproves. Mom is positioned as the "bad-parent" who is putting her child at risk.

Considered through a post-critical ethics of openness, becoming-cameron is a multiple, co-existing and ever-changing AND. I have switched to a lower case "c" in cameron's name to signal the fluidity of becoming. He is patient-with-muscular dystrophy but also a boy-jumping-gleefully, and many other becoming-camerons. The assembling of clinic-physiotherapist-mom-disease-risks produces one configuration that can be contrasted to the cameron of trampoline-home-family-body sensations-pleasure. "Cameron" is both and neither of these constructions, a singular multiplicity that is always in flux, defying categorizations of child, muscular dystrophy,

symptoms, function, prognosis, autonomous, incapable, vulnerable, sick, well, disabled, etc. And, of course, the same approach opens up how we understand “physiotherapist”, “mom”, and the open assemblages of other material and affective elements that come together to collectively “do physiotherapy”, “do family”, “do cameron”.

In the face of such porous and unstable relations, the question arises of how ethics is even possible. If all is open and shifting, where is the ethical responsibility? Shildrick (2005) suggests that the consequentialist calculus of traditional bioethics is “no more than an exercise in management” largely devoid of ethical content (p. 12). Rather the task of ethics, she asserts, is to think beyond the boundaries of the familiar. Doing ethics then is a critical exercise in questioning predetermined categories, principles and logics whether these are those of traditional bioethics or those of physiotherapy/healthcare. The ethical moment is the moment of doubt (*aporia*), where the old rules may no longer apply and different categories and ways of knowing emerge. Doubt does not preclude action. Shildrick (2005) draws on Derrida’s notion of the undecidable as signalling a responsive and responsible ethics:

(Derrida’s) argument is that in the face of complex and incommensurable demands that suggest at best a multiplicity of competing ways forward, the imposition of one set of moral principles rather than another simply sidesteps the need for ethical decision. Rather than an effort to engage with the undecidable, the resort to preexisting rules or laws represents a retreat to the security of the known, not a real encounter with the ethical issues in hand. (p. 11)

A “real encounter” is one where existing modes of thought are “made strange” - an act of thinking for oneself. This is more challenging than it might seem. Nevertheless, it is the essence of criticality: questioning deeply held assumptions, principles, tenets and truths that are seldom reflected upon but which govern daily action.

In the study, the clinical team and researchers discussed what had transpired in the Quinn encounter. The clinicians suggested that the prohibition against jumping was primarily related to the risk of muscle breakdown/myoglobinuria associated with Cameron's medication. They stated that because of these risks "there really is no choice". Here was the moment of certainty, of rote application of biomedical logics of risk/benefit without doubt or questioning. There was "no choice" and therefore no ethical conundrum. According to the biomedical logics of healthcare, these risks *automatically* overrode considerations of pleasure. "He just loves it!" is not a sufficient rationale. The team did not see an ethical responsibility to doubt or temper this certainty; instead, they were confronted with an uncomfortable duty to "educate" the family towards getting rid of the dangerous trampoline. Yet, once these modes of thinking were laid bare through our discussions, while the team may not have immediately changed their practices, they decided quite easily that there were other ways of seeing the situation, other possible cameron's to consider. This realization did not provide a prescription of what to do, but opened up the conversation to admit other constellations of cameron/family/muscular dystrophy/pleasure that may be enacted or blocked through clinical practices. Ways that extend beyond "It's not an activity I'd recommend, but it's up to you".

Conclusion as opening

A commitment to openness in physiotherapy requires a radical shift in habits of thought. Appreciating that most everyday practices of assessment, treatment, and education are imbued with ethical import requires physiotherapists to adopt a position of continual doubt. Setting aside the certainty of what patients need is aided by reconsidering "patients" in terms of multiple becomings (Setchell, Nicholls & Gibson, 2017). Instead of reasoning through

a set of objective problems, risks, and “contextual factors”, an open approach expands the moral imagination to consider irreducible and shifting connections and possibilities. Pleasure and risk, for example, are considered alongside each other, not in order to choose but to enable: to free up new creative possibilities that might not have been previously imagined. What could physiotherapy achieve in considering the becoming patient, in questioning how practices (re)produce the body-at-risk to the exclusion of other modes of doing and being? What compromises or affective appreciations might emerge? Such an ethics shifts and expands the logics of practices to embrace undecidability and thinking for oneself.

While an ethics of openness does not provide a framework for approaching ethical practice, it does provide a guiding question: *What are you doing when you are doing what you are doing?* (Gibson, 2016a). In other words, what are the effects of what you are doing - considered in the broadest possible terms? What are considered good outcomes and why? In pursuing preferred outcomes, what other effects are produced and what other possibilities are rendered impossible, for this patient and others? Here is the essence of criticality that I opened with at the beginning of the chapter. Providing ethical physiotherapy *care*, in the many senses of the term, is a tremendous task characterized by constant twists, turns, problems, frictions and complications that are never settled or straightforward. Doubt is difficult for professionals who are trained to be experts, whose job it is to know things, to have answers, to educate patients (Gibson, 2016a). Asking, “what are we doing”, however, is essential in avoiding complacency in our collective commitments to provide ethical care.

Acknowledgements

Data presented in this chapter was drawn from a research study funded by the AMS Phoenix Program. Thanks to the study

participants who gave so generously of their time and insights. Thanks also to the study research team: Laura McAdam, Jenny Setchell, Thomas Abrams, Patty Thille, and Bhavnita Mistry. Barbara Gibson is supported by the Bloorview Children's Hospital Foundation Chair in Childhood Disability Studies.

References

- Agger, B. (1991). Critical theory, poststructuralism, postmodernism: their sociological relevance. *Annual Review of Sociology*, 17, 105–31.
- Beauchamp, T.L. & Childress, J.F. (2013). *Principles of Biomedical Ethics*, (7th ed.). New York, NY: Oxford University Press.
- Calhoun, C. (1995). *Critical social theory: culture, history, and the challenge of difference*. Chichester: Wiley-Blackwell.
- Deleuze, G. (1995). *Negotiations: 1972–1990*. New York, NY: Columbia University Press.
- Deleuze, G. & Guattari, F. (1987) *A thousand plateaus: Capitalism and schizophrenia*. Minneapolis: University of Minnesota Press.
- Deleuze, G. & Guattari, F. (1983) *Anti-oedipus: Capitalism and schizophrenia*. Minneapolis: University of Minnesota Press.
- Eakin, J., Robertson, A., Poland, B., Coburn, D. & Edwards, R. (1996). Towards a critical social science perspective on health promotion research. *Health promotion international*, 11(2), 157–165.
- Enck, G. (2014) Six-step framework for ethical decision making. *Journal of health services research & policy*, 19(1), 62–64.
- Gibson, B.E. (2016a). *Rehabilitation: A post-critical approach*. Boca Raton, FL: CRC Press.
- Gibson, B.E. (2016b). Moving rehabilitation. In *Rehabilitation: A post-critical approach* (1–26). Boca Raton, FL: CRC Press.
- Gibson, B.E. (2016c). Disability/Normality (Ch 2). In *Rehabilitation: A post-critical approach* (27–50). Boca Raton, FL: CRC Press.
- Gibson, B. E. (2014). Parallels and problems of normalization in rehabilitation and universal design: enabling connectivities. *Disability and rehabilitation*, 36(16), 1328–1333.
- Gibson, B. E. (2006). Disability, connectivity and transgressing the autonomous body. *Journal of Medical Humanities*, 27(3), 187–196.

- Goodley, D., Lawthom, R. & Cole, K. R. (2014). Posthuman disability studies. *Subjectivity*, 7(4), 342–361.
- Goodrich, T. J., Irvine, C. A. & Boccher-Lattimore, D. (2005). Narrative ethics as collaboration: a four-session curriculum. *Families, Systems & Health*, 23(3), 348–357.
- Kelly, S. E. (2003). Bioethics and rural health: theorizing place, space, and subjects. *Social Science & Medicine*, 56(11), 2277–2288.
- Kinsella, E. A. & Pitman, A. (2012). Engaging phronesis in professional practice and education. In *Phronesis as professional knowledge* (1–11). Rotterdam: SensePublishers.
- Massumi, B. (1992). *A user's guide to capitalism and schizophrenia: Deviations from Deleuze and Guattari*. Cambridge, Massachusetts: MIT Press.
- Mastin, L. (2008) *The basics of philosophy*. Retrieved from: http://www.philosophybasics.com/branch_ethics.html.
- McDonald, M., Rodney, P. & Starzomski, R. (2001). *A framework for ethical decision-making*. Retrieved from: <http://ethics.ubc.ca/upload/a%20framework%20for%20ethical%20decision-making.pdf/>.
- Mehta, N. (2011). Mind-body dualism: A critique from a health perspective. *Mens Sana Monographs*, 9(1), 202–209.
- Mol, A. (2008) *The Logic of Care: Health and the Problem of Patient Choice*. London: Routledge.
- Murray, S.J. & Holmes, D. (2009). Introduction: Towards a Critical Bioethics. In S.J. Murray & D. Holmes (eds.), *Critical interventions in the ethics of healthcare: Challenging the principle of autonomy in bioethics* (1–11). New York: Routledge.
- Price, J. & Shildrick, M. (1998). Uncertain thoughts on the disabled body. In M. Shildrick & J. Price (eds.), *Vital signs: feminist reconfigurations of the bio/logical body* (224–249). Edinburgh: Edinburgh University Press.
- Setchell, J., Abrams, T., Thille, P., Mistry, B. & Gibson, B.E. (2017). Enhancing human aspects of care with young people with Muscular Dystrophy: Results from a participatory qualitative study involving clinicians. *Child: Care, Health & Development*. E-print, DOI: <https://doi.org/10.1111/cch.12526>.
- Setchell, J., Nicholls, D. A. & Gibson, B. E. (2017). Objecting: Multiplicity and the practice of physiotherapy. *Health*. E-print, DOI: 1363459316688519.

- Sherwin, S. (2008). Whither bioethics? How feminism can help reorient bioethics. *IJFAB: International Journal of Feminist Approaches to Bioethics*, 1(1), 7–27.
- Sherwin, S. (1998). A relational approach to autonomy in healthcare. In S. Sherwin (Ed.), *The politics of women's health: Exploring agency and autonomy*. (19 – 47). Philadelphia, PA: Temple University Press.
- Shildrick, M. (2005). Beyond the body of bioethics: Challenging the conventions. In M. Shildrick & R. Mykitiuk (eds.), *Ethics of the body; Postconventional Challenges* (1–28). Cambridge, MA: MIT Press.
- Shildrick, M. (2000). Becoming vulnerable: Contagious encounters and the ethics of risk. *Journal of Medical Humanities*, 21(4), 215–227.
- Shildrick, M. (1997) *Leaky Bodies and Boundaries: Feminism, Postmodernism and (Bio)ethics*. Taylor and Francis. Kindle Edition.
- Stiker, H.J. (1999). The birth of rehabilitation. In *A history of disability*. (121–89). Ann Arbor: University of Michigan Press
- Swisher, L. L. D., Arslanian, L. E. & Davis, C. M. (2005). The realm-individual process-situation (RIPS) model of ethical decision-making. *HPA Resource*, 5(3), 1–7.

CHAPTER 2

What can critical theory do for the moral practice of physiotherapy?

Anna Ilona Rajala | University of Brighton, School of Humanities, Centre for Applied Philosophy, Politics and Ethics

Abstract

Physiotherapy is undeniably a concrete practice. What then do theoretical considerations on moral matters have to do with it? Drawing on Max Horkheimer's distinction between critical and traditional theory, I suggest that once the meaning of moral theory is recast as critical theory, in contrast to a mere framework of ethical codes and rules, a deeper significance of theory for 21st-century physiotherapy practice can be drawn out. Critical theory, a practice of critique and resistance to improve human existence, has clear significance for physiotherapy. Drawing on the critical philosophy of Theodor W. Adorno, this chapter describes some of the aspects of the kind of critical moral theory that is relevant for physiotherapy today: it demands consideration of real contexts and people, it seeks to disrupt the "business as usual" of the field, and aims to remain open to maintain its relevance and critical purchase. To achieve the

objective of critical theory in physiotherapy, it needs to be understood as an ongoing struggle rather than immediate solution. Thus, rather than merely agreeing on some ethical rules, critical theory needs to analyse and resist whatever might restrict morality in practice.

Introduction

Ethics, morals, theory. Who cares, right? After all, physiotherapy is a material practice that deals with concrete and often immediate physical problems. So far in its history, physiotherapy has benefited from adopting the scientific reductionist view of the body, function, movement and health that is characteristic of biomedicine (Nicholls, 2018). Does moral theory – that is, theoretical considerations on moral and ethical¹ matters – have anything to do with the “hard science” of physiotherapy? What, if anything, can moral theory do for 21st-century physiotherapy? The purpose of this chapter is to offer some answers to these questions and to contribute to theoretical literature on rehabilitation.

In applied ethics, such as physiotherapy ethics, “theory” is usually taken to refer to the plethora of classical and contemporary ethical theories that seek to determine the grounds for arguing what is

1 Ethics and morals can be roughly distinguished by their etymology: “morals” comes from the Latin *mores* for the characteristic customs and conventions of a society or community and ethics from the Greek *ethos* for nature, disposition and customs implying a more personal set of standards (which have to be socially accepted because the idea of an individual private ethics is absurd). The terms are often used interchangeably (e.g. ethics vs. moral philosophy) and also contrary to their etymological distinction (e.g. in Scott’s 1998 textbook, morals have religious connotations and are therefore considered more personal than the authority or study of ethics). There is also obviously an overlap between personal and social, which is why drawing a line between them is at best superficial. All etymological definitions in this chapter follow the Oxford English Dictionary, retrieved on 10 September 2017 from <http://www.oed.com/>.

right and wrong, or good and bad, in the actions and persons of human beings (e.g. in Scott, 1998; Sim, 1997; Gabard & Martin, 2011). Whether acting out of duty or according to ethical principles (deontology and principlism), whether paying less attention to the needs of some patients to benefit many as the putative best outcome (utilitarianism, or consequentialism), or whether disposed to having excellent moral character and practical wisdom to act virtuously in clinical practice (virtue ethics) – each approach yields different perspectives and justifications for practice. This is all very well. However, to think critically about moral theory for physiotherapy today is neither to settle disputes between different theories nor to decide which one to endorse. As I argue in the first part of this chapter, the commercialization and rationalization of social life that began to take form in the advent of the age of Enlightenment in Western Europe destroys the grounds for taking any conception of morality seriously (Poole, 1991).² What was once the moral jurisdiction of the church and state has increasingly become a matter of personal preference: one could, in principle, argue a case for virtue ethics today and utilitarianism tomorrow, and all readers have to do is to choose which theory suits them and their presuppositions better. The problem is that no matter how well any approach is justified, or which codes of ethics are followed, there is still unfathomable injustice and suffering in the world. This is not to suggest universalism, relativism, foundationalism or an anti-theory approach, as all such binary extremes are equally unhelpful. Nor is it to say that classical moral philosophy or professional ethical codes ought to be abandoned. It is merely to

2 “Modernity” is used to describe this process. It is contested whether we have transitioned into something else through the critique of modernity (stemming from e.g. Nietzsche, Weber and postmodern philosophy). The rational scientific project of modernity, however, continues to have a hold on social and moral life, as well as on health sciences (e.g. Gibson, 2016).

say that in order to address the crisis of morality, it is time to move beyond understanding moral theory as the plethora of approaches that might enter the marketplace of physiotherapy ethics. Thus, drawing on the critical theorist Max Horkheimer, I suggest that physiotherapy ethics today calls for *critical theory*: the engagement in critical and reasoned reflection on moral philosophy and ethical codes, as well as on the moral context of practice, rather than an agreement on a moral framework for physiotherapy – as if, merely to do so, it would guarantee moral practice.

In the second part of this chapter, I argue that the objective of morality – the struggle against injustice and suffering – requires that the actual and particular, rather than abstract universal norms, become the centrepiece of ethics. I then examine the putative gap between theory and practice. To address the challenges of contemporary healthcare, as Nicholls (2018) argues, physiotherapy needs to move beyond the biomedical paradigm that has underpinned it. This also implies that physiotherapy, as a material practice, ought to be understood as more than a mere economic exchange of services, technical knowledge and skills: it involves working on, with, for, around and through bodies that encounter, interact with and touch each other, move and are moved physically, psychologically, socially, culturally, biopolitically and emotionally. In short, physiotherapy is undeniably what has been called *body work* (see e.g. Twigg, 2006) in sociology. I argue that critical moral theory is indeed needed in physiotherapy today, not despite the innate materiality of body work, but because of it: physiotherapy is a material practice but it is also inescapably social and therefore a moral practice. To approach the question of moral theory and practice in a manner that is attentive to the people and practices that are invisible in the marketplace of care – those that the innate materiality of physiotherapy makes visible – theory's practicality cannot simply be about *whether* it is practical

or not. For “theory” is not one unified practice. Rather, one has to ask *what kind* of theory, if any, might serve physiotherapy today, both its explicit and hidden realities? What are the demands for its practicality in this context?

Finally, drawing on the work of Horkheimer’s close colleague, Theodor W. Adorno, I argue that theoretical critical inquiry that is directed towards the material and ideological realities of healthcare is already *in itself* a practice. Understood through the etymology of the Greek *theoria*, theory is a practice of contemplation, observation, speculation, seeing and a looking at. It is to be a spectator, to see both in the sense of apprehension and comprehension. The etymology links theory with thought which is not a copy of reality or its passive recipient but, as Benedetto Croce (2000, p. 32) puts it, it is “as active as action”. The practice of theory as critical thought seeks understanding of the mode of our social life in modernity and, more explicitly since Marx, as I explain below, its transformation through critique. Herein lies the value of critical theory for physiotherapy: when it criticises and resists³ whatever in the actual material and ideological context might obstruct moral physiotherapy practice – wherever and however morality finds meaning and expression in the context of modernity – theory becomes a practice that is moral because it is also political. As Adorno 2000, p. 176) writes: “the quest for the good life is the quest for the right form of politics, if indeed such a right form of politics lay within the realm of what can be achieved today”.

Even if radical social transformation and politics to achieve it are uncertain, critique and resistance are means that are available – at least for some. However, it is unreasonable to expect that critique will immediately solve all problems. Such impatience towards

3 Wherever there is critique, there is also resistance, because they necessitate each other (Hoy, 2004).

theory, as Adorno (2000, p. 4; 1998, p. 293) argues, restricts its openness and thus its “power of resistance”. What critical theory can do is develop the moral and political maturity of practitioners, educators and researchers. It aims at empowering them to disrupt the conditions for practice that are today often less than favourable. These less-than-favourable conditions may be the result of, for example, a lack of time, communication, collegiality, solidarity, leadership or resources. The relevance of this chapter for physiotherapy is, then, to develop an understanding of moral agency in modernity, one that gives voice to theoretically rigorous critical moral practice that is attentive to real people and contexts, rather than fixed ethical frameworks that guide from above.

Modernity and moral theory

To see why the understanding of “theory” as the array of approaches to moral matters is insufficient, we need to look at the processes that shape social and ethical experience in modern life.⁴ It is by no means a new or radical claim that modernity itself – its disenchanting forces of secularisation, consumerism and science – undermines the meaning of morality (see Bennett, 2009). Modernity is a temporal notion but more importantly, it refers to the inescapable mode of social experience that is dominated by processes of rationalization and commercialization (Osborne, 1992; Poole, 1991). These processes of modernity, as Bernstein (2001, p. 420) argues, enclose ethical experience “on all sides in rationalized institutional

4 The concept of experience has a long history in philosophy – Martin Jay (2005) traces it insightfully – that often carries more complex meaning compared to everyday language. In this chapter, experience refers to the Hegelian sense of *Erfahrung*, i.e. the dialectical process between subject and object, which cumulatively shapes consciousness, understanding and knowledge. Importantly, the concept of experience also contains the reference to Benjamin and Adorno whose concern is the question of the decay and possibility of *Erfahrung* in modernity.

structures and social practices”. This undermines everything non-factual, as well as the motivation to pursue anything non-factual, including moral ideals and values. In short, what passes for morality is hollowed out by positivism. Morality in modernity is, therefore, only fugitive and a matter of subjective belief and preference (Bernstein, 2001; MacIntyre, 1985; Poole, 1991). If there remains such a thing as a modernist ethical experience at all, Bernstein (2001, p. 420) writes, then it is “the experience of the promise of a form of life escaping [such] nihilism”.

The problem of modernity illuminates the need to rethink the meaning and function of moral theory, more specifically, the need to move towards critical theory. In his seminal 1937 essay on the distinction between traditional and critical theory, Horkheimer (1973; see also Horkheimer & Adorno, 2002) argues that traditional theory follows the Enlightenment ideal of science and thought (of which positivism is a continuation) which holds rationalistic, mathematical and mechanistic thought in the highest value. Traditional theory, he argues, seeks to be a universal system of facts and conceptual determinations in which every proposition can be derived from and subsumed under its concepts without friction or contradictions. This description of traditional theory epitomizes what modernity’s “imprint of meaninglessness” means for Max Weber (1991, p. 139): namely, that “there are no mysterious, incalculable forces that come into play, but rather ... one can, ... in principle, master all things [including morality] by calculation.” The prime example of this in healthcare ethics is the consequentialist framework of four principles (Beauchamp & Childress, 2013), in which ethical considerations exist in reference to four putatively universal norms: respect for autonomy, nonmaleficence, beneficence and justice. Traditional theories, such as the four principles framework, attempt to find grounding for ethics in universal principles and positivistic ideals but, paradoxically, by doing so they also destroy

the grounding because ethical experience ultimately transcends positivistic “facts” conceptual definitions and calculation.

Rather than suggesting an ethical tool or a specific theory to address the problem of modernity, Poole (1991) argues a case in favour of critical theory and maintains that the task of moral philosophy today is to criticise existing social life and its practices to direct change. Critical theory, Horkheimer (1973) argues, is a mode of inquiry concerned with the prevailing social totality and its injustices, and it seeks radical improvement of the conditions of human existence. Importantly, according to him, because of its object of critique – the contemporary situation of a historically changing society – neither the practice to achieve its emancipatory goals nor its exact theoretical structure can be fixed. According to Horkheimer, critical theory is in evolution as long as there are injustices that call for radical social transformation.

Edwards and colleagues (2011, pp. 1643–1644) argue that the ethical codes that often underpin physiotherapy ethics have broadened from a concern for individual patients’ well-being towards the inclusion of social and global matters. This “represents a maturation of the physical therapy profession’s sense of moral agency ... [that] extends beyond the treatment encounter between individual therapists and patient and into those broader social and ethical issues that are increasingly recognized as shaping and determining health.” The broadened perspective, which for Edwards and colleagues calls into question concepts about both current practices and foundational theory, represents a moving away from traditional theory. If this is right, and if the move is towards anything like critical theory, then the nature of moral theory as something that prescribes norms from above ought also to be called into question. Because critical theory is always in evolution, it necessarily questions the concept of normativity understood as the ability to spell out a definitive alternative to whatever is under critique. Critical

theory can make normative claims, and often does. However, fixing it in a way that canonises it as an infallible replacement for whatever is under critique misses the complexity of social structures and practices – and it is exactly this complexity that calls for critical rather than traditional theory in the first place. This also applies to making critical theory into a precise tool. Delany and colleagues (2010) formulate a model for physiotherapy ethics that moves towards critical morality by spelling out three steps: listen actively, think reflexively and reason critically. This exemplifies what critical moral practice might look like. The point of critical theory, however, is not to prescribe how to implement critical thinking. Instrumentalising critical theory runs the risk of restricting its openness, as by defining it, it would also define its limits. Rather, critical work needs, as Gibson (2016, p. 13) writes, “an ongoing commitment to thinking against the grain.”

The objective of morality

Even if critical theory cannot be fixed, the improvement of human existence is nonetheless the object of its practice. This object is not altogether unlike the “objectives of morality” in the four principles approach. Tom L. Beauchamp (2010, p. 176), one of its foremost advocates, argues that the objectives are such that promote “human flourishing by counteracting conditions that cause the quality of people’s lives to worsen.” This is difficult to disagree with. However, the moral urgency of global suffering calls for a more radical formulation. Croce (2000, p. 50), for example, is more forthright: “Morality is nothing less than the struggle against evil; and if evil did not exist morality would not exist either.” Such objective is undeniably Herculean, even utopian, when conceived in terms of definitive outcomes rather than an ongoing struggle. Any positive social change requires taking steps though the “negative”: critique,

resistance and action towards what is “better” even if it is ambiguous, transient, beyond conceptualisation and often out of reach.

Gordon Finlayson (2002) reformulates Adorno’s call for resistance against the conditions of a life that is “false” and fittingly calls it the *ethics of resistance*. According to Finlayson (2002, pp. 6–8), the ethics of resistance requires political maturity that “prevents conscience from ossifying into moralistic righteousness”, as well as humility and affection, that is, the capacity to be moved. This point has also been made in ethics of care regarding shifting the focus of ethics from depersonalised, distanced, impartial and generalising rationality towards the inclusion of “virtues associated with care, such as compassion, attentiveness, empathy and attention to detail” (Sevenhuijsen, 1998, p. 5; see also Tronto, 1993). In other words, moral theory and practice need to pay attention to what is too often considered irrelevant or secondary in the search for normative universals: particularity, people, bodies, context, affect, feelings, emotions, power relationships and suffering.

Kate Schick (2009) argues that Adorno’s attention to particular suffering challenges and disrupts the abstraction, instrumentalism and universalism of modernity. Owen Hulatt (2014) also interprets the theme of suffering in Adorno’s thinking. He argues that it constitutes a somatic impulse that must have both normative and moral content.⁵ An observer of suffering, as Hannah Arendt (1990) points out, does not of course share the suffering in a somatic sense. The “somatic impulse” is rather the reaction, the embodied affect – disgust, shame, sadness, shudder or anger – in the face of suffering which motivates moral action, critique and resistance. Being a witness to suffering may of course fail to move and motivate. Such failure constitutes, however, nothing less than one of the most pressing questions for both moral theory and practice.

5 I disagree with Hulatt that Adorno claims suffering to be normative. However, for the purposes of healthcare ethics, his interpretation is useful.

In other words, if we are to take Beauchamp and Childress' objective of morality seriously, practice cannot place its trust in moral principles detached from the particularity of human experience and, to put it provocatively, sit back to witness morality happen. Defining principles and codes of ethical conduct does not yet guarantee moral and ethical practice. Rather, as Joan Tronto (1993) argues, for moral arguments to be taken seriously, they need to be understood in their political context and the inherent power relationships within both moral situations and moral theories. Therefore, rather than merely justifying norms that constitute the ideal moral practice for physiotherapy, critical moral theory starts with what the objective of morality requires: challenging the prevailing practices and conditions that cause people's lives to worsen, for example, due to exploitation, injustice, inequality, poverty, exclusion, silencing, discrimination, or the neo-liberal consensus and its demand for exchange-value over just healthcare provision.

Towards a materialist view of morality

During the past few decades, empirical research in healthcare ethics has increased to the extent that it is no exaggeration to speak of the "empirical turn" (Borry, Schotsmans & Dietrickx, 2005). It has also been suggested, with due critical interrogations (Loughlin, 2006), that ethical decision-making should be "evidence-based" (Borry, Schotsmans & Dietrickx, 2006). This new paradigm of empirical moral inquiry has challenged the prospects of contributions from the standard classical theories, such as utilitarianism and deontology, with the added option of the four principles approach. At the same time, however, and in line with the problem of modernity and the appeal of traditional theory, the value of philosophical and theoretical inquiry in a more general sense has also become suspect.

The question that reveals the relationship between theory and practice is often framed in terms of utility: is moral theory of any *use* for practical research and clinical practice? Should moral theory inform them, or *vice versa*? If these questions are asked in utilitarian terms, the answers tend to favour utilitarian approaches.⁶ The conditions of healthcare today demand utility, both in evidence-base and cost-effectiveness that militate against non-utilitarian theoretical and philosophical considerations, both materially and intellectually, simply because “evidence” and “effectiveness” too readily come to be understood merely on an empirical basis. Consequently, other approaches to ethics become marginalised, especially those that challenge modernity, that transgress the formalism and abstracted simplification of traditional normative theories and that are impossible to translate into the language of utility – especially in terms of the markets (Diamond, 1992; Rajala, 2016). These marginalised approaches also include those that draw upon the everyday material realities of care as body work that often deal with what is already rejected⁷ and hidden: disability, difference, old age, death, the boundless leaky body, its waste and fluids, and touch that often involves intimate areas (e.g. Lawler, 1991; Shildrick, 1997; Twigg, 2006).

Physiotherapy, just like care work, is utterly material and concrete. The unavoidable mutuality of touching and moving bodies, the involvement of leakage and waste, and neediness and dependence, are necessary and natural parts of both caregiving and care

6 E.g. Monteverde (2014) frames his questionnaire in terms of practicality of application. The results favour consequentialism and principlism that are both utilitarian approaches.

7 The rejection is not merely a consequence of the rational scientific processes; what is rejected reminds us of our own limits and, ultimately, the limit of life. This object is, as Julia Kristeva (1982, p. 4) argues, something rejected but something that one does not part from: it is uncanny, it disrupts identity, system and order, and disrespects borders, position and rules.

receiving (Tedre, 2004), but often also physiotherapy practices to different degrees. Moral theory that pursues an understanding of physiotherapy cannot afford to ignore this. On the contrary, the necessities of the body should be the basis recognition of both caregivers and those who are cared for (Rajala, 2016). Attention to the body, as some recent critical research in physiotherapy shows (e.g. Gibson, 2016; Nicholls & Holmes, 2012), disrupts and resists the detachment of traditional moral theory as well as the misleading “certainties” and reductionism of an evidence-based approach. In other words, a material practice requires a materialist ethics that considers actual people with bodies acting in physical spaces, times and context, but without reverting to traditional theory and its positivism that excludes all matters in life that cannot be directly verified by empirical evidence.

Critique and resistance in Adorno’s philosophy

It might seem odd that I treat Adorno as the theorist of philosophy and resistance *par excellence*, given his infamous quarrels with the German political student movement (see e.g. Jeffries, 2016, pp. 341–350) and his oft-quoted aphorism that there is “no right life in the wrong one” (Adorno, 2005, p. 39). After all, these have earned him – however unfairly – the reputation of a political defeatist and a moral pessimist. I turn to Adorno because I share some of this “pessimism”: it is self-deceiving to think that political resistance without the critical input of theory, the meticulous pointing out of the wrong and false in the world, could achieve a “better” world where neither resistance nor critique are any longer needed. However, I also share the utopian hope – the point of contemplation for critical theory and the reason why Adorno is not simply a defeatist and a pessimist – that even if a right kind of society is difficult to portray

explicitly, its possibility is at least conceivable. There is thus an alternative to the conformity with the *status quo*. As Adorno (1998, p. 288) writes, “the false, once determinately known and precisely expressed, is already an index of what is right and better.”

To understand the context of Adorno’s argument about theory and practice, we have to start with Marx’s famous eleventh thesis on Feuerbach: “The philosophers have only *interpreted* the world, in various ways; the point is to *change* it” (Marx, 1975, p. 423). Here Marx posits the practical changing of the world above its mere theoretical diagnosis. Adorno (1973, p. 3) argues, in reply to the primacy of practice especially in 20th-century Marxism, and as a critique of state socialism, that because the moment to realise the revolutionary social change was missed, philosophy as the critique of the *status quo* is still very much needed. The prevailing evil and suffering in the world necessitates, he argues, that the thought that cannot be realised is not simply discarded. What Adorno means is that to understand why the opportunity was missed, political practice needs theory that explores the societal and political reality and its dynamic, so that political practice remains self-critical and serves its purpose to produce “a rational and politically mature humanity” (Adorno, 1998, p. 14). If, Adorno (1998, p. 265) warns, theory is simply subjugated to practice, the truth content of theory is dissolved, because theory becomes unavoidably limited by its sole purpose being to serve practice. In fact, and this is Adorno’s point about political resignation, the “utopian moment in thinking is stronger the less it ... objectifies itself into a utopia and hence sabotages its realization” (Adorno, 1998, p. 292).

Nevertheless, Adorno remains concerned for action – not least inasmuch as he regards theorisation as itself active; as practical. Despite his repudiation of direct political action without theoretical interpretation, the Kantian question of “What shall we do?” is for Adorno still the crucial one for moral philosophy and for

philosophy in general.⁸ Such practicality, as it was for Aristotle and for Kant, is in fact precisely what moral philosophy deals with. However, Adorno sees a problem in that practicality is used to refer to mere problem solving. Rather, his focus is on theory *as* practice, which has its roots in the philosophical origins and meaning of the Greek word *praxis*, referring to acting and doing. Theory, on the other hand, does not refer to the smorgasbord of competing theories and approaches that philosophy has produced throughout its history. According to Adorno (2000, p. 3), theory refers to the theoretical analyses – the practice of theory – that are essentially critical in nature. Theory, Adorno argues, is akin to the practice of prudent thinking, which is not the mere forming of concepts, or of making judgements correctly; rather, it is at the same time the ability to direct itself outside itself – to the object outside the subject, or the material and ideological reality. Therefore, thinking is not mere subjective activity. Granted, it cannot be imagined without the subject. It is essentially, however, a dialectical process *between* the thinking subject and its object in which they mediate each other mutually (Adorno, 1973). Such thinking is, for Adorno (1998, 11; 109; 254; 261), inherently practical.

Because thinking is not merely subjective, it must have some effect outside itself. To effect social change, however, it needs to stay open and critical (cf. Gibson, 2016). Thought that merely recites what is accepted without reflecting upon it, Adorno (1998, pp. 122; 264) argues, brings thought to a standstill: it cannot be called thinking proper. On the contrary, he argues further, thinking that approaches its object openly and that is based on progressive knowledge is also free towards its objects in the sense that it refuses to have rules prescribed to it by some external authority (Adorno, 1998, p. 13). Social change needs

8 Adorno is not Kantian and whether he has a specific “ethics” beyond morally motivated critique is highly contestable.

such a critical form of thought according to Adorno: for it does not take mere applicability as the criterion of knowledge, maintaining the existing conditions, but rather negates whatever is prescribed to it and so exercises resistance by refusing to take part in the wrong state of things (Adorno, 1998, pp. 259; 292; Adorno, 2000, p. 7). Such thinking is the “force of resistance” (Adorno, 1998, p. 293). Within thinking, then, lies the key to the relationship between theory and practice that, as Adorno (1998, p. 261) argues, “neither divides the two such that theory becomes powerless and praxis becomes arbitrary...” Rather, because thinking is an activity, and therefore there is no such thing as pure thinking, theory as critical thinking – as critical theory – is already *in itself* a form of practice (Adorno, 1998, p. 261).

Critical theory as resistance in physiotherapy

The implications of critical theory for moral theory in physiotherapy are far-reaching. It shifts the focus towards the existing material and ideological conditions that mediate acting subjects, thinking, morality and knowledge. Moreover, because it is a practice that concerns social change, it is a political practice that is moral because, while it is political, it also *disrupts* political hegemony. Critical theory, therefore, transgresses the boundary between the political and the moral (see Tronto, 1993). The task for such moral theory is also to resist whatever might obstruct moral and ethical action in practice, to become an ethics of resistance. Traditional moral theory with fixed norms runs the risk of becoming limited by its own content. In contrast, acting ethically, and even according to moral norms, requires creativity and openness that is achieved by such open-ended critique and resistance that Adorno describes (cf. Gibson, 2016).

Although the physiotherapy profession has its own ethical dimensions (see Delany et al., 2010), it also shares a lot with bioethics general.⁹ To illuminate the political role of bioethics, Lisa Parker (2007) argues that bioethics has a conservative role in contributing to the processes of rational deliberative democracy but it should also be regarded as a form of activism. While bioethics often takes a stand on social justice, this is not yet, for Parker, what activism means. Social justice is rather “the business as usual of the field” and activism should be something that disrupts business as usual (Parker, 2007, p. 146). When practised well, even when participating in public deliberative processes, she argues, bioethics should serve as a corrective to the deficiencies of the deliberative processes thus serving an activist role. As activism, bioethics seeks the inclusion of those who are traditionally excluded from deliberative democratic processes, and draws attention to structural injustices, inequalities, power relations, identity categories, binaries in thinking, and dominant conceptual frameworks for bioethical discussion and consensus (Parker, 2007). Parker’s activism concretely complements what I have argued so far: that theory as practice should be disruptive, should point out what is hidden and rejected, and that it should seek to point out and critique systemic flaws in the conditions for morality.

Adorno (2000, p. 4) and Parker (2007, pp. 148–149) both point out a difference between critical theorising and activism: that theory, because it does not really “do” anything, is considered to fail to take a political stand. Adorno (1998, pp. 260; 292; 2000, p. 4) argues that this impatience, the demand that theory must produce its practically legitimating justification immediately, does not advance thought beyond itself but ties it down by the criteria of immediate effectiveness. Instead, the call for immediate effect

9 Bioethics commonly refers to the study of the ethical implications of the advances of medical research and technology.

needs to be resisted, Adorno argues, in order to ruthlessly follow a theory through to see where it might lead, which is exactly what makes theory practical. What Adorno means is that political action requires a reasoned analysis of that situation; analysis that does not conform but may be able to point beyond the given constraints of the situation, social totality and immediately given “facts”. Such thinking, that does not conform to what is immediate becomes transformative, a practical productive force: “If thinking bears on anything of importance, then it initiates a practical impulse, no matter how hidden that impulse may remain to thinking” (Adorno, 1998, p. 264).

Conclusions

I have argued that theory does indeed have something to do with physiotherapy. My main claim is that the kind of theory that finds meaning for 21st-century physiotherapy is critical theory. However, as with any open-ended approach, more questions arise than I have space to address. One of these questions, and perhaps the most difficult to answer, is this: Are critique and resistance privileges? Are they more readily available to those who already have a voice in the clinic, academia and politics? Are those in less powerful positions able to criticise and resist or can it cause them more harm? If so, is it enough that those who can criticise, do so by acting as their advocates? On the other hand, we might ask: Could the articulation of critique and resistance empower the powerless to find a voice? Another set of questions has to do with the agency of the physiotherapist. Is it right to assume and indeed expect that all physiotherapists are and should be interested in politico-moral agency? Is it not easier to resign critical thinking to the formal normative frameworks that have already been set out? If so, should they do so, if they simply do not have resources to engage with critique?

The challenge, then, is to bring critical thinking from the margins to the fore. My fear, however, as with any critical work that challenges conventions, is that I may be preaching to the converted.

What is critical theory for physiotherapy? The demands of critical theory, in order to have practical purchase, include creating awareness among the profession about ethics and morality as critical political notions that are attentive to the materiality of people, spaces and contexts. The aim of critical work is to help researchers, practitioners and students to identify those situations where critique and resistance improve the well-being of patients and, perhaps controversially, also the therapist: a healthy working force is better for the patients, rather than being overwhelmed by conditions that are less than favourable for best practice, for example due to “moral distress” (see Carpenter, 2010). This is not mere problem-solving. It is not the giving of an ethical seal of approval to certain clinical practice. Rather, this is a demand for a self-critical, and for other-critical, practice.

I am not against problem-solving or traditional normative ethics because both are of course useful. The latter can certainly provide a vocabulary, structure, arguments and shorthand about ethics. Neither are, however, exhaustive of moral practice; or of, as I would put it, critical practice. Furthermore, even traditional and formal theories need to be “kept alive” by exercising constant critical thinking towards them – it often moves on speculative level to find reasons and justifications but always arises from the material world we inhabit, but also tolerates the uncertainty that modernity finds intolerable – rather than thinking that once some ethical ground rules are in place, all is well. I acknowledge that traditional normative theories still have a place in healthcare and physiotherapy but my hope is that critical theory can challenge their claim to authority. I hope that this will grant thinking a moment of freedom and the thinker an agency, so that thinking can indeed reach beyond

itself and initiate change. This cannot be done, however, without thought's resistance to what is merely given. Moreover, it cannot be expected that any change will occur immediately rather than as a struggle. The point of critical theory as practice – the practice of critique and resistance, call it activism or the ethics of resistance – is to work towards radical social transformation but also to point outside the hegemonic discourses of modernity.

Acknowledgments

I thank friends and colleagues at CPN for making this book happen, and the organizers and delegates who lent an ear at *Critique, resistance and action: The second critical perspectives in nursing and health care international conference*, at University of Sydney in 2016, where this chapter first saw the light of day. I am immensely grateful to Bob Brecher for helping me improve the text in the last minute. As always, this chapter is dedicated to my critical companion, Timo Uotinen, who read numerous drafts.

References

- Adorno, T. W. (1998). *Critical Models* (H. W. Pickford, trans.). New York: Columbia University Press.
- Adorno, T. W. (2005). *Minima Moralia* (E. F. N. Jephcott, trans.). London: Verso.
- Adorno, T. W. (1973). *Negative Dialectics* (E. B. Ashton, trans.). New York: Routledge.
- Adorno, T. W. (2000). *Problems of Moral Philosophy* (R. Livingstone, trans.). Cambridge: Polity.
- Arendt, H. (1990). *On Revolution*. Harmondsworth: Penguin Books.
- Beauchamp, T. L. (2010). *Standing on Principles*. Oxford: Oxford University Press.
- Beauchamp, T. L. & Childress, J. F. (2013). *Principles of Biomedical Ethics* (7th ed.). Oxford: Oxford University Press.

- Bennett, J. (2009). Modernity and its Critics. In *The Oxford Handbook of Political Science* (127–138). Oxford: Oxford University Press.
- Bernstein, J. M. (2001). *Adorno: Disenchantment and Ethics*. Cambridge: Cambridge University Press.
- Borry, P., Schotsmans, P. & Dierickx, K. (2006). Evidence-based Medicine and its Role in Ethical Decision-making. *Journal of Evaluation in Clinical Practice*, 12(3), 306–311. doi:10.1111/j.1365-2753.2006.00548.x
- Borry, P., Schotsmans, P. & Dierickx, K. (2005). The Birth of The Empirical Turn in Bioethics. *Bioethics*, 19(1), 49–71. doi:10.1111/j.1467-8519.2005.00424.x
- Carpenter, C. (2010). Moral Distress in Physical Therapy Practice. *Physiotherapy Theory and Practice*, 26(2), 69–78. doi:10.3109/09593980903387878
- Croce, B. (2000). *History as the Story of Liberty*. Indianapolis: Liberty Fund.
- Delany, C. M., Edwards, I., Jensen, G. M. & Skinner, E. (2010). Closing the Gap between Ethics Knowledge and Practice through Active Engagement: An Applied Model of Physical Therapy Ethics. *Physical Therapy*, 90(7), 1068–1078. doi:10.2522/ptj.20090379
- Diamond, T. (1992). *Making Gray Gold: Narratives of Nursing Home Care*. Chicago: University of Chicago Press.
- Edwards, I., Delany, C. M., Townsend, A. F. & Swisher, L. L. (2011). New Perspectives on the Theory of Justice: Implications for Physical Therapy Ethics and Clinical Practice. *Physical Therapy*, 91(11), 1642–1652. doi:10.2522/ptj.20100351.10
- Finlayson, J. G. (2002). Adorno on the Ethical and the Ineffable. *European Journal of Philosophy*, 10(1), 1–25. doi:10.1111/1468-0378.00147
- Gabard, D. L. & Martin, M. W. (2011). *Physical Therapy Ethics* (2nd ed.). Philadelphia: F. A. Davis Company.
- Gibson, B. E. (2016). *Rehabilitation: A Post-critical Approach*. Boca Raton: CRC Press.
- Horkheimer, M. (1973). Traditional and Critical Theory. In *Critical Theory: Selected Essays* (188–243). New York: Continuum.
- Horkheimer, M. & Adorno, T. W. (2002). *Dialectic of Enlightenment* (E. Jephcott, trans.). Stanford: Stanford University Press.

- Hoy, D. C. (2004). *Critical Resistance: From Poststructuralism to Post-critique*. Cambridge, MA: MIT Press.
- Hulatt, O. (2014). Normative Impulsivity: Adorno on Ethics and the Body. *International Journal of Philosophical Studies*, 22(5), 676–695. doi:10.1080/09672559.2014.913654
- Jay, M. (2005). *Songs of Experience: Modern American and European Variations on a Universal Theme*. Berkeley & Los Angeles: University of California Press.
- Jeffries, S. (2016). *Grand Hotel Abyss: The Lives of the Frankfurt School*. London: Verso.
- Kristeva, J. (1982). *Powers of Horror: An Essay on Abjection* (L. S. Roudiez, Trans.). New York: Columbia University Press.
- Lawler, J. (1991). *Behind the Screens: Nursing, Somology and the Problem of the Body*. Melbourne: Churchill Livingstone.
- Loughlin, M. (2006). A Platitude Too Far: ‘Evidence-based Ethics’. *Journal of Evaluation in Clinical Practice*, 12(3), 312–318. doi:10.1111/j.1365-2753.2006.00590.x
- MacIntyre, A. (1985). *After Virtue* (2nd ed.). London: Duckworth.
- Marx, K. (1975). *Early Writings* (R. Livingstone & G. Benton, trans.). London: Penguin.
- Monteverde, S. (2014). Undergraduate Healthcare Ethics Education, Moral Resilience, and the Role of Ethical Theories. *Nursing Ethics*, 21(4), 385–401. doi:10.1177/0969733013505308
- Nicholls, D. A. (2018). *The End of Physiotherapy*. Oxon: Routledge.
- Nicholls, D. A. & Holmes, D. (2012). Discipline, Desire, and Transgression in Physiotherapy Practice. *Physiotherapy Theory and Practice*, 28(6), 454–465. doi:10.3109/09593985.2012.67694
- Osborne, P. (1992). Modernity is a Qualitative, Not a Chronological, Category. *New Left Review*, 192(3), 65–84.
- Parker, L. S. (2007). Bioethics as Activism. In *The Ethics of Bioethics: Mapping the Moral Landscape* (144–157). Baltimore: The Johns Hopkins University Press.
- Poole, R. (1991). *Morality and Modernity*. London: Routledge.
- Rajala, A. I. (2016). Pitkääikaishoivan ruumiillisuuden arvosta. In *Työruumis jälkiteollisessa taloudessa* (140–144). Tampere: Vastapaino.
- Sevenhuijsen, S. (1998). *Citizenship and the Ethics of Care: Feminist Considerations on Justice, Morality, and Politics*. London: Routledge.

- Schick, K. (2009). 'To Lend a Voice to Suffering is a Condition for All Truth': Adorno and International Political Thought. *Journal of International Political Theory*, 5(2), 138–160. doi:10.3366/e175508820900038x
- Scott, R. (1998). *Professional Ethics: A Guide for Rehabilitation Professionals*. St. Louis: Mosby.
- Schildrick, M. (1997). *Leaky Bodies and Boundaries: Feminism, Postmodernism, and (Bio)ethics*. London: Routledge.
- Sim, J. (1997). *Ethical Decision Making in Therapy Practice*. Oxford: Butterworth-Heinemann.
- Tedre, S. (2004). Tukisukkahousut sosiaalipolitiikkaan. Inhomaterialistinen hoivatutkimusote. In *Ruumis töihin! Käsite ja käytäntö* (41–64). Tampere: Vastapaino.
- Tronto, J. (1993). *Moral Boundaries: A Political Argument for an Ethics of Care*. New York: Routledge.
- Twigg, J. (2006). *The Body in Health and Social Care*. Houndmills: Palgrave Macmillan.
- Weber, M. (1991). Science as Vocation. In *From Max Weber: Essays in Sociology* (129–157). Oxon: Routledge.

CHAPTER 3

Reconceptualising causation in evidence-based physiotherapy

Roger Kerry | Division of Physiotherapy and Rehabilitation Sciences, University of Nottingham

Abstract

Physiotherapy practice is complex. Each interaction between a therapist and a person seeking care is unique. Physiotherapy research is aimed at providing knowledge, which can be used to inform clinical decision-making within such practice. Considering predicted therapeutic effectiveness, for example, research data should inform the process of deciding which intervention is most likely to have a causal effect on the health of the person. The growing engagement of physiotherapy practice with a framework of evidence-based practice strengthens the profession's commitment to an association between research and clinical decision-making. It would be hoped then, that the sort of causal claims arising from research methods provide precisely the sort of information needed for clinical practice, in all its complexity. This chapter presents a thesis that questions the clinical relevance of causal claims arising from our prioritised research methods. It does this on ontological grounds. The chapter proposes that the nature of causation in evidence-based physiotherapy can be understood by

the way the evidence-based framework structures itself. It then problematises this in the perspective of the complex discipline of physiotherapy with an assertion that the identified Humean nature of causation fails to relate to the context-sensitivity and complexities of a truly person-centred healthcare domain. Solutions are signalled towards a dispositional reconceptualisation of causation that would provide a more robust ontological framework on which research methods and clinical practice could be based.

Introduction

When we express what we do with patients, it is in causal terms: “this could *work* for you”; “we can help you *return* to function”; “this treatment should be *effective*”, etc. These notions are increasingly influenced by a specific idea of what causation is. In an evidence-based practice framework, causation is undeniably Humean¹. That is, causal claims derive from constantly conjoined events (observational studies) and/or from counterfactual conditions (randomised controlled trials). This is problematic, not least because many

1 This relates to a theory of causation given by Scottish philosopher David Hume (1711–1776). Hume’s influence on our understanding of EBM is discussed in more detail later in this chapter. However, for now, it helps to understand the basic idea of Humean causation, which is arguably the most significant idea of causation throughout the last few centuries. His idea is something which now seems desperately intuitive: causation is nothing more than a belief based on observations of two (or more) discrete events, such that event *A* is the cause of event *B*. His famous example is of two billiard balls: Ball *A* rolls and hits Ball *B*, and we say that the rolling of Ball *A* was a cause of the rolling of Ball *B*. This entails three ideas: i) that there is *contiguity* (the two events are spatiotemporally close); ii) there is *temporal priority* (Ball *A* – the cause – always comes before Ball *B* – the effect); and iii) there is *constant conjunction* – if the experiment was repeated, we would notice the same observation to a degree when we come to believe that the rolling of Ball *A* is the *cause* of the rolling of Ball *B*. Critically, Hume claimed that there was nothing more to causation – no actual *act*, *substance*, or *mechanism*. Causation is simply one thing followed by another. The reader is directed to Mumford and Anjum (2013) for further accessible information on causal theories.

evidential elements are excluded from the causal story, for example mechanistic studies, and the patient. A Humean account of causation also paradoxically prohibits the core business of evidence-based practice: for general causal claims from research to inform single instances of clinical decision-making. This chapter argues for reconceptualisation of causation whereby causes are complex, context-sensitive and seen as dispositions that only tend towards their effect. This has the advantage of being inclusive of multiple sources of information, as well as taking the patient as the starting point to understanding what “could work for you”. Thus, the core business of evidence-based physiotherapy is better satisfied.

The chapter presents an argument for why the traditional account of causation within evidence-based physiotherapy should be considered as a Humean notion. This is then problematised in relation to the central claim of evidence-based medicine (EBM)², which is that “evidence from study designs higher up the hierarchy more reliably informs therapeutic decisions” (La Caze, 2008, p. 361).

The notion of causation is problematised in relation to evidence-based medicine. That is, how do causal claims, established by the scientific research methods favoured by EBM, relate to individual instances of care, or indeed policy? In sum, the chapter argues that EBM presently conceptualises causation as a Humean idea, and that this is insufficient in respect of the core activity and claims of EBM. It then proposes a reconceptualisation of the nature of causation that addresses some of the fundamental challenges to the core activity of EBM. This is based on a theory of causal dispositionalism.

2 I will make no distinction between the tenets of *Evidence-based Practice* and *Evidence-based Physiotherapy* and *Evidence-based Medicine* (EBM) for the purpose of this arguments within this chapter. The scientific rationale and logical basis are the same in each framework. The vast majority of philosophical literature regarding these themes refers to EBM, and as such, this extant literature will be used for the debate regarding EBP.

Why causation?

In health care, we are interested in knowing whether a therapeutic health intervention works, that is, whether or not it causes a desired health effect. Thinking of causal relationships in this way signals what we understand of the processes that have generated sufficient knowledge to allow such a statement to be made. These processes have changed over time. Understanding what works was once a product of experience, or wisdom from a teacher perhaps. Modern health care sees these processes as insufficient and has adopted specific research methods to generate knowledge of causal relationships. Formal observation and recording of patient behaviour as a response to interventions grew into what we now know as clinical epidemiology. A segue of observational studies into multi-condition trials was seen as a significant advancement of cause-claiming research methodologies. Randomised controlled trials (RCTs) were introduced in the 1950s with claims of epistemological superiority over other methods. This claim continues today and is witnessed by explicit notions of evidential hierarchies and structures of what constitutes quality of evidence and strength of recommendations for practice. Almost parallel to the development in research methods was the re-framing of clinical epidemiology as a formal framework of EBM³. This movement aimed to facilitate clinical decision-making by making best use of the evidence available. The evidence in this sense was normatively suggested – as

3 When I talk about “EBM”, I am talking about the *post-1991* movement. The term and reconceptualised notion of “*Evidence-based Medicine*” was first formally introduced in the field of medical epidemiology in 1991 (Guyatt, 1991). The term does actually appear sporadically throughout literature on medical statistics from the 1930s up to the 1990s. However, for the purpose of this argument, I will consider Guyatt’s 1991 paper as the formalised introduction of the term.

per Sackett's⁴ much quoted definition – to be multiple-sourced knowledge relevant to the clinical question:

Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research (Sackett et al., 1996, p. 71).

Depending on the nature of the clinical question, “systematic research” would mean the best research for that particular question purpose. Questions of causation (i.e. does this work?) would appeal to methods of causation – that is, RCTs, or ideally systematic reviews of RCTs. Thus, research methods are an inherent and immanent part of EBM, and findings from research should be used to directly inform clinical practice.

The majority of philosophical concerns in this area have been associated with epistemological issues of research methods. Causation is explained as a product of research methods, and philosophy has aimed to understand the best methods for producing causal claims. The issue of observational epidemiological studies versus RCTs is often used as a demonstration of epistemological differentiation, (for example, Vandenbroucke, 2008). Most commonly, conclusions appeal for continued commitment to the experimental type comparative studies exemplified by RCTs. Appreciation of the ability of statistical analyses to compare group means against each other is linked to beliefs about the method's ability to differentiate correlation from causation. Observational studies can suffer from a

4 David Sackett was a founder of the contemporary EBM movement. He was founding chair of the first department of Clinical Epidemiology and Biostatistics in the world at McMaster University, Canada. During the early 1990s, he was a key member of McMaster's *Evidence Based Medicine Working Group*, a group that led the way in transitioning the seemingly stale notion of *clinical epidemiology* into a more “shop-floor” idea of *evidence-based medicine*.

lack of a comparable control group: a group so similar to the intervention group save one factor that any inferences drawn must be considered coincidental, not causal. The ability of RCTs to create and control homogenous groups and manipulate interventions appeals to the scientist. If the groups are similar save one thing (the intervention), and a between-group difference in outcome is observed, then it is argued that that difference must be due to the intervention. Causation – rather than some other association – can be claimed. Thus, when we state, “it works”, we are saying something about the epistemological qualities of the research methods embedded in this framework of EBM. Despite what has just been said, I will eventually claim that EBM can be satisfied with causal claims from certain types of observational studies too, and I contend that this in fact is the key to understanding the nature of causation in EBM, as it stands.

Constraining philosophical analysis to epistemological concerns entails significant limitations. “It works” may well say something about epistemology, but it might also say something about what we understand of the nature of causation. Thus if we propose that epistemological concerns are of urgent priority to understanding best care, then ontological concerns also need to share that priority. Here is an example: I say, “it works” because I have attended to outcomes of epistemologically superior research methods (for causation at least). This exposes my appreciation of how knowledge is generated. However, I am also saying that what I mean by causation is that it is something inherently related to those methods in its nature. For example, I might genuinely believe that a causal relationship did not exist before it was *produced* by the RCT, or whatever; or I might believe that the causal relationship did always exist but I did not know of it and it took the RCT to *expose* it; or I might say that I always strongly suspected a causal relationship but the findings of the RCT better *justify* my use of the intervention in some procedural sense. However viewed, what I am saying is that the nature of causation seems to be dependent on the research methods at hand.

This then presents some problems. If evidential hierarchies are to be taken seriously, (i.e. evidence from study designs higher up the hierarchy more reliably informs therapeutic decisions), as is the normative stance, then causal ontology can be read from the hierarchy itself. That is, causation is something that is inherently related to the fact that groups are compared against each other, but not something that is part of “lower level” evidential sources. This is a clear position that exposes how health science understands causation. I will use this normative stance as the basis of the majority of the analysis to follow.

The normative stance alone is complex and challenging. However, the broad problem is exaggerated further by the descriptive stance. In reality, causal claims are, made from multiple sources of evidence that may or may not include RCTs, for example, smoking causes cancer. Nevertheless, there is a problem: health science states that causation should exclusively be the domain of certain types of studies, and causation is dependent on, and is characterised by, that epistemology. However, causal claims are made otherwise. Therefore, what causation is cannot be sustained on epistemological grounds. Further, epidemiology does not have a “fall-back” epistemological position to widen the nature of causation. It is therefore necessary to include attention towards the most fundamental aspects of an activity if progress is to be made regarding both scientific and humanistic directions. The focus of this chapter shall now be on these ontological concerns.

A Humean account of causation for EBM

On causation, Hume stated:

[W]e may define a cause to be an object, followed by another, and where all the objects similar to the first are followed by objects similar to the second. Or in other words where, if the first object had not been, the second never had existed. (Hume, 1748, Sect 7, Part 1, Para 60).

This should be read in two parts: first Hume states that a cause is a form of regularity: one object regularly followed by another. He then asserts a condition that the regularity should be confirmed by the fact that the second event did not occur when the first object did not exist. This aligns to a counterfactual condition. The counterfactual account is developed by many, but perhaps David Lewis offers a comprehensive modern philosophical treatment of the conditional (Lewis, 1973a). In sum: “ $A \gamma \rightarrow C$ is nonvacuously true if and only if C holds at all the closest A worlds”⁵ (Lewis, 1973a, p. 561). Cartwright also represents counterfactual conditions in experimental-like trials by saying:

[I]f two groups have identical distributions, save one (T) and a probabilistic difference obtains (O occurs in “T” group only) then T is causally related to O (Cartwright, 2007, p. 46).

Accordingly, the counterfactual state (control or comparison group) is in fact the truthmaker of causation: that is the proposition cannot be true in itself – it is the counterfactual that is making it true. We can observe a series of events following each other, but we only read causation into the observation if the same regularity is absent in another condition. Causation in health science is then in some part counterfactually dependent. This is a secure position if elements below RCTs are to be considered non-evidentiary. However, as suggested, this seems not to be a favoured position and evidential claims for causation do exist in relation to non-controlled (non-counterfactual) observational studies. Therefore, if the rules of evidence differentiate controlled methods as being

5 Lewis uses the symbol “ $\gamma \rightarrow$ ” as the counterfactual operator. For Lewis then: “Given any two propositions A and C , we have their counterfactual $A \gamma \rightarrow C$: the proposition that if A were true, then C would also be true. **The operation $\gamma \rightarrow$ is defined by a rule of truth**, as follows. $A \gamma \rightarrow C$ is true (at a world w) iff either (1) there are no possible A -worlds (in which case $A \gamma \rightarrow C$ is vacuous), or (2) some A -world where C holds is closer (to w) than is any A -world where C does not hold” [emphasis added] (Lewis, 1973a, p. 560).

constitutive of causation due to their structural characteristics, but causal claims still arise from non-controlled methods, then counterfactual dependency cannot be a sufficient account for the theory of causation in healthcare nor any science.

The structure and function of observational studies requires some expansion if the essence of causation is to be considered further. For the purpose of this step, observational studies will be thought of simply as that collection of methodologies embedded in the tradition of epidemiology, in which the intention is to investigate associations between determinants of health and health outcomes. They do this by observing large groups of patients in various ways. The differentiating characteristics of observational studies from RCTs are that “investigators neither allocate patients to receive an intervention, [nor] administer an intervention” (Howick, 2011, p. 40). As such, observational studies suffer from nearly intractable problems of “confounding by indication” (Vandenbroucke, 2008, p. e67), or as Howick summarises:

The main problems with observational studies are that they suffer from (i) self-selection bias... (ii) allocation bias, and (iii) performance bias (Howick, 2011, p. 40).

For the purpose of searching for their causally evidential basis, then, we can surmise that although observational studies do indeed follow-up and identify patterns of association in large groups of people over time, controlling for confounding and systematic biases are absent. The closest possible A world does not exist. How then can we read causation into these elements given the counterfactual condition asserted by Hume? In fact, Hume allowed that causation could be wholly represented in fact by adherence to three criteria: temporal priority, contiguity, and constant conjunction:

Every object like the cause, produces always some object like the effect. Beyond these three circumstances of contiguity, priority, and constant

conjunction, I can discover nothing in the cause. (David Hume, 1740, Para 9).

Thus, if an observational study can demonstrate that the cause always precedes the effect (*a* precedes *b* in time), that the effect is consistently close to the cause (*a* and *b* are spatiotemporally contiguous), and that the association is repeatedly and constantly observed (events like *a* are invariably followed by events like *b*), we can in fact still claim causation in a Humean sense (*a* causes *b*), but not counterfactually. Indeed, this is the position of GRADE⁶ regarding the potential for “upgrading” observational studies to the status of RCTs (Guyatt et al., 2011). This regularity view of causation offers a better philosophical stance for supporting causal claims from observational studies, in the sense of capturing how evidential frameworks view causation. The regularities view is still embedded with a counterfactual make-up: trials simply compare the difference between two or more regularly occurring events. In this sense, the counterfactual condition can thus be seen as some sort of “add-on” to strengthen a belief in the observer’s impression of the comparative rates of events. However, that the *truthmaker* to a causal claim is the counterfactual group is an unstable position to hold. It is clear that the *causes* we are interested in are actually in the factual group (the intervention group, say).

Let us consider a further dimension to understanding what causation might be here. This relates to EBM’s de-emphasis of evidence from mechanistic science and mechanistic reasoning⁷. This, I say, further supports the notion of causation in EBM being considered

6 Grading of Recommendations, Assessment, Development and Evaluations Working Group

7 These terms express a concept that relates to the scientific activity *and associated inferences* of understanding and explaining how parts of a system relate to each other. The conflation of “scientific activity” and “associated inferences” is purposeful and facilitates clarity. In this case then, what I mean by *mechanisms* seems similar to what others mean by it, for example (Clarke et al., 2014).

as something Humean. Take *On the idea of a necessary connexion* from Hume's *Enquiry*:

*The impulse of one billiard-ball is attended with motion in the second. This is the whole that appears to the outward senses. The mind feels no sentiment or inward impression from this succession of objects: consequently, there is not, in any single, particular instance of cause and effect, **any thing** [sic] **which can suggest the idea of power or necessary connexion** [emphasis added] (Hume, 1748, Sect 7, Part 1, Para 50)*

So, Humeans have a strict interpretation of this. Briefly, for the present purpose, we can use Lewis' *Neo-Humean Supervenience* thesis as a helpful example of such Humeanism:

*[A]ll there is to the world is a vast mosaic of local matters of particular fact, just one little thing and then another. ... We have geometry: a system of external relations of spatiotemporal distances between points. Maybe points of space-time itself, maybe point-sized bits of matter or aether (sic) or fields, maybe both. And at those points we have local qualities: perfectly natural intrinsic properties that need nothing bigger than a point at which to be instantiated. For short: we have an arrangement of qualities. **And that is all. There is no difference without difference in the arrangement of qualities. All else supervenes on that** [emphasis added] (Lewis, 1986, p. IX)*

Thus, the world here is simply a vast collection of local matters of facts with all else supervening on the mosaic of facts. The facts themselves, however, are "devoid of any intrinsic nomic, causal, or modal character" (Jacobs, 2011, p. 81). In these terms then, EBM seems to have no concern with understanding causes as anything more than regularities of facts. That is, there is nothing internal to the causal process that relates to a cause producing an effect, for example, some sort of real force or compulsion. Causation is just

one thing followed regularly by another. EBM seems not to claim that causation is itself observable in either RCTs or observational studies. It is only the regularity of one event being followed by another that is observable.

Although Humeans (and EBM) might be happy with this stance as a complete account of causation, health science and healthcare practice might not be. Health science in one sense seems rich with a history of informative science ranging from laboratory studies through to large scale clinical trials. Further, healthcare itself is constructed of clinical experiences, patient values and social contexts. Indeed all of these elements are explicitly embraced and showcased in EBM's manifesto. If a Humean stance is to be taken, then what is there to be said of the *other* discounted knowledge, experiences, patient input, and contexts? The EBM framework determines that clinical decisions – entailing causal intentions – should integrate as much of this knowledge as possible. A Humean commitment seems not to allow such background conditions a role in the understanding of a precise nature of causation in health care, thus an ontological tension seems to exist. This tension exists in at least two places: First, tension within the research methods themselves. Although broadly Humean, there are some difficulties in understanding how comparative trials (counterfactual dependency) relate to a *difference making* theory of causation, whilst observational studies relate more closely to a pure *regularities* view of causation. Even within a Humean world, it is therefore difficult to understand what causation is. If we do not understand what causation is, then how do we know we have found it? This makes it troublesome to understand how observed facts can remain stable through their transition to spatiotemporally removed environments. What is holding the facts together in order for them to remain stable during their transference and operationalisation in the complex and context-sensitive situations of clinical decision-making for individuals and populations?

Summary of the problems with Hume

Hume offered an account of causation by which the research activity with EBM can be understood. The way causal claims are generated within the EBM framework is, in no uncertain terms, Humean. This leaves us asking whether or not this account is relevant for the central claim of EBM, which is concerned with translating such claims from their source of origin (research) to place of intended use (clinical practice). Is the sort of causation established by EBM's research methods the sort of causation we desire in either policy or individual clinical decision-making?

To sum up the Humean position, what we can say is that causation is in fact not causation at all, but something that is analysed away into a collection of discrete statistical facts. Hume and EBM explicitly demonstrate that they have no concern with the matter of causation itself, only in what can be known by the structured and systematic observation of constantly conjoined events. Taking these statistical facts to a spatiotemporally removed environment relies on assumptions and premises that must be defined by what those facts represent. Below, we can see that this is problematic if health care is to be thought of as something which embraces the complexity of human nature and the socio-cultural environment within which humans exist. Indeed, this is something which is most likely not even up for debate. To portray this, we can consider a model of person-centred health care, and try to understand how a Humean idea of causation resonates with the characteristics of a holistic health care model. Previous authors have defined what might be meant by a humanistic, holistic health care model:

Person centered medicine an affordable biomedical and technological advance to be delivered to patients within a humanistic framework of care that recognises the importance of applying science in a manner that respects the patients as a whole person and takes full account of

his (sic) values, preferences, aspirations, stories, cultural context, fears, worries and hopes and thus that recognises and responds to his emotional, social and spiritual necessities in addition to his physical needs (Miles & Mezzich, 2012, p. 219).

This model builds on earlier “landmark” casuistic framing of how EBM should be considered (Tonelli, 2006). Further, it references a historical background of care related to the evolution of a biopsychosocial framework (Engel, 1977) – namely Francis Peabody’s *The Care of The Patient*, and Paul Tournier’s *Medicine de la Personne*.⁸ Referring to Engel’s rejection of a monistic or reductionist approach to clinical practice, the sentiments of person-centred health care are clear:

In doing so, he [Engel] directly laid the foundations of the thinking that now recognises the importance of complexity theory in medical practice and that illustrates that clinical phenomena are generally far too complex to be understood solely through the use of linear cause-effect models (Miles & Mezzich, 2012, p. 210).

The emergence of person-centred health care can be sketched out from a developing EBM movement and a general idea of historical “good care” referred to as patient-centred care. The difference between the *patient* and the *person* is emphasised in sympathy to a “deep respect...as unique living beings” (Epstein & Street, 2011, p. 100). Person-centred health care gives a substantial and focused account of a “crisis” of knowledge, care, compassion and costs in modern medicine (Miles & Mezzich, 2012). Its claim is that an over-emphasis of scientific medicine has resulted in the depersonalisation of care. In response, proponents of person-centred

8 See: Peabody, F. W. (1927). *The Care of the Patient*. *Journal of the American Medical Association* 88, p. 877 – 882.; Tournier P. (1940) *Médecine de la Personne*, Neuchâtel, Switzerland: Delachaux et Niestlé.

care propose an emergent humanistic model of clinical practice grounded in holism and complexity. There is an easy and intuitive response to this, that EBM does not in fact “depersonalise” care at all. EBM proponents have indeed suggested how EBM has led to the sophisticated articulation of the proper role that patients’ values and circumstances play in clinical decision-making (for example, Montori and Guyatt, 2008 and Montori et al., 2013). Furthermore, it may be that the person-centred argument sees EBM as a rigid strategy for the practicalities of clinical decision-making (always do what is supported by the best evidence). This might not be a fair characterisation of EBM because of the tension it artificially creates between facts and individual values. However, despite these intuitive responses, it is still unclear to see how the relationship between facts (data, say) and values (clinical context, patient values), might actually develop whilst maintaining the grounded principles of holistic person-centred care. This is especially the case given the Humean characterisation of causation.

We are now left with a paradox whereby the very methods prioritised by EBM to inform its own practice reveal an account of causation in which the translation of causal claims remains unfounded. So the question remains: Can there be an alternative way of accounting for causation in EBM that relates much more convincingly to person-centred, holistic health care? The final section of this chapter argues that there is, and as such sketches out, a possible re-conceptualisation of the causal account for EBM.

Causal dispositionalism as a way forward for evidence-based health care

I have drawn out an account for causation within health care by considering the way by which it structures its evidential sources. This is an unusual way to explore an ontology, but EBM gave few other

options. EBM seems not to be concerned with what causation is, only the observation of discrete, constantly conjoined events. As it stands, EBM is perhaps best considered as deontological. Although this might satisfy some (for example, Howick, 2011), it seems substantially to curtail further enquiry and progress into the philosophy and practice of health care. I suggest a position where a causal ontology is developed in light of the core values and purposes of health care, say, as per person-centred care, and that its epistemological account follows. Therefore, what we read from the outputs of the methods, far better relate to the type of causal activity desired in making clinical decisions intended to impact on the health status of individual people or inform health policy. Here, I suggest that a theory of causal dispositionalism can respond to many of the problems exposed by the Humean account. The theory in mind is one based on the work of Mumford and Anjum (Mumford & Anjum, 2011), and is one which takes causes as tendencies towards an effect, and as things which manifest in single instances. The theory considers the notion of causation as complex, and whether or not causes result in some effect is a highly context-sensitive issue. Furthermore, and of utmost importance in responding to Hume, the theory takes causes as real and primitive – that is, causation cannot be analysed away to something else, as is the case with the Humean account. Causes are the very things that make up what the person is, and the person is the most obvious source of observation to understand what causation is.

It is beyond the parameters of this chapter to lay out a fully detailed account of the theory of dispositionalism, and for this the reader is directed to supporting resources (Kerry et al., 2012; Eriksen et al., 2013; Mumford & Anjum, 2011; Mumford & Anjum, 2012). For the purpose of this chapter, causal dispositionalism will be introduced within a focussed framework of key areas relevant to the central claims of EBM. The key areas which emerge from the existing problematisation of causation and which also relate to

EBMs central claim are i) how can a theory provide detail of causal content from its methods, ii) how can it motivate a viable epistemology, iii) how can it account for individual decision-making, and iv) how can it help understand the assumptions needed to bridge the inferential gap between population level evidence and clinical decisions. These four key areas are now attended to in turn.

Causal content

A traditional Humean account of causation offers some explanation as to how causal claims are developed from research methods. The account is able to discuss such claims in terms of either frequencies of occurrence of events, the degree of differences between two frequencies, or both. Proponents of the Humean account are satisfied that this sufficiently explains the causal role of research content, specifically highlighting that this avoids unnecessary matters of ontology. The dispositionalist response is straightforward: the content that is being referred to here is not of causation, but of something else. The essence of causation has not been reached, and as such, any explanation related to causal content cannot be given. The “truthmaker” of causation within traditional accounts is removed from where causation itself is most likely to be found. What dispositionalism offers is a view that sees causation within the core of the content itself. Changes are seen within groups, and these changes occur because of multiple events tending towards and away from effects. Whereas Humeans consider single and necessary causes by proxy of frequently occurring observed events, dispositionalists see various causal factors that may or may not manifest in an effect. The causal role of these events for dispositionalism is the notion of how they manifest and how they may tend towards and away from anticipated thresholds. Dispositionalists are unsatisfied with causal explanations that relate to frequentist interpretations of probability,

as probability should be thought of in relation to the propensities held by causal factors.

Epistemology

Proponents of a Humean account of causation in health care have taken it as problematic that dispositionalism sees causes as real, for example Williamson (2006). By committing to the reality of causes, the demarcation between those matters that are problematic and those that are not is compromised. As such, accepting that causes themselves may not be a real feature of the world, permits priority of epistemological enquiry – that is, we do not need a “thick” theory of causation in order to understand the world. As such, Williamson and others prefer a theory of *epistemic causality* (Russo & Williamson, 2011). In order for such a theory to advance understanding of the world, it must accept that multiple methods are used as evidential sources. However, because there is no commitment to what causation is, all that can be said is that each method must relate to its own interpretation of causation, for example RCTs relate to causes as making a difference; observational studies relate to causes as regularly occurring events; etc. Although this *causal pluralism* seems to advance from an idea on *causal monism* (that there is only one way to find one idea of causation), its inability to commit to a single idea of what causation is leads again to a Humean stalemate.

Dispositionalism offers a commitment to monism, but an *ontological* monism. That is to say, there is a single idea of what a cause is. It can align this with a notion of pluralism, but a *methodological* pluralism. This means that because causes are complex and context-sensitive, they will display many symptoms. Accepting that the outcomes of scientific methods are *symptomatic* rather than *constitutive* of causation facilitates a methodological pluralist stance, whereby information from

multiple methods and sources may reveal parts of the causal process. These sources can include indicators of causation such as mechanistic science and patient narratives. Dispositionalists do not need to worry about the cumbersome and ultimately unsuccessful reconciliation of multiple theories of causation, because causes are only one thing.

Individual decision-making

Proponents of Hume say their causal account explains inference from research to the clinic. However, the assumptions for this are unfounded. They argue for this conclusion with limited consideration of the ontological issues at stake. Indeed, their stance suggests those considerations are not even relevant. An ontological inquiry however is beneficial in unveiling some of the shortcomings of current causal models for the complexities of medical phenomena. The essence of this chapter centres on the relationship between general and particular instances of causes. A causal theory should account for causal processes in individual-level clinical decision-making. The traditional stance had limited options and utility concerning this, appealing to either a rationalised faith in probabilistic inference, or some claim to universal laws. Dispositionalism can respond with ease to this desideratum. Although it has no deep ontological commitment to the priority of either general or particular instances, dispositionalism does take the single instance as to where causes are. From this, the theory can account for general causes as being *signals* to where causation might lie. There is no commitment needed to universal laws, and the account avoids problems associated with probability and induction, as below.

The inferential gap

The Humean position is simply to assert that if prioritised methods are conducted correctly – without experimental error – then

predictions should be forthcoming that are simple, exact and unfailing. Good examples of this characterisation of EBM are found in critical responses to a dispositions account by, for example, Strand and Parkkinen (Strand & Parkkinen, 2014; 2015). However, we know this to be false; otherwise the problem of induction would not be centuries old. The gap between science and application will never be unfailing, and inferences can always be wrong. Any account of causal inferences has, therefore, to respect the obvious datum that predictions are fallible and defeasible. A Humean account is grounded in deductivism and therefore necessity. What this means is that the logical form of the traditional account dictates that all claims will be necessarily so, to a probabilistic level (note that framing necessity in terms of probability does not solve this issue). So how can cases of failed causation be accounted for? Dispositionalism avoids commitment to ever necessitating an effect, and rather offers an explanation of prediction and inference within a fallibilist's framework in which dispositions tend to produce their effects but might not always do so. With dispositionalism, the problem of induction becomes redundant.

Conclusion

This chapter has proposed that causation is an idea that is central to the essence of evidence-based physiotherapy. By understanding the structure of prioritised evidential sources within the EBM framework, a causal account related to a Humean theory of causation can be developed. This is problematic to the central claims of EBM because a world of constantly conjoined discrete events does not seem prepared to relate to a person-centred model of health. Thus, any grounds on which to bridge the space between research outcomes and clinical decision-making remain unfounded. What would better support and progress the purpose of evidence-based practice is a theory of

causation that better understands causes to be real, singular, complex, and context-sensitive. If this were the case, multiple research methods would be able to work in establishing where causes lie. However, population level research outcomes would not be constitutive of causation, merely symptomatic. The real causal matter would be found in the single, individual case.

References

- Cartwright, N. (2007). Are RCTs the gold standard? *Biosocieties*, 2(1), 11–20.
- Clarke, B., Gillies, D., Illari, P., Russo, F. & Williamson, J. (2014). Mechanisms and the Evidence Hierarchy. *Topoi*, 33(2), 339–360. doi:10.1007/s11245-013-9220-9
- Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine. *Science*, 196, 129–136.
- Epstein, R. M. & Street, R. L. (2011). The value and values of patient-centered care. *Annals of Family Medicine*, 9, 100–103.
- Eriksen, T. E., Kerry, R., Mumford, S., Lie, S. A. N. & Anjum, R. L. (2013). At the borders of medical reasoning: aetiological and ontological challenges of medically unexplained symptoms. *Philosophy, Ethics, and Humanities in Medicine*, 8(1), 1–11. doi:10.1186/1747-5341-8-11
- Guyatt, G. (1991). Evidence-based medicine. *Annals of Internal Medicine* (*American College of Physicians Journal Club suppl 2*), 114, A-16.
- Guyatt, G. H., Oxman, A. D., Sultan, S., Glasziou, P., Akl, E. A., Alonso-Coello, P.,...Schuenemann, H. J. (2011). GRADE guidelines: 9. Rating up the quality of evidence. *J Clin Epidemiol*, 64(12), 1311–1316. doi:10.1016/j.jclinepi.2011.06.004
- Howick, J. (2011). *The Philosophy of Evidence-Based Medicine*. Chichester: BMJ Books.
- Hume, D. (1740). *An Abstract of a Treatise of Human Nature* (eds Norton, D. F. & Norton, M. J.) (D. F. Norton & M. J. Norton Eds.). New York: Oxford University Press, 2000.
- Hume, D. (1748). *An Enquiry Concerning Human Understanding*. Oxford: Oxford University Press.

- Jacobs, J. D. (2011). Powerful qualities, not pure powers. *The Monist*, 94(1), 81–102.
- Kerry, R., Eriksen, T. E., Lie, S. A. N., Mumford, S. D. & Anjum, R. L. (2012). Causation and evidence-based practice: an ontological review. *Journal of Evaluation in Clinical Practice*, 18(5), 1006–1012. doi:10.1111/j.1365-2753.2012.01908.x
- La Caze, A. (2008). Evidence-Based Medicine Can't Be.... *Social Epistemology*, 22(4), 353–370. doi:10.1080/02691720802559438
- Lewis, D. (1973a). *Counterfactuals*. Oxford: Oxford University Press.
- Lewis, D. (1973b). Causation. *The Journal of Philosophy*, 70(17), 556–567. doi:10.2307/2025310
- Lewis, D. (1986). *Philosophical papers: Volume II*. New York: Oxford University Press.
- Miles, A. & Mezzich, J. E. (2012). The care of the patient and the soul of the clinic: person-centered medicine as an emergent model of clinical practice. *International Journal of Person Centred Medicine*, 1(2), 207–222.
- Montori, V. M., Brito, J. P. & Murad, M. H. (2013). The Optimal Practice of Evidence-Based Medicine Incorporating Patient Preferences in Practice Guidelines. *Journal of the American Medical Association*, 310(23), 2503–2504. doi:10.1001/jama.2013.281422
- Montori, V. M. & Guyatt, G. H. (2008). Progress in evidence-based medicine. *Journal of the American Medical Association*, 300(15), 1814–1816. doi: 10.1001/jama.300.15.1814
- Mumford, S. D. & Anjum, R. L. (2011). *Getting Causes from Powers*. Oxford: Oxford University Press.
- Mumford, S. D. & Anjum, R. L. (2012). Causal dispositionalism. In A. Bird, B. D. Ellis, & H. Sankey (Eds.), *Properties, Powers, and Structures: Issues in the Metaphysics of Realism*. New York: Routledge.
- Mumford, S.D. & Anjum, R. L. (2013). *Causation: A Very Short Introduction*. Oxford: Oxford University Press.
- Russo, F. & Williamson, J. (2011). Epistemic causality and evidence-based medicine. *History and philosophy of the life sciences*, 33(4), 563–581.
- Sackett, D. L., Rosenberg, W. M. C., Gray, J. A. M., Haynes, R. B. & Richardson, W. S. (1996). Evidence based medicine: What it is and what it isn't – It's about integrating individual clinical expertise and the best external evidence. *British Medical Journal*, 312(7023), 71–72.

- Strand, A. & Parkkinen, V. P. (2014). Causal knowledge in evidence-based medicine. In reply to Kerry et al.'s causation and evidence-based practice: an ontological review. *Journal of Evaluation in Clinical Practice*, 20(6), 981–984. doi:10.1111/jep.12093
- Strand, A. & Parkkinen, V. P. (2015). Causation in evidence-based medicine: in reply to Kerry et al. *Journal of Evaluation in Clinical Practice*, n/a-n/a. doi:10.1111/jep.12304
- Tonelli, M. (2006). Evidence-based medicine and clinical expertise. *The virtual mentor : VM*, 8(2), 71–74. doi:10.1001/virtualmentor.2006.8.2.ccas1-0602
- Vandenbroucke, J. P. (2008). Observational Research, Randomised Trials, and Two Views of Medical Science. *PLoS Med*, 5(3), e67. doi:10.1371/journal.pmed.0050067
- Williamson, J. (2006). Dispositional versus epistemic causality. *Minds and Machines*, 16, 259–276.

CHAPTER 4

New materialism and physiotherapy

David A. Nicholls | School of Public Health and Psychosocial Studies, Auckland University of Technology

Abstract

Over the last decade, new materialism has emerged as a radical approach to philosophy that has profound implications for the way we think about education, practice and research. It challenges the human-centredness of our everyday lives, and proposes some interesting new ways to think about the future. It critiques 400 years of humanistic science, including the more recent interest in the phenomenology of “being”, drawing on the work of Deleuze, Heidegger, Foucault and others to propose a radical new ethics based on the affective capacities of all things. In this chapter, I offer a broad introduction to new materialism, focusing on the ways that its various forms challenge traditional hierarchies that have long placed white, anglophone men at the top of the social pyramid. I explore new materialism’s challenge to the ideas of binaries (normal: abnormal, body: mind, etc.), the nature of agency, and the implications for a monistic ontology of matter. I conclude the chapter by speculating on the ways new materialism might inform future physiotherapy practice, arguing that there is much in the approach that physiotherapists will find familiar, but also much that they may find profoundly interesting and challenging.

Background

Over the last few years, an increasing number of physiotherapy educators, practitioners, researchers and writers have turned their attention towards the experiential, qualitative and subjective dimensions of health and wellbeing. Moreover, although quantitative, experimental approaches to research remain the most popular kinds of knowledge, there is a growing interest in more holistic, embodied understandings of physiotherapy practice and people's experiences of recovery, rehabilitation and therapy. Over the last decade a radical new approach to thinking and practice has emerged that is neither quantitative nor qualitative. New materialism challenges the privilege given to humans in Western philosophy and establishes a new philosophy of matter. So far, it has drawn the attention of philosophers, scientists and sociologists from a panoply of disciplines, but as yet little work has been undertaken in healthcare.

A number of these “new materialist” approaches have emerged around the work of Michelle Foucault, Gilles Deleuze, Félix Guattari and others in recent years, including actor network theory, affect theory, object orientated ontology and speculative realism, and they draw on a wide range of influences, ranging from poststructural feminism to theoretical physics, deep ecology to posthumanism.

The various forms of new materialism cohere around some broad principles that will be unpacked in more detail below. To summarise, new materialist approaches reject the idea that humans are superior to all other forms of animate and inanimate matter and explore a “flat ontology” among all things. They are opposed to the binaries that have traditionally dominated Western thinking. They challenge the phenomenological emphasis on “being”, focusing instead on things “becoming”. And they draw from a diverse set of theoretical approaches, methodologies, and practice theories,

including those found in the pure and applied sciences, indigenous cultures, postmodernism and critical theory.

Despite new materialism's growing significance as a radical new voice in philosophy, it has made little impact in healthcare thus far, and only a few examples exist of its use in areas directly relevant to physiotherapy (see for example Gibson, 2016, 2006; Mol, 2002; Nicholls et al., 2016; Setchell, Nicholls, & Gibson, 2017; Shildrick, 1997, 2014). However, it does offer some interesting and potentially fruitful ways to examine some of the changes facing physiotherapy, healthcare, and some of the broader social questions facing humanity.

New materialism points to some innovative ways to engage ethically with others and re-invigorate our search for fairness and justice in the face of the increasingly discredited "humanist" project of the modern period (DeLanda & Harman, 2017). It opens a space for new relationships between people, animals, plants and objects in an ecosystem defined by the capacity for things to interact, not the superiority of one type of matter over another. Over the remainder of the chapter, I will unpack some of these ideas and opportunities and attempt to apply these to physiotherapy in an "expanded field" (Krauss, 1979), because to me, physiotherapy is concerned with all matter, and new materialism offers some tantalising opportunities for physiotherapists to define a practice paradigm that could open up multiple new "lines of flight" (Deleuze & Guattari, 1987).

Key principles

New materialism, as a concept, can be quite difficult to grasp, partly because it offers such a radical alternative to conventional ways of thinking, and partly because it relies on new modes of expression to define its parameters. Reading the works of some of its proponents, one is struck by how language is used differently. The meanings of

common terms like agency, becoming and desire, are sometimes extended to non-human actants, and less common words like *clina-men*, *conatus* and *monism* are used to express alternative ways of thinking. New materialism also offers some radical approaches to grand philosophical concepts like ethics, ontology, subjectivity and teleology, and so may seem counterintuitive and perplexing to some. In response to this challenge, what follows is an introduction to some of new materialism's key principles. This is by no means a comprehensive account, and it inevitably takes some liberties with the breadth and diversity of writings on the subject. I have focused on five main principles of new materialism: "thing-power"; the challenge to traditional hierarchies; the appeal of monism and opposition to binaries; agency; and intermingling and becoming. After outlining these key principles, I close the chapter by looking at some of the ways new materialism might relate to a more expansive physiotherapy.

Thing-power

The first principle that unites many new materialists is an interest in objects, things or "matter". New materialists are interested in what Jane Bennett called "thing-power" (Bennett, 2009, p. xiii). This is the idea that all matter has the capacity to affect and to be affected, and so challenges the idea that some "things" – particularly human things – matter more than others. New materialists see matter as dynamic and responsive, and these properties are inherent in the things themselves, not merely as human projections (ibid, p. 5). "Matter", for new materialists, is no longer seen as passive, intractable and lifeless "stuff", but as vibrant material that makes up human and non-human life: from tiny atoms and chemical compounds, to complex organisms and social systems.

Focusing on matter in this way demands a considerable ontological re-orientation away from the kinds of anthropocentric

(or human-centred) positions that have dominated thinking for many centuries (Fox & Alldred, 2016b). New materialism critiques much of this history, arguing that we have developed ways of thinking and practicing that are too humanistic, and have looked to understand the world through human eyes (almost all qualitative research and person-centred practice, for instance, does this), or assert human command of other people and the natural world (most quantitative research and evidence-based practice). It argues that while these humanistic approaches have brought considerable benefits to us, they have also contributed, amongst other things, to the normalisation of white, male privilege and the systematic and industrial-scale abuse of the natural world for human gain. Many see new materialism, therefore, as a radical and necessary alternative to humanistic thinking and a departure from the anthropocentric philosophies that have dominated Western cultures since the Enlightenment.

For physiotherapists, *matter* gives form to our practice. Matter can mean the anatomical structures that we mobilise, or the bodily functions, synaptic connections, and the diffusion of substrates that we work to enhance. It can mean the assemblages that form between the hand of the therapist and the skin of the patient – and the myriad neuro-chemical processes that mediate the therapeutic experience. Matter also refers to objects – including the inanimate things that help to define our practice and differentiate what we do from others: our goniometers and stethoscopes, treatment beds and patient records. Critically, these aspects of practice are often thought of as less important than the human experiences, and so new materialism sees this privileging of the human experience as a real problem.

The challenge to traditional hierarchies

Many new materialists draw inspiration from the work of philosophers like Baruch Spinoza and Friedrich Nietzsche, and more

recently, Gilles Deleuze, Félix Guattari, Martin Heidegger and Michel Foucault, who have all critiqued the hubris of “man’s” sovereignty and dominion over the natural world¹. Continental philosophers like Deleuze and Foucault have been particularly scathing of the idea that humans are superior to all other living and non-living things, with Foucault echoing Nietzsche in proclaiming the “Death of Man” half a century ago (Foucault, 1970). Figure 4.1 below shows a representation of perhaps the most familiar representation of man’s place in modern Western culture.

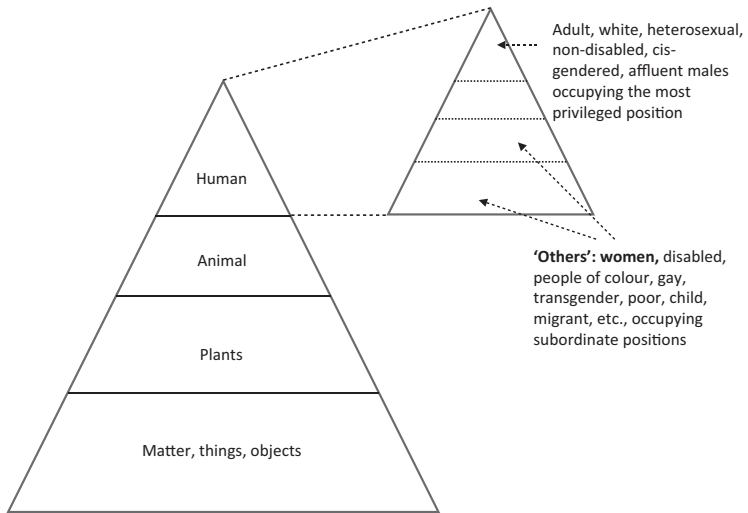


Figure 4.1: Human-centred hierarchy of the natural world

1 I use the word “man” in specific places within the text to refer to the classical tradition of seeing the white, privileged, heteronormative and non-disabled male as the apotheosis of Western culture. This treatment is seen by many new materialists as inherently problematic, and evidence of a hierarchy that extends through “other” humans (non-male, non-white, disabled, marginalised populations, etc.), down through animals and plants, and ending finally with inanimate objects. Destabilising the metaphorical pyramid that has elevated man to its artificially constructed summit, is one of the fundamental tenets of new materialism.

It seems axiomatic that humans should sit above all other matter in the universe, given our capacity for conscious self-awareness, spoken language and ethical reasoning. Indeed, the belief that humans command the rest of the natural world can be found in pre-Socratic writing and Aristotle's view that only man had an intellectual or rational soul and was, as a result, superior (Thomas, 1983, p. 30-1). Existential German philosopher Martin Heidegger described inanimate objects as being "without world", animals and plants as "poor in the world" with only humans as having the capacity to be "world producing" (Heidegger, 1995). Jeffrey Nealon describes the hierarchy that underpins much of the philosophy, politics, science and religion in the west as "rigidly demarcated from the bottom up" (Nealon, 2016, p. 32).

The idea that humans are superior to all other matter in the cosmos, therefore, has a long history. Notwithstanding the many human achievements in the arts; economics; linguistics and taxonomy; science and technology; social organisation; and politics, some have argued that the belief in human dominion over all things has resulted in many of humanity's most appalling acts of hubris. From the abuse of animals and the destruction of the natural world for personal gain, to slavery, human trafficking, and genocide, there are many examples of human arrogance and self-conceit that can be attributed to our belief in our age-old sense of privilege and natural advantage.

One of the most enduring and pernicious conceits is the belief that within the human domain a further hierarchy exists, such that white, heterosexual, Western males represent the most refined, sophisticated and idealised form of humanity. There are now vast volumes of writing from disabled people, ecology advocates, LGBTI activists, feminists, Marxists, equal rights activists, and many others, who have long disputed this ordering, and many are now turning to new materialism for tools with which to trouble prevailing patriarchal, colonial, heteronormative and anthropocentric attitudes (Butler, 1993; Davies, 2016; Feely, 2016; Haraway, 2006, 2008; Lather, 1993; Riskin, 2016).

Ironically, physiotherapists have really only just begun to consider the subjective human experience of physiotherapy, and embrace the “idealist” philosophies of people like Martin Heidegger & Maurice Merleau-Ponty (see, for example, Bjorbækmo & Engelsrud, 2011; Sviland, Martinsen & Råheim, 2014; Standal & Engelsrud, 2013). Fewer still are exploring some of the social structures that govern human experience. So, the desire to “flatten” the traditional hierarchy that privileges the human over all things perhaps comes before we have really understood the possibilities that humanistic inquiry (e.g., common forms of qualitative research) offers. Nevertheless, new materialism argues that privileging the human is not without its risks, however, and that we cannot afford to endorse the hubris in the belief that we are “Lords of all we survey”.

The appeal of monism and opposition to binaries

New materialists argue that hierarchies are problematic because they create the possibility for discrimination, stigma and abuse. Something is always sitting above something else in a hierarchy, and such positioning implicitly involves value judgements about the virtues and qualities of some things over others. Such hierarchies are only possible because human societies have long sought to understand the world through taxonomies of difference and binary judgements. For the last 400 years or so, these judgements have been dominated by scientific classifications and logics, through which all matter is judged and ranked according to its proximity to human norms. Truth can be seen to be superior to lies; health is better than sickness; reason more desirable than unreason; normality preferable to abnormality; and so on. Such binary judgements implicitly privilege one thing over another in an endless series of

comparisons that ultimately results in a universal hierarchy that defines what Foucault called the “order of things” (Foucault, 1970).

For its part, modern healthcare would not function if it were not for binary judgements made about ill (vs healthy) people, made by qualified (vs “lay” or quack) practitioners, working in organised institutional settings (as opposed to everyday community locations). Almost the entire basis of physiotherapy practice is based on binaries: from patient assessments that define what is wrong and needs to be fixed; to ethical codes that state what is professional behaviour and what is unprofessional; to funding systems that determine who is eligible for financial support and who is not.

New materialists argue that binary judgements are deeply problematic, drawing, instead, on “flat”, or what Leibniz called “monist” – meaning “singular” – ontologies. In this approach, reality is not ordered hierarchically, but as a flat plane or multi-dimensional matrix in which all matter is rhizomatically distributed (Deleuze & Guattari 1987). No arbitrary distinction is made between the values and qualities of humans, inanimate objects, plants, animals, emotions and thoughts, cultural beliefs, symptoms, functions, rocks and bus tickets, digital media, theories, pets, football fans, partners and office shelving systems. Instead, new materialists utilise a diffuse “continuum of materiality” (Fox & Alldred, 2016a, p. 4), in which human and nonhuman matter is considered dispersed and differentiated. New materialists view microbiological matter and macro-social processes on the same “plane of consistency” (Deleuze & Guattari, 1987), often occupying multiple locations at the same time. They look to the self-organising capacity of things in combination, as well as the local, material effects of things in a constant state of flux – ever changing, moving and becoming. New materialists redefine what people have come to refer to as “agency” – a term normally used to denote the volitional acts of humans – allowing that all things are expressive and, as such, vibrant and agentic.

New materialist physiotherapy would begin, therefore, from the basis that human subjectivity is not superior to all other forms of matter. This might elevate, for instance, the status of a wheelchair from something that is merely an “aid” to a person’s mobility, to a necessary and equal partner in an assemblage that allows a person to move. Oxygen, processes of diffusion, muscle contractions and feelings of breathlessness, might be allied to air quality, pollution standards, and plant photosynthesis in an ontological equivalency that spans all human and non-human entities.

Agency

New Materialism breaks with the Enlightenment belief that “a scientific explanation must not attribute will or agency to natural phenomena” (Riskin, 2016, p. 2). Agency has long been considered one of the defining characteristics of the human species, and a concern “that seems as close to the heart of what science is as any scientific rule or principle” (ibid, p. 4). By contrast, new materialists believe that agency is the capacity of things to affect and be affected, and this approach “elides any distinction between physical/biological materiality and the expressive realms of concepts, thoughts and feelings” (Fox & Aldred, 2016b, p. 18). Thus, a park bench exercises agency when it provides a resting place for a weary walker. It is not just the walker, with her powers of conscious decision-making, that “decides” what actions to take; all things play their part and form affective assemblages if the park bench is to affect change and make a synergistic moment between the seat and the walker possible. Even negative spaces, like openings in a tree line or the retirement of a work colleague, become agentic when they provide space for other things to move in to. In Deleuzian and Guattarian terms, affect equates to the desire things have to make things happen (Deleuze & Guattari, 1987).

The park bench, by virtue of its particular configuration and assemblage of capacities, desires to be sat on (as opposed to making a cup of tea, for which it is distinctly ill equipped). This is what Jane Bennett calls the vibrancy and vitality of things (Bennett, 2009). Of course, there have been examples of the power of matter to affect human life written throughout the history of education, philosophy, politics, science and society, but in these accounts agency is an attribute “given” to things by people, and is not inherent in the things themselves. Heidegger, for example, spoke of *das Zeug* or the “usefulness” of tools, and Marx wrote about historical materialism as a structural force driving human society. Few, until recently, have turned away from this anthropocentrism, and sought to understand what Barad et al. called “things in phenomena” (Barad, Nelson & Nelson, 1996, p. 176).

Intermingling and becoming

If agency is the capacity for things to act and to produce the world in all its dynamic vibrancy and flux (Fox & Alldred, 2016b, p. 4), the things we see, feel, hear, taste and touch can be said to be the “effects” of affective properties interacting with their environments: the result of millions of interminglings and assemblages formed by matter. This mass of matter in constant formation and deformation represents an “affect economy” (Clough, 2004, p. 15). In this economy, the value of matter is judged not by their proximity or use value to humans, but by the ability to affect or be affected by other things. A new materialist affect economy assumes that assemblages involving humans represent only a tiny percentage of the interminglings taking place across the cosmos at any one time, and so offers another implicit critique of the anthropocentrism present in most sciences and cultural studies.

Karen Barad has argued that the affect economy cannot be understood as a trade and exchange between isolated sovereign entities,

arguing that it is misleading to talk about matter *inter*-acting, because this implies that each element is in some ways distinct from the other. Barad uses the term *intra*-action instead to refer to actions that occur within two or more already entangled non-bounded entities (Barad 2007; Dolphijn & Van der Tuin, 2012). As phenomena form and de-form, they acquire new capacities to affect and be affected, and this engenders a constant movement that “goes on repeatedly within assemblages, in a ‘rhizomatic’ branching, reversing, coalescing and rupturing flow” (Fox & Alldred, 2016b, p. 24). In this way, it is somewhat arbitrary and imprecise to attempt to define the boundaries of agentic phenomena (what Deleuze and Guattari called “territorialisation”), since they are always in transition; always becoming, never sedimenting into “being”.

New materialists reject the hermeneutic fascination with “being” and look, instead, to the transformative potential of things “becoming”. They are less concerned with what things “are” and more with what things might become when they intra-act with other things. They are concerned with the dynamism, evasiveness and slipperiness of matter in combination. Where “being” represents stasis, territorialisation, and fixity; “becoming” represents movement, deterritorialisation, deconstruction and flow. Speed and slowness – terms intimately connected with movement and physiotherapy – become key metrics for the affective capacity of assemblages, because they focus more on the dynamic potential of phenomena and less on noumena or the things-in-themselves (Fox & Alldred, 2016a, p. 59).

How might new materialism relate to physiotherapy?

In many ways, physiotherapy is ideally suited to new materialist approaches, because new materialism is fundamentally about complexity and movement, and expert therapy demands an

understanding of all matter: from the body's structures and functions, to a sensitive humanism, from an appreciation for the social context influencing people's lives, and an awareness of the non-human matter that mediates people's engagement with the world. The problem has been finding a philosophy or theoretical framework that makes sense of this complexity and diversity.

Having spent much of its history drawing from the quantitative biological sciences, physiotherapists are now starting to look towards existential philosophy and the humanities to better understand our practice relationship with clients, and what physiotherapy-related matter means for people. Nevertheless, new materialists would argue that such inquiries largely reinforce the same binary distinctions between quantitative and qualitative, nature and culture, objective and subjective, which were critiqued earlier in the paper. Therefore, although physiotherapy ought to be well suited to complex and diverse philosophies and theories, it is perhaps anchored to traditional and well-established binaries that, some have argued, may be resisting necessary reform (Nicholls 2017).

Physiotherapists could retain their affinity for the biological sciences

In recent years, there has been much criticism directed towards physiotherapy's historical affinity with the body-as-machine, (Bjorbaekmo & Engelsrud, 2011; Nicholls, 2017; Nicholls & Gibson, 2010). These authors have argued that "real" physiotherapy practice is much broader than the profession itself allows, and that if physiotherapy is to survive and prosper into the future, it must find ways to account for this breadth, and explain its complexity to itself and to the publics that draw on its skills and resources (Nicholls, 2017). Inherent in this is the need to incorporate new thinking with the best of the old.

Far from dismissing physiotherapy's biomechanical heritage, as some recent humanistic analyses have done, new materialism not only

accepts the physical reality of the body, it embraces it and encourages practitioners to see all matter non-hierarchically. Further, it draws no distinction between the biological and the social, so dissolves the need for the kinds of factional tribalism about what is quantitative and what is qualitative. It sees the biological in everything. Examples of this openness to the biological, chemical and physical nature of the world are everywhere in the writings of new materialists. Karen Barad, for example, draws on the work of Niels Bohr's measurement of sub-atomic particles to develop the idea of phenomena and intra-action (Barad, 2007), Jane Bennett examines food, metals, electricity and stem cells in her work on "vibrant matter" (Bennett, 2009), and John Dupré writes about polygenomic organisms, alleles and microbiota (Dupré, 2012).

Movement and becoming

If there is one concept that most physiotherapists would agree lies at the heart of their professional identity, it would be movement (Covington, 2015; Sahrman, 2014; Standal & Engelsrud, 2013; Wikström-Grotell & Eriksson, 2012). In an age when even orthodox health professions need to market their competitive advantage, movement appears to be a commonly used term that physiotherapists feel confident to rally behind (see, for example, <http://www.wcpt.org/wptday> and <http://tinyurl.com/n7fmvol>). Some physiotherapy authors have even argued that the profession needs to "own the human movement system" (Sahrman 2014, p. 1040). Movement has been a defining feature of theoretical models of physiotherapy for nearly half-a-century (Broberg et al., 2003; Cott et al., 1995; Hislop, 1975), and persists in the language of participation and activity (Escorpizo, 2015). When physiotherapists refer to movement, however, they are generally referring to the physical movements of the body or its parts. Physiotherapists rarely engage with other meanings of movement: the microscopic osmotic

movement of molecules across cell membranes, for example, or the macroscopic population-scale movements of migrations and diasporas (Nicholls, Gibson & Fadyl, 2015). This is a largely self-determined approach, with physiotherapists' ability to distinguish themselves from other competing healthcare providers a primary driver in the desire to "own" movement (Nicholls, 2017).

New materialism is a philosophy that embodies movement, displacement, restlessness, deterritorialisation (Deleuze & Guattari, 1987), latent potential, and disruption as a positive force for change on a much grander scale (Braidotti, 2013; Gibson et al., 2014; Goodley & Runswick-Cole, 2014). It is concerned with the ceaseless "becoming" that occurs in the act of intra-acting. More than a decade ago, physiotherapist Barbara Gibson suggested ways in which the connectivity between things might carry therapeutic potential, pointing to a way in which physiotherapists and others might think differently about movement;

Connectivity is a potential to uncover new and varied ways of becoming and considering how things could be otherwise. Instead of resisting connectivity, the project could be to explore connections and appreciate differences: becoming other(s) in multiple ways, a multiplicity of flowing connections made, released and reformed. These multiple becomings point towards a freedom. Not freedom from interference but freedom to experiment, explore, peek outside of the limits, journey there and back again. Refuse and re-fuse (Gibson 2006, p. 195).

In recent years, some of the other authors in this book have joined Gibson in examining connectivity and its potential to function as a new philosophy of movement, in an attempt to open up physiotherapy to some new ways of thinking and practicing (Nicholls et al., 2016; Nicholls et al., 2015; Standal & Engelsrud, 2013). This work suggests that a new expanded "materialist"

approach holds some latent potential for physiotherapists and others interested in movement in an expanded field.

Connecting physiotherapy to a greater social purpose

There can be little doubt that the physiotherapy profession has gained the respect and trust of the public, of its peers, and of “the state”, in large part because it has been able to demonstrate its usefulness. Physiotherapy has grown through times of war, epidemic and social reform because it legitimised a set of therapeutic practices and, when necessary, adapted these to the changing needs of society (Nicholls, 2017). The future for the profession may therefore depend on its ongoing ability to adapt and reform, and what is increasingly clear is that technical proficiency and a depersonalised approach to the body-as-machine will no longer be enough (Trede & McEwan, 2016). As public health services become decentralised, and people are expected to exercise greater choice and responsibility for themselves, health and wellbeing has become a terrain upon which complex negotiations are taking place, and the role of the “expert” practitioner is coming increasingly in question (Law & Mol, 2002; Mol, 2002).

Physiotherapists have been reticent to explore the more profound aspects of their work, retaining a professional modesty about the biomechanical discourses that underpin their social functions. There can be little doubt, however, that physiotherapy practice can affect some people profoundly, and the reasons why people engage physiotherapists frequently have less to do with the more prosaic matters of bodily function than what these facilities make possible; how physiotherapy makes people feel; and how this represents transformative possibility. New materialism is grounded in a philosophy of affective potential, and so provides language and ideas for ways that practitioners might express the radical possibilities

of physical therapy. It subverts familiar language and offers alternatives to the humanistic, scientific and sociological binaries that now appear to be functioning like a dragging anchor in the face of rapid and dynamic social change. Articulating the real breadth of physiotherapy's affect economy may therefore function as a liberating, progressive and critical act of resistance to the questions that are now emerging around the future for physiotherapy practice.

A new methodology to understand the complexity of physiotherapy

Finally, new materialism may provide an innovative set of conceptual tools to allow practitioners to better see themselves and connect with a broader ecosystem, with the result being that the profession may find a new purpose and alternative ways to respond to the rapidly changing world it operates within. Baker wrote that "The hardest thing of all to see is what is really there" (Baker 1967, p. 19), and so it would seem when it comes to the familiar ways that we have come to understand the world through a modern, humanistic lens. Over recent years, however, criticisms have been levelled at some of the limitations of these anthropocentric approaches, and these have resulted in a wave of new object- and ontologically-orientated approaches to research and writing, of which new materialism is a powerful contributor.

Adopting an entirely new philosophical approach to thinking and practicing physiotherapy is not without its risks however. Moreover, physiotherapists would need to unlearn much in order to adapt their practice to the needs of future healthcare. At the same time, new materialism allows for a great deal that has been long treasured by physiotherapists, and reconciles many of the tensions that have slowed the growth and development of practice for many years. Perhaps most significantly, new materialism provides a

set of methodological tools to allow physiotherapists and others to examine their practice, redefine their professional purpose, establish a new professional ethics, and connect with a much broader affect economy.

Conclusion

In this chapter, I have sought to introduce new materialism, a relatively new and, I believe, exciting paradigm. The reason for including it in this edited collection is that it may offer physiotherapists positive ways to practise otherwise. It destabilises many of the traditional binaries common to contemporary healthcare, and offers a significant challenge to the kinds of humanistic philosophy that have dominated Western philosophy for centuries. Its emphasis on an anti-hierarchical flat ontology, and its focus on the agency of all things, bypasses some of the tensions now being experienced by physiotherapists and others, and replaces them with an entirely new way of thinking and practicing, that connects physiotherapy with a much broader ecosystem. It represents a collection of related philosophies, methodological tools, and an array of theoretical orientations whose time has come, and it may be of immeasurable support to those who wish to radically transform their practice.

References

- Baker, J. A. (1967). *The peregrine*. New York: New York Review Books Classics.
- Barad, K., Nelson, L. H. & Nelson, J. (1996). Meeting the universe half way: Realism and social constructivism without contradiction. In L. H. Nelson & J. Nelson (eds.), *Feminism, science and the philosophy of science* (161–194). Dordrecht: Kluwer.
- Barad, K. M. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Durham: Duke University Press.

- Bennett, J. (2009). *Vibrant matter: A political ecology of things*. Durham (NC): Duke University Press.
- Bjorbækmo, W. S. & Engelsrud, G. H. (2011). “My own way of moving” - movement improvisation in children’s rehabilitation. *Phenomenology & Practice*, 5(1), 27–47.
- Braidotti, R. (2013). *Metamorphoses: Towards a materialist theory of becoming*. Oxford: Wiley.
- Broberg, C., Aars, M., Beckmann, K., Emaus, N., Lehto, P., Lähteenmäki, M. -L., . . . Vandenberghe, R. (2003). A conceptual framework for curriculum design in physiotherapy education – an international perspective. *Advances in Physiotherapy*, 5(4), 161–168. doi:10.1080/14038190310017598.
- Butler, J. (1993). *Bodies that matter: Feminism and the subversion of gender identity*. London: Routledge.
- Clough, P. T. (2004). Future matters: Technoscience, global politics, and cultural criticism. *Social Text*, 22(3), 1–23.
- Cott, C. A., Finch, E., Gasner, D., Yoshida, K., Thomas, S. G. & Verrier, M. C. (1995). The movement continuum theory of physical therapy. *Physiotherapy Canada*, 47(2), 87–95.
- Covington, J. K. (2015). *Developing a professional embodiment of movement: A situational analysis of physical therapist clinical instructors’ facilitation of students’ emerging integration of movement in practice*. Thesis.
- Davies, B. (2016). Ethics and the new materialism: A brief genealogy of the postphilosophies in the social sciences. *Discourse: Studies in the Cultural Politics of Education*, 1–15.
- DeLanda, M. & Harman, G. (2017). *The rise of realism*. John Wiley & Sons.
- Deleuze, G. & Guattari, F. (1987). *A thousand plateaus — capitalism and schizophrenia*. Minneapolis: University of Minnesota Press.
- Dolphijn, R. & Van der Tuin, I. (2012). *New materialism: Interviews and cartographies*. Ann Arbor: University of Michigan.
- Dupré, J. (2012). *Processes of life: Essays in the philosophy of biology*. Oxford: Oxford University Press.
- Escorpizo, R. (2015). Summary and way forward: Doing more of ICF in physical therapy. *Physiotherapy Research International: The Journal for Researchers and Clinicians in Physical Therapy*, 20(4), 251–3. doi:10.1002/pri.1656.

- Feely, M. (2016). Disability studies after the ontological turn: A return to the material world and material bodies without a return to essentialism. *Disability & Society*, 1–21. doi:10.1080/09687599.2016.1208603.
- Foucault, M. (1970). *The order of things: An archaeology of the human sciences*. London: Tavistock.
- Fox, N. J. & Alldred, P. (2016a). Sociology, environment and health: A materialist approach. *Public Health*, 141, 287–293. doi:10.1016/j.puhe.2016.09.015.
- Fox, N. J. & Alldred, P. (2016b). *Sociology and the new materialism: Theory, research, action*. London: Sage.
- Gibson, B.E. (2016). *Rehabilitation: A post-critical approach*. New York: Taylor and Francis.
- Gibson, B. E. (2006). Disability, connectivity and transgressing the autonomous body. *Journal of Medical Humanities*, 27(3), 187–96. doi:10.1007/s10912-006-9017-6.
- Gibson, B. E. (2014). Parallels and problems of normalization in rehabilitation and universal design: Enabling connectivities. *Disability and Rehabilitation*, 36(16), 1328–1333. doi:10.3109/09638288.2014.891661.
- Gibson, B. E., Carnevale, F. A., & King, G. (2012). “This is my way”: Reimagining disability, in/dependence and interconnectedness of persons and assistive technologies. *Disability and Rehabilitation*, 34(22), 1894–9. doi:10.3109/09638288.2012.670040.
- Gibson, B. E., King, G., Teachman, G., Mistry, B. & Hamdani, Y. (2016). Assembling activity/setting participation with disabled young people. *Sociology of Health & Illness*. doi:10.1111/1467-9566.12496.
- Gibson, B. E., Nixon, S. A. & Nicholls, D. A. (2010). Critical reflections on the physiotherapy profession in Canada. *Physiotherapy Canada. Physiothérapie Canada*, 62(2), 98–100, 101- 3. doi:10.3138/physio.62.2.98.
- Goodley, D. & Runswick-Cole, K. (2014). Becoming dishuman: Thinking about the human through dis/ability. *Discourse: Studies in the Cultural Politics of Education*, 37(1), 1–15. doi:10.1080/01596306.2014.930021.
- Haraway, D. (2006). *A cyborg manifesto: Science, technology, and socialist-feminism in the late 20th century* (117–158). London: Springer.
- Haraway, D. J. (2008). *When species meet*. Minneapolis: University of Minnesota Press.

- Heidegger, M. (1995). *The fundamental concepts of metaphysics: World, finitude, solitude*. Bloomington: Indiana University Press.
- Hislop, H. J. (1975). The not-so-impossible dream. *Physical Therapy*, 55(10), 1069–1080.
- Krauss, R. (1979). Sculpture in the expanded field. *October*, 8, 31–44.
- Lather, P. (1993). Fertile obsession: Validity after poststructuralism. *The Sociological Quarterly*, 34(4), 673–693.
- Law, J. & Mol, A. (eds) (2002). *Complexities: Social studies of knowledge practices*. Durham: Duke University Press. Retrieved from <http://site.ebrary.com/id/10207677>
- Mol, A. (2002). *The body multiple: Ontology in medical practice*. Durham: Duke University Press.
- Nealon, J. T. (2016). *Plant theory: Biopower & vegetable life*. Stanford: Stanford University Press.
- Nicholls, D. A. (2017). *The end of physiotherapy*. London: Routledge.
- Nicholls, D. A. & Gibson, B. E. (2010). The body and physiotherapy. *Physiotherapy Theory and Practice*, 26(8), 497–509.
- Nicholls, D. A. & Larmer, P. (2005). Possible futures for physiotherapy: An exploration of the New Zealand context. *New Zealand Journal of Physiotherapy*, 33(2), 55–60.
- Nicholls, D. A., Atkinson, K., Bjorbækmo, W. S., Gibson, B. E., Latchem, J., Olesen, J., . . . Setchell, J. (2016). Connectivity: An emerging concept for physiotherapy practice. *Physiotherapy Theory and Practice*, 32(3), 159–70. doi:10.3109/09593985.2015.1137665.
- Nicholls, D. A., Gibson, B. E. & Fadyl, J. K. (2015). Rethinking movement: Postmodern reflections on a dominant rehabilitation discourse. In K. McPherson, B. E. Gibson, & A.
- Riskin, J. (2016). *The restless clock: A history of the centuries-long argument over what makes living things tick*. Chicago: University of Chicago Press.
- Sahrman, S. A. (2014). The human movement system: Our professional identity. *Physical Therapy*, 94(7), 1034–1042. doi:10.2522/ptj.20130319.
- Setchell, J., Nicholls, D. A. & Gibson, B. E. (2017). Objecting: Multiplicity and the practice of physiotherapy. *Health* (London, England: 1997), 1363459316688519. doi:10.1177/1363459316688519.

- Shildrick, M. (1997). *Leaky bodies and boundaries: Feminism, postmodernism and (bio)ethics*. London: Routledge.
- Shildrick, M. (2014). "Why should our bodies end at the skin?": Embodiment, boundaries, and somatechnics. *Hypatia*, 30(1), 13–29. doi:10.1111/hypa.12114.
- Standal, F. & Engelsrud, G. (2013). Researching embodiment in movement contexts: A phenomenological approach. *Sport, Education and Society*, 18(2), 154–166. doi:10.1080/13573322.2011.608944.
- Sviland, R., Martinsen, K. & Råheim, M. (2014). To be held and to hold one's own: Narratives of embodied transformation in the treatment of long lasting musculoskeletal problems. *Medicine, Health Care & Philosophy*, 17(4), 609–24. doi:10.1007/s11019-014-9562-0.
- Thomas, K. (1983). *Man and the natural world: Changing attitudes in England 1500–1800*. Penguin UK.
- Trede, F. & McEwan, C. (eds) (2016). *Educating the deliberate practitioner*. Amsterdam: Springer.
- Wikström-Grotell, C. & Eriksson, K. (2012). Movement as a basic concept in physiotherapy--a human science approach. *Physiotherapy Theory and Practice*, 28(6), 428–38. doi:10.3109/09593985.2012.692582.

Plateau 2

Practicing differently

CHAPTER 5

Performative acts of physiotherapy

Blaise Doran | Children's Pain Management Clinic, The Royal Children's Hospital, Melbourne

Jenny Setchell | Bloorview Research Institute, Holland Bloorview Kids Rehabilitation Hospital / School of Health and Rehabilitation Sciences, The University of Queensland

Abstract

There are elements of performance and acting techniques that are relevant and applicable to the (physio)therapeutic encounter. Specifically, we consider Keith Johnstone's heuristic framework of theatrical improvisation around which performers can create interesting narratives and relationships. The concepts of "status" and "blocking" seem particularly pertinent to the therapeutic interaction. Much has been written about the power differential in a variety of healthcare encounters, including physiotherapeutic ones. Collaborative interactions in healthcare are considered favourable, yet physiotherapists have been criticised for continuing to engage in predominantly therapist-centred models of communication. We extend some of Johnstone's theatrical constructs with the theories of feminist post-structuralist Judith Butler to consider how they might be useful in understanding physiotherapists' clinical interactions. For Butler, there is little distinction between personal and political, where even the most mundane-seeming acts are scripted by (and script) hegemonic belief systems. She outlines how identities are formed through

repetition of certain “speech acts”, postures and movements. Butler’s theories of performativity can help physiotherapists understand how they (re)produce patterns of interaction in clinical encounters that (re)inforce therapist-centred interactions. Understanding these interactions using a Butlerian reading of Johnstone’s techniques can provide physiotherapists tools for recognising, and resisting hegemonic physiotherapy practices.

Introduction

As this chapter introduces elements of acting and performance techniques and considers their relevance and applicability to the therapeutic encounter, we thought it relevant to introduce the theatrical aspects of ourselves to provide some context. Before retraining as a physiotherapist, Blaise Doran was a professional theatre actor for 10 years, working in a variety of styles, predominantly modern classics and Shakespeare. Improvisation was one of the foundations of his training, and it was used variously to develop scripts, the emotional tone of a scene and occasionally in performance. In his experience, parallels between physiotherapy and acting exist in the interactive nature of physiotherapeutic encounters, and this nourished his approach to such interactions, particularly in his current work with children and adolescents experiencing chronic pain. A clinical physiotherapist – now an academic – Jenny Setchell also had a career as a physical theatre/acrobatic performer. Her performance work was primarily physical – i.e. she embodied meaning through acro-balance, aerials, and dance. For Jenny, improvisation was a core part of devising new work. The content of her performance focussed primarily on (deconstructing/queering) gender: in many ways a physicalisation of some of Judith Butler’s concepts of performativity that we employ in this chapter. We hope to be able to share

some of our insights from our performative worlds with other physiotherapists.

The idea for this chapter came about during a conversation over a beer at a conference. We realised that we both use aspects of what we have learnt as performers to inform how we relate to patients (we use “patient” in its clinical sense, as the recipient of care but acknowledge that the use of the term has been criticised elsewhere [e.g., Langer & Abelson, 1974]). We discussed a number of ideas relating to performance, including that of *status transactions*. The study of status in theatre relates to the idea of a constant, and sometimes subtle, interplay between supremacy and obedience (power relationships) occurring in human interaction. We speculated whether physiotherapists adjust their interpersonal communications, including status transactions, intuitively to address these relationships. Our initial discussion extended to include Judith Butler’s concept of *performativity*. Butler (1999) applied her ideas specifically to gender, proposing that gender identities conform to societal expectations as they are continuously replicated/created through the repetition of particular physical and verbal actions. Gender is not innate, she asserted, but created to society’s specification through continual performance (ibid). We suggest this concept of gender performativity may be extended to other forms of identity construction, including “physiotherapist”. What constitutes a physiotherapist is not pre-existing: through repetition of particular bodily gestures, attitudes and acts of speech, the recognisable identity of a “physiotherapist” is formed. As we discuss, this recognisable identity also includes certain “status” positioning(s).

While acknowledging that there may be more than one manifestation of this recognisable physiotherapist identity, continuously repeated elements coalesce to produce a kind of normative template. We propose that there is, professionally and socio-culturally,

a collective idea of “a physiotherapist”. In keeping with the theatrical theme, we will call this collective idea of a physiotherapist an “archetype”. We will delve into the physiotherapy archetype more comprehensively below, highlighting how it is both productive and limiting for the profession, and in turn has implications in terms of physiotherapists’ power to regulate, constrain or work to liberate others. We argue that developing an understanding of this physiotherapist archetype presents opportunities to work in ways that subvert problematic power differentials that can exist in physiotherapeutic interactions (see, Harrison & Williams, 2000; Potter, Gordon & Hamer, 2003). To our knowledge, there has been no previous discussion (in physiotherapy or similar health professions) on status, improvisation and performativity in therapeutic encounters.

What we present is an interactional framework, and we argue that awareness of factors such as status can be helpful, particularly when therapeutic encounters become challenging. We acknowledge that this is one way to approach interpersonal communication, not the only way, and that the perspective we present is skewed towards Western cultures, as we predominantly discuss our own experiences – primarily within the United Kingdom and Australia. Nonetheless, we aim to provide an innovative analysis of the physiotherapist’s “performance” as informed by established techniques used in theatrical improvisation that should, with considerations of nuance, have relevance across numerous contexts.

Keith Johnstone’s “Impro”

Performance training is not a homogenous entity – there are plentiful (sometimes competing) schools of thought and approaches to training. While acknowledging this, we choose to focus on just

one – best known as improvisation, or more commonly, “impro”. A consideration of what impro might bring to physiotherapy would be incomplete without exploring Keith Johnstone’s pioneering work on theatrical improvisation, which was influential in Blaise’s actor training and Jenny’s performance devising process. Johnstone had a varied career as an educator, writer, script reader, theatre director and drama teacher. In his monograph, *Impro: Improvisation and the Theatre* (1979; hereafter *Impro*), Johnstone outlines a heuristic framework around which performers can create interesting narratives and relationships. Johnstone likes to simplify, and a superficial reading of *Impro* may leave the reader with the impression that his approach is one-dimensional, and uncritically favours action over thought. However, his work is a complex synthesis of his observations on the processes involved in improvised performance, and diverse conceptual influences drawn from his experiences in education and theatre, which concludes that the creative process (dramatic or otherwise) should be less about thinking and discussion, and more about doing. Johnstone emphasises the process of improvisation is founded on an ability to be aware of, and use, openness and vulnerability. Being comfortable with failure is an important component of this, and we will revisit the concept in the context of clinical interactions. Taking the risk to move away from reproducing the conventional, and embracing difference and newness underpins Johnstone’s approach, because (as with critical perspectives in healthcare) the novelty of making “the familiar strange” (Kumagai & Wear, 2014) can be interesting and enlightening. While critical approaches are far from homogeneous, they arguably share with Johnstone a drive to shift customary thinking and established practices.

Johnstone peppers *Impro* with autobiographical details, and his approach to pedagogy is particularly interesting. He describes

working against his formative experiences of school which, as he describes them, were oppressive (involving power and status). He maintains that this constraining type of education stunted his creativity for many years. Johnstone's approach to teaching bears comparison with the methods described by one of the founding thinkers of critical pedagogy, Paulo Friere. Friere (2000) is celebrated for his censure of traditional pedagogic approaches, and what he called "the 'banking' concept of education" (p. 72) where students are conceptualised as empty vessels to be filled with information as if making deposits into a bank account. For Friere, to view the learner as a passive receptacle is a form of oppression that promotes conformity to the *status quo*, rather than a liberating process of dynamic and creative knowledge discovery (for a discussion of this in relation to health profession education, see Halman, Baker and Ng, 2017). While teaching in a working-class area of South London, Johnstone subverted the traditional teaching methods that he experienced as a student (particularly: conforming to rigid strictures, focus on end results, and shunning failure) in order to creatively engage his pupils. It is possible to make connections between traditional teaching methods and the teleological focus (and repudiation of failure) in rehabilitation. Teaching, for Johnstone, is a creative act, and these experiences feed the epistemological stance of *Impro*. Rehabilitation can and should be a similarly creative act; an important factor in our reflections on therapeutic interactions below.

Next, we elaborate on Johnstone's concept of *status*, which we propose forms an important and influential part of therapeutic interactions, and to the performative "physiotherapist archetype". We then extend these concepts further through Judith Butler's (1999) theories of performativity and highlight the relevance to the therapeutic interaction.

Johnstone's concept of status

“Status is a confusing term unless it’s understood as something one does. You may be low in social status, but play high, and vice versa.”

Johnstone (1979, p. 36)

Bringing to mind status may evoke thoughts of an individual’s social standing and even her/his lineage, conjuring notions of hierarchy. Johnstone (1979), as illustrated by the above quotation, clearly uses the term “status” to describe what one *does* (how one behaves), rather than what one *is* (socially oriented concepts of self). At the core of his interpretation are the concepts of dominance and submission. Working with a group of actors in the 1960s, he struggled to get them to improvise naturalistic dialogue without sounding stilted or dull. His pragmatic solution was inspired by some diverse reading, including Konrad Lorenz’s (1952) treatise on animal behaviour; particularly the pecking order of birds. He used “pecking order” within improvisation exercises and, assuming he would be met with resistance if he called it “dominance and submission”, he coined the term “status” (Robbins Dudeck, 2013). Johnstone discovered that getting actors to raise their status (dominate) or lower it (submit), even subtly, facilitated remarkable changes in the quality of the dialogue, and physical communication (e.g., Figure 5.1).

He emphasises that the taking of higher or lower status has little to do with an individual’s putative social standing. The process is rarely in stasis, as it needs to be continuously verbally and physically modulated. Johnstone believes we all have a preferred status, our default starting point within any given interaction. While he gives little elaboration as to what may influence this (other than it being based on his own observations). Some readers may recognise that there are others who have written about preferred status, and how status may be socially – indeed performatively – created

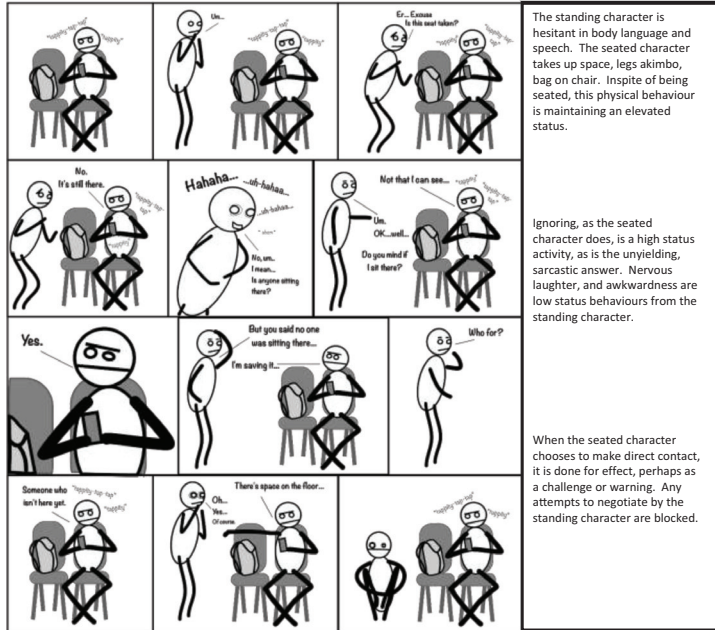


Figure 5.1: "Is this seat taken?" An illustrated example of how status may work in an improvised performance (source: the authors)

(e.g. Bourdieu, 1977). While we recognise the importance of these perspectives, it is beyond the scope of this text to include them.

Status and performativity

To an extent, Johnstone's interpretation of status resonates with the Butlerian view of performativity, where behaviours, speech and physical actions, continually repeated (something one does) consolidate an identity (the performative self), rather than it being an internalised reality (something one is). Using Butler's perspective, it is possible to consider the identities adopted in different contexts (for our purposes, "the patient" and "the physiotherapist") as conforming to particular kinds of repeated actions, gestures, behaviours and speech. This connects well with the *status* concept (Johnstone, 1979) where

performing particular actions, physical and verbal behaviours, and vocal qualities produce high or low status.

“Performativity” and “performance” have clear similarities – both involve language and vocal tone, physicality and movement, behaviour and affect. In this chapter, we will use the common understanding of “performance” to refer to both the representation of artistic works, and (more subtly) the expression of a tacit agreement between individuals wherein one “acts” a role in an everyday context (i.e. acting offended over something that is said). To understand how performativity is different from performance it is worth looking to the former’s original use in relation to speech. Austin (1962) introduced the concept of performativity in relation to the performative nature of certain phrases. Other than what is being spoken (i.e. the words used) Austin (1962) put forward two further elements: The “illocutionary act”, which is the speaker’s intended purpose behind the words, and the “perlocutionary effect”, which is the actual effect the person speaking has on the person they are speaking to. Performativity thus recognizes that speaking involves more than simply the production of words. Butler (1999) goes further, acknowledging the repressive power of language, particularly the elements that are repeated in societal and legal credos, and extending the concept of performativity to non-verbal acts. Performativity, then, for Butler, is the cyclical reproduction through speech, action, physical displays, and so on, that consolidate an identity, and that are validated (or censored) by others.

Butler (1999) is renowned for applying the concept of performativity to gender and, in doing so, extending understandings of the productive power of performativity beyond that of Austin (1962). She deconstructs the idea that gender is a stable or predetermined inherent feature of the individual, refuting the notion that it is something individuals are born with. Instead Butler proposed that through repeated actions of speech, behaviour and mannerisms

(something which we learn, or receive) gender is consolidated, as (for example) masculinity or femininity. As Karen Barad (2007) succinctly depicts, Butler describes gender as an “iterated doing through which [gendered] subjects are brought into being” (p. 57, parentheses added by the authors). Gender is thus understood as perpetually reproduced through physical and verbal actions that constitute subjects through performative acts, and are policed by the expectations of others. There are multiple masculinities and femininities, however dominant forms of gender identities can be restrictive and coercive to those who fall outside of these putative “norms”. Butlerian performativity can be extended beyond considerations of gender (e.g., Larsson, 2012), to describe the speech, behaviour, mannerisms and actions that contribute to the formation of other identities. While recognising that (like with gender) there is no single physiotherapist subject identity, we consider the dominant archetype of “the physiotherapist” below.

One way to discuss “the physiotherapist” using Butler’s concept of performativity through the work of Johnstone (1979) is to return to our notion of an *archetype*. We will draw primarily on Frye’s (1957) understanding of the notion. Importantly, Frye acknowledges Greco-Roman and Judeo-Christian cultural influences on western notions of archetype, and emphasising the quintessential qualities of characters as being recognisable in spite of the differing detail of the narrative (e.g., the hero, the villain, the mentor, the wise woman), particularly if one stands back to see the (mythopoeic) design. This cultural influence is significant for our interpretation, as it opens up the possibility of archetypes being performatively reinforced by the culture from which they emanate. The archetype, then, is the recognisable “normative template” that Butler (1999) might argue is (re)produced through performativity. To use a theatrical example, in *Commedia dell’Arte* (a form of Italian improvisational theatre dating back to the 16th Century), there are four main

archetypes: *Zanni* (servants), *Vecchi* (old men), *Innamorati* (lovers), and *Capitani* (captains), (Chaffee & Crick, 2015). A 16th century audience attending a performance by a *Commedia* troupe would expect to see such stock characters, and expect them to behave in certain ways. They are the genotype to the phenotype of the individual actor's improvised performances - the inscribed model from which all others are made, and are usually strong enough to withstand whatever personal interpretation the actor brings.

To apply the concept of an archetype to physiotherapy, one might perform a simple thought experiment: You are a casting director for a film or television show that is to have a physiotherapist as one of the characters. You must decide what type of actor you would cast so s/he will be easily recognised as a physiotherapist: you will need to make decisions about gender; ethnicity; body shape; mannerisms; and vocal quality. Note that this "archetypal physiotherapist" does not necessarily reflect what you actually see in your workplace but rather the dominant societal concept of a physiotherapist. We created Figure 5.2, below, to show some



Figure 5.2: Possible descriptors of the archetypal physiotherapist (source: the authors)

possible descriptors associated with physiotherapists in Western healthcare settings.

Reflecting upon the elements that you decided formed an “archetypal physiotherapist” may be a revealing process. Physiotherapy (perhaps wishfully) likes to portray itself as a diverse profession, but it is worth considering whether the idea of diversity stays at the forefront of your mind when imagining a physiotherapist and if your first imprint, reflecting a “normative template”, suggests something more like the descriptors shown in Figure 5. 2, above.

Because we suggest that the archetype is culturally embedded, something reinforced performatively and reflecting the concepts of Butler (1999), a possible challenge arises: How does the physiotherapy profession encode a different archetype that reflects the constative desire of the profession to be inclusive and diverse? Evolving from this archetype of the physiotherapist may be difficult, because it is mediated by sociocultural expectations from within the profession as well as broader society (Hammond, 2013; Dahl-Michelsen, 2014). Mediators such as training syllabuses, colleague practices and behaviours, patient expectations, professional codes of conduct, and juridical foundations of our scopes of practice (amongst other things) delineate how physiotherapists think, look and act. Thus, Butler’s (1999) performativity can be applied to physiotherapy “as set of repeated acts within a highly rigid regulatory frame that congeal over time to produce the appearance of substance, a natural sort of being” (pp. 43-44). The performative view of physiotherapy (as expressed through the archetypal “physiotherapist”), then, is that it is not so much what one *is*, but what one *does*. As a profession, or at least in professional contexts, we collude in this performative act by continuing to embody it. Central to Johnstone’s conception of improvisation is the notion that creative risks need to be taken and that failure is expected, even necessary at times, to produce more interesting work. The physiotherapy

profession may need to consider how playful or creative subversions of our established archetype may benefit us, and acknowledge that there may be failures along the way.

The verbal and physical actions that constitute a physiotherapist (e.g., observing bodies move, measuring joint range, interacting with patients, using outcome measures) form a state of doing rather than being. Such constraints exist before one enters the profession, and while individual *acts* of physiotherapy remain unscripted and can be subjectively (i.e. individually) interpreted, once the designation is assumed it becomes difficult to shift or subvert the physiotherapist identity too far out of its relatively fixed framework without consequences. We invite the reader to consider further what constitutes “the physiotherapist” as a performative identity (Butler, 1999). An identity that requires the tacit agreement and observance of received expectations that (taking a Foucauldian perspective) form a kind of carceral system, with its associated network of panoptic resources to ensure compliance, with judgements passed and punishments meted out for those who do not conform (Foucault, 1975; Eisenberg, 2012). As we propose in the next section, this physiotherapist archetype has the capacity to constrain or to liberate through the use of *status* in its performative acts.

The fundamental components of status transactions

While by no means comprehensive, we have emphasised and extended aspects of Johnstone’s (1979) concepts of status to consider contexts familiar to physiotherapists. It is probable that many physiotherapists already use parts of these concepts within their work (consciously or unconsciously). Based on our own clinical practice experiences, we suggest that through conscious awareness of therapist’s and patient’s status behaviours (as will be

outlined below), a greater appreciation of how they influence clinical interactions can be developed. We hope that an exploration of status presents opportunities for physiotherapists to recognise and modulate their own status behaviours in any given context, and to strengthen the therapeutic alliance. It is our reflection that such explicit consideration fosters more positive interactions, particularly when therapeutic relationships become challenging.

There are some fundamental tenets in performed improvisation that are transactional components of status. Perhaps the foremost of these is the *offer*: indeed Johnstone (1979) suggests that anything an actor does is an offer that can be either accepted or blocked. An offer is usually a clear, brief interaction (verbal or non-verbal) that sparks the improvised narrative. In order for any action to advance, the other performer needs to *accept*. If the performer avoids, repudiates, or contradicts the offer this is a *block*. Blocking kills the action, and distracts from the original offer (and performer who offered) shifting the focus to the blocker. However, there are more subtle ways in which blocking is used that feed into status. These do not wholly negate the offer, but alter the status between the two actors as the offer is not fully accepted by one party. Such behaviour is considered by Johnstone to be adopting a high status position. We created a fictitious example (Figure 5.3) to show how this may apply to someone experiencing low back pain who is referred to a physiotherapist by an orthopaedic surgeon.

There is a creative way to prevent “blocking” speech behaviour (both in impro, and everyday interactions) and that is to use “*Yes, and...*” as an answer to patient offers. “*Yes, and...*” is an improvisational concept that allows the action to keep flowing, and it is almost impossible to block another person’s offer when it is used. There are clearly other ways to maintain “flow” in an interaction, as we briefly illustrate below (Figure 5.4):

<p>Person with back pain: I'm in terrible pain all the time. I've been told my spine is crumbling, and it's bone-on-bone in parts of it...</p>	<p>[Offer] The person seeking treatment offers their narrative.</p>
<p>Physiotherapist: I see. Who did you hear that from?</p>	<p>[Block] Although apparently accepting, it is non-committal. There is a wariness that the lay interpretation of facts may require correcting with expert knowledge makes it a block, albeit a partial one. This sets up a status differential, so that the therapist takes high status.</p>
<p>Person with back pain: The orthopaedic surgeon told me. I've had an MRI, and...</p>	<p>[Offer] While this appears to try to block the therapist, the person seeking treatment is actually trying to offer their narrative again, but ups the ante to raise their status, by mentioning significant players, and imaging as "proof".</p>
<p>Physiotherapist: I don't think that's what he meant. Can you remember what he told you?</p>	<p>[Block] This is a clear negation of the second attempted offer, then cross-examination. Again, Johnstone would consider this taking high-status.</p>
<p>Person with back pain: Degeneration... or ... I don't know... something...</p>	<p>[Offer] Although an offer, the answer is essentially coerced. Status is lowered, verbal qualities start to change (hesitation, loss of confidence).</p>
<p>Physiotherapist: You're probably thinking of degenerative joint disease. That doesn't mean your spine is crumbling. Let me explain it to you...</p>	<p>[Block] The physiotherapist continues to block, through correcting the person seeking treatment, even though the answer was coerced from them. The physiotherapists then goes on to further negate the original narrative; "trumping" the offer maintains the higher status.</p>

Figure 5.3: Example of a physiotherapist-patient encounter to demonstrate offers and blocking (source: the authors)

<p>Person with back pain: I'm in terrible pain all the time. I've been told my spine is crumbling, and it's bone-on-bone in parts of it...</p>	<p>[Offer] The person seeking treatment offers their narrative.</p>
<p>Physiotherapist: Yes, and the way you describe it sounds distressing. Can you tell me what that means to you?</p>	<p>[Accept] Instead of blocking, an affirmative response indicates acceptance of what has been offered. Furthermore, following up with an open question that solicits information maintains "flow".</p>

Figure 5.4: "Maintaining Flow": An example of a physiotherapist-patient encounter to demonstrate offer and acceptance (source: the authors)

Obvious discrepancies in status do appear in clinical interactions, but commonly much subtler status transactions occur. The "see-saw principle" is a term used by Johnstone (1979, p. 37) to

convey the constant give-and-take exchange in status transactions that, in a performance context, are reflective of relatively balanced power interactions in real life. More successful clinical interactions likely rely on the consistent give-and-take of high and low status where both (or all) parties alternate positions; as if on a see-saw (Baker et al., 2011). While eliminating all power differentials may be a challenge, alternating status positions in physiotherapist-patient interactions is a possible way to dynamically share power and promote collaborative practices such as shared decision making (Joseph-Williams et al., 2014). The notion of the expert physiotherapist has been part of modern developments in the profession, with specialisation pathways in Australia, and consultant physiotherapists in the UK as two examples. This is not problematic *per se*, but an awareness of our actions (what we *do*) in relation to use of status might need to be factored in. As physiotherapists, our desire to educate those who come to see us, where people are referred to us for our *expertise*, may end up blocking patient offers with the unintended effect of creating therapist-centred interactions (e.g., Hiller, Guillemin & Delany, 2015) thereby giving higher status to the therapist. Following is a précis of information contained within Johnstone's *Impro* that he suggests are manifestations of high and low status behaviours.

Physical control

Physical control equates to “body language” or physicality. Physicality that creates high status includes enacting precise, efficient and confident movements. High status posture, depending on context, can be relaxed, open and changing fluidly between postural sets (dominating postures), or can be upright and still (intimidating postures). Self-interaction is limited, and often used for a desired effect (such as superciliously holding on to one's chin while

listening to what others are saying). Thus, movement and posture in those claiming high status exudes control. Movements used to create low status are effectively the opposite. Moving tentatively, with twitches, or with poor coordination – or those who move with unusually stiff and awkward physicality enact low status. Johnstone suggests that in adopting low status, the body may be stooped, or internally directed (as if folding in on oneself) or low tone and slack (acquiescent). Low status is also enacted through frequent head movement, and self-interaction that is influenced by the level of nervousness (e.g. covering one's mouth with one's hand, fidgeting with clothing, etc.). As might be expected, in physical terms, those displaying low status exude a lack of confidence.

It should be easy to recall or imagine scenarios in which, purely in terms of physicality, a physiotherapist behaved in a high status manner and the person seeking treatment displayed low status behaviour, according to the above indicators. Certainly, people referred for physiotherapy treatment may be moving awkwardly, stiffly, and so on; the semaphore of “low status”. What may be potentially missed from this is that in contrast, the physiotherapist (though their physicality) is likely to enact high status – placing themselves in the “higher” position of the status see-saw from the moment an individual comes to see them. While we re-iterate that this does not apply to all physiotherapists at all times, to conform to archetypes, competence and confidence in movement are part of the stock-in-trade of physiotherapy. However, it is informative that a typical physiotherapist posture (likely created through a continual rehearsal of “good posture” or through conveying a “sporty” image: see Dahl-Michelsen, 2014), can be perceived as high status and potentially intimidating. From a performative perspective, the fit and physically confident archetype of *the physiotherapist* pitted against the patient whose movement has been labelled as “pathological” or “incompetent” creates a status differential. Physiotherapists

see patient physicalities as movement compensations, or as part of psychologically-informed diagnoses like *fear-avoidance*, or *kinesiophobia*, but may neglect to consider the status or performative implications of such physicality. To our knowledge, physiotherapists rarely receive training in these types of broader, sociocultural implications of movement/posture in therapeutic encounters (for an informative discussion see Larsson & Quennerstedt, 2012).

Knowing that particular physical expressions create different status positions might help physiotherapists choose when to change their physicality from their archetypal “correct” posture and movement. The purpose would be to see if such an *offer* is accepted by the patient and if so, to observe if their physicality alters. For example, when a physiotherapist wants to hear a patient’s perspective, they might choose to temporarily slouch a little. Try it! We have both found that changing our physicality to claim lower status at times appeared to help create a more two-way interaction with patients. Be aware, that choosing to subvert the physiotherapist archetype (e.g. by slouching) may have any number of other consequences (i.e. a risk that the subversion may fail). There is the possibility, for example, that a patient may perceive a therapist to be less “trustworthy”, “competent” or “professional”. However, it can be powerful to creatively subvert the archetype, and while both patients and physiotherapists may find it challenging, it is not necessarily negative.

Vocal and verbal control

Physical control theoretically goes in tandem with vocal and/or verbal control. As might be predicted, people adopt high status positions by speaking in a volume “suitable” to the context, modulating pitch and tone accordingly, with fluidity, and accepted prosody. Vocal and verbal behaviours that enact low status might

include speaking in a voice that is quiet and/or monotonous or a volume that is considered inappropriately loud for the context. The speech may have an overly rapid, blurring quality, or may equally be hesitant and mumbling, and there are likely to be fillers (“*um*”, “*er*”, “*ah*”, “*like*”, etc.). On the last point, Johnstone (1979) makes a distinction between how fillers may be used differently to create high or low status. Vocal fillers generally transmit hesitation and lack of confidence (low status), but high status behaviour may be to extend those sounds to take up aural space so that others cannot interrupt.

It is likely that physiotherapists moderate their vocal quality to suit various patient situations. When considering that around half the physiotherapeutic encounter may be verbal (Roberts & Bucksey, 2007; Roberts, Whittle, Cleland & Wald, 2012), both vocal quality and verbal content are bound to be influential. To our knowledge, there is no physiotherapy-specific examination of vocal quality. However, within medicine, some researchers discuss an association between affect conveyed by vocal tone and malpractice litigation against surgeons (Amabady, LaPlante, Nguyen, Rosenthal, Chaumeton & Levinson, 2002). There may also be a long-lasting negative influence from what clinicians say to people experiencing low back pain (Darlow, Dowell, Baxter, Mathieson, Perry & Dean, 2013), and a need to recognise the emotive nature of orthopaedic vocabulary (Vrancenu, Elbon & Ring, 2011). Physiotherapists may wish to consider their own vocal qualities, reflecting upon the contexts in which they use high or low status vocal qualities with patients. For example, a physiotherapist might use confident-sounding, high status speech when disagreeing with a patient on a diagnosis. This could be problematic if the patient consequently feels less comfortable about raising doubts. A greater awareness of the effects of vocal quality, and acknowledging the possibilities for disrupting usual performative physiotherapist voice, might help provide physiotherapists with options to work differently.

Touch

Johnstone makes surprisingly little of the use of interpersonal physical contact in *Impro*. The clearest examples he provides relate to the crossing into someone else's peri-personal space intentionally (in order to make them uncomfortable, creating high status) or as a gaffe (creating low status). These examples are, however, simplistic; the nuance of interpersonal touch, and the myriad contextual factors that influence it have been stripped away (likely to gain more comedic effect).

The question of touch in a physiotherapeutic context (and how it relates to status) is difficult to establish, as touch has a host of factors that influence it. Nonetheless, considering the importance of touch in physiotherapy it is worthy of reflection. In a physiotherapeutic context, touch is often expected/desired (Nicholls & Holmes, 2012) and thus may not be experienced as an invasion of personal space. Because touch is a foundational element of physiotherapy, there is an expectation that it forms part of treatment, so it may or may not produce the high status often produced by touching someone in other contexts (for example: guiding someone by the elbow as they walk, or patting someone on the back or head often generate high status). On the other hand, relevant positions of high (therapist) and low (patient) status may be reinforced with patients who fear pain associated with touch, are uncomfortable with a stranger touching them, or simply dislike it. Physiotherapists have only just begun to explore such elements of “doing” physiotherapy. Notably, in a study of physiotherapist-patient interactions, Hiller et al. (2015) observed that while dialogue was often practitioner-centred (i.e. the physiotherapist adopted high status) this was frequently tempered by the use of touch and casual conversation, which these authors argued produced more balanced status interactions. There is considerable nuance to discussions of the status produced from touch in

a physiotherapy setting – individual contexts are important to consider in any given interaction.

Status as communicated by the environment

The relationship between environment and status is something Johnstone addresses only briefly. He suggests that status transactions are not exclusively with another individual, but can be with the environment itself, and dominance and submission (status) can be seen in the context of territoriality. Referring to *space*, he proposes that environments and objects can influence whether an individual takes high or low status; the socio-cultural meaning of which is explored in more depth by social theorists such as Ahmed (2006), and Bourdieu (1977). Thus, the status of a physiotherapist (and the individuals using physiotherapy services) is likely to vary if their environment changes. For example, when a primarily outpatient-based physiotherapist is required to work on an inpatient ward, or an inpatient therapist is required to work in domiciliary rehabilitation, there are likely effects of the different status of different work environments as well as a possible drop in status due to reduced familiarity with surroundings. Regardless, in all these scenarios, the physiotherapist usually leads (adopts high status) and the individual seeking treatment acquiesces (adopts low status). When in the rehabilitation gym, the physiotherapist is in a familiar environment, moves comfortably and confidently, knows what the equipment is called and how to use it. A patient unfamiliar with this environment must conform in order to interact, and it is likely that conformity will mean deference (lowered status). The environment, then, can influence status transactions and identity formation of the physiotherapist and patient through the trappings of the physiotherapy workplace, such as plinths, parallel bars, training equipment (Nicholls, 2012). They are an intrinsic part of the performativity of physiotherapy.

Conclusions

Becoming aware of what occurs in status transactions might assist physiotherapists in forming more helpful therapeutic alliances with patients. The contextual identities we inhabit (our performative selves) tether us to unconscious subroutines of behaviour, which in turn serve to reify a particular type of physiotherapist. Status is an inherent part of performing “the physiotherapist”. The physiotherapist may be seen, through repetitions of various actions, behaviours and speech acts to be at once an arbiter, a sage, and a master of their craft; granting permissions, imparting knowledge; dexterous and restorative in their handling. The client seeking treatment may likewise be perceived as the vessel (perhaps vassal) that is the receiver of this combined acumen, but who is also asking for help. For this to be the case, the hierarchical nature of the relationship as described requires conformity to the model it puts forward, which is why it may be described as performative. Reflecting on this, someone labelled by a physiotherapist as *an engaged patient* may be conforming to the status that his/her performative identity allows: an identity that has been constructed, reproduced and internalised by patient and physiotherapist alike and which manifests in their behaviour and judgments. Conversely, the *challenging patient* may resist this construction, perceiving herself to be of equal or higher status than the physiotherapist, and conflict arises from each agent constantly vying for high status. Neither of these scenarios is necessarily helpful for achieving what is arguably the ultimate goal of physiotherapy – meaningfully improving the lives of those who seek care. A power difference tipped towards the physiotherapist is likely to reduce the ability for patients to bring their own needs and meanings into physiotherapy encounters. With a greater awareness of the performative nature of enacting “the physiotherapist”,

and its status implications, we may be able to contribute to addressing power discrepancies, and subvert our entrenched performative identities. Doing so should open up opportunities to act and speak in ways that creatively play with what it means to be “a physiotherapist” and “a patient” – providing more options for agile, tailored care for those who seek it. Furthermore, in the spirit of *Impro* we should not be afraid to fail at doing so, or at least become more comfortable with it. Understanding physiotherapy through theatre and performance techniques offers a way to scrutinise what we do as physiotherapists. Exploring status and performativity offers specific “thinking and doing” approaches that are not usually part of physiotherapy training.

References

- Ahmed, S. (2006). *Queer phenomenology: Orientations, objects, others*. Durham, NC: Duke University Press.
- Ambady, N., LaPlante, D., Nguyen, T., Rosenthal, R., Chaumeton, N. & Levinson, W. (2002). Surgeons’ tone of voice: A clue to malpractice history. *Surgery*, 132(1), 5–9.
- Austin, J. L. (1962). *How to do things with words*. Oxford, UK: Oxford University Press.
- Baker, S. C., Gallois, C., Driedger, S. M. & Santesso, N. (2011). Communication accommodation and managing musculoskeletal disorders: doctors’ and patients’ perspectives. *Health Communication*, 26(4), 379–388.
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Durham, NC: Duke University Press.
- Bourdieu, P. (1977). *Outline of a Theory of Practice* (R. Nice, Trans.). Cambridge, UK: Cambridge University Press.
- Butler, J. P. (1999). *Gender Trouble*. New York, NY: Routledge.
- Chaffee, J. & Crick O. [Eds] (2015), *The Routledge companion to Commedia dell’Arte*. Abingdon Oxfordshire, UK: Routledge.

- Dahl-Michelsen, T. (2014). Sportiness and masculinities among female and male physiotherapy students. *Physiotherapy Theory & Practice*, 30(5), 329–337.
- Darlow, B., Dowell, A., Baxter, G. D., Mathieson, F., Perry, M. & Dean, S. (2013). The enduring impact of what Clinicians say to people with low back pain. *The Annals of Family Medicine*, 11(6), 527–534.
- Eisenberg, N. R. (2012) Post-structural conceptualizations of power relationships in physiotherapy. *Physiotherapy Theory & Practice*, 28(6), 439–46.
- Foucault, M. (1977). *Discipline and punish: The birth of the prison*. London, UK: Allen Lane.
- Freire, P., Ramos, M. B. & Macedo, D. (2000). *Pedagogy of the oppressed* (30th ed.). New York, NY: Continuum International Publishing Group.
- Frye, N. (1957). *Anatomy of criticism: four essays*. Princeton, NJ: Princeton University Press.
- Halman, M., Baker, L. & Ng, S. (2017). Using critical consciousness to inform health professions education: A literature review. *Perspectives on Medical Education*, 6(1), 12–20.
- Hammond, J. (2013). *Doing gender in physiotherapy education: A critical pedagogic approach to understanding how students construct gender identities in an undergraduate physiotherapy programme in the United Kingdom* (PhD thesis). Kingston University and University of Roehampton, Roehampton, United Kingdom.
- Harrison, K. & Williams, S. (2000) ‘Exploring the power balance in physiotherapy’, *British Journal of Therapy and Rehabilitation*, 7(8), 355–361.
- Hiller, A., Guillemin, M. & Delany, C. (2015). Exploring healthcare communication models in private physiotherapy practice. *Patient Education and Counseling*, 98(10), 1222–1228.
- Hush, J. M., Cameron, K. & Mackey, M. (2010). Patient satisfaction with Musculoskeletal physical therapy care: A systematic review. *Physical Therapy*, 91(1), 25–36.
- Johnstone, K. (1979). *Impro: Improvisation and the Theatre*. London, United Kingdom: Methuen Drama.
- Joseph-Williams, N., Edwards, A. & Elwyn, G. (2014). Power imbalance prevents shared decision making. *BMJ*, 348, g3178.

- Kumagai, A. K. & Wear, D. (2014). "Making strange": a role for the humanities in medical education. *Acad Med*, 89(7), 973–977.
- Langer, E. & Abelson, R. (1974). A patient by any other name: Clinician group difference in labelling bias. *Journal of Consulting and Clinical Psychology*, 42(1), 4–9.
- Larsson, H. & Quennerstedt, M. (2012). Understanding movement: A Sociocultural approach to exploring moving humans. *Quest*, 64(4), 283–298.
- Lorenz, K. (1952). *King Solomon's ring: New light on animal ways*. London, UK: Methuen.
- Nicholls, D. A. (2012). Foucault and physiotherapy. *Physiotherapy Theory & Practice*, 28(6), 447–453.
- Nicholls, D. A. & Holmes, D. (2012). Discipline, desire, and transgression in physiotherapy practice. *Physiotherapy theory and practice*, 28(6), 454–465.
- Potter, M., Gordon, S. & Hamer, P. (2003). The physiotherapy experience in private practice: The patients' perspective. *Australian Journal of Physiotherapy*, 49(3), 195–202.
- Robbins Dudeck, T. (2013). *Keith Johnstone: A critical biography*. London, UK: Bloomsbury.
- Roberts, L. & Bucksey, S. J. (2007). Communicating with patients: What happens in practice? *Physical Therapy*, 87(5), 586–594.
- Roberts, L. C., Whittle, C. T., Cleland, J. & Wald, M. (2012). Measuring verbal communication in initial physical therapy encounters. *Physical Therapy*, 93(4), 479–491.
- Senju, A., Vernetti, A., Kikuchi, Y., Akechi, H., Hasegawa, T. & Johnson, M. H. (2013). Cultural background modulates how we look at other persons' gaze. *International Journal of Behavioral Development*, 37(2), 131–136.
- Vranceanu, A. M., Elbon, M. & Ring, D. (2011). The emotive impact of orthopedic words. *Journal of Hand Therapy*, 24(2), 112–117.

CHAPTER 6

A critical perspective on stigma in physiotherapy: The example of weight stigma

Jenny Setchell | Bloorview Research Institute, Holland Bloorview Kids Rehabilitation Hospital / School of Health and Rehabilitation Sciences, The University of Queensland

Ukachukwu Abaraogu | University of Nigeria, Department of Medical Rehabilitation / School of Health and Life Sciences, Glasgow Caledonian University

Abstract

This chapter explores what might be learnt about physiotherapy by considering its intersection with stigma. Stigma was described by Goffman as a phenomenon whereby an individual has an attribute that is deeply discredited by society, and is rejected as a result as a result of the attribute; where “normal identity” is “spoilt” by the process of stigmatisation. From a post-structuralist critical perspective, stigma is not static or finite but is (re)constructed in various social, historical, cultural and political environments. A characteristic that is stigmatised in one context may not be in another. Considering this, the context of physiotherapy has the possibility to (re)create or (re)inforce stigmatisation of certain

attributes not only in ways that may reflect general societal stigma, but also in ways that may be specific to the profession. In this chapter, we discuss stigma in physiotherapy broadly, considering what it is about physiotherapy that may contribute to the discrediting of certain attributes. We use the example of weight stigma, a topical and little explored form of stigma that is becoming more evident in healthcare in the current climate of “the obesity epidemic”. We draw from empirical research, definitions and narratives of physiotherapy in different countries (particularly our home countries of Nigeria and Australia) to help examine weight stigma in physiotherapy. We explore how weight stigma is enacted in a physiotherapy context – a profession in which there is an inherent focus on bodies. We conclude with a discussion of possibilities for the physiotherapy profession to learn from a greater consideration of stigma.

Introduction

He [the physiotherapist] was very sporty and fit. Even though I'd been doing step aerobics I didn't feel very fit I think I have a stereotype that physios are very healthy and very fit and very slim and I feel like I'm not really like that... I guess that makes me feel sort of inadequate in a way.... It's almost like I started making lots of excuses.

Hetti (pseudonym), from Setchell, 2015.

This chapter explores physiotherapy using a stigma lens. We argue that thinking critically about stigma can illuminate much about physiotherapy – in particular some of the psychological, social, political and power aspects of the profession. We highlight that traditional understandings of stigma tend to focus primarily on the psychological and interpersonal aspects of stigma (e.g., the essentialist understandings of Allport, and Adorno, and the symbolic

interactionism of Goffman) and do not sufficiently attend to broader contextual aspects. To further understandings of stigma in physiotherapy beyond the psychological/interpersonal, and to consider broader contextual issues, we draw on post structuralism (in particular Foucault) to engage a critical perspective. The epigraph above provides hints of some of these contextual factors: for example, it reveals that physiotherapy is constructed as health- and fitness-focussed. Often returning to the exemplar of weight stigma, we discuss how such constructions can have some (usually unintentional) negative effects, which we believe are little explored in the profession.

The epigraph, and other findings from the same study which involved interviews with patients about their experiences of attending physiotherapy, provide an opportunity to imagine what it might feel like for someone with a stigmatised characteristic (in this case being labelled “overweight”) to enter a physiotherapy clinic (Setchell, Watson, Jones & Gard, 2015). People in this study described their experiences of discomfort when attending a physiotherapy clinic including: sitting on a chair that is too small for them; seeing health promotion posters of thin people on the walls; observing sporty-looking people exercising in the Pilates area; meeting the physiotherapist who (like in the epigraph) was thin and sporty-looking; feeling like their body was exposed to judgement when they undress or are observed; and being told that their condition was due to their weight (*ibid*). These types of experiences, where the person feels judged (stigmatised) for a particular characteristic, are known to negatively affect people, including causing them to have poorer physical and psychological health outcomes; exercising less; having more disordered eating; and avoiding health care appointments – effectively being denied healthcare (Drury & Louis, 2002; Phelan et al., 2015). This chapter explores why patients might have these types of stigmatising experiences

in physiotherapy, and considers what physiotherapists might do to help create a more supportive environment for their clients. We have divided the chapter into two distinct sections. The first section is a theoretical introduction to stigma – and a critical exploration into why it might occur. The second section discusses the physiotherapy profession, highlighting how thinking critically about the nexus between stigma and physiotherapy can help develop new thinking and practices.

Stigma

Research on the nature of stigma has spanned a number of disciplines, and many stigmatised characteristics, which may explain why there are many definitions of stigma. Crocker, Major, and Steele (1998) produced a widely-used definition: “stigmatized individuals possess (or are believed to possess) some attribute, or characteristic, that conveys a social identity that is devalued in a particular social context” (p. 505). Their definition, derived from Goffman’s 1963 symbolic interactionist stigma theories, outlines some of the major micro-social components of stigma: it is linked to an attribute, it involves negative judgement, it is social rather than individual, it does not reside within a person or the stigmatised characteristic but is produced in interactions with others, and it is not a static phenomenon but is created only in some contexts. Applied to this chapter’s exemplar of weight stigma, this definition highlights that people are judged negatively based on their perceived status as overweight, and that this conveys a devalued social identity in many contexts (at times including, as we will argue, physiotherapy). However, while useful, we believe there are a number of limitations to such definitions. To explore this issue, we will discuss and critique three mainstream approaches to understanding why stigma happens – and illustrate what they

might mean in the context of physiotherapy research on weight stigma. We have chosen these approaches because, while they are largely discredited as comprehensive theories, they continue to underpin most research into stigma, and are also part of what currently constitutes lay understandings of (and rationale for) stigmatisation (Dixon & Levine, 2012).

Social cognition approaches explain stigma as the result of the brain's oversimplification when processing the large amounts of information it receives about other people (Allport, 1954). By suggesting that all minds function similarly, these approaches present stigma as an inherent, essential part of being human. However, this theory cannot explain why only some people stigmatise. It cannot explain why some physiotherapists score highly on weight stigma tests, while others do not (Abaraogu, Duru & Setchell forthcoming; Setchell, Watson, Jones, Gard & Briffa, 2014). Further attempts to explain stigma include the *personality trait approaches* associated primarily with Adorno, Frenkel-Brunswick, Levinson, and Sanford (1950). As the name suggests, these theories posit that only people with certain personality types stigmatise; that is, the physiotherapists who stigmatise do so because they have a particular personality type. One critique of these approaches, however, is again their essentialism: they constitute personalities as static and do not allow for analysis of stigma that is incited in particular social or political contexts. Both the personality and the social cognition approaches are individualistic and cannot consider, for example, the societal or institutional production or perpetuation of stigma that has repeatedly been shown to be possible in experimental and real life conditions.

The final proposed way of understanding stigma we discuss is grounded in Goffman's symbolic interactionism. The *group membership approaches* focus on the effects on individuals of being part of a group (Tajfel & Turner, 1985). Those using these approaches argue that when people behave as members of a group

(e.g. physiotherapists) they react to other people according to their group's social beliefs in order to consolidate their own sense of identity, or as a result of cognitive simplifications (like the social cognition approaches). As a result, proponents argue that people give preferential treatment to those they identify as being part of the same social group to which they themselves belong and may stigmatise other people on the basis of perceived other group membership. Using this theory, physiotherapists (and other groups) are seen as inherently stigmatising – they might be expected to stigmatise people who are overweight (for example) if they are not seen to be similar to physiotherapists – thus constituting an outside “group”. While this group membership understanding of stigma is more complex, and takes social context into account more than other approaches we have outlined, stigma is still considered to be a by-product of cognitive simplifications (Tuffin, 2004). As a result, the same criticisms are relevant as for the social cognition approaches regarding the nature of stigma as inherent to human thinking (ibid). Some have also contested that this theory presents an oversimplified, static understanding of how groups operate, arguing that they are largely considered in isolation from wider contexts (Jenkins, 2008). For example, some cultures tend to *favour* people from other groups rather than stigmatise them (Gough & McFadden, 2013). In relation to physiotherapists and people who are considered overweight – this is a valuable approach to understand some of the stigma that might pass between the two groups, but the approach lacks the nuance to consider how broader institutional issues of power might be involved, or where these issues might vary (for example, what happens if a physiotherapist herself/himself is labelled overweight?).

In summary, while the three approaches (social cognition, personality trait, and group membership) we have discussed above may account for certain occasions of stigma they all lack mechanisms to

understand the effects of political, cultural or historical variations on stigma, and do not directly consider the relevance of power (Gough & McFadden, 2013). As a result, they are not able to account for possible contextual aspects of stigma in physiotherapy. To address these issues, we draw from post-structuralist thinking, in particular work based on theories of the French post-structuralist philosopher Michel Foucault.

Foucault considered behaviour, interactions and feelings to be produced through discourses (ways of constituting knowledge through particular patterns of thinking and doing), which he saw as created by (and creating) not only social, but also political, cultural and historical contexts (Foucault, 1977, 1978). Applied to stigma, Hannem (2012) argued that this means stigma is not only socially, historically, culturally and politically situated, but also *created* or *recreated*. Stigma is not finite or static but may be (re)constructed in varying environments and linked to power inequalities.

Foucault's theories (particularly those on governmentality) contribute an understanding that power and governance are exercised not only by the state and its institutions, such as the army and police, but also by other institutions that are not traditionally seen as exercising power (Foucault, 1979). While never directly discussed by Foucault, other theorists such as Stacey Hannem have applied Foucault's thinking to stigma in ways that help to consider ostensibly power-neutral "institutions" such as physiotherapy (Setchell, Gard, Jones & Watson, 2017). For example, Hannem (2012) noted that stigma can come from the institutionalisation of ways of managing the perceived risk of a stigmatised attribute. While the institution often intends overtly to help "when the need for assistance is justified by the inherently 'different', 'risky' or 'tainted' characteristics of the population, stigma is created in the very agencies that are supposed to be providing help" (Hannem, 2012, p. 25). With characteristics identified as risky, certain "truths" are produced

that they (or the people that possess these characteristics) require management, or what Foucault would call “discipline”. Particular behaviours and bodies are thus valorised, allowing for other behaviours (e.g., exercising, dieting) and bodies (e.g., thin, muscular) to become considered “less-than”: in this way, power is interwoven into some forms of stigma. It is important to note, however, that this power moves in both directions; people who are stigmatised can resist individuals or institutions (Foucault, 1977). These theories on power provide an opportunity to explore this production of truth in the profession of physiotherapy that may result in stigma.

Post-structuralist perspectives provide insight into the socio-political reasons behind weight stigma in a contemporary context. Foucault argued that the ingenuity of the systems of power (or what he referred to as “regimes of truth”) that create the conditions for disciplining people who have particular characteristics is that any people, even those who possess the “risky” characteristic themselves, can take up a disciplining action. People are thus disciplined (or discipline themselves) to manage this socially produced risk-truth so that they are maintained as “productive citizens” to support the ‘greater good’ of society” (Farrugia, 2009). Therefore, a person can be seen as “unproductive” or “expensive” and can be held individually accountable for this lack of productivity (Foucault, 1978). This thinking can be applied to this chapter’s example of weight stigma, but it can also help understand aspects of other types of stigma found in physiotherapy such as chronic pain or disability stigma. Foucault (1979) argued that this way of viewing people is in line with neoliberal economic rationalist systems of governance, where there is a focus on individual (rather than state) responsibility for productivity.

Furthermore, Foucault highlighted an increase in medicalisation, where attributes that had not previously been considered “an illness” were subsequently deemed “abnormal” and the subject

of medical attention – and stigma (Gard & Wright, 2005; Lupton, 2012a). For example, Murray (2007) discusses medical constructions of fatness as “deviance”, and Tischner and Malson (2012) argue that health approaches to “obesity” often present fatness as a “failing”. Again, similar thinking has been applied to other forms of stigma such as disability stigma (Shildrick, 1996).

Based on these post-structural, critical perspectives on stigma, we argue for an emphasis on power, and the historical, political, cultural constructions or enactments of stigma. A post-structural perspective helps illuminate why weight stigma, for example, appears common in the west (Puhl et al., 2015) and has been less common, but is increasing, in the global south (Brewis, Wutich, Falletta-Cowden, & Rodriguez-Soto, 2011), and that weight stigma also differs with various other contexts such as gender or sexuality (van Amsterdam, 2013). A nuanced understanding of context is thus important to an exploration of stigma. In the next section, we highlight how the context of physiotherapy might intersect with stigma.

Physiotherapy

Overall there has been little discussion about stigma in the physiotherapy literature. A small amount of research has been done on the stigmatisation of disability, mental illness and chronic pain (e.g., French, 1994; Probst & Peuskens, 2010; Synnott et al., 2015). To summarise, this research highlights two main points: stigma occurs in a number of situations in physiotherapy, and physiotherapists lack an understanding of the stigma that their patients might experience. There is an even smaller amount of research highlighting the claim that physiotherapists also are stigmatised (or self-stigmatised) for possessing various “othered” attributes. For example, physiotherapists hold self-stigmatising fears of gaining

weight (Setchell et al., 2014), discipline their own bodies to “maintain a healthy weight” (Black, Marcoux, Stiller, Qu & Gellish, 2012, p. 1424), and negotiate disability stigma (Atkinson, & Owen Hutchinson, 2005). This second body of research, although not the focus of this chapter, highlights that it is important to acknowledge that physiotherapists too can have bodies, behaviours or attributes that may be stigmatised. As we hope readers are already starting to see, a deeper consideration of stigma might illuminate much about physiotherapy – providing opportunities to enact social, psychological and political aspects of care towards rethinking aspects of practice that might produce stigma. We now examine physiotherapy reflexively to consider some relevant assumptions underpinning the profession thinking and practices.

The physiotherapy profession demonstrates many similarities across the world, despite some local variations. Similarities are evident in the self-definitions of professional bodies on their official websites. The Australian Physiotherapy Association (2015) defines physiotherapy as “a healthcare profession that assesses, diagnoses, treats and works to prevent disease and disability through physical means”. The physical focus of the Australian association is echoed by the Nigeria Society of Physiotherapy (2015), which defines physiotherapy as involving the “evaluation of patients through the administration of physical tests to determine the presence and/or extent of an injury prior to the use of physical modalities for preventive and therapeutic purposes”. However, this focus applies not only to our home countries. For example, the Chartered Society of Physiotherapy in the United Kingdom (2015) provides a similar, but somewhat broader, definition of physiotherapy as a profession that helps “people affected by injury, illness or disability through movement and exercise, manual therapy, education and advice”. While seemingly an obvious point, it is interesting to note the repetition in these definitions of words such as “physical”;

“exercise”, “manual” and “injury”. While these words cannot reveal what happens in clinical practice, we argue that they do highlight an underlying institutionalised assumption in physiotherapy that physical issues are primary, and necessarily demand physical tests and physical treatments. We unpack and problematise this assumption in the remainder of this chapter and argue that it is a key issue that exploring stigma exposes in the profession.

Many physiotherapists would argue that this physical focus of the profession is changing. Certainly, in recent times there have been signs of a shift away from a purely physical approach in some sub-specialities. For example, there is growing awareness that conditions such as pain may also have psychological or social origins. However, relevant to considerations of stigma, there remains a notable absence of any discussion of the cultural, political or temporal factors involved in physical health. Theoretical and philosophical investigations of physiotherapy are scarce, and some authors argue that the profession lacks self-analysis (Wikström-Grotell & Eriksson, 2012), reflexivity (Trede, 2012) and acknowledgement of its historical and sociopolitical context (Shaw & DeForge, 2012). A small but growing number of authors (many of whom are included in this book) have begun to investigate the philosophical underpinnings of physiotherapy. We draw mainly upon the work of these critical physiotherapy scholars (and at times critical health literature from related fields) to discuss elements of the profession relevant to stigma. Here we apply the Foucauldian concept introduced earlier: that power and governance play out in physiotherapy, an institution that has not been traditionally thought of as a site of political power. We make visible the elements of the profession that can render stigma (with a particular focus on weight stigma) possible, salient and consequential. We introduce these topics under three sub-headings: “positivism”; “bodies, visibility and normality”; and “professional reflexivity”.

Positivism

Positivism is underpinned by the idea that there is a stable, knowable reality that can be described through observation and is the underlying philosophy behind traditional scientific approaches to health research. Although physiotherapy practice is arguably grounded in both humanistic and scientific paradigms, the profession generally focuses on the biomedical scientific perspective grounded in positivism (Praestegaard & Gard, 2013; Setchell, Nicholls & Gibson, 2017). Parry (2004) argued that the adoption of this orthodox “medical model” dates back to gender-related historical constraints on the women who founded the profession and who were willing to “trade autonomy for orthodoxy, to carry out ancillary and subordinate tasks ... in exchange for recognition and patronage” (p. 310). Today, this positivist way of thinking is evident (for example) in the way that randomised controlled trials and systematic reviews are upheld as “gold standards” in the profession, to the marginalisation of other methodologies (Crosbie, 2013). Orthodox biomedical approaches are also reflected in the physical focus of the professional definitions we discussed earlier, and many aspects of physiotherapy-patient interactions.

Before continuing, we want to highlight that we do not intend to suggest that positivistic scientific endeavours are unimportant, or necessarily bad. Rather, like others, we propose that this type of science can only address some of the phenomena physiotherapists deal with, while also having some underexplored negative consequences. For example, Bolam and Chamberlain (2003) argued that positivism positions the health professional as the powerful “expert”. Recent literature discusses this “expert positioning” in physiotherapy, highlighting that physiotherapy practice is often primarily practitioner-centred, where the therapist often controls the direction, content and definition of “truths” in their interactions with patients (Hiller, Guillemin, & Delany, 2015). This expert

positioning can have ethical implications (Trede, 2006; Wikström-Grotell & Eriksson, 2012). For example, Bjorbækmo and Engelsrud (2011) argued that an “expert” perspective can be noted in extensive “testing” of children with disabilities. Using a phenomenological approach, the authors suggested that such testing transmitted the physiotherapists’ views of what was “important, correct or admirable” (p. 123), which could result in insecurity and lack of confidence of the patient in themselves. In a Foucauldian analysis of Danish physiotherapy practice, Praestegaard, Gard, and Glasdam (2015, p. 22) argued that when patients resisted physiotherapists’ “regimes of truth”, including those about body size, they were met with stigma and judgement from physiotherapists:

These patients resisted the physiotherapists’ understandings and descriptions of body image, self-care and medicalization of the body. This means that the patients do not accept the premise for physiotherapeutic treatment, and even worse, they defy by not obeying. Accordingly, the physiotherapists meet these patients with judgmental and stigmatizing attitudes. Patients, who are not able to live in the politically defined, normative “healthy” way, are disapproved as they are regarded as not taking active responsibility for their own life. (p. 22)

Another possible negative consequence of having a positivist perspective is that the health professional is often established as a scientific or “objective” observer, assumed to be free from subjective observations or moral judgements (Lupton, 2012b). Assumed objectivity or neutrality is likely to obscure the need for critical examination of the beliefs underlying healthcare practice. In particular, the social, cultural, power and political elements of practice may not be attended to (Eisenberg, 2012; Jorgensen, 2009). Patton and Nicholls (2014) posited that lack of attention to these elements might result in health professionals having difficulty observing judgement or stigma in their own attitudes or behaviour. This explains the findings

in the stigma studies that physiotherapists often overlook that stigmatised attributes such as fatness can potentially be assigned social, cultural and economic/political value (e.g., Setchell, Watson, Gard & Jones, 2016). As Nicholls and Gibson (2012) argued, these aspects may well be overlooked as “confounding factors” when employing a predominantly positivist perspective.

We want to be careful to clarify that we are not suggesting that positivism *necessarily* leads to behaviours such as practitioner-centred practice or positioning the therapist as an “expert”, nor that these ways of working always lead to less ethical practices. Rather, we wish to argue that in relation to the stigma, it is important to consider potential issues of power involved in positivism, which can be evident in some of the clinical expressions of this particular way of viewing the world.

Bodies, visibility and normality

The body is clearly central to practice in physiotherapy. “Doing” physiotherapy involves closely observing bodies, touching bodies, and partial undress of the body. In clinical settings physiotherapists commonly comment on, assess, move bodies or body parts. Furthermore, they ask patients to be aware of their own bodies, so that, for example, patients can learn about and potentially change their postural or movement habits. This can involve physiotherapists encouraging patients to give visual attention to their bodies by observing themselves in mirrors or video recordings. Clinical interactions are frequently about two (or more) bodies interacting in close and intimate ways. We argue that these interactions are about the fleshy reality of bodies at least as much as about thinking about the vector a muscle exerts on a bone or the number of degrees a joint moves. The corporeal presence of bodies (and thus corporeal stigmatised attributes such as fatness) are thus routine and integral parts of physiotherapy.

While a physiotherapist might ostensibly focus on observing the movement of a joint, other elements of what they are doing have implications for the visibility of stigmatised characteristics. Returning to this chapter's example of weight stigma, the fatness of a body is likely to be more obvious because the physiotherapist may have removed clothing from the body, might be touching the body and looking closely at the body (Setchell et al., 2015). Increased visibility of this stigmatised attribute could have a number of effects on the consultation. Rolls of fat can become exposed, touched, and under the therapist's gaze (*ibid*) in ways that are rare in many other healthcare environments (e.g., dentistry or psychology) or most day-to-day interactions. Regardless of what the therapist is actually thinking, the way the body looks – including visible stigmatised characteristics – may become a particularly salient issue for people in physiotherapy contexts.

Despite the integral involvement of the body in physiotherapy, little theoretical or philosophical attention has been given to how the body is constructed, viewed and managed by the profession (Nicholls & Gibson, 2010). This is not unexpected when considering the predominantly physical focus of the definitions of the profession presented earlier in this chapter and the positivist theoretical perspective that underpins much of the thinking in the profession. Congruent with these theoretical underpinnings, Nicholls and Gibson (2010) argued that physiotherapists generally attend to the body in a biomechanical (or “machine-like”) way. For example, physiotherapy research and clinical work has placed much focus on the length of muscles, joint range of movement, the type of exercises to prescribe for a particular condition and physical function (Jorgensen, 2009; Thornquist, 2006). However, there are many other possible understandings of bodies that physiotherapy marginalises, such as the person's lived experiences of their body in health and illness, and the social, cultural or political meanings of

bodies, including stigma. The priority physiotherapists ascribe to various understandings of the body has important implications for clinical practice.

Using a Bourdieusian approach, Gibson and Teachman (2012) examined the biomechanical focus of the profession, arguing that physiotherapists put considerable effort into establishing what a “normal” body is. This effort can be seen in studies such as the *1000 Norms Project*, which aims to establish for physiotherapists what a “normal” range is in “healthy” humans in the areas of dexterity, balance, ambulation, joint range of motion, strength, endurance and motor planning (McKay et al., 2016). Looking at power from a Foucauldian perspective, considering who constructs what constitutes “normal” is very important, as these people have the power to decide who/what needs intervention (disciplining) to become more “normal”. As discussed by Nicholls and Gibson (2010), having a construction of a “normal” body in physiotherapy necessarily means an “abnormal” or “deviant” body is also established. When physiotherapy seeks a normatively functioning body it “disciplines” bodies that are “abnormal”. Notions of normality can contribute to negative self-identities, and potential stigmatisation, of those who are constructed as “not normal”.

Professional reflexivity

Considering the potential issues that we have outlined associated with positivism and the understandings of bodies, we suggest it is a matter of concern that authors have highlighted a lack of reflexive practice within the profession (Shaw & DeForge, 2012). Clouder (2000) has argued that this lack can be seen at an individual level where, unlike some other healthcare professions, reflexivity is not an established part of the practice and education of clinical physiotherapists. In some cases, clinical

self-reflection is encouraged (Patton, Higgs, & Smith, 2013) and has been taken up institutionally (Frith, Cowan, & Delany, 2015; Rowe, 2012). However, in discussing interviews and workshops with physiotherapists on the topic of self-reflection, Clouder (2000) highlighted that while participants often demonstrated the ability to reflect on the technicalities of practice (such as the success of treatment techniques), they found it difficult to consider their own subjectivity: “the clinician her/himself did not appear to be part of the reflective frame of reference. Even though self-awareness was clearly identified as important, there was – without exception – a transfer of attention to the client/patient” (p. 216). Similarly, Trede (2006) maintained that there is little prioritisation of a deeper individual reflexivity, such as consideration of social, philosophical, interpersonal, emotional, embodied or power elements of practice. We suggest that this could mean that physiotherapists are ill-equipped to recognise and respond to potentially complex or sensitive interactions involving stigma. There is also a lack of theoretical and philosophical reflexivity at the discipline level. For example, little attention is given to these factors in physiotherapy education curricula or research endeavours (Nicholls & Gibson, 2012; Setchell et al., 2017). Without these intellectual resources, the profession is likely to be unaware of its theoretical underpinnings; psychological, social and political issues such as stigma; and may struggle to find other ways of thinking about its practice.

Conclusion

Thinking critically about stigma in physiotherapy opens up opportunities to think and practice otherwise in the profession. Investigating stigma in physiotherapy has an unsettling effect on some of the premises currently underpinning the profession: it

contributes to thinking and practice that questions the dominance of the body-as-machine focus of the profession. Questioning this focus supports calls for the profession to incorporate other elements such as the socio-political aspects of bodies and other things. It contributes to calls for more person-centred approaches to the individuals who seek our care. Encouragingly, this work has begun to be taken up in a number of areas. For example, a number of physiotherapists have argued for more reflexivity in education and practice. Both Patton et al. (2013) and Rowe (2015) argued that it is important to critically examine physiotherapy pedagogy to enhance clinical learning, and Nicholls and Gibson (2012) discussed the importance of philosophy in physiotherapy. Further, Grace and Trede (2013) suggested the need to rethink pedagogical approaches to incorporate philosophical knowledge. There are also a growing number of physiotherapists who are developing comprehensive theoretical insights into physiotherapy (Nicholls et al., 2016; Nicholls & Gibson, 2012; Setchell et al., 2017). This book also contains many examples of physiotherapists approaching the socio-political and philosophical aspects of the profession that can help physiotherapists build the theoretical resources to be aware of aspects of stigma discussed in this chapter. Broadly, this thinking matters politically. It is a challenge to an over-reliance on reductionist thinking, including powerful systems that preference individual blame for health conditions. This chapter supports other critical thinking that advocates a paradigm shift to a physiotherapy that incorporates broader considerations of the socio-political conditions that create the possibilities for issues such as stigma.

Acknowledgments

Much of the material presented in this chapter is a reworked version of an unpublished section of Dr Setchell's PhD thesis, and a

small section has already been published in *Physiotherapy Theory & Practice* (permission has been granted by the journal to reproduce the content here).

References

- Abaraogu, U., Duru, D. & Setchell, J. (forthcoming). Weight stigma in physiotherapy: A cross sectional survey of Nigerian physiotherapists.
- Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J. & Sanford, N. (1950). *The authoritarian personality*. New York, NY: Harper Row.
- Allport, G. W. (1954). *The nature of human prejudice*. Oxford, England: Addison-Wesley.
- Atkinson, K. & Owen Hutchinson, J. (2005). Visually impaired physiotherapists: Challenging professional attitudes. *International Congress Series*, 1282, 908–912.
- Australian Physiotherapy Association. (2015). *What is physiotherapy?* Retrieved from <http://www.physiotherapy.asn.au>
- Bjorbaekmo, W. S. & Engelsrud, G. H. (2011). Experiences of being tested: A critical discussion of the knowledge involved and produced in the practice of testing in children's rehabilitation. *Med Health Care Philos*, 14(2), 123–131. doi:10.1007/s11019-010-9254-3
- Black, B., Marcoux, B. C., Stiller, C., Qu, X. G. & Gellish, R. (2012). Personal health behaviors and role-modeling attitudes of physical therapists and physical therapist students: A cross-sectional study. *Phys Ther*, 92(11), 1419–1436.
- Bolam, B. & Chamberlain, K. (2003). Professionalization and reflexivity in critical health psychology practice. *Journal of Health Psychology*, 8(2), 215–218. doi:10.1177/1359105303008002661
- Brewis, A., Wutich, A., Falletta-Cowden, A. & Rodriguez-Soto, I. (2011). Body norms and fat stigma in global perspective. *Current Anthropology*, 52(269–276). doi:10.1086/
- Chartered Society of Physiotherapy Website. (2015). *What is physiotherapy?* Retrieved from <http://www.csp.org.uk/your-health/what-physiotherapy>
- Clouder, L. (2000). Reflective practice in physiotherapy education: A critical conversation. *Studies in Higher Education*, 25(2), 211–223.

- Crocker, J., Major, B. & Steele, C. (1998). Social stigma. In D. Gilbert & S. Fiske (eds.), *The Handbook of Social Psychology* (504–553). Boston, MA: McGraw-Hill.
- Crosbie, J. (2013). Does a stubborn commitment to ‘evidence’ stifle innovative thinking? *Journal of Physiotherapy*, 59, 69–71.
- Dixon, J. & Levine, M. (2012). *Beyond prejudice: Extending the social psychology of conflict, inequality and social change*. Cambridge, England: Cambridge University Press.
- Drury, C. & Louis, M. (2002). Exploring the association between body weight, stigma of obesity, and health care avoidance. *Journal of the American Academy of Nurse Practitioners*, 14(12), 554–561. doi:10.1111/j.1745-7599.2002.tb00089.x
- Eisenberg, N. R. (2012). Post-structural conceptualizations of power relationships in physiotherapy. *Physiotherapy Theory & Practice*, 28(6), 439–446. doi:10.3109/09593985.2012.692585
- Farrugia, D. (2009). Exploring stigma: Medical knowledge and the stigmatisation of parents of children diagnosed with autism spectrum disorder. *Sociology of Health & Illness*, 31(7), 1011–1027. doi:10.1111/j.1467-9566.2009.01174.x
- Foucault, M. (1977). *Discipline and punish: The birth of the prison*. London, England: Allen Lane.
- Foucault, M. (1978). *Security, territory, population: Lectures at the Collège de France 1977–1978* (G. Burchell, Trans.). Basingstoke, England: Palgrave Macmillan.
- Foucault, M. (1979). *The birth of biopolitics: Lectures at the Collège de France 1978–1979*. New York, NY: Palgrave Macmillan.
- French, S. (1994). Attitudes of health professionals towards disabled people: A discussion and review of the literature. *Physiotherapy*, 80(10), 687–693.
- Frith, C., Cowan, S. & Delany, C. (2015). Reflection training as a form of professional development for physiotherapy clinical educators. *Focus on Health Professional Education: A Multidisciplinary Journal*, 16(2), 88–91.
- Gard, M. & Wright, J. (2005). *The obesity epidemic: Science, morality and ideology*. London, UK: Routledge.
- Gibson, B. E. & Teachman, G. (2012). Critical approaches in physical therapy research: Investigating the symbolic value of walking.

- Physiotherapy Theory & Practice, 28(6), 474–484. doi:10.3109/09593985.2012.676936
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. London, England: Penguin.
- Gough, B., & McFadden, M. (2013). *Critical social psychology* (2nd ed.). New York, NY: Palgrave Macmillan.
- Grace, S., & Trede, F. (2013). Developing professionalism in physiotherapy and dietetics students in professional entry courses. *Studies in Higher Education*, 38(6), 793–806. doi:10.1080/03075079.2011.603410
- Hannem, S. (2012). Theorizing stigma and the politics of resistance. In S. Hannem & C. Bruckert (eds.), *Stigma revisited*. Ottawa, Canada: University of Ottawa Press.
- Hiller, A., Guillemain, M., & Delany, C. (2015). Exploring healthcare communication models in private physiotherapy practice. *Patient Education and Counseling*, 98(10), 1222–1228. doi:10.1016/j.pec.2015.07.029
- Jenkins, R. (2008). *Social identity* (3rd ed.). London, England: Routledge.
- Jorgensen, P. (2009). Concepts of body and health in physiotherapy: The meaning of the social/cultural aspects of life. *Physiotherapy Theory & Practice*, 16(2), 105–115. doi:10.1080/095939800407295
- Lupton, D. (2012a). *Fat*. New York, NY: Routledge.
- Lupton, D. (2012b). *Medicine as culture: Illness, disease and the body* (3rd ed.). London, England: Sage.
- McKay, M. J., Baldwin, J. N., Ferreira, P., Simic, M., Vanicek, N., Hiller, C. E., . . . Norms project, C. (2016). 1000 norms project: Protocol of a cross-sectional study cataloging human variation. *Physiotherapy*, 102(1), 50–56. doi:10.1016/j.physio.2014.12.002
- Murray, S. (2007). Corporeal knowledges and deviant bodies: Perceiving the fat body. *Social Semiotics*, 17(3), 361–373. doi:10.1080/10350330701448694
- Nicholls, D. A., Atkinson, K., Bjorbaekmo, W. S., Gibson, B. E., Latchem, J., Oleson, J., . . . Setchell, J. (2016). Connectivity: An emerging concept for physiotherapy practice. *Physiotherapy Theory & Practice*, 32(3), 159–170. doi:10.3109/09593985.2015.1137665
- Nicholls, D. A. & Gibson, B. E. (2010). The body and physiotherapy. *Physiotherapy Theory & Practice*, 26(8), 497–509. doi:10.3109/09593981003710316

- Nicholls, D. A. & Gibson, B. E. (2012). Editorial: Philosophy and physiotherapy. *Physiotherapy Theory & Practice*, 28(6), 418–419.
- The Nigerian Society of Physiotherapy website. (2015). *Welcome*. Retrieved from <http://www.nigeriaphysio.org/welcome>
- Parry, R. (2004). Communication during goal-setting in physiotherapy treatment sessions. *Clinical Rehabilitation*, 18(6), 668–682.
- Patton, N., Higgs, J. & Smith, M. (2013). Using theories of learning in workplaces to enhance physiotherapy clinical education. *Physiotherapy Theory & Practice*, 29(7), 493–503. doi:10.3109/09593985.2012.753651
- Patton, N. & Nicholls, D. A. (2014). Access, agency and abilities. In Higgs J, Croker A, Tasker D, Hummell J, & Patton N (eds.), *Health practice relationships: Practice, education, work and society* (93–100.). Rotterdam, The Netherlands: Sense Publishers.
- Phelan, S., Burgess, D., Yeazel, M., Hellerstedt, W., Griffin, J. & van Ryn, M. (2015). Impact of weight bias and stigma on quality of care and outcomes for patients with obesity. *Obesity Review*, 16(4), 319–326. doi:10.1111/obr.12266
- Praestegaard, J. & Gard, G. (2013). Ethical issues in physiotherapy: Reflected from the perspective of physiotherapists in private practice. *Physiotherapy Theory & Practice*, 29(2), 96–112. doi:10.3109/09593985.2012.700388
- Praestegaard, J., Gard, G. & Glasdam, S. (2015). Physiotherapy as a disciplinary institution in modern society - a Foucauldian perspective on physiotherapy in Danish private practice. *Physiotherapy Theory & Practice*, 31(1), 17–28. doi:10.3109/09593985.2014.933917
- Probst, M. & Peuskens, J. (2010). Attitudes of Flemish physiotherapy students towards mental health and psychiatry. *Physiotherapy*, 96(1), 44–51. doi:10.1016/j.physio.2009.08.006
- Puhl, R. M., Latner, J. D., O'Brien, K., Luedicke, J., Danielsdóttir, S. & Forhan, M. (2015). A multinational examination of weight bias: Predictors of anti-fat attitudes across four countries. *International Journal of Obesity*, 39, 1166–1173. doi:10.1038/ijo.2015.32
- Rowe, M. (2012). The use of assisted performance within an online social network to develop reflective reasoning in undergraduate physiotherapy students. *Medical Teacher*, 34(7), e469–475. doi:10.3109/0142159X.2012.668634

- Rowe, M. (2015). Exploring the characteristics of capable healthcare professionals. *South African Journal of Physiotherapy*, 71(1). doi:10.4102/sajp.v71i1.247
- Setchell, J., Gard, M., Jones, L. & Watson, B. M. (2017). Addressing weight stigma in physiotherapy: Development of a theory driven approach to (re)thinking weight related interactions. *Physiotherapy Theory & Practice*, 33(8), 597–610.
- Setchell, J., Nicholls, D. A. & Gibson, B. E. (2017). Objecting: Multiplicity and the practice of physiotherapy. *Health*, Available online.
- Setchell, J., Watson, B. M., Jones, L., Gard, M. & Briffa, K. (2014). Physiotherapists demonstrate weight stigma: A cross-sectional survey of Australian physiotherapists. *Journal of Physiotherapy*, 60(3), 157–162.
- Setchell, J., Watson, B. M., Jones, L. & Gard, M. (2015). Weight stigma in physiotherapy practice: Insights from patient perceptions of interactions with physiotherapists. *Manual Therapy*, 20, 835–841.
- Setchell, J., Watson, B., Gard, M. & Jones, L. (2016). Physical therapists' ways of talking about weight: Clinical implications. *Physical Therapy Journal*, 96(6), 865–875. doi:10.2522/ptj.20150286
- Shaw, J. & DeForge, R. T. (2012). Physiotherapy as bricolage: Theorizing expert practice. *Physiotherapy Theory & Practice*, 28(6), 420–427. doi: 10.3109/09593985.2012.676941
- Shildrick, M. (1996). Posthumanism and the monstrous body. *Body & Society*, 2(1), 1–15.
- Synnott, A., O'Keeffe, M., Bunzli, S., Dankaerts, W., O'Sullivan, P. & O'Sullivan, K. (2015). Physiotherapists may stigmatise or feel unprepared to treat people with low back pain and psychosocial factors that influence recovery: A systematic review. *Journal of Physiotherapy*, 61(2), 68–76. doi:10.1016/j.jphys.2015.02.016
- Tajfel, H. & Turner, J. C. (1985). *The social identity theory of intergroup behaviour*. Pacific Grove, California: Brooks-Cole.
- Thornquist, E. (2006). Face-to-face and hands-on: assumptions and assessments in the physiotherapy clinic. *Medical Anthropology*, 25(1), 65–97. doi:10.1080/01459740500514489
- Tischner, I. & Malson, H. (2012). Deconstructing health and the un/healthy fat woman. *Journal of Community & Applied Social Psychology*, 22(1), 50–62. doi:10.1002/casp.1096

- Trede, F. (2006). A critical practice model for physiotherapy. (Doctoral Dissertation), The University of Sydney. Retrieved from http://eresearch.qmu.ac.uk/1722/1/eResearch_1722.pdf
- Trede, F. (2012). Emancipatory physiotherapy practice. *Physiotherapy Theory & Practice*, 28(6), 466–473. doi:10.3109/09593985.2012.676942
- Tuffin, K. (2004). *Understanding critical social psychology*. London, England: Sage.
- van Amsterdam, N. (2013). Big fat inequalities, thin privilege: An intersectional perspective on ‘body size’. *European Journal of Women’s Studies*, 20(2), 155–169. doi:10.1177/1350506812456461
- Wikström-Grotell, C. & Eriksson, K. (2012). Movement as a basic concept in physiotherapy: A human science approach. *Physiotherapy Theory & Practice*, 28(6), 428–438.

CHAPTER 7

The desire for “hands-on” therapy – a critical analysis of the phenomenon of touch

Fiona Moffatt | School of Health Sciences, University of Nottingham

Roger Kerry | School of Health Sciences, University of Nottingham

Abstract

The application of touch has arguably formed the cornerstone of physiotherapy practice. The phenomenon of touch, specifically its legitimisation as a professionalisation strategy has already undergone critical analysis. What has been explored to a lesser extent is the meaning of touch from the patient perspective. Why is the “laying on of hands” seemingly so important to patients and service users, especially given that interpretation of empirical research findings within an evidence-based practice paradigm appears to question the comparative effectiveness of touch-based interventions? The imperative of the increasing public desire for an embodied health experience will constitute a central theme of our argument. In this chapter, we aim to develop a better understanding of touch by critically analysing the phenomenon within the context of physiotherapy. We begin with a short history of

touch, highlighting its importance to our embodied self-knowledge. We then contextualise touch within a therapeutic context. We consider what constitutes therapeutic touch and body work, before addressing what touch might mean for professional identity and mandate. Finally, we draw on ideas from sociology of consumption (specifically touch as a consumer health technology). We do this in order to reconceptualise the narrative regarding the use of touch, as well as commenting on the impact of such a reconceptualisation for the future of the profession. Some suggestions are made in our conclusion regarding options for the framing of touch in physiotherapeutic work. Our suggestions could serve towards redefining our professional identity, our relationship with those who seek our care, and the nature of what society sees as a consumer health technology.

Introduction

In this chapter, we argue that touch in physiotherapy can be productively rethought. Touch has been a central notion within physiotherapy since the origin of the profession, so much so that the identity of the profession has been largely determined by touch and what touch is. Pre-dating its place in physiotherapy, touch has a rich sociological and philosophical history. This history can provide a context on which a modern reworking of touch as a professional device can be predicated. Further, a sociological lens can expose, in late modernity, the notion of touch as a consumer health technology – that is, something which members of a contemporary society desire as part of their human identity and function. This raises challenges and opportunities for the physiotherapy profession. Do we acquiesce to this modern consumerism and provide touch as a service despite empirical research findings that contest its therapeutic effectiveness (what we will call “scientific evidence”)?

Or do we abandon touch on the grounds of such “evidence”, and in doing so risk alienating ourselves from the consumerist public? We offer here an analysis of the phenomenon of touch with these questions and this background in mind. The chapter begins with a focussed summary of touch as a human sense, followed by how touch can be aligned to therapeutic intents. Our sociological argument then unfolds.

A short history of touch

The role of the sense of touch in sensory consciousness has historically played understudy to other sensory modalities such as sight and hearing (Massie, 2013). In the Aristotelian treatise on the soul, for example, the sense of touch is ranked fifth in order of esteem relative to the other senses. Paradoxically however, Aristotle also acknowledges it as the most perfected sense in humans compared to animals, this discrimination rendering man the most intelligent of animals (Massie, 2013). The complex constitution of touch is equally well represented in the philosophical debate regarding touch as a unisensory or multisensory experience. Whilst this argument is beyond the scope of this chapter (instead cf. Fulkerson, 2011), the experience of touch is irrefutably diverse, involves innumerable receptors and nerve endings, and serves a multitude of functions (Routasalo, 1999). Touch is considered crucial to a reflexive, embodied existence; Husserl states that without touch we could never truly experience our own body, “...when we are touched, our body appears to us; it appears as our lived body in a way that it cannot appear in vision” (Mattens, 2009, p. 101).

A phenomenological perspective, and specifically the work of Merleau-Ponty, argues that it is our sensory experience that provides the foundation for our understanding and interaction within the world around us. Merleau-Ponty asserts that we relate to

the world not via a dualism of subject-object or micro-macro, but rather an intimately entwined relationship: “To belong to the world in this way means that our primary way of relating to things is neither purely sensory and reflexive, nor cognitive or intellectual, but rather bodily and skilful” (Thompson, 2005, p. 3). Touch is a unique sense in that it has the ability to bring objects, people and the world into proximity (Paterson, 2007). It is the lack of differentiation between body and world, the indivisibility between the moment of touching and the act of being touched, that contributes to a Heideggerian sense of “being-in-the-world” (Bjorbækmo & Mengshoel, 2016; Thompson, 2005).

Touch and the therapeutic context

From a developmental psychology perspective, touch is considered the primal sense, operant from eight weeks gestation (Valsiner & Connolly, 2002) and of fundamental importance during early infancy. In adulthood however, touch can be more problematic as we “accede to an understanding of ourselves as essentially singular, unified and bounded” (Price & Shildrick, 2002, p. 70). In acquiescing to an ethics of touch, we become quintessentially cautious about whom and how we touch, and what may constitute unwelcome or inappropriate touch (Nicholls & Holmes, 2012). For healthcare professionals, including physiotherapists, there has been a clear move to make a distinction between *physical* and *therapeutic* touch (Bjorbækmo and Mengshoel, 2016). For the purpose of this chapter, we align ourselves with this move and agree with Paterson (2007), for example, in defining *therapeutic touch* as the range of physiotherapy treatment practices incorporating touch. This distinguishes the nature of the phenomenon from the ubiquitous *physical touch*, which could be talked about within a range of professional and layperson contexts. We are not necessarily concerned

with some of the generic ideas of physical touch that relate across contexts and professions, but rather the notions of touch that have a therapeutic intent within the physiotherapy domain. Therapeutic touch in physiotherapy is often disguised and denoted by other terms:

“In physiotherapy, touch (both the word and the concept) is not necessarily referred to as such. Instead, it exists tacitly in such concepts as: palpation . . . , nonverbal skills . . . , and embodiment and body work . . . The term ‘massage’ also implies touch.” (Bjorbækmo & Mengshoel, 2016, p. 11).

Thus, what we mean by therapeutic touch in physiotherapy is some sort of assemblage of the above ideas. Concerning *body work*, we see this also as something which physiotherapy can clearly exemplify. Twigg et al., (2011, p. 171) refer to body work as “paid work on the bodies of others”, and early definitions detail the notion allowing for dimensions including “the production or modification of bodies through work” (e.g. Gimlin, 2007, p. 353). We will soon juxtapose our idea of touch in the sociological sense with the hard-line empirical evidence of therapeutic effectiveness of the sort of touch we are referring to. This can be characterised by therapeutic touch “interventions” such as mobilisation and manipulation techniques. This will simply serve as a tool to allow us to make commentary about how the profession should respond if empirical evidence conflicts with a complex, more humanistic understanding of touch.

The move to distinguish between types of touch is exemplified in the history of practitioners pre-cursory to physiotherapists: trained masseuses. Socio-political antecedents to the attempts of these masseuses to professionalise their trade, including the desire to legitimise their practices by establishing a disciplinary approach to therapeutic touch, have been described by others (e.g. Nicholls & Cheek, 2006). Such attempts have perhaps resulted in removing “*any association*

between touch and eroticism”, and putting “*distance between themselves and prostitutes*” (Nicholls & Gibson, 2010, p. 500).

The use of therapeutic touch as a professionalisation strategy has, in the main, served physiotherapy well. Over one hundred years of rhetoric have supported the notion of physiotherapy as a “hands-on” profession, performing in a “high touch arena” (Owen, 2014; Roger et al., 2002, p. 170; Thornquist, 2006). Manual therapy and manual handling (as a way of facilitating movement) have become bastions of professional and clinical physiotherapy practice (Owen, 2014) – “manual” deriving semantically from the Latin *manualis*, meaning of, or belonging to, the hand (Oxford Dictionaries, 2012).

Owen (2014) noted that, as part of the professionalisation project, physiotherapists sought to distance themselves from the “low tech” hands-on practices associated with low status manual work. Specifically, “[t]he presence of technical equipment provided definition of the practice by differentiating physiotherapy’s hands from the hands of the laity, and the plethora of other ‘manual’ workers... practicing in the healthcare system” (Owen, 2014, pp. 171-2). Perhaps more significantly, Owen also described how the development of hands-on therapy was implicated as an integral component of clinical reasoning and autonomous, embodied problem solving practices. She noted that touch allows the physiotherapist to “reconstruct” the patient’s body, facilitating the assessment-inference-treatment sequence that is constitutive of professional practice. This observation is also supported by Rose (1999) who studied a graduate physical therapy programme that trained students in manual therapy skills and tactile discrimination. Rose noted that “...manual therapy places strong emphasis on the systematic manipulation of musculoskeletal structures through an array of hands-on techniques that are used **strategically** as the therapist, through careful observation, questioning and listening, **develops a hypothesis about the source(s) of a patient’s problems; rejects or**

refines the hypothesis; formulates a treatment plan” (Rose, 1999, p. 137 emphasis added).

In this way, the embodied touching/moving practices of physiotherapy have served not only to define and distinguish the nature of the profession, but also to discriminate the tacit knowledge/skills that underpin it. As such, the haptic practices of physiotherapy have arguably provided the foundations for the “craftwork” or “art” of physiotherapy (Remedy Physio, 2015; Sennett, 2009). These haptic practices are visible through the eyes of service users, and the case vignette below offers such an example.

Service users’ perception of touch

Case Vignette: David’s Story

“Of course, I’ve had neck and back problems for years. Really struggled at times to manage it. I’ve tried all sorts of things, TENS, heat, physiotherapy. I’ve seen any number of physiotherapists! To be honest, my experiences have been mixed. Some have been brilliant, others not so. Do you know, one physiotherapist never even touched me? They went through the entire appointment without ever once laying their hands on me! Obviously I didn’t go back. What sort of physiotherapist doesn’t touch their patient? I eventually found a superb practitioner who I’ve used pretty much since. They instantly got me onto the treatment bed and gave my neck a good massage, a move around and a good ‘click’. I go back periodically for more of the same – a bit of a ‘sort out’ to keep me in good shape.” (Authors’ paraphrase of personal communication with a patient)

Like David’s story, anecdotal and empirical accounts have emphasised the significance that service users attach to touch and corporeal proximity in therapeutic encounters (Bjorbækmo & Mengshoel, 2016). Drawing on interviews and anecdotal accounts, Bjorbækmo & Mengshoel (2016, p. 17) described the physiotherapeutic intervention as a “silent, touching, moving dance” that ensues once an initial conversation has taken place. The interconnection between therapist and patient is predicated, the authors stated, on elements of both gnostic touch (cognitive, investigative, intellectual and technical), and pathic touch (emotive, expressive, attentive).

The authors assert that the result of this haptic encounter – a vital dialogue mediated through touch and movement - is that the patient “feels safe, heard, respected and ready to accept [the therapist’s] invitation to explore new possibilities” (Bjorbækmo & Mengshoel, 2016, p. 19).

That touch is much more than a physiological, cutaneous sensation is a well-rehearsed argument (Leonard & Kalman, 2015). What Bjorbækmo & Mengshoel (2016) added was an exploration of the meaning of touch (to a patient or service user) within the context of the therapeutic encounter. However, might there be other ways to conceptualise the experience of touch that provides us with alternative understandings? Below we suggest that there is value in utilising notions of body work and consumption, and consequently considering touch as a form of consumer health technology.

Touch as a consumer health technology

Our argument states that, in order to better understand patients’ desire for hands-on therapy, we must situate it within the 21st century service economy and contemporary consumption practices and preferences. For example, Baudrillard (1998) has argued that, in modern society, consumption has become institutionalised and normalised as a duty of the citizen, whereby consumption relates not only to goods, but also human services and, therefore, relationships. As such, consumption has become an integral component of everyday life and thought, and influences our personal identity (Henderson & Petersen, 2002). We would argue that this is a relevant perspective for physiotherapists given the increasingly pervasive view of health as a commodity, patients as consumers, and a changing relationship between the state and the citizen in terms of “responsibility” for health and wellbeing (Henderson & Petersen, 2002).

Perceptions of health and disease have changed significantly since Talcott Parsons' structural-functionalist account of modern medicine (Parsons, 1951). In this account, illness was represented as a deviant or dysfunctional state preventing effective performance of normative social roles, and with the affected individual entering into a dependent relationship with a specific therapeutic agent or agency (Shilling, 2002). Late modernity (i.e. contemporary society) has instead become increasingly defined by health promotion and the pursuit of well-being – citizens as governed subjects who are deemed responsible for health-seeking behaviours, in the pursuit of physical, emotional and social wellbeing (Bunton, Burrows, & Nettleton, 1995). The “rationalities” and “technologies” of such government (Lemke, 2002) now extend far beyond the traditional confines of the “clinic”, and instead pervade any number of diverse domains and discourses. The intent of this *new public health* is described as a paradigm shift from reducing disease, to improving health, via increasing reliance on empowered, autonomous and self-disciplining individuals rather than expert dominance (Vallgarda, 2011).

Foucault argued that self-government required individuals to act upon their own bodies, beliefs and behaviours as an ethical project of the self (Dilts, 2010). As such, individuals endeavour to create “appropriate” subjectivities (conscious/unconscious sense of self) and identities that are contingent on their interpretation of the socio-cultural context and the dominant discourses (Lupton, 1995). For Foucault, discourse was not simply the prevailing rhetoric that shapes thinking and meaning, but in fact the way that bodies, minds and lives become constituted and governed (Weedon, 1996). Bunton et al. (1995) noted that under late-modernism the notions of health and identity are inextricably and intimately related with that of consumption – we have become consumers of health information, vitamins and supplements, activity monitors,

calorie counting apps and cholesterol reducing margarine, for example. Furthermore, in this consumer culture (Bauman, 1989), one's reflexive self-identity becomes ever more linked to the “body as a project” (Bunton et al., 1995). Shilling (2003) attributed this body project (in part) to the fact that individuals are increasingly aware that the body is a work in progress, influenced and formed by lifestyle choices that are frequently products of consumption practices, for example purchasing (or not purchasing) gym membership, complying (or not complying) with national guidelines for physical activity.

Consuming touch: body work as part of the body project

What we propose here is that many individuals come to “consume” physiotherapy as an inherent part of this body project and in response to their self-identity as health seeking citizens. The service nature of physiotherapy is conceptualised by these individuals as a form of body work – in this instance, the notion that their body is attended to by another as a form of paid labour (Gimlin, 2007). However, to truly understand individuals' motivations, Bunton et al. (1995) advise that we must be cognisant of the symbolic meanings embedded within our health “commodities” – specifically, in this account, the symbolic meaning of touch within physiotherapeutic body work.

The symbolism of touch extends far beyond the “simple” process of mechanically influencing soft tissues or articular structures. Therapeutic touch ultimately affects the recipient's self-identity, purportedly creating an individual who feels “aligned”, “mobile”, “supple”, “balanced”, or “tension-free” (patients' anecdotal descriptors). Furthermore, touch – especially massage and manipulation – may be viewed as an example

of service work associated with tending the body (Twigg et al., 2011). Service work of this type makes deep connections between healthcare and consumer culture (Maguire, 2001), and is perhaps best exemplified by those who seek out sports massage or osteopathic/chiropractic “adjustment” on a regular, prophylactic basis, and at their own expense. Therefore, we should ask: does touch - as a popular consumer health “technology” - reflect the habits and dispositions of late modern subjects embedded within both consumer culture and “new public health”? Critically, we should then question whether therapeutic touch begins to confer a symbolic status for the consumer? Indeed, the successful pursuit of a body project in general, is resolutely associated with individuals who possess financial resources, time, health literacy and/or sociocultural capital (Shilling, 2002). Could it therefore be that therapeutic touch (as a preferred consumer health technology) has come to be associated with such a status? If so, it is not surprising that consumers “shop around” (Shilling, 2002) in the way described by David (case vignette) in order to identify a practitioner who facilitates the formation of that self-identity via touch oriented body work. This consumerism also challenges the traditional power relations associated with healthcare body work, where the advantage is generally situated with the practitioner who possesses the expertise and authority that mandates how the body will be treated (Twigg et al., 2011). In David’s case the power relations of body work become, arguably, more egalitarian as his consumer status affords him some element of choice.

Whilst the argument presented here is of significance in terms of expanding our understanding of health consumerism in particular, it also raises significant questions for the profession of physiotherapy. If the perceived success of physiotherapy rests (at least for a significant number of patients) with practitioners who interweave touch with their service users’ self-identity and body projects,

what does that mean for a profession whose origins have been historically embedded in touch? Perhaps more fundamentally, what then happens to individuals’ body projects if the profession reconceptualises its fundamental ideas of therapeutic intervention in response to a prevailing discourse influenced by a multitude of factors? Of particular interest for this debate is the profession’s commitment to scientific bureaucratic medicine. With this in mind, we then explore the impact that “scientific evidence” may have for this critical analysis of touch.

The crisis of evidence - a catalyst for change?

The sociocultural argument presented so far offers a thick theory for understanding the relationship between identity and touch – touch being an integral notion for the body project and consumers of health. However, there may be a crisis at hand. What does the scientific evidence¹ tell us about the role of touch in achieving meaningful health outcomes in a cost-effective way? Moreover, what are we to make of developing contemporaneous models of healthcare that presuppose limitations in singular, passive, and biologically driven interventions? There is a well-rehearsed dialogue about “hands-on versus hands-off therapy”. This is something we wish to avoid repeating, primarily because the usual framing of such dialogue not only fails to embrace sociocultural aspects of identity and consumerism, but also artificially characterises the utility of scientific data in developing some sort of

1 For the purpose of our argument, we are taking the narrow view of the term *scientific evidence* as shorthand for comparative quantitative data – the sort prioritised by practice frameworks such as Evidence Based Medicine. For example, systematic reviews of high quality randomised controlled trials.

professional consensus. What is necessary, however, is to attend to the knowledge and thought that this type of scientific evidence does provide, and wonder what that might mean to us professionally, and to users of our services.

It is not the purpose of this chapter to provide a detailed review of the evidence of therapeutic effectiveness for therapeutic touch. However, for the purpose of our argument we can surmise that such evidence leads us to believe that in terms of commonly utilised health outcomes, touch-based therapies might not be as comparatively effective as once thought (for example O’Keeffe et al., 2016)². The effect of this belief extends to the recommendation that utility of touch-based therapies is seriously questioned in the management of many painful and movement dysfunctions (e.g. NICE, 2016). Similarly, biopsychosocial models of practice with limited understanding of what “psycho” or “social” might mean, may shift the emphasis away from touch-based interventions towards therapeutic strategies aimed at the (limited) empowerment of individuals through active pursuits such as exercise and physical activity. So without touch, what is physiotherapy?

Although we are interested in much more than just a scientific programme here, the interpretation of findings as presented above seem to be edging towards a shift in the way we as physiotherapists consider human identity and the role of touch. However, is this an opportunity to re-evaluate the sociocultural aspects of

2 Of course, there are interpretations, systematic reviews, and meta-analyses that do not explicitly or conclusively dismiss the comparative effectiveness of some touch-based therapies in particular conditions and dysfunctions. However, in this chapter we are anticipating a certain trend being witnessed in a specific area of practice (in this case management of pain in musculoskeletal dysfunction). This trend indicates a potential shift in the profession’s scientific understanding of the human and, as such, a potential shift in what the profession might mandate as clinically effective. For our argument, this simply serves as a tool to use in allowing an advance in commentary on the nature and role of touch.

how humans interact in terms of body work? Of course, there are other options. We could work on the sociocultural theory irrespective of this interpretation of findings, and continue in a linear trajectory to build the story of humans and touch further. This, however, would lack some responsibility to that part of our professional commitment that strives towards an evidence-based framework normatively underpinned by data from prioritised research methods. Hence, at this point we are motivated to consider whether the rich reports of identity and touch so far can be reconceptualised in a way by which our profession can be better characterised, taking into account the “evidence base” as well as sociocultural understandings of touch.

Navigating the future of physiotherapeutic touch

This discussion must inevitably close with consideration of the issues at stake for physiotherapists working in late modernity, where the concepts of new public health and consumerism remain significant leitmotifs. How are physiotherapy professionals to address the issue presented here – that is, that our emergent “evidence base” does not necessarily align well to consumer preference?

Owen (2014, p. 194) notes that when attempts to “devalue” or undermine therapeutic touch have been encountered historically, professionals have stalwartly sought to defend the value of such work. She argues that this has been achieved in one of two ways: either by adaptation or development to create an alternative touch “technology”, or by maintenance of the “*movement/touch rhetoric*”. The motivation for this, she contends, is preservation of historical physiotherapeutic identity and its occupational jurisdiction (Abbott, 1988). Nevertheless, is there value in blithely pursuing the same strategy at this particular nexus?

Instead, is this an opportunity to re-evaluate the corporeality of physiotherapy work?

It appears that there are (at least) three options for the profession and its membership (Figure 7.1: Options for the future framing of touch in physiotherapeutic work). The first is that we respect the professional and social values of touch and elect to retain it (in all its therapeutic guises) as a principal component of our management approaches. The implicit risk however, is that having aligned the profession with a commitment to a particular type of evidence based practice, we jeopardise our credibility within the wider scientific and healthcare community. The second alternative is to accept the abandonment of all “non-evidenced” therapeutic touch as a treatment option. However, historical precedents suggest that this abandonment of touch will be unsuccessful and has the potential to alienate a considerable proportion of the professional membership and the general public/health consumers.

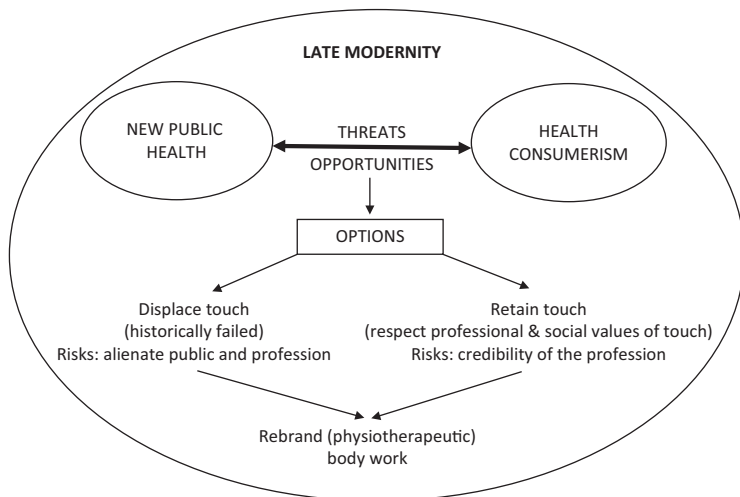


Figure 7.1: Options for the future framing of touch in physiotherapeutic work

The third option offers a reconciliatory position. Here we suggest the value of re-branding physiotherapeutic body work and redefining sociocultural conceptions. This reconceptualisation would encompass body work in a range of iterations: work done to the body by the health consumer themselves (e.g. physical activity / self-management programmes), work facilitated remotely (e.g. via tele-rehabilitation), as well as work that entails physical touch of the body. This option acknowledges that touch is an important part of professional identity and consumer preference and therefore prevents it from being displaced by evidence, whilst still creating space for interventions that are therapeutically effective. Many physiotherapists will already use this approach in their practice, but our challenge here is to complete this reconceptualisation process *en masse*.

Conclusion

The sociocultural analysis of touch offered within this chapter reveals further opportunities for a deeper understanding of both the profession, and the relationship between physiotherapists and those who consume our services. We propose here an opportunity to redefine body work, whilst preserving a recognisable dimension of professional and human identity. The profession's rich history of “holding on at all costs” to the idea of touch now seems to do us no favours. Subtly, health consumers might be persuaded of an empowerment and identity that derives from the interaction between themselves and physiotherapy - a profession committed to aligning itself with the resolution of global health burdens whilst being conscious of humanity and some of its deepest and complex desires. To do this, we need to understand being human not only as body, but also as a social consumer.

References

- Abbott, A. (1988). *The System of Professions: An Essay on the Division of Expert Labor: Essay on the Division of Expert Labour*. Chicago, IL: University of Chicago Press.
- Baudrillard, J. (1998). *The Consumer Society: Myths and Structures* (1st edition). Los Angeles, CA: Sage Publications Ltd.
- Bauman, Z. (1989). *Legislators and Interpreters: On Modernity, Post-Modernity and Intellectuals* (New Ed edition). Cambridge, UK: Polity.
- Bjorbækmo, W. S. & Mengshoel, A. M. (2016). 'A touch of physiotherapy' — the significance and meaning of touch in the practice of physiotherapy. *Physiotherapy Theory and Practice*, 32(1), 10–19. <https://doi.org/10.3109/09593985.2015.1071449>
- Bunton, R., Burrows, R. & Nettleton, S. (eds.). (1995). *The Sociology of Health Promotion: Critical Analyses of Consumption, Lifestyle and Risk*. London ; New York: Routledge.
- Dilts, A. (2010). *From 'Entrepreneur of the Self' to 'Care of the Self': Neoliberal Governmentality and Foucault's Ethics* (SSRN Scholarly Paper No. ID 1580709). Rochester, NY: Social Science Research Network. Retrieved from <https://papers.ssrn.com/abstract=1580709>
- Fulkerson, M. (2011). The unity of haptic touch. *Philosophical Psychology*, 24(4), 493–516.
- Gimlin, D. (2007). What Is 'Body Work'? A Review of the Literature. *Sociology Compass*, 1(1), 353–370. <https://doi.org/10.1111/j.1751-9020.2007.00015.x>
- Henderson, S. & Petersen, A. R. (2002). *Consuming Health: The Commodification of Health Care*. London, UK: Routledge.
- Lemke, T. (2002). Foucault, Governmentality, and Critique. *Rethinking Marxism*, 14(3), 49–64. <https://doi.org/10.1080/089356902101242288>
- Leonard, K. E. & Kalman, M. (2015). The Meaning of Touch to Patients Undergoing Chemotherapy. *Oncology Nursing Forum*, 42(5), 517–526. <https://doi.org/10.1188/15.ONF.517-526>
- Lupton, D. (1995). *The Imperative of Health: Public Health and the Regulated Body*. London, UK: SAGE.
- Maguire, J. S. (2001). Fit and Flexible: The Fitness Industry, Personal Trainers and Emotional Service Labor. *Sociology of Sport Journal*, 18(4), 379–402. <https://doi.org/10.1123/ssj.18.4.379>

- Massie, P. (2013). Touching, Thinking, Being: The Sense of Touch in Aristotle's *De Anima* and its Implications. *Minerva - An Internet Journal of Philosophy*, 17, 74–101.
- Mattens, F. (2009). Perception, Body, and the Sense of Touch: Phenomenology and Philosophy of Mind. *Husserl Studies*, 25(2), 97–120. <https://doi.org/10.1007/s10743-009-9054-x>
- NICE. (2016). Low back pain and sciatica in over 16s: assessment and management | Recommendations | Guidance and guidelines | NICE. Retrieved 16 February 2017, from <https://www.nice.org.uk/guidance/ng59/chapter/recommendations>
- Nicholls, D. A. & Cheek, J. (2006). Physiotherapy and the shadow of prostitution: The Society of Trained Masseuses and the massage scandals of 1894. *Social Science & Medicine*, 62(9), 2336–2348. <https://doi.org/10.1016/j.socscimed.2005.09.010>
- Nicholls, D. A. & Gibson, B. E. (2010). The body and physiotherapy. *Physiotherapy Theory and Practice*, 26(8), 497–509. <https://doi.org/10.3109/09593981003710316>
- Nicholls, D. A., & Holmes, D. (2012). Discipline, desire, and transgression in physiotherapy practice. *Physiotherapy Theory and Practice*, 28(6), 454–465. <https://doi.org/10.3109/09593985.2012.676940>
- O'Keeffe, M., Purtill, H., Kennedy, N., Conneely, M., Hurley, J., O'Sullivan, P., ... O'Sullivan, K. (2016). Comparative Effectiveness of Conservative Interventions for Nonspecific Chronic Spinal Pain: Physical, Behavioral/Psychologically Informed, or Combined? A Systematic Review and Meta-Analysis. *The Journal of Pain: Official Journal of the American Pain Society*, 17(7), 755–774. <https://doi.org/10.1016/j.jpain.2016.01.473>
- Owen, G. (2014). *Becoming a practice profession: A genealogy of physiotherapy's moving/touching practices* (PhD). University of Cardiff.
- Oxford Dictionaries. (2012). *Paperback Oxford English Dictionary* (7 edition). Oxford, UK: OUP Oxford.
- Parsons, T. (1951). Illness and the Role of the Physician: A Sociological Perspective. *American Journal of Orthopsychiatry*, 21(3), 452–460. <https://doi.org/10.1111/j.1939-0025.1951.tb00003.x>

- Paterson, M. (2007). *The Senses of Touch: Haptics, Affects and Technologies*. Oxford ; New York: Berg Publishers.
- Price, J. & Shildrick, M. (2002). Bodies Together: Touch, Ethics and Disability. In M. Corker & T. Shakespeare. *Disability/Postmodernity: Embodiment Theory* (62-75.). London ; New York: Continuum.
- Remedy Physio. (2015). Toby Hall: Manual Therapy is an Art. Retrieved from <http://www.remedyphysio.co.uk/blog/manual-therapy-is-an-art-2/>
- Roger, J., Darfour, D., Dham, A., Hickman, O., Shaubach, L. & Shepard, K. (2002). Physiotherapists' use of touch in inpatient settings. *Physiotherapy Research International*, 7(3), 170–186. <https://doi.org/10.1002/pri.253>
- Rose, M. (1999). 'Our Hands Will Know': The Development of Tactile Diagnostic Skill—Teaching, Learning, and Situated Cognition in a Physical Therapy Program. *Anthropology & Education Quarterly*, 30(2), 133–160. <https://doi.org/10.1525/aeq.1999.30.2.133>
- Routasalo, P. (1999). Physical touch in nursing studies: a literature review. *Journal of Advanced Nursing*, 30(4), 843–850. <https://doi.org/10.1046/j.1365-2648.1999.01156.x>
- Sennett, R. (2009). *The Craftsman*. London, UK: Penguin.
- Shilling, C. (2002). Culture, the 'sick role' and the consumption of health. *The British Journal of Sociology*, 53(4), 621–638. <https://doi.org/10.1080/0007131022000021515>
- Shilling, C. (2003). *The Body and Social Theory*. London, UK: SAGE.
- Thompson, E. (2005). Sensorimotor subjectivity and the enactive approach to experience. *Phenomenology and the Cognitive Sciences*, 4(4), 407–427. <https://doi.org/10.1007/s11097-005-9003-x>
- Thornquist, E. (2006). Face-to-face and hands-on: assumptions and assessments in the physiotherapy clinic. *Medical Anthropology*, 25(1), 65–97. <https://doi.org/10.1080/01459740500514489>
- Twigg, J., Wolkowitz, C., Cohen, R. L. & Nettleton, S. (2011). Conceptualising body work in health and social care. *Sociology of Health & Illness*, 33(2), 171–188. <https://doi.org/10.1111/j.1467-9566.2010.01323.x>
- Vallgarda, S. (2011). Appeals to Autonomy and Obedience: Continuity and Change in Governing Technologies in Danish and Swedish Health Promotion. *Medical History*, 55(1), 27–40.

- Valsiner, J. & Connolly, K. J. (eds.). (2002). *Handbook of Developmental Psychology* (1 edition). Thousand Oaks, CA: SAGE Publications Ltd.
- Weedon, C. (1996). *Feminist Practice and Poststructuralist Theory, 2nd Edition* (2nd edition). Cambridge, MA: Wiley-Blackwell.

CHAPTER 8

Equine-facilitated physiotherapy – devised encounters with daring and compassion

Tobba Therkildsen Sudmann | Department of Occupational
Therapy, Physiotherapy and Radiography, Western Norway
University of Applied Sciences

Abstract

Physiotherapy with horses and rider-patients builds on communication and interaction through groundwork and mounted work. This chapter discusses outdoor equine-facilitated physiotherapy on green care farms with three patients representing ideal types from the author's clinical practice. The practice of co-creation and improvisation, i.e. devising, is used to discuss how the triad of physiotherapist, rider and horse, work together to support the rider's step-by-step changes towards better health. Being with horses facilitates exploration of communicative strategies and embodied ways of being, whilst nature and physical activities add value to the therapeutic benefits. Horses represent risk and desire, as does the facing of bodily constraints or habits. Physiotherapy

aims to facilitate a purposefully created change by playing with daring (out-of-the-ordinary experiences when usual boundaries are pushed) and compassion. Therapist, rider and horse face dares and desire together by experimenting, improvising, and testing new modes of co-being and becoming. The ideas and tools from applied drama (i.e. collaborative creation and contact improvisation) tune human and horse bodies to communication and action. Outdoor practice and devising equip physiotherapists with a larger toolbox for a playful practice.

Introduction

Physiotherapy practice should not be confined to hospitals, outpatient clinics or other health or training-related facilities. Many of physiotherapists' approaches and practices can be applied in a wide range of settings, by appropriating and exploiting the material and non-material resources available. This chapter presents a Norwegian case of equine-facilitated physiotherapy in outdoor settings at green care farms. The first section introduces the use of horses in Scandinavian physiotherapy treatment, followed by a section on rhythm, balance and suppleness, comparing horses' and riders' bodies. The next two sections detail the theoretical foundation of the chapter; the intertwined relationship between micro-interaction, biological adaptation to living conditions, and improvisation, and present three idealised patients constructed from the author's clinical practice. The last two sections discuss encounters with daring and compassion, and devising strategies for including these in equine facilitated physiotherapy. The conclusion sums up the argument on how devising ways of working with daring, out-of-the-ordinary experiences and compassion may give deep bodily satisfaction and facilitate step-by-step health-promoting life changes.

The Scandinavian approach to equine-facilitated physiotherapy

Horses have been used to ameliorate or treat health concerns since their domestication around 3,500 years ago, and professional and lay riders often refer to ancient anecdotal evidence for their healing effect on the human mind and body. In Norway, the use of horses in physiotherapy has been approved since the early 1960s. Since the turn of the century, the Norwegian Physiotherapy Association (NPA) has continually taken steps to assure the quality of professional development education in the use of horses in physiotherapy and associated horsemanship. There is no internationally agreed definition of the practice of practitioners using horses for health purposes. In Norway, the NPA uses the concept of riding physiotherapy/physiotherapist to emphasise that riding is both a means and an end. A riding physiotherapist approved by the NPA may offer group-based or individual treatment sessions on horseback, lasting up to one hour. Patients pay for horse rental, and physiotherapists are reimbursed from the National Insurance scheme.

The cases presented in this chapter draw on the author's experiences of offering equine-facilitated physiotherapy on green care farms. In Europe and the USA, some health and welfare services are available at farms. These services build on strength-based approaches toward participants, and the health-promoting effect of contact with animals and nature (Haubenhofer, Elings, Hassink, & Hine, 2010; von Lindern, Lymeus, & Hartig, 2017). Persons suffering mental health problems show improvement after a farm-animal intervention (Pedersen, Patil, Berget, Ihlebæk, & Gonzalez, 2015). People living with dementia report that day-care on farms adds considerable value to their life (Sudmann & Børsheim, 2017), as do people taking part in drop-in centre

activity with horses (Sudmann, Forthcoming 2018). The context of the therapy is important; physical activity and contact with nature effects health in a positive manner (Ottosson, 2007; Thompson Coon et al., 2011; von Lindern et al., 2017). In Norway, green care farms are trademarked *Inn på tunet* (Into the Farmyard), and are required to comply with health, environment and safety requirements. The term “green” in “green care farms” refer to agriculture and sustainability.

When horses have been used therapeutically in physiotherapy, their contribution to human health and wellbeing has been explained as deriving partly from physical and social activity around horses, e.g. mucking out, preparing fodder, grooming, tacking up, (Håkanson, 2008), and partly as a result of rhythmical movements shared between rider and horse to facilitate body awareness, mobilisation, balance or coordination (Angsupaisal et al., 2015; Håkanson, Möller, Lindström, & Mattsson, 2009; Von Dietze, 2011). Horses are used in substance abuse and mental health therapy at several Norwegian hospitals, increasing treatment retention and learning (Kern-Godal, Brenna, Kogstad, Arnevik, & Ravndal, 2016; Thelle, 2010). Adapted riding for disabled children is offered at two hospitals and in local municipalities (Trætteberg, 2006), and horses are shown to contribute to development of self-esteem (Hauge, Kvalem, Berget, Enders-Slegers, & Braastad, 2014; Træen & Koren, 2003). In Scandinavia horses are used successfully in social work with self-harming adolescents (Carlsson, 2016). Horses may be used as means and ends in drug rehabilitation outside the realms of treatment institutions, e.g. as work placement or day centre activity (Sudmann, Forthcoming 2018; Sudmann & Agdal, 2015). A common denominator in research on horses’ impact on human health is the focus on the subtle micro-interaction and communication between humans and equines.

Rider's and horse's rhythm, balance and suppleness

Professional or leisure horseback riding is rewarding when the human and the non-human athletes have sufficient and adequate training for the discipline of choice. The aim of the training and education of the horse and rider is to prepare the horse for increasingly complex tasks while carrying the rider. For the horse to keep its balance while moving, the rider must balance on the horse by integrating rhythm and suppleness (Von Dietze, 2010, 2011). When rider and horse are connected and synchronised, their movements are fluid and harmonious. The art of riding is to connect and communicate with the horse through micro signals via the rider's seat and body posture, making the horse move as the rider wants, or the rider move as the horse wants – whether this is in a supple or collected mode (see Figure 8.1). The horse's training scale bears resemblances with how physiotherapists assess and facilitate body awareness and movement in their patients. The arrow in the figure indicates increasing complexity in the horse's movements under saddle. The key to success in riding is non-verbal communication – i.e. the rider must develop her sensitivity for arousal, tensions and rhythm in horse and herself. In therapy, reaching beyond the first three steps is rare.

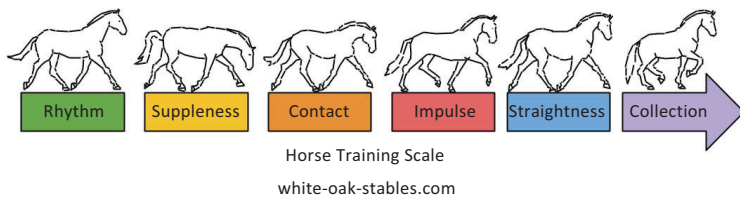


Figure 8.1: Horse Training Scale (White Oak Stables, 2014). Used with permission. (<http://white-oak-stables.com/2014/12/19/horse-training-scale/>)

For many rider-patients who have been subjected to traumatic experiences or are struggling to live with mental health challenges

or substance use disorders, bodily resources are drained, and many have temporarily lost the ability to fine-tune and integrate attention, respiration, muscular tension and movement. Living with threats or worries, pains or cravings often leads to a distorted and “distant” relationship to bodily sensations and needs. Disadvantages, traumas or abuse, or long standing drug abuse literally changes the body at a biological level, which subsequently may be measured (Getz, Kirkengen, & Ulvestad, 2011). In the Norwegian psychomotor physiotherapy tradition, the Global Body Examination (GBE) is used for assessment and quantification of bodily problems and resources. The GBE score is composed of examination of posture, respiration, movements, muscles and skin (Kvåle, Bunkan, Opjordsmoen, & Friis, 2016). Kvåle et al. have shown that patients with longstanding pain, mental health issues or musculoskeletal disorders have significantly worse GBE scores than the control groups without these problems (Kvåle et al., 2016).

Using the complete GBE necessitates partly undressing the patient, which is time-consuming and neither feasible nor necessary to accept a rider-patient for treatment. The theoretical base for the GBE builds upon an understanding of the lived body as an integrated biological, physiological, emotional and cognitive unit, a predominant notion in the psychomotor physiotherapy tradition (Bunkan & Thornquist, 1990). Dysfunction in any domain of the GBE (posture, respiration, movements, muscles and skin) will always influence the others. The theoretical foundations for the “Horses’ Training Scale” is built on a cognate philosophical foundation directing therapists’ and trainers’ attention toward posture, respiration, movements and muscle tension in relation to context in horse and rider alike. Suppleness in horses equates dynamic muscle tension, unrestricted respiration and attentiveness in humans – keys to effortless movement and balance. By observation and hands-on guidance the therapist gets valuable information

about the patient's bodily resources, i.e. how lived life is inscribed in the body. Henceforth, riding physiotherapy is an approach to re-integrating and re-discovering the interdependencies of mind and body on horseback, while working with rhythm and balance *in* movement.

Interaction and improvisation

Physiotherapy is a means to support changes in bodily habits to enhance wellbeing and health. To reach this aim, the physiotherapist must create therapeutic alliances with patients, and make use of available resources and experiential possibilities. Working with rider-patients and horses is to balance risk-taking and safety, daring and compassion. Around horses, it is wise to be cautious, and it is dangerous to be a daredevil. The potential danger adds a challenge, providing a mixture of risk and pleasure that seem highly valued by all riders – patients or not. When communicating with horses, humans must move, talk and touch the horse in ways that assure the horse that the humans are part of their herd, and not a threat to their welfare. Horses are prey animals and are extremely sensitive to how members of “the herd” (the human and non-human animals) behave and communicate. Depending on the human's comportment and behaviour, humans may be interpreted as part of the herd or as predators. Communication through movement, voice and touch is always related to the present, which calls for a compassionate approach to horses, and an attentive presence.

Equine-facilitated physiotherapy pays heed to a multitude of micro-details in deportment, demeanour and movement, in horses and humans. Goffman builds his sociology on detailed studies of animal and human behaviour, and demonstrates how movements, breathing, tensions, signs and gestures feed into any encounter and social setting (Bourdieu, 1983; Goffman, 1959, 1972). We emit signals

that are hard to alter – smell, height, weight, age, disability, heartbeat, breathing, and skin colour - and other signs that can be controlled at will, such as movement, clothes, speech, and hair colour. The four domains assessed by GBE – posture, respiration, movements, and muscle tension – give signals that are perceived by horses and humans alike. Goffman (1983) argued that the interaction order is a moral domain, where we are responsible for each other's wellbeing. We use signs given and given off as indications of whether the situation is safe, and negotiate a situational definition. Communication with horses is based on co-being and co-presence, where bodily dialogues are salient (Maurstad, Davis, & Cowles, 2013). A therapy situation must be created anew every time a patient and a therapist meet, especially when there is a horse present. The triad of rider, horse and therapist must meet and greet, negotiate and create the content of the session, and must close the session and break the triad when done (Shambo, Young, & Madera, 2013).

Using ideas and tools from applied drama in physiotherapy, such as “devising”, can be viewed as applied micro-sociology. Devising is the process of designing and directing collaborative creative work, whether the aim is to create a public drama performance or new bodily experiences. Creating new bodily experiences or performances with a horse as co-actor and co-creator calls for contact and communication by means other than words. In applied drama and physical theatre, a creative session often starts with contact improvisation (e.g. following another person's lead through direct or indirect contact), and exercises and selected movements to tune the present bodies to communication and interaction (Boal, 1995; Nicholson, 2005). In equine-facilitated psychotherapy and learning aka the HEAL-model, the concepts of devising, negotiation and play are used to guide interaction between horse and human (Shambo et al., 2013). Goffman's studies show how contexts and materiality represent possibilities and barriers for social

interaction, how situations are defined and how various alternatives to ordinary activities are developed (Goffman, 1986). Applied drama is deeply indebted to micro-sociology and to Goffman.

As stated above, lived life is inscribed in our biology (Getz et al., 2011), and contemporary conceptualisations of health point toward health as a collective resource and a social practice (Crawford, 2006). Health is also defined as the ability to adapt and self-manage in the face of social, physical, and emotional challenges (Huber et al., 2011). Health promoting adaptation necessitates new stimuli and challenges, which can be coaxed out with equine-facilitated physiotherapy.

Three patient ideal types

For the sake of the argument, and to be able to build a case of devising for dares and compassion, three [ideal typical] cases are presented below. These persons do not exist; they are fictional constructs built for analytical purposes from the author's experiences working as a riding physiotherapist. Following Kim (2012), Weber argued that "an ideal type is formed by the one-sided *accentuation* of one or more points of view" according to which "*concrete individual* phenomena ... are arranged into a unified analytical construct" (*Gedankenbild*). In its purely fictional nature, it is a methodological "utopia [that] cannot be found empirically anywhere in reality" (Weber 1904/1949, 90 in Kim, 2012). Ideal types are fictional, and the ideal type never seeks to claim its validity in terms of a reproduction of or a correspondence with reality. Kim (2012) states that the validity of the ideal types can be ascertained only in terms of adequacy. In my study of how female physiotherapists dealt with bodily proximity to their male patients, I constructed the ideal types "The good patient" and "The clever physiotherapist" to show how gender, age and sexuality were constituents of the therapeutic relationship (Sudmann, 1998). Judging by the reception

of the argument, the validity of the ideal types was adequate. The subject matter of this chapter has been discussed with several of the author's rider-patients, and they have given valuable inputs to the construction of the cases and to the arguments presented below. A corresponding methodology, the composite case study, has also been used to provoke critical thinking in health profession practice, including physiotherapy (e.g. Samenow, Worley, Neufeld, Fishel, & Swiggart, 2013; Setchell, Nicholls, & Gibson, 2017).

Ava (16): "Everything is about feeling safe"

This young girl has anorexia and demonstrates self-harming behaviour, social anxiety, anxiety attacks, concentration problems, and social problems. She lives in foster care and has partly dropped out of school. When we meet, Ava walks towards me with a smile, shifty eyes, respiration movements that are hard to detect, and a flexed body posture with almost imperceptible arm movements as she walks. She looks both hesitant and determined when walking into the farmyard. She talks to the horse and me in a low voice. She tells me that she finds the horses scary, and that she has dreaded coming to the stables. I am happy to greet her, and to tell her that it is wise to be wary and a bit nervous around horses. Furthermore, I tell her that being attentive and alert prevents accidents, and keeps the horses calm around us, because they are more afraid than we are. We smile to each other and talk about prey (horses) and predator (humans) animals, and how humans may act as predators towards each other, making us feel like prey. Ava has been with horses as a child, but did not learn to ride. During therapy, it is Ava's preference to fetch the horse from the pasture, groom the horse, and ride with as little tack as possible – just the bridle and a lead rope for the therapist. The horse walks or trots (the therapist jogs).

Benjamin (32): “I’ve been thinking about riding ever since my last mount”

This young man has a long history of drug use (alcohol, nicotine, marijuana, psychotropic pills, self-designed drugs), he is a drifter and periodically a street-dweller, and has no contact with family. Friends are fellow users or drifters. Because I do not want to focus on possible “failures”, I do not ask - and therefore do not know - about his level of education or his employment history. Benjamin’s body is usually in a half-stooped or flexed position, looking self-assured and insecure at the same time. He presents himself as an active survivor, not victimised or a passive sufferer. He tells me about a valuable life, and his multiple skills enabling him to survive on the streets, and moving around in several countries around the world. He impresses me with his survival skills, and I ask about how he keeps warm when the temperature is well below zero, how he finds shelter and safety to protect life, limb and property, and other questions relating to survival and wellbeing. Benjamin used to be a skilled rider and horse handler. During sessions, Benjamin prefers to find the horse in the stable, groom the horse himself and use standard tack when riding: a saddle and a bridle. We go trail riding together.

Charlotte (48): “It’s a revelation!”

Single-mother, divorced, long term sick leave, complicated relationship with ex-husband and father of her children. Her marriage exposed her to spousal abuse, as well as financial and practical barriers preventing her from leading a life on her own. She is very wary when arriving at the stables, her breathing is shallow, and her body is in an extended standby position – always already prepared to react on any demand or threat. Charlotte has never been on a horse before, and a friend had recommended that she try riding

physiotherapy. At first, Charlotte does not want to learn riding, and is experiencing a mixture of fear and delight when we meet. As therapy progresses, Charlotte finds that she prefers a bareback pad when mounted, and she likes the horse to be groomed and tacked when she arrives. The horse is handled from the ground by the therapist, by lead rope and bridle. Charlotte enjoys being carried by the horse, and the sense of safety the natural surroundings and the triad gives her. The therapist occasionally offers Charlotte the reins, but she refuses to take them: she would rather just enjoy being carried and communicating with the horse through her seat. We walk and talk in the woods – following trails or gravel roads. Charlotte relaxes and grows on the horse, and looks relaxed and content after the session. After every ride, she has strengthened herself so that she is able to make and stick to a plan for facing next week's demands and challenges.

Encountering daring and compassion

These ideal typical patients have referrals from their local doctor, informing about diagnose(s) or functional problems (pain, myalgia), but little more. Patients referred to me are invited to visit the stables and greet the horses and me before they decide to start riding therapy. During this first encounter (free of charge), we talk about horses, about when and how to meet, and we walk around the farm. Sometimes they want to try to sit on a horse for 5 minutes, and sometimes not. I never ask them about their worries, diagnoses, medication or other treatment they are undergoing or have been subjected to before. However, my experience in the GBE and neurological rehabilitation (particularly Bobath therapy) combined with my intimate knowledge of the challenges and survival skills in the field of (substance) abuse and mental health, equip me with a keen eye and observational curiosity. My observations

during this first meeting give me detailed information about the patient-rider's bodily functioning, e.g. by observing walking and alertness towards the farm environment. Walking is a functional vital sign, and speed, cadence, balance and rhythm are dependent on the functioning of all bodily organs (Middleton, Fritz, & Lusardi, 2015). Drug abuse, worries, side effects of (prescribed) medication or pain manifest by impacts on walking. The riders' interaction and communication with animals or other persons reveal desires, wants or fears, and their awareness of and responsiveness to micro-communication and signs. Horsemanship also provides a valuable source of information. When on horseback, the horse's reactions most often confirm my observations about muscular tensions, arousal, restricted movement or breathing, insecurity or fear – but also desire and delight. The horse always shows when the rider is supple and connects to the horse. Suppleness is a dynamic flexibility and a moment-to-moment adjustment of movement and tension and unrestricted breathing synchronised with the horse's own suppleness. The horse will try to adjust itself to the rider. Becoming attuned to these details highlighted by interactions between horse, rider, environment and therapist can give profound insight and food for thought for the patient. Rider-patients often utter sentences like “*Can you really see that?*” or “*How can you possibly know that?*”.

To connect with the horse, the rider must be aware of her breathing and her seating. Breathing calms or arouses the horse, and may make it stand still, trot, canter or even bolt. The seat of the rider communicates with the horse through pelvic movements, changes in tension in the pelvic floor (e.g. by breathing), micro-movements around the body axis, or eye-movements. The horse's responsiveness to these invisible and otherwise insignificant changes in arousal, tension and movement guides the rider when exploring and playing with body awareness. When working with breathing, pelvic

movement, dynamic core stability and posture, the rider is given different tasks or exercises to perform. These movements and their accompanying images (hold a large ball, juggle eggs, pick apples, scratch your wrist, pedal your feet, comfort the horse, pat the horse's hindquarters or shoulders, make yourself tall, make yourself small, be a queen, be a beggar, swim) all have an impact on the rider's seat, posture, muscle tension, breathing, attention and connection with the horse. These tasks and movements directly affect the bodily qualities assessed by the GBE (Kvåle et al., 2016). For example, when working with Benjamin, we used images relating to his dreams of being a cowboy, riding his own horse, sleeping rough in the wilderness, wrangling or catching his own food. Some days Benjamin would trust the horse and connect with it without hesitation, other days he was anxious on arrival and the horse became anxious as well. Our working together shifted from riding in walk and trot together, to Benjamin being mounted and the therapist accompanying as a sidewalker. Contact improvisation was more difficult when the anxiety level was high, but also easier because a worried but sensitive rider feels the horse's reactions to his worries, and may allow the therapist to hold her hand at the forefoot, the thigh, the lower back or on the horse's withers to calm them both. When the therapist uses "hands-on" on the rider, the rider is encouraged to follow the therapist's lead, or to take the lead and let the therapist follow the movements. Ava and Charlotte played with being led/taking the lead as well, to increase their range of motion and experience of safety in the saddle – and to exercise agency.

Being mounted on a large horse is to view the world from a different position. For many this is frightening. Ava always wants an Icelandic pony, which is easy to work around from the ground, being only about 135 cm tall at the withers. When on the ground, she refers to the pony as small and sweet, but when mounted she gets scared because it is so tall. Working with a pony makes it easy for

the therapist to physically guide and comfort both rider and horse, always keeping one hand on the bridle and the other at the back or thigh of the rider, or on the horse's mane or neck. Ada is guided to feel the horse's movement, count its steps, or tell a story of us being in a completely different setting; riding in the mountains, swimming with the horses, teaching a dog to follow a horse. Imagining other places and activities reduces her muscular tension and deepens her breath, and helps her connect with the horse, with me and the actual setting. Sitting on a horse places you above the walkers, in a position associated with power and control. Many patients find this powerful position frightening. Because they are accustomed to being the one who gets intimidated, they experience the roles as reversed, and may have difficulty enjoying their empowered position. Riding physiotherapy enables encounters with difference and otherness, and permits strange encounters within the familiar (Ramsden, 2017). Horses facilitate encounters with alterity or strangeness and provide tools for step-by-step life changes. Charlotte's experience of horseback riding as a revelation is telling.

Devising for equine facilitated physiotherapy

Horses need to be looked after, groomed and included in the herd of human and non-human animals. Horses fascinate the Avas, Benjamins and Charlottes, but they are also afraid of them and have experienced the double-edged consequence of horsing around – daring and compassion. While around horses, therapeutic tools are verbal and bodily dialogue (Sudmann, 2009). I talk with and touch horse and rider, and use the whole of my body close to the horse, and close to the rider, without asking permission to do so to ensure the horse's trust and security in the person, and the person's trust in the horse. Subsequently I might ask, "Did you see or feel what I just

did?”, and invite a discussion about non-verbal and touch-based communication and social interaction between humans and non-human animals. Everything is about micro-communication and voluntary risk taking (Goffman, 1967; Lyng, 2005), about voluntary signs given and involuntary signs given off – and our interpretation of these infinitely small and minute signs.

Ava, Benjamin and Charlotte and their peers have intimate knowledge about social stratification, about put-downs and marginalisation, about how people socially police each other and how this is embodied (Getz et al., 2011). Being with horses creates a recuperative and healing space where alternative modes of being can be crafted or tested. These modes of co-being facilitate a biosocial becoming – where body and mind are integrated, and human and non-human animals are tuned towards each other (Davis & Maurstad, 2016; Maurstad et al., 2013). The environments on farms and in stables are rich; they offer an everyday context for therapy, contact with nature and new biosocial becoming. Benjamin’s dreams about the centaur – the merging of human and horse (Bornemark & Ekström von Essen, 2010), Charlotte’s desires to be carried and comforted (Shambo et al., 2013) or Ava’s desire to ride bareback (Von Dietze, 2011) are examples of how horses make dreams come true, and how they facilitate exploration of self and steps towards health-promoting changes.

Physiotherapists are designers of movement and motor learning situations, but many are probably still inclined to take sole responsibility for the design, forgetting to involve patients as they should. Working with people and horses, the practice of devising – i.e. collaborative creation and contact improvisation – provides a relevant and inspiring approach. Devising is a physical way of working through movements to tune bodies to communication and interaction, as described in the sections above. Augusto Boal, one of applied drama’s founding fathers, created numerous games and

activities to enhance our ability to “see what we look at, to listen to what we hear, and to feel what we touch” (Boal, 1985). Boal’s (1995) volume on theatre and therapy provides a collection of exercises for tuning bodies to the situation at hand, and for wounded bodies to heal. Using Boal’s exercises on horseback introduces an element of risk not present in his practice. The relation between risk-taking, desire and pleasure, has been detailed by Lupton and Lyng as a powerful source for wellbeing (Lupton, 2013; Lyng, 2005). In our western societies, we work hard to preclude or minimize risk, making life predictable and relatively safe. However, many find safety synonymous with boredom, and many find challenging cultural boundaries intriguing. Daring to face risks and cultural taboos may create a sensual titillation, a sense of accomplishment, or fear. Making changes in bodily habits or embarking on a life-changing journey is risky, but it presupposes a desire for change, and a pleasurable reward when done. The young adults that participated in Andvig and Hummelvoll’s one-year inclusive theatre project, summed up their experiences in “I dare!”. Their applied drama project was resource oriented, created a space for connectedness to others, and an arena for consciousness-raising (Andvig & Hummelvoll, 2017). Interestingly, they compare their findings with what green care farms offer young adults. Equine facilitated physiotherapy, as individual treatment on farms, has the privilege to draw on the available restorative resources in a natural environment (von Lindern et al., 2017). Devising for daring and compassion in physiotherapy is to create a space for improvisation and testing of new bodily habits and communicative styles. Critical consciousness grows from verbal and bodily dialogues, and from the playing around with alternative scenarios for one’s life. Encounters with alterity or the commonplace add value to same endeavours - as do encounters with generosity (Frank, 2004).

Concluding remarks

The outback (dirty) environment of riding, the rhythm and movement of the horse, the exposure to changing weather, and the triad between human and non-human animals combine to offer a situated treatment approach that may seem unintelligible in a limited medical paradigm. Drawing on micro-sociological approaches to communication and on understandings of health as social and biological adaptations to living conditions made it possible to unpack equine facilitated physiotherapy as a co-created performance, where possibilities and barriers for healing are explored. The keys to understanding how physiotherapy with rider-patients enhances bodily confidence and communicative sensitivity and strengthens their ability to face challenges of everyday living are co-presence, co-being and co-becoming. Interestingly, rider-patients who do not dare to see a regular physiotherapist have the bravery and curiosity to embark on a quite challenging therapeutic journey.

Earlier on, students of physiotherapy were educated as designers of motor learning situations. Based on the discussions above, one might suggest that tomorrow's students should be educated in devising and improvising as well, to empower patients to dare to subject themselves to new bodily explorations and experiences. New health promoting habits can be supported and facilitated by curiosity and surprise. Rider-patients such as Ava, Benjamin and Charlotte have been hurt a lot; abused and maltreated beyond the imaginative capacity of most people. They know too much about fear, anxiety and pain – and must regain bravery to dare to face the world and to protect themselves. The stable, for most people a challenging environment, necessitates sensitivity, wariness, and presence. Horses and physiotherapists can enhance healing, enablement, add value and support to the steps they need to take themselves to improve their own life.

Minutious studies of social encounters and relations in public were the subject matter of Goffman's studies of animals, gamblers, filmmakers and everyday interaction. He introduced the interaction order as a subject matter in itself, and argued that the interaction order was sacred, a ritual that preserved the moral and social standing of everyone present (Goffman, 1983). Micro signs and actions such as glances, smiles, touch, micro movements, grins, winks, or utterances/sounds are necessary to uphold a situational definition and to agree upon who we are, or may become, in this communal setting. To share food and coffee, gloves, hats, or sheepskins or deer hides to keep warm, necessitates awareness of others' needs in relation to one's own needs and illustrates the sacred and ritual character of social interaction. The stables and environments at green care farms offer a social arena where wounded bodies may heal (Frank, 2004).

The Avas, Benjamins, Charlottes and their peers, would profit from a more generous and less intrusive and invalidating reception by physiotherapists or other carers, helpers or professionals. At the end of the day, it all comes down to being able to lead the life of ones' own choosing, and to finding a way of co-being with fellow humans or animals that is more rewarding than taxing. Health is a collective resource and social practice (Crawford, 2006; Huber et al., 2011), and most health problems and solutions emerge outside the health care systems and their professionals (Getz et al., 2011). Appropriation and exploitation of resources outside the standard healthcare frame, such as farms and animals, situates healthcare where health problems arise – in everyday living within everyday contexts. Using the ideas and tools from psychomotor physiotherapy in creative conjunction with applied drama, indoor or outdoor, equips physiotherapists with a larger toolbox and a playful practice.

References

- Andvig, E. & Hummelvoll, J. K. (2017). 'I dare': experiences of young adults at risk participating in a one-year inclusive-theatre project in Norway. *Nordic Journal of Social Research*, 7, 46–65.
- Angsupaisal, M., Visser, B., Alkema, A., Meinsma, M., Maathuis, C. G., Reinders-Messelink, H. & Hadders-Algra, M. (2015). Therapist-designed adaptive riding in children with Cerebral Palsy: Results of a feasibility study. *Physical therapy*, 95(8), 1151–1162.
- Boal, A. (1985). *Theatre of the oppressed*. NY: Theatre Communications Group.
- Boal, A. (1995). *The rainbow of desire. The Boal method of theatre and therapy*. London, England: Routledge.
- Bornemark, J. & Ekström von Essen, U. (eds.). (2010). *Kentauren: om interaktion mellan häst och människa*. Huddinge, Sverige: Södertörns högskola.
- Bourdieu, P. (1983). Erving Goffman, discoverer of the infinitely small. *Theory, Culture and Society*, 2(1), 112–113.
- Bunkan, B. & Thornquist, E. (1990). Psychomotor therapy: an approach to the evaluation and treatment of psychosomatic disorders. In T. Hegna & M. Sveram (eds.), *International perspectives in physical therapy 5: Psychological and psychosomatic problems* (45–74). London, England: Churchill Livingstone.
- Carlsson, C. (2016). Triads in equine-assisted social work enhance therapeutic relationships with self-harming adolescents. *Clinical Social Work Journal*, 1–12.
- Crawford, R. (2006). Health as a meaningful social practice. *Health*, 10(4), 401–420.
- Davis, D. L. & Maurstad, A. (2016). *The Meaning of horses: biosocial encounters*. London, England: Routledge.
- Frank, A. W. (2004). *The renewal of generosity: Illness, medicine, and how to live*. Chicago, IL: University of Chicago Press.
- Getz, L., Kirkengen, A. & Ulvestad, E. (2011). The human biology-saturated with experience. *Tidsskrift for Den norske legeförening*, 131(7), 683–687.
- Goffman, E. (1959). *The presentation of self in everyday life* (Vol. reprint 1990). London, England: Penguin.

- Goffman, E. (1967). *Interaction ritual. Essays on face-to-face behavior* (Vol. reprint 1982). New York, NY: Pantheon Books.
- Goffman, E. (1972). *Encounters. Two studies in the sociology of interaction*. Harmondsworth, UK: Penguin.
- Goffman, E. (1983). The interaction order. *American Sociological Review*, 48(February), 1–17.
- Goffman, E. (1986). *Frame analysis. An essay on the organization of experience*. Boston, MA: Northeastern University Press.
- Haubenhofner, D. K., Elings, M., Hassink, J. & Hine, R. E. (2010). The development of green care in western European countries. *Explore: The Journal of Science and Healing*, 6(2), 106–111.
- Hauge, H., Kvalem, I. L., Berget, B., Enders-Slegers, M.-J. & Braastad, B. O. (2014). Equine-assisted activities and the impact on perceived social support, self-esteem and self-efficacy among adolescents—an intervention study. *International Journal of Adolescence and Youth*, 19(1), 1–21.
- Huber, M., Knottnerus, J. A., Green, L., van der Horst, H., Jadad, A. R., Kromhout, D., . . . van der Meer, J. W. (2011). How should we define health? *BMJ*, 343.
- Håkanson, M. (2008). *Equine assisted therapy in physiotherapy*. (PhD), Göteborgs universitet, Göteborg, Sverige.
- Håkanson, M., Möller, M., Lindström, I. & Mattsson, B. (2009). The horse as the healer—A study of riding in patients with back pain. *Journal of bodywork and movement therapies*, 13(1), 43–52.
- Kern-Godal, A., Brenna, I. H., Kogstad, N., Arnevik, E. A. & Ravndal, E. (2016). Contribution of the patient–horse relationship to substance use disorder treatment: Patients’ experiences. *International journal of qualitative studies on health and well-being*, 11. doi:10.3402/qhw.v11.31636
- Kim, S. H. (2012). Max Weber In E. N. Zalta (Ed.), *Stanford Encyclopedia of Philosophy (Fall 2012 Edition)*.
- Kvåle, A., Bunkan, B. H., Opjordsmoen, S. & Friis, S. (2016). The Global Body Examination (GBE): A useful instrument for examination of patients with long-lasting musculoskeletal and/or psychological disorders. *European journal of physiotherapy*, 18(2), 137–143.
- Lupton, D. (2013). *Risk*. London, UK: Routledge.
- Lyng, S. (2005). *Edgework : The Sociology of Risk-Taking*. New York, NY: Routledge.

- Maurstad, A., Davis, D. & Cowles, S. (2013). Co-being and intra-action in horse–human relationships: a multi-species ethnography of be (com) ing human and be (com) ing horse. *Social Anthropology*, 21(3), 322–335.
- Middleton, A., Fritz, S. L. & Lusardi, M. (2015). Walking speed: the functional vital sign. *Journal of aging and physical activity*, 23(2), 314–322.
- Nicholson, H. (2005). *Applied drama. The gift of theatre*. Basingstoke, England: Palgrave Macmillan.
- Ottosson, J. (2007). *The importance of nature in coping. Creating increased understanding of the importance of pure experiences of nature to human health*. (PhD Articles+frame story), Swedish University of Agricultural Sciences, Alnarp. (2007:115)
- Pedersen, I., Patil, G., Berget, B., Ihlebæk, C. & Gonzalez, M. T. (2015). Mental health rehabilitation in a care farm context: A descriptive review of Norwegian intervention studies. *Work*, 53(1), 31–43.
- Ramsden, H. (2017). Walking & talking: making strange encounters within the familiar. *Social & Cultural Geography*, 18(1), 53–77.
- Samenow, C. P., Worley, L. L., Neufeld, R., Fishel, T. & Swiggart, W. H. (2013). Transformative learning in a professional development course aimed at addressing disruptive physician behavior: A composite case study. *Academic Medicine*, 88(1), 117–123.
- Setchell, J., Nicholls, D. A. & Gibson, B. E. (2017). Objecting: Multiplicity and the practice of physiotherapy. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, 0(0), 1363459316688519. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/1363459316688519> doi:10.1177/1363459316688519
- Shambo, L., Young, D. & Madera, C. (2013). *The listening heart: The limbic path beyond office therapy*. Chehalis, WA: Human-Equine Alliances for Learning (HEAL).
- Sudmann, T. T. (1998). Fra ubehag til vitenskap. Kvinnelige fysioterapeuters håndtering av kroppslig nærhet til mannlige pasienter (From Unpleasantness to Science - Female physiotherapist's mangament of bodily proximity with male patients). *Kvinneforskning*, 22(3/4), 80–101.
- Sudmann, T. T. (2009). *(En)gendering body politics. Physiotherapy as a window on health and illness*. (PhD Medical Sociology),

- University of Bergen, Bergen. Retrieved from <http://hdl.handle.net/1956/3143>
- Sudmann, T. T. (2018). *Communitas and Friluftsliv: Equine-facilitated low-threshold activities for drug users*. *Community Development Journal* (Supplement no 3).
- Sudmann, T. T. & Agdal, R. (2015). Tenk at jeg kan få ri! Hesteassisterte aktiviteter for ungdom og voksne med rusrelaterte problemer (Imagine - I can ride! Equine assisted activities for youth and adults with drug related problems). *Psyke&Logos*, 35(2), 69–84.
- Sudmann, T. T. & Børsheim, I. T. (2017). 'It's good to be useful': Activity provision for people living with dementia on green care farms in Norway. *International Journal of Practice Development*, Volume 7, Suppl, Article 8. <https://doi.org/10.19043/ipdj.7SP.008>
- Thelle, M. I. (2010). Horsepower helps. Evaluation of Horse Assisted Psychotherapeutic Treatment with Severely Traumatized Inpatients – A Pilot Study. *Scientific and educational journal of therapeutic riding*, (3), 25–35. Retrieved from http://www.modum-bad.no/filarkiv/File/_pdf-filer/Horsepower_helps.pdf
- Thompson Coon, J., Boddy, K., Stein, K., Whear, R., Barton, J. & Depledge, M. H. (2011). Does participating in physical activity in outdoor natural environments have a greater effect on physical and mental wellbeing than physical activity indoors? A systematic review. *Environmental science & technology*, 45(5), 1761–1772.
- Træen, B. & Koren, E. (2003). Jenter og hest. Stallen som arena for sosialisering og mestring. *Tidsskrift for ungdomsforskning*, 3(2), 3–26.
- Trætteberg, E. (2006). *Ridning som rehabilitering*. Oslo, Norway: Akilles.
- Von Dietze, S. (2010). *Balance in movement: How to achieve the perfect seat*. North Pomfret, Vermont: Trafalgar Square Books.
- Von Dietze, S. (2011). *Rider and Horse. Back to Back*. North Pomfret, VT: Trafalgar Square Books.
- von Lindern, E., Lymeus, F. & Hartig, T. (2017). The restorative environment: A complementary concept for salutogenesis studies. In M. B. Mittelmark, S. Sagy, M. Eriksson, G. F. Bauer, J. M. Pelikan, B. Lindström, & G. A. Espnes (eds.), *The Handbook of Salutogenesis* (181–195): Springer International Publishing. Retrieved from <http://>

link.springer.com/chapter/10.1007/978-3-319-04600-6_19/fulltext.html. doi:10.1007/978-3-319-04600-6

White Oak Stables. (2014). Horse Training Scale. Retrieved from <http://white-oak-stables.com/2014/12/19/horse-training-scale/>

Plateau 3

Rethinking education

CHAPTER 9

Unbinding physiotherapy knowledge. Critical disability studies' epistemology: moving towards a socially-just physiotherapy profession

Karen Yoshida | Department of Physical Therapy, University of Toronto

Abstract

In this chapter, I describe a critical alternative epistemology for Critical Disability Studies. Epistemology is the study of what is knowledge and truth. An epistemology delineates what is knowledge, who can claim knowledge and how it is assessed through a particular worldview. I base my critical disability studies epistemology (CDSE) on Afro-centric feminist epistemology as articulated by Collins and augmented by bell hooks. This Afro-centric feminist epistemology, in opposition to a euro-centric masculinist epistemology, embraces the concept of interlocking, diverse forms of oppression and promotes resistance. A CDSE centers on the generation and validation of knowledge through critical

reflection of embodied experiences, active dialogue emphasizing connectedness to others and community, and the ethics of care - emotionality and empathy as investment and accountability related to one's relationship(s) to disability. Incorporating a CDSE will support the further development of critically reflexive and analytical physiotherapy students, clinicians, teachers, researchers and policy makers to promote more socially just PT practices.

Introduction

Physiotherapy knowledge has moved from being a “craft” occupation (Miles-Tapping, 1989), to a clinical science-based knowledge dominated by evidence-based and health science discourses (Jette et al., 2003). One important health science approach that has influenced health professions in Canada and elsewhere is the Social Determinants of Health (SDH) approach (Public Health Agency of Canada, 2011). The SDH approach takes as its focus that health is based on many influences of which health services is only one component. An SDM approach examines the context of disease and ill health and promotes the idea that while individual behaviour towards health is important, this behaviour is conditioned and influenced by the social circumstances and social locations of individuals, communities and populations. Proponents of the SDH approach indicate that people's socio-economic status, occupation, and social networks are the most important influences on health (Public Health Agency of Canada, 2011). The importance of the SDH approach is that it has encouraged health professions in Canada to look explicitly and intentionally at the “social” aspects and to incorporate this approach within the content and practice of their professional activities.

This turn towards the social is evident within physiotherapy. Proponents of the national and international PT professional

community have moved to articulate and conceptualize PT as a socially-informed and socially-producing knowledge base (see Critical Physiotherapy Network Website). This includes explicating, interrogating and disrupting the “physicality” of physical therapy. Over the years, work within the profession has taken a more “social” approach to problematizing and re-conceptualizing key concepts and issues within physiotherapy (Cott, Finch, Gasner, Yoshida, Thomas, & Verrier, 1995; Gibson & Teachman, 2012; Nicholls, Gibson & Fadyl, 2015; Yoshida, 1993; Yoshida, 1994) such as the concepts of movement, self-conceptions, and disability. Historically and currently, the concept of disability has been predominantly defined in individual/medical and physical terms as a deficit, defect or lack within the body that requires some intervention to ameliorate or reduce the disability. Given this view, those living with disability were/are seen as unable to engage in everyday aspects of life – living in the community, school, work, relationships, travel, having intimate relationships, and raising children. Disability advocates/activists as early as the 1960s and 1970s in the United States, Canada and United Kingdom challenged the individual/medical view of disability and put forth a social model view of disability (Dejong, 1979; Oliver, 1990; Union of the Physically Impaired Against Segregation [UPIAS], 1975). In this framework, notions of disability are considered to be created by the inaccessible physical environments, policies and practices of an abelist or able-bodied majority society (UPIAS, 1975; Oliver, 1990). These grass roots organizations called for equal rights for disabled people and seeded the development of academic scholarships in Disability Studies in the United States, Canada and United Kingdom (Dejong, 1979; Shakespeare, 2010; Driedger, 1989) and globally with the United Nations’ Convention for the rights of People with Disabilities (United Nations, 2006). In the United States

and Canada, Disability Studies as a discipline has distanced itself from deficit models of disability commonly used in medicine, rehabilitation and special education (Linton, 1998). However, if traditional professional views of disability and practices are to change, there is a need for direct engagement of Disability Studies scholarship in these disciplines (Chen, Kirchner & Kudlick, 2004; Block, 2004; Yoshida, Self, & Willis, 2016). There is scepticism, however, among Disability Studies scholars toward this excursion into non-Disability Studies academic programs. In addition, while there are a few healthcare professional programs that have CDS content/programs, there is still a lack of acceptance and acknowledgement that CDS is relevant or legitimate knowledge. This tension provides the context for this chapter.

As both a DS scholar and physiotherapist, I began teaching Critical Disability Studies (CDS) in the Department of Physical Therapy at the University of Toronto, Canada, more than 20 years ago. I have detailed key principles and values needed to teach CDS (Yoshida et al., 2016), critical pedagogical imperatives, and some of the major teaching content as well (Yoshida, Self, Willis & Rose, 2017). I argue here that it is important to incorporate CDS into current physiotherapy (PT) knowledge, as it provides a critical alternative epistemology (CDSE). Epistemology is the study of what is knowledge and truth. An epistemology delineates what is knowledge, who can claim knowledge and how it is assessed through a particular worldview.

I suggest that a CDSE unbinds or opens up PT knowledge to relevant, alternative knowledge claims and critical analyses and therefore would lead to more socially just PT pedagogies and practices. CDSE coupled with social justice pedagogies and practices within PT can support the further development of critically reflexive and analytical students, clinicians, researchers and policy makers within PT and rehabilitation.

In this chapter, I offer a CDSE – what it consists of, and its merits for PT education and the profession as a whole. Theoretically, I bring together Afro-centric Feminism epistemology (Collins, 1991), feminism and praxis (hooks, 2000), and disability and social justice (Berne, 2015; Mingus, 2011) to underpin the CDSE that I use in PT education at the University of Toronto. The writings of Collins and hooks have been important touchpoints for my teaching and research over the past ten years. In what follows I : 1) state my positionality (social locations); 2) discuss the four basic tenets of Afro-centric Feminist epistemology (Collins 1991) – concrete experience, use of dialogue, talking from the heart (expression, emotions and empathy) and ethics of personal accountability, and show how this standpoint differs from euro-centric masculinist epistemology; 3) describe how I have shaped a CDSE using Collins and bell hooks¹ works as a foundation. In doing this, I do not conflate disability, gender and race, but seek to illustrate their similarities and acknowledge their important differences; and 4) discuss the importance of physiotherapy taking up this alternative epistemology of disability to support socially just PT pedagogies and practices. I also will envision a future PT profession that incorporates CDS epistemology in terms of its key features.

I: Positionality and background to this chapter

Stating one's positionality (i.e. one's social locations and relationships to disability) provides the reader with information to understand how experiences shape the focus and analysis of one's work and in this case, this chapter. It is also an important element of a CDSE that I describe later. I am a non-disabled, cis-gendered, Canadian

1 bell hooks does not capitalize her first and last name

woman of third generation Japanese ancestry, raised in a working class home. I am privileged as a tenured professor, located in an academic department of physical therapy, positioned within a Rehabilitation Science Institute and embedded within a Faculty of Medicine. I work in a public, research intensive university in Canada. My graduate training was in the sociology of health and illness and the sociology of disability in a graduate program that emphasized the examination of the social inequities of health.

My relationships to disability (O’Toole, 2013) are multiple. I am a Critical Disability Studies scholar and ally. I have disabled family members. I have worked with disabled colleagues and other disability-positive allies in research and teaching since 1987. In my work, I place the word “critical” in front of Disability Studies to distinguish it clearly from disability as a medical/clinical issue, given the context in which I work. In this paper, I use “disabled person or people” as a politicized term to signify that disability is a positive identity for many people and that disability is a social product(s) of diverse and multiple social relations within a western capitalist society.

II: Afro-centric feminist epistemology (Collins)

Patricia Hill Collins’ articulation of Afro-centric Feminist epistemology (AFE) (Collins, 1991) and bell hooks’ feminist theory (2000) provide the foundation for this chapter. These two seminal feminist pieces center issues of domination, multiple oppressions, and resistance. They provide a strong foundation for my articulation of Critical Disability Studies epistemology. In this chapter, I summarize the key points of Collins’ AFE that I believe are important to a CDSE. In writing this summary, I remain respectful of and use her specific wording of identifications throughout my paper.

According to Collins (1991), the AFE epistemological standpoint is oppositional to the euro-centric, masculinist knowledge validation process that dominates academic discourse. Black women have to struggle against white males' interpretations of the world to articulate a self-defined (black woman's) viewpoint, which can be seen as subjugated knowledge (Collins, 1991). Within this web of domination, both Collins (1991) and hooks (2000) reject the notion of separate oppressions (i.e. gender, race and class), and the adding on of other oppressions (additive model of oppression) in viewing domination. They propose reconceptualizing relations of domination for Black women as a system of *interlocking* oppressions of race, class, and gender because these oppressions arise from an encompassing, historical system of dominance. For Black women, race, class and gender are most important. This interlocking approach promotes thinking explicitly about these oppressions and other forms of oppression, such as religion, age, ability/disability and sexual orientation, the interplay between them and how they may work to dominate others.

In placing African-American women and other marginalized groups in the center of analysis, one can see how groups have various amounts of privilege and penalty (oppression) in a historically created system (Collins, 1991). For example, white women can be penalized by their gender, but privileged by ability. A white disabled person may have privilege in some setting and a racialized disabled person may not. Within a system of interlocking oppressions and, depending on their social circumstances, a person may be a member of an oppressed group (disabled), may be an oppressor (male) and thus simultaneously oppressor and oppressed (Collins, 1991). For example, domination related to race and gender produces racism and sexism (hooks, 2000). These oppressions exclude people from having choice and opportunities and most importantly, socializes the oppressed to believe that their oppression is natural.

hooks (2000) describes sexism as the process whereby individuals are socialized or taught/learn to behave in particular ways that make them act in compliance with oppressive dominant social structures and institutions. For example, Black women are taught that relationships with other Black women will not enrich their lives and are taught not to bond together. According to hooks (2000), Black women need to unlearn this. This unlearning of “internalized sexism/racism” is pivotal to creating political solidarity among Black women.

Collins’ Afro-centric Feminist epistemology reflects elements of both women and African-Americans’ epistemologies. This means being a part of these groups and yet, at the same time, standing apart from both groups (Collins, 1991). hooks (2000) believes this insider-outsider position is essential to Black women’s consciousness. Collins (1991) acknowledges the diverse experiences of oppression among Black women given their varied insider-outsider positions. This diversity of experiences informs her epistemology.

Collins’ four basic tenets of Afro-centric Feminist epistemology (AFE) are: a) concrete experience as a criterion of meaning; b) use of dialogue to assess knowledge claims; c) ethics of caring - talk from the heart (expression, emotions and empathy); and d) ethics of personal accountability. These four tenets are interrelated and work together to form an AFE.

Concrete experience as a criterion of meaning

In this dimension of an AFE, Collins suggests that there are two ways of knowing – knowledge and wisdom. The distinction between the two is based on lived experience. Knowledge is information not experienced whereby wisdom is knowledge gain through experience. Those who have lived experiences of a situation are considered to have more credibility than those who have no direct

personal experience. Related to the importance of lived experience is the use of practical images, narratives and stories that are representative of the lived experiences of Black American women. These forms of knowledge allow for subjectivity between women, reside in the women (not higher authorities) and are experienced directly in the world, not through abstractions (Collins, 1991). Within her narrative method, these stories or experiences are told and trusted by the communities of Black women. Concrete experiences of self-definitions are valued and validated within various institutions of black women's lives – their centrality in the family, the church and other places where people congregate.

Use of dialogue to assess knowledge claims

The process of validating and assessing claims to knowledge is done through the use of dialogue. Dialogue here is equal and mutual engagement between two active individuals (hold subject positions)– the speaker and listener who are both members in the community. This is in contrast to euro-centric masculinist epistemology of active subject to a passive object (Collins, 1990), in which there is no dialogue.

The primary epistemological assumption supporting the use of dialogue in determining knowledge claims is the connectedness to others (Collins, 1991). This connection with others is part of a traditional African holistic worldview which seeks out harmony. This connectedness is an important aspect of the knowledge validation process from an AFE. In this process, people actively engage in seeking connections with others and become more human and empowered within the context of a community (Collins, 1991). This is in contrast to euro-centric masculinist epistemology of separation or isolation to create knowledge within research settings such as the laboratory, and within academic spaces isolated from communities.

The ethics of caring - talking with the heart

A third tenet of an AFE epistemology is the ethics of care or talking with the heart, which involves three related dimensions: personal expressiveness, emotions, and empathy. All three dimensions are pivotal to the AFE knowledge validation process (Collins, 1991).

The first dimension of the ethics of care is the importance of the uniqueness of each individual. Based in African humanism, each person is seen as a distinct and valued being (Collins, 1991). One example of this value is illustrated in black women quilters who place vibrant patterns and colours next to each other in a quilt. The individual differences within patterns are seen as enriching the entire quilt, not competing against each other (Collins, 1991).

The second dimension is the legitimacy of emotions in dialogue. To display emotion in dialogue, means that the speaker is invested in the validity of the argument (Collins, 1991). In AFE, there is no need to separate emotions from intellect to advance and assess knowledge. This is in contrast to euro-centric male epistemology which favours dispassionate and objective knowledge. In this epistemology, knowledge can only be gained if the knower excludes emotion and feelings. This separation of emotions from intellect supposedly avoids bias in acquiring knowledge through a scientific research process. The third dimension is the development of the capacity for empathy. Collins (1991) claims the capacity for empathy is important not only for the knower (oppressed) to extend to others, but to believe in others' capacity for empathy. Collins acknowledges that the ethics of care may be part of women's experiences and this supports the AFE of connection in which "truth" emerges through care (Collins, 1991).

The ethics of personal accountability

The last of AFE's proposed ways to assess a person's knowledge claims is, at the same time, to evaluate the person's character, values, and ethics. This is done by asking for information on the individual's values and daily life experiences. In relating their concrete experiences, individuals reveal their point of view, what they hold important, how they relate to people and the derived meanings of these experiences. All of these qualities, point to the overall character of the person, their relationships to others and to the actions they take in everyday life and in acquiring knowledge. According to Collins (1991), this accountability is essential to assess the knowledge claims of any person. These major tenets of AFE provide the basis to shape a Critical Disability Studies epistemology to which I now turn.

III: The shaping of a critical disability studies epistemology

In this section I discuss how I have shaped a CDS epistemology to teach CDS within the Physical Therapy program at the University of Toronto. The CDSE I articulate and use is underpinned by many of the views expressed by Collins (1991) and hooks (2000) and disability justice activists (Berne, 2015; Mingus, 2011). Collins (1991) suggests that subjugated knowledge is produced by groups who are marginalized or othered by dominant groups. As disabled people have been (and still are) excluded from mainstream society, they are a group that have produced their own subjugated knowledge.

As mentioned earlier in the chapter, I am not conflating gender, race and disability- they are not interchangeable. I agree with Collins and hooks in their observation that there are many sites of oppression that are interlocked or connected, as they are produced

by an overarching historical system of oppression. Disability as an axis of oppression shares some similarities with race and gender, but the expression of privilege and penalty of disability will be varied, and the meanings of privilege and penalty will be influenced by the particulars of the disability/difference and many other axes of oppression (race, gender, class, age, sexual orientation, indigenous identity, rural/urban, nation state, etc). This acknowledgement of how multiple social locations may be seen as interlocking oppressions is the basis for current understandings of intersectionality. Given this, intersectionality (Hankivsky, 2014) is an important concept and way of thinking that physiotherapists need to embrace. Earlier in this chapter I mentioned that the Social Determinants of Health has helped the health professions to turn towards the social. The SDH is an important first step in understanding an intersectional approach and could be implemented within PT curricula. In addition, writings on Disability Justice emphasize this understanding of intersectionality (Berne, 2015; Mingus, 2011).

In what follows, I draw on the four tenets of AFE to inform my formulation of a CDSE. I will elaborate on how each “fits” or is consistent or not consistent with current disabled scholars’ thinking of disability. I bring into this conversation disabled scholars who are speaking about some of the same issues – oppression, intersectionality and disability social justice.

“Lived” experiences as an essential criterion of meaning

The importance of concrete lived experience is core or fundamental to any CDSE, and I have shown that this lived experience is essential to an AFE. The lived or embodied experiences of disabled people provide the foundation for critical reflection and analysis. This lived or embodied experience means that individuals are able to

critically articulate how social structures/ institutions (e.g. policies, rules) have impacted their lives (Williams, 1998). However, domination related to disability can make it difficult for disabled people to “see” and articulate how institutions and practices affect their daily lives.

Disabled people’s oppression has often been labelled ableism. Ableism is a system of oppression produced by the dominant abled-bodied majority view (Campbell, 2008). This view is reflected in physical/social environments , practices and behaviours taken for granted. Disabled people are excluded in society if the physical environment is constructed in such a way that it poses barriers to access, e.g. barriers to wheelchair users. Social practices of watching a movie in a theatre demand that all who attend can see and hear the movie. This would exclude those identified as deaf and/or blind. Taken for granted interactional practices, such as how one greets another person by saying hello and looking directly at them, assumes that everyone can interact in this way.

Ableism as a system of oppression is based on a normal/abnormal dichotomy. Like sexism and racism, it has its roots within a western dichotomous system of thinking. Even within a more current western culture of hybridity and diversity, this dichotomous mode of thinking of disability still prevails. The concept of the normal and its construction has been fully articulated elsewhere (Davis, 1995), and is summarized briefly here. The idea of the “norm” was spurred by Eugenics and the population movement. Measures such as weight, height, limb length and so on, were seen to be distributed along a “bell” shape curve, with the mean or most frequently observed measurements forming the centre point of this curve. This bell shaped curve has two endpoints that indicate amounts of the trait/measure that is lesser or greater than the average for the population. Both would be seen as departures from the average measure. This posed a problem for eugenicists

as traits such as intelligence or heights that were greater than the average would be seen as departures from the norm, albeit, in a negative way. To deal with these situations, Francis Galton, created the concept of quartiles (Davis, 1995). The bell curve distribution of a trait was then segmented into quartiles, and he substituted the idea of ranking. This meant a rank order from lowest (first) to the second and third quartiles encompassing the majority of the area under the centre part of the bell curve. The highest quartile is at the upper end of the curve. This use of ranked quartiles has allowed eugenicists to say that those who were very tall in height – fourth quartiles) possessed a desirable amount of the trait. At the other end of the curve, those whose traits were in the first quartile were seen as possessing insufficient amount of the trait (e.g. intelligence, height, weight) and were seen as deviating from normal and thus devalued (Davis, 1995).

This arbitrary definition of normal contributes to the normal/abnormal dichotomous thinking in western science that continues to be propagated by institutions that promote this particular way of being and doing things. For example, in medicine and rehabilitation, there are specific “normal” ways to move around in the world. This usually involves walking upright as the standard (Gibson, 2016). This is an ableist view of moving around. This dominant assumption of standing upright has implications – for example, how physical environments are structured (stairs), how space to get around is configured, and how clothes are designed and produced.

Disabled people who attend healthcare institutions for treatment risk becoming socialized to see the world in this way and to believe this is the correct way. For example, the idea that upright mobility is only way they should move. Given this, disabled persons may spend much time learning how to move in this way and may forego any other options for mobility. This is an ableist view of mobility.

If a person comes to learn and believe that upright mobility is the only or preferred way to move in the world, one can say that the person has internalized an ableist perspective on mobility. The disabled person's internalized ableism is a form of oppression inculcated from the dominant abled bodied majority. This internalized ableism is widespread – it can relate to every facet of everyday life, such as work, school, relationships, family and social etiquette. Similar to Black women, disabled people may need to unlearn the internalized ableism, to reflect, question and challenge it and to speak out about how they believe they should be in the world based on their experiences (Campbell, 2009).

Use of dialogue to assess knowledge claims

It is essential for a CDSE that disabled people speak and share their experiences with other disabled people. The importance of dialogue to assess knowledge claims was highlighted in AFE. Historically, disabled children had been segregated in schools, and had lived in rehabilitation treatment centres, especially in urban centres. It was thought that this separation from mainstream society would help disabled children to learn and focus on normalized ways of being and doing. While the situation has changed today, in that disabled children are not isolated from others, the emphasis during treatment is still to learn how to move and act in normalized ways. However, clustering together in rehabilitation spaces has had, in many cases, unanticipated effects. By being together, disabled children also can share their stories and their experiences. Individuals speaking to each other may learn that their differences are not individual, are socially produced and in some cases, learn how to resist these normalizing processes (Yoshida, Shanouda & Ellis, 2014).

Dialogue is also important for the teaching of others who do not have this direct lived experience. Disability Justice scholar

Patti Berne (2015) talks about sustainability, which means that disabled people's teachings and experiences are the critical guide to a disability justice movement. For physiotherapists, this means seeking out and acknowledging the legitimacy of disabled person's experiences and how this knowledge is important to our collective practice, teaching and research. Disabled people need to be involved in the teaching of their own lives to non-disabled people (Linton, 1998). This leadership is important as disabled people, disabled scholars and disabled physiotherapists know how the system impacts their daily lives (Berne, 2015). In teaching CDS using a CDSE, this means using first person narratives (in for example, print, video or in person) to impart knowledge. It also means including disabled scholars' writings as well. Dialogue needs to be set up between the disabled person/teacher and non-disabled student/learner in an environment that is safe and encourages participation.

The ethics of caring - "talking from the heart"

A CDSE needs to emphasize the importance of passionate dialogue, or speaking from or with the heart, as part of the process to assess knowledge claims. The first dimension of speaking with the heart involves the reflection and expression of each unique disabled person. Each disabled person is valued as they are and who they are within an approach acknowledging that all people are worthy (Berne, 2015). This valuing of each disabled person and his/her/their individual self(ves) expression(s) is important and is exemplified by the disabled community's efforts to engage in disability social justice related to access. The disability social justice notion of access emphasizes moving away from accessibility as an individual and independence perspective to a view of access as collective and interdependent action (Mingus, 2011). This means the

group acknowledges every person's uniqueness as well as supporting each other to achieve access. For Mingus (2011, p. 1), accessibility is important because "It is the concrete resistance to the isolation of disabled people".

The importance of emotionality in dialogue is related to this self-expression. Emotionality conveys the individual's life world to others in a more complete, complex and nuanced way that resonates with disabled and non-disabled people. Finally, a CDSE requires empathy. Empathy requires the willingness of the knower to continuously listen and learn from disabled people themselves. This continuous learning is important for both disabled and non-disabled people. For disabled people, it is not enough to know one's own experiences, but in addition to learn from other disabled people's experiences and needs. For non-disabled people, including myself, there is always something to learn from my disabled colleagues both in the community and in academia.

The ethics of personal accountability - one's relationship to disability

In evaluating people's knowledge from a CDSE, it is important to assess their relationships to disability (O'Toole, 2013). This information gives the listener important knowledge about the knower. From a CDSE, one would question: who are the relationship(s) with? What is the type of relationship? Is it with a professional service organization for a disability or a disability rights organization? Is it led by disabled people? What orientation to disability does the knower claim – Individual, Medical, Social or Disability rights? Are the relationships temporary, enduring, reciprocal and/or equitable in nature in relation to issues of power and control? Do the relationships embrace everyday knowledge and/or professional knowledge? All of these questions will provide the listener with a way to

assess an individual's character, values and ethics and ultimately to assess their knowledge claims related to disability (Collins, 1991).

Conclusion

I have presented a CDSE that has supported my teaching CDS within the Department of Physical Therapy at the University of Toronto. I have used AFE as articulated by Collins, reinforced by hooks, as the basis for this alternative CDS epistemology. CDSE emphasizes a number of important principles: the critical reflection of lived experiences, active dialogue related to connectedness to others and the community, emotionality and empathy as investment in knowledge and accountability related to one's relationship(s) to disability. These principles of a CDSE are situated within a system of interlocking oppressions which can constrain action and opportunities.

What is the way forward for the future of physiotherapy relative to CDS? CDSE provides an alternative and critical epistemology that brings in embodied knowledge of disabled people to better inform physiotherapists in teaching, research, and practice. Understanding the impact of the health and social systems on disabled people will assist physiotherapists to be allies (disability justice) in supporting and advocating with disabled people within the context of complex health care systems. For example, a shift away from an abelist notion of independence (being physically self sufficient) to encompassing an interdependent view of physical therapy practice (embracing access, mixed abilities and helping others) would mean challenging the exclusive importance of upright walking to embracing a more diverse way(s) of mobility based on a person's need in different spheres of life. Given the intersecting issues of racism, sexism, and poverty with disability, physiotherapists would need to consider these issues as well in working with

people to develop desired forms of mobility. In this way, physiotherapists will be supporting these justice movements as well. We need to incorporate a critical epistemology that will support the continuing evolution of our critical, reflexive and action-oriented profession. In this way, CDSE provides the basis for socially just physiotherapy practices that will support equitable health services for all.

References

- Berne, P. (2015) Disability Justice – A working draft. Retrieved from <http://sinsinvalid.org/blog/disability-justice-a-working-draft-by-patty-berne>.
- Block P. (2004). Disability studies in the belly of the beast. *Disability Studies Quarterly*, 24(4). Retrieved from <http://dsq-sds.org/article/view/884/1059>.
- Campbell, F.A.K., (2008). Exploring internalized ableism using critical race theory. *Disability & Society* 23(2), 151-62.
- Chen, L., Kirchner, C. & Kudlick, C. (2004). Guidelines for disability studies: Highlights of a 2004 SDS Listserve discussion. *Disability Studies Quarterly*, 24(4). Retrieved from <http://dx.doi.org/10.18061/dsq.v24i4.894>
- Collins, P. H. (1991). Towards an Afro-centric feminist epistemology. In P.H. Collins (Ed.), *Black feminist thought* (201-220) . London, UK: Routledge.
- Cott C., Finch E., Gasner D., Yoshida, K.K., Thomas S. & Verrier M. (1995). The movement continuum theory of physical therapy. *Physiotherapy Canada*, 47(2), 87-95.
- Davis, L. J. (1995). *Enforcing normalcy: Disability, deafness and the body*. New York, NY: Verso.
- Dejong G. (1979). Independent living: From social movement to analytic paradigm. *Archives of Physical Medicine and Rehabilitation*, 60, 435-446.
- Driedger, D. (1989). *The last civil rights movement: Disabled Peoples' International*. London: Hurst.

- Gibson, B.E. & Teachman, G. (2012). Critical approaches in physical therapy research: Investigating the symbolic value of walking. *Physiotherapy Theory and Practice*, 28(6), 474-484.
- Gibson, B.E. (2016). Mobilities (Chapter 6). In *Rehabilitation: A post-critical approach* (113-136). Boca Raton, FL: CRC Press.
- Hankivsky, O. (2014). Intersectionality 101. The Institute for Intersectionality Research and Policy. Vancouver, BC: Simon Fraser University. .
- hooks, b. (2000). *Feminist theory: From the margins to the center*. Second Ed. London, UK: Pluto Press.
- Jette, D.U. , Bacon, K. , Batty, C. , Carlson, M. , Ferland, A. , Hemingway, R. , . . . Volk D. (2003) . Evidence- based practice: Beliefs, attitudes knowledge and behaviors of physical therapists. *Physical Therapy*, 83(9), 786-805.
- Linton, S. (1998). Disability studies/not disability studies. In *claiming disability: knowledge and identity*. (132-156). New York, NY: New York University Press.
- Miles-Tapping, C. (1989). Sponsorship and sacrifice in the historical development of Canadian physiotherapy. *Physiotherapy Canada*, 41(2), 72-80.
- Mingus M. (2011). *Changing the framework: Disability justice*. Retrieved from <https://leavingevidence.wordpress.com/2011/02/12/changing-the-framework-disability-justice/>
- Nicholls, D.A., Gibson, B.E. & Fadyl, J.K. (2015). Rethinking movement: Postmodern reflections on a dominant rehabilitation discourse. In K. McPherson, B.E. Gibson & A. Leplège (eds.), *Rethinking Rehabilitation Theory and Practice* (97-116). Boca Raton, FL: CRC Press.
- Oliver, M. (1990). The politics of disablement—new social movements. In M.Oliver (Ed.), *The politics of disablement* (112-131). London, UK: Springer.
- O’Toole C. (2013). Disclosing our relationships to disabilities: An invitation for disability studies scholars. *Disability Studies Quarterly*, 33(2). Retrieved from <http://dsq-sds.org/article/view/3708/3226>
- Public Health Agency of Canada (2011,Nov 21). *What determines health?* Retrieved from. <https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health.html>.
- Union of the Physically Impaired Against Segregation (UPIAS)

- (1975). *Fundamental principles of disability*. London, UK: The Union of the Physically Impaired Against Segregation.
- United Nations (2006). *Convention on the right of persons with disabilities (CRPD)*. Retrieved from <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>
- Williams S.J. & Bendelow G. (1998). *The lived body: Sociological themes, embodied issues*. London, UK: Routledge...
- Yoshida K.K., Self, H. & Willis, H. (2016). Values and principles of teaching critical disability studies in a physical therapy curriculum: Reflections from a 25-year journey – Part 1: Critical disability studies value framework. *Physiotherapy Canada* 68(4), 315-318.
- Yoshida, K.K., Self, H., Willis, H. & Rose, N. (2017). Values and principles of teaching critical disability studies in a physical therapy curriculum - Part 2: pedagogical imperatives and teaching innovations. *Physiotherapy Canada*, 69 (1), 6-9.
- Yoshida, K.K., Shanouda, F. & Ellis, J. (2014). An education and negotiation of difference: Schooling experiences of Canadian youths who contracted polio prior to 1955. *Disability and Society*, 29(3-4), 345-358.
- Yoshida K.K. (1993). The reshaping of self: A pendular reconstruction of identity among individuals with traumatic spinal cord injury. *Sociology of Health and Illness*, 15(2), 217-245.
- Yoshida, K.K. (1994). Institutional Impact on self concept among persons with spinal cord injury. *International Journal of Rehabilitation Research* 17, 95-107.

CHAPTER 10

A Baradian approach to evidence-based practice in physiotherapy education

Tone Dahl-Michelsen | Department of Physiotherapy, Oslo and Akershus University College of Applied Sciences

Karen Synne Groven | Institute of Health and Society, University of Oslo / Department of Physiotherapy, Oslo and Akershus University College of Applied Sciences

Abstract

During the past decade, there has been an increased focus on evidence-based practice in physiotherapy programmes. Evidence-based practice involves combining best research evidence (external evidence), clinical expertise and patients' values and preferences. Competence to search and evaluate research evidence is considered crucial in ensuring that a new generation of physiotherapists are able to choose treatments proven to have the best effect. Physiotherapy programmes also focus on equipping students with clinical skills and taking patients' values and needs as their starting point for evidence-based practice. How these different forms of knowledge relate to one another, however, is unclear. Inspired by Karen Barad's theory of agential realism, this paper explores evidence-based practice as processes of becoming within the physiotherapy encounter. Drawing on the experiences

of physiotherapy students, who prior to their study in the physiotherapy programme had encountered different physiotherapists, we put Barad's concept of "intra-acting" into play as a critical and alternative way to conceptualise evidence-based practice. Our findings show how knowledge as best research evidence (external evidence), knowledge as clinical expertise, and knowledge as patients' values and preferences, is co-constructed into the phenomena of evidence-based practice within the physiotherapy-patient encounter. When discussing how students should develop their skills in order to learn how to perform evidence-based practice, we argue that physiotherapy programmes need to take into account that evidence-based physiotherapy comprises a number of intra-active processes of becoming rather than being a fixed phenomenon.

Introduction

During the past decade, there has been an increased emphasis on evidence-based practice within physiotherapy programmes (Olsen, 2015). This emphasis fits a general trend favouring evidence, particularly in Western societies, implying that all educational programmes, professional actions and political decisions should be evidence-based (Kyvik & Vågan, 2014). In medicine, the foundation for the evidence-based paradigm was that historically, medical treatments relied solely on tradition, anecdotes and theoretical reasoning from basic sciences (Hofmeijer, 2014; Engebretsen et al., 2015; Greenhalgh et al., 2014). Thus, there was a lack of evidence as to whether or not treatments were effective. At its most extreme, there was a risk that treatments would provide small benefits, have no effect at all or be potentially harmful. To avoid these scenarios, one solution was to use experimental evidence, giving priority to randomised

controlled trials (RCTs) and meta-analyses of trial results (Engebretsen et al., 2015, p. 529). Historically, there has been a strong link between the professions of physiotherapy and medicine (Haugen, 1997; Nicholls & Cheek, 2006; Ottosson, 2007), which helps explain why evidence-based medicine, e.g. knowledge generated from RCTs design, has also come to strongly influence physiotherapy. Within both professions, the following definition from Sackett et al. (1996) communicates the key to evidence-based practice as being a combination of evidence and clinician expertise:

Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research (Sackett et al., 1996, p. 71).

Crucially, Sackett and colleagues found that good clinicians combine individual clinical expertise and best available external evidence, and neither is found to be sufficient on its own. However, they did not include patient/client preferences, which is a deficit in their definition. Heated debates ensued about how to comprehend evidence, not least in Norway, where the term “evidence-based” was translated as “knowledge-based”, causing critical attention to focus on what counts as knowledge in the clinical health professions (Ekeland, 2009; Ekeli, 2001, 2002; Heggen & Engebretsen, 2009; Nortvedt & Jamtvedt, 2009).

Conflicting logics behind the evidence-based practice model

The debate concerning how to approach and interpret evidence-based practice has been fuelled by discussions of the relationship

between the various concepts as well as how to assess experience-based and scientific knowledge. Some of the key questions in this debate relate to the following: *What counts as scientific knowledge? Do circumstances or context alone count in relation to patient values? Is tacit and personal knowledge devalued as part of clinical expertise?* In addition, questions have been raised as to whether results from clinical trials can inform decisions about real patients, whose complexity seldom fits the textbook description of disease (Greenhalgh et al., 2014). As highlighted by Norwegian philosopher Harald Grimen, the evidence-based model stems from two conflicting logics: the logic of the evidence hierarchy and the logic of the circular model (Grimen, 2009, p. 212). The evidence-based model consists of three components: research (external evidence), clinical expertise and patients' values and preferences. In this model, research is a priority while research designs are arranged in hierarchical order. By comparison, in the circular model, research (external evidence), clinical expertise and patients' values and preferences comprise three circular components of equal size. Together, these three circles form another larger circle, namely the circle of evidence-based practice (see Jamtvedt et al., 2015, p. 22). Grimen's concern revolves around how the circular components are supposed to interact. In this interaction, external evidence seems to play the leading role, although the three circles are ostensibly of equal importance.

Given that the point of evidencing is to inform rather than eliminate discretion, it is hard to see how proponents of evidence-based practice conceptualise or give meaning to the concept of discretion (professional judgement) (Grimen, 2009, p. 214; Hofmeijer, 2014). In other words, what is the point of the circular model if the evidence hierarchy is given priority? And if the circular model is given priority - or if the two different logics are to

be considered equal - what is the point of the evidence hierarchy? (Grimen, 2009, p. 214). Along similar lines, other critics have called for more attention and value to be focused on both clinicians' and patients' experience-based knowledge. Greenhalgh and colleagues, for example, have argued that evidence-based medicine needs to be person-centred, an approach they call "real evidence based medicine" (Greenhalgh et al., 2014, p 3). Gibson and Martin (2003) have addressed potential contributions from qualitative methods in evidence-based physiotherapy practice. As they put it, "if the aim of physiotherapy is to work collaboratively with patients to maximize their integration into the community, then the research agenda needs to address the lived experiences of patients within and outside the physiotherapy setting" (Gibson & Martin, 2003, p. 356). These scholars also suggest that qualitative methods are well suited to capture complexity. In addition, they argue that physiotherapy programmes should arm students with a broad understanding of the nature of evidence in order to prepare them to evaluate research critically (Gibson & Martin, 2003, p. 356).

Within the context of physiotherapy education, Olson and colleagues (2014) explored students' evidence-based learning processes. They found that students who were exposed to more teaching in evidence-based practice more often conducted a critical review of research than those who were exposed to less teaching in evidence-based practice. However, in clinical situations involving patients, there was no difference in terms of how the students utilised research-based knowledge (Olsen et al., 2014). Although students tried to use an evidence-based approach, they felt uncertain, as novices in clinical practice, about how to actually go about doing it. As a result, they relied on their clinical instructors, were more engaged with clinical work, and lacked role models who could show them how to

use an evidence-based approach (Olson, 2015, p. 78). In other words, students seemingly struggled with how to integrate best research evidence (external evidence), clinical expertise and patients' values and preferences into diagnosis and selection of appropriate treatment approaches.

Approaching evidence-based physiotherapy through Barad

In this paper, Karen Barad's agential realism informs our critical approach to traditional notions of evidence-based physiotherapy. Barad's theory (2007) is founded on the idea that not only humans, but all entities have *agency*. As Højgaard and colleagues put it:

Agential denotes that everything “does” something, in other words, that everything is performative and has agency. Nothing is delimited as a separate entity. Everything is always engaging something else, in specific ways designated by the concepts; intra-activity, i.e., matter and meaning, object and subject, nature and culture are all mutually articulated and mutually entangled (Højgaard et al., 2012, p. 68).

Agency enables us to undercut notions of fixation, linearity and the one-dimensionality of matter and materiality. Instead, we can emphasise performativity through intra-active processes across the distinctions by which we normally operate. These distinctions include human/nonhuman, subject/object and matter/discourse. According to Barad, an intra-active mode of thinking offers a fruitful alternative to the linear and somewhat individualistic agential concept of inter-action. Indeed, the concept of “intra-action” is essential within Barad's framework, implying that all entities have agency. Whereas *inter-* means “among”, *intra-* means “within”.

In the context of physiotherapy, *interaction* would be when the bodies of a patient and physiotherapist interact but both bodies remain independent. Conversely, physiotherapy from the perspective of *intra-action* implies that the body of the physiotherapist and the body of the patient co-exist within the encounter. Put differently, whereas *interaction* assumes that there are separate individual agencies, which precede their interaction, *intra-action* recognises that agency emerges *through* intra-action (Barad, 2007, p. 33). Indeed, agency emerges through entangled constitution (Barad, 2007, p. 33; Højgaard et al., 2012, p. 69). In this regard, intra-action can be understood as a relational and entangled *phenomenon*, always in process. There is no definite beginning or end, no clear-cut timeline (Juleskjaer, 2013, p. 756). Such a radical stance enables us to critically explore evidence-based practice as *becoming*. More precisely, we argue that evidence-based practice cannot be understood as consisting of research, clinical expertise and patients' values and preferences as separate and pre-existing entities. Rather, these concepts should be regarded as dynamic and inseparable through *agential intra-action*. In this way, they become the phenomena of evidence-based practice within the physiotherapy encounter. In so arguing, we acknowledge Barad's concept of *apparatus* as key to what sets the *intra-active process* in motion, and which involves a form of *boundary-making* (Højgaard et al., 2012, p. 69). According to Barad, apparatuses are both materials and discursive practices through which "objects" and "subjects" are produced: "[They] are the material conditions of possibility and impossibility of mattering; they enact what matters and what is excluded from mattering [...] Hence apparatuses are 'boundary-making practices,'" (Barad, 2007, p. 148). Different apparatuses perform boundary-setting practices by way of *agential cuts* (Barad, 2007, p. 155). An agential cut is what creates boundaries, and Barad argues that agential cuts in intra-actions

produce phenomena, which are therefore inherently related to one another (Juelskjaer, 2013, p. 757).

Finally, in Barad's view, apparatuses are "specific material reconfigurations of the world that do not merely emerge in time but iteratively reconfigure *spacetime* as part of the ongoing dynamism of becoming" (Barad, 2007, p. 142). This implies that although agential cuts are unique in each setting, the notion of *spacetime* enables us to go beyond a linear perspective of space, time and matter. Barad outlines it as "ways to think about the nature of causality, agency, relationality, and change without taking these distinctions to be foundational or holding them in place" (Barad, 2012, p. 32).

In our analysis, we put Barad's concepts into play through the examples of two physiotherapy students (Celine and Linda). We reframe the evidence-based model by reconceptualising the three key concepts of research, clinical expertise and patients' values and preferences, viewing them as our *apparatus under scrutiny*, in which *agential cuts* draw boundaries between each apparatus or concept of knowledge. This reframing entails an intra-active analysis of the physiotherapy encounter in which *agential cuts* are dependent on how the space of each concept/apparatus varies individually. Concepts and material discursive reconfigurations of the world therefore become meaningful through *agential cuts* (Højgaard et al., 2012, p. 70). In our context, then, *what counts as meaningful* in each encounter with the three knowledge sources emerges as *unique in each encounter*.

Apparatus of analysis

In this paper, we draw upon empirical evidence from in-depth interviews with eight first-year physiotherapy students who visited physiotherapists before enrolling in an undergraduate physiotherapy programme in Norway. The data derives from the

first author's PhD project (Dahl-Michelsen, 2015). The interviews were conducted face-to-face and lasted for 50-70 minutes each. They were digitally recorded and transcribed by Dahl-Michelsen. Barad's (2007) approach of reading diffractively inspired us methodologically. This approach entailed reading the students' stories, and the research literature on evidence-based practice intra-actively, that is through Barad's diffractive approach (Højgaard et al., 2012; Jackson & Mazzei, 2012). In our study, this diffractive approach had a particular bearing on the choice of analytical research questions. Initially, we analysed the interviews in accordance with the following empirical research question: *How do the experiences of physiotherapy students who have encountered physiotherapists themselves relate to the concepts of evidence-based physiotherapy?* Next, to allow for depth as well as variation, we conducted a more detailed analysis during which we selected the two interviews we thought best demonstrated the diverse experiences of students' encounters with physiotherapists. Using a diffractive-narrative approach, we developed Celine's and Linda's stories (Zabrodska et al., 2011). In this phase of our analysis, we addressed the following research question: *What can Baradian agential realism offer our understanding of evidence-based practice within physiotherapy encounters?*

The study was approved by the Data Protection Office for Research (NSD) and all students gave their informed consent. The empirical data was translated from Norwegian into English by both authors separately, and agreed upon, in two face-to-face meetings.

Encountering physiotherapy through a Baradian lens

In the following section, we address how Celine and Linda's experiences within different physiotherapy encounters relate to the concepts of evidence-based physiotherapy viewed through a Baradian lens.

First, let us briefly contextualise their experiences. Earlier, Celine had been an elite athlete in handball. During those years, she suffered various injuries. Her recovery from different injuries involved encounters with various physiotherapists. In contrast, Linda had suffered and recovered from myalgic encephalomyelitis (ME). In this process, she encountered physicians and neurologists as well as different physiotherapists.

Celine's story

I was good at handball from early on. Thinking back, as a child it was only fun. Of course, I trained a lot but, honestly, I remember it as only fun. When I was 15, I started to play on an international level as well and then it became harder. The training was tougher, of course; there was more training. I was forced to run harder, fight more, be more aggressive and, yes, I liked it but in one of the sessions, I was involved in an accident where I fell and unfortunately broke my leg so then I was out for some time. I went to see a physiotherapist. That is, I had thrown my crutches away and I had begun to walk – but I was limping and had a lot of pain and it was painful to move... The treatment was active and I got an exercise programme. There was nothing wrong with the programme, I think. It involved different exercises in weight-bearing positions, tailored to strengthen the weakened muscles in the leg that was broken. He [the physiotherapist] told me that the programme was evidence based. ... But I felt that he did not understand me and my situation. ... Although I could run a little, I was almost depressed because I could not play handball – it hurt too much – the pain made it physically impossible. ... My goal was to get back to handball. My identity was ... I am a handball player. I felt he had no understanding of that. It was difficult [the feeling of not being understood].

In this extract, Celine reflects on the physiotherapist's reliance on clinical guidelines, which emphasise research evidence at the

expense of a more patient-centred approach. Considering how her pain persisted during treatment sessions and how she felt alone in dealing with it, Celine questions the physiotherapist's clinical expertise. As she sees it, reflecting on the episode in retrospect, the physiotherapist was not sensitive to her preferences and needs during the treatment process. What Celine's scepticism brings to the fore, interpreted through Barad's terms, is how the *apparatuses* of patients' values and preferences and clinical expertise become cut off from the phenomena of evidence-based practice. Indeed, the apparatus of research *becomes* the phenomena of evidence-based practice through agential cuts. Viewed through such a lens, one could argue that the physiotherapist fails to engender an intra-active process with Celine to enhance her recovery process. To us, the absence of sensitivity towards how the various exercises affected her pain is striking, suggesting failure to adequately adapt research findings to the individual's unique situation. What Celine emphasises most is the physiotherapist's failure to recognise her identity as a handball player. In Baradian terminology (2007), an ongoing disruption of spacetime-mattering inhibits a meaningful treatment process in terms of progress and effect. The disruption points to a future focus on what to do next, and thus a linear future focus, rather than acknowledging dis/continuity concerning Celine's embodied experiences as a handball player. For Celine, future and past intra-act, intensifying her worries that she may never become able to play handball as well as she did before. Her identity as a sporty and fit handball player is threatened and is not addressed as intra-acting with her pain and worries during treatment. The disruption concerns spacetime-mattering as she strives to reconfigure ongoing subjectivities (Juelskjaer, 2013). In other words, Celine struggles to find meaningful coherence in how to handle her situation of being injured.

In light of our Baradian analysis, it is no wonder that Celine categorises this physiotherapist as less competent. She tells us that she ended the physiotherapy treatment and slowly recovered. However, when she was 22, she again experienced injury.

My crucial ligament broke and, given my prior bad experience with physiotherapists, especially the first one that I told you about, I followed some recommendations and contacted a physiotherapist I knew was a good one. And he truly was - he was very experienced. He made me conscious about what kind of exercising I should do to strengthen my muscles. So, as such, it was similar to the other one - it was evidence based. [The treatment involved various exercises to strengthen the knee muscles in line with guidelines and research evidence as to which method is most effective]. However, it was different. I was in the therapy room doing various exercises but he observed how I was performing them and he kept asking me about what I felt when I was doing them; "what do you feel when you are doing it this way or that way" ... and we developed the progression together. He involved me. That was what he was doing. He knew that my ambition was to be back in handball and was serious about that, and he worked with me all the time.

In this example, Celine seems much more enthusiastic as to the effects of the treatment. This enthusiasm relates to how the physiotherapist combines research evidence, clinical expertise and patients' values and preferences. Or, to put it in a Baradian agential framework, the cut-off of each apparatus takes a different, and more satisfactory, path, in contrast to Celine's experience with the less competent physiotherapist. In other words, agential cuts produce the phenomena of evidence-based physiotherapy differently in terms of intra-actions. In this example, research evidence, clinical expertise and patients' values and preferences intra-act and produce the cut-off through each apparatus,

so that the phenomena of evidence-based physiotherapy incorporate all three concepts of evidence-based practice. Through the apparatus of patients' values and preferences, this agential cut becomes more significant and cuts off clinical expertise and research evidence. In other words, the intra-actions of the three concepts (apparatuses) are dominated by the apparatus of patient's values and preferences. In terms of subjectivity, identity and Barad's notion of spacetimemattering, this points to how the physiotherapist's approach seemingly supports Celine's recovery process. As evidenced through Celine's emphasis on feelings and effect, discourse and matter intra-act as her hopes of recovering to continue as a handball player resonate with the hopes of the physiotherapist. Spacetimemattering is emphasized as part of the intra-active process. In this regard, Celine's past handball career is not something linked only to the past. By acknowledging that she can indeed play handball again, as well as being sensitive to the injury as a possible drawback to her being the same player as before, agential cuts are made during the treatment process, cuts that open up other possibilities; Celine can still be a handball player, albeit not exactly the same as before.

Linda's story

My recovery period from ME lasted four years. Generally, I will say that my encounter with the health system was quite convoluted when I had such an perplexing illness. I was very sick and they [neurologists and physicians] attended to me in kind of odd ways. It was as if they did not really believe me. The focus was on finding out whether or not I had ME. The focus was on the diagnosis and not on how I should cope with the situation, so to speak. In addition, my experiences were troublesome because of arrogance.

When I came into physiotherapy, then, I felt that they were not so concerned with my diagnosis. It was like I had these kinds of problems, and we had to solve these, and so we collaborated to try to solve them. I felt ... I felt more that they believed me in a way. ... However, when I met physiotherapists, I was also in the recovery process, so it was a more positive side of my illness process. However, it is complicated because recovering is not ... just about recovery - you are ill or you are in recovery. How can you actually know with this blurry disease? Nevertheless, I felt that something happened when I was in physiotherapy and it ... felt so wonderful. ... I met several competent physiotherapists during the period when I had ME. However, one of them made a profound impression on me. He was interested in my experiences of my illness (ME) and in my situation. He was in a way a sparring-partner and it was collaboration. For example, if I felt that the exercises were too easy and wanted to progress then he was very much in dialogue - ok then we should try something else, but at the same time, he was good at forcing me to break when I got a relapse because I was doing too much. Therefore, it was - we had this good cooperation. Also, it is complicated with ME because there is little research on it and it is not clear what it is and what treatment to do. So, surely, it is not easy. Nevertheless, he read a lot [of research], told me about it, and asked me what I thought. He was so engaged and had been in a Lightning programme [non-medical training programme], but he was sceptical, I understood, but still open-minded and asked me what I was thinking. He was involved in research himself and was part of a team in England, I think, and gave them input from the clinical setting.

Linda's story points to difficulties related to suffering from an illness lacking evidence both in terms of criteria for diagnosis and guidelines for effective treatment. The evidence concept (external evidence) is thus different in Linda's story compared with Celine's. Viewed through Barad's agential realism, the cut-off through the

apparatuses, to use a Baradian term, produce the phenomena of evidence-based physiotherapy including research, clinical expertise and patients' values and preferences. However, the agential cuts here make research in terms of external evidence less prominent, whereas clinical expertise and patients' values and preferences become more significant. Once again, the apparatus of patients' values and preferences predominate, producing the phenomena of evidence-based physiotherapy. This example brings to the fore a different agential cut than is seen in Celine's story. The cut-off with regard to clinical expertise and patients' values and preferences produces a different evidence-based phenomenon. Linda's story highlights how the concept or apparatus of patients' preferences becomes more uncertain and takes a different path, which suggests a closer intra-action with the apparatus of clinical expertise. In other words, the clinical expertise of the therapists evolves into an intra-actional process with the bodily experiences of the patient (called values and preferences in the model of evidence-based physiotherapy). In this example, the apparatus of research is also produced differently because there is significant uncertainty as to how to approach ME in terms of external evidence. However, this does not imply that the phenomena of evidence-based physiotherapy as produced in Linda's story cuts off research. We argue that the research is intra-acting *in closer relation to* clinical expertise and patients' values and preferences than in the story of Celine.

In a similar way as demonstrated in Celine's story, Linda's story discloses how the uncertainty of ME put her identity under pressure. Linda also seems to strive to reconfigure ongoing spacetime-mattering subjectivities (Juelskjaer, 2013), showing how she struggles to find meaningful coherence for her identity and her situation of being ill and, at the same time, hopefully recovering. From the point of view of her recovery process, Linda narrates from within an agential cut. She is cut off from her illness as

past experience of becoming, and instead she enacts, and becomes enacted, as somebody who is experiencing recovery (Barad, 2007; Juelskjær, 2013). At the same time, she intra-acts between the past, present and future from the point of view of her experiences. In other words, spacetime mattering and subjectivity are threaded through each other (Juelskjær, 2013).

Thinking beyond traditional evidence-based practice in physiotherapy education

Remarkably, scholars, educators and textbooks seem to agree that challenges with using an evidence-based approach should be dealt with through increased emphasis on clinicians' and students' competences in searching, finding and critically evaluating research literature regarding the effectiveness of different methods (e.g., Fetters & Tilson, 2012; Hebert, Jamtvedt, Hagen & Mead, 2011; Jamtvedt et al., 2015; Olsen, 2015). We agree that clinicians and physiotherapy students need to be skilled to search for and critically evaluate research findings and thus identify the most effective treatment approach. Our main point here, however, is that what counts as effective is contextual, dependent on *the very becoming* of evidence-based practice within each physiotherapy encounter. Thus, clinicians and students need to develop competence in understanding the *intra-action* of research, clinical competence and patients' values and preferences. In addition, our Baradian-inspired analysis suggests that physiotherapy encounters may be *intra-active processes* of becoming. In effect, these intra-active processes within each encounter come into being via unique agential cuts through the three apparatuses (circles) within the evidence-based practice model. However, when Celine and Linda describe their treatment as being evidence-based, when referring to their encounters with different physiotherapists, they

denote research evidence as being synonymous with evidence-based practice. This indicates that, as physiotherapy students, they perceived the model of evidence-based physiotherapy as giving priority to one of the circles within the model. Their perceptions, therefore, comply with a hierarchical understanding of the model. As pointed out in our introduction, the main criticism of the model concerns how it promotes a circular and harmonic understanding despite functioning as a hierarchical model in practice (Grimen, 2009; Heggen & Engebretsen, 2009). Needless to say, this discrepancy is bound to confuse students. As critical thinking is regarded as at the core of the student learning process, including professional development in the use of evidence-based practice, we argue that students would benefit from learning how to problematise the basic premises of the model. In this regard, critical thinking should not be limited to the competence of systematic searching for and applying best (external) evidence to practice. Critical thinking needs to include the ontological and epistemological premises upon which the model is based.

Sackett and colleagues (1996) pointed to the philosophical origins of external evidence and clinical expertise as a compelling topic for clinicians, public health practitioners, purchasers, planners and the public. Rowe and Oltmann (2016) argue that there are conflicting logics between evidence-based practice in clinical medicine and learning theories. This conflict concerns the design of RCTs as an ontological and epistemological worldview, assuming context to be controlled.

Current theories of knowledge, however, point to learning as occurring in an open system that cannot be controlled (Rowe & Oltmann, 2016, p. 6). Rowe and Oltmann, thus conclude that because RCTs “risk forcing us to take up ontological and epistemological positions in a technical rationalist framework – a framework that perceives the world as having one truth, which is inconsistent with a real understanding of learning” – RCTs should not be

the favoured method by which to investigate learning (Rowe & Oltmann, 2016, p, 8).

Mumford and Anjum (2011) offer a new ontological foundation called causal dispositionalism. Here, evidence of causation involves how and why an intervention causes a certain effect. Causation concerns tendencies, which come in degrees, and the interaction of different factors is key for the outcome (Anjum et al., 2015, p. 1). These authors emphasise the need to broaden the perspective as to what counts as scientific evidence. This is especially the case with causal evidence. In the same way, we argue that Barad's intra-active perspective offers a unique approach to understanding the relations between the circles within the evidence-based practice model. Indeed, Barad's ideas of entanglement foster a new way of understanding evidence-based practice, and thus also evidence-based physiotherapy. In particular, we suggest that a Baradian approach proposes new ways to overcome the conflicting epistemological premises rooted in the different ontological understandings on which the circles within the evidence-base model are nurtured. Combining epistemology as the theory of knowing and ontology as the theory of being –“*knowing in being*” (Barad, 2007, p. 149), Barad provides a fruitful starting point for future discussions, debates and critical thinking about evidence-based physiotherapy.

Students in physiotherapy education emerge as physiotherapists through their entangled intra-relating: As Barad puts it:

Individuals emerge through and as part of their entangled intra-relating ... thereby making it impossible to differentiate in any absolute sense between creation and renewal, beginning and returning, continuity and dis-continuity, here and there, past and future. (Barad 2007, p. ix).

In other words, learning how to use evidence-based practice in meaningful ways for physiotherapists and their patients' entails acknowledging that they are entangled through intra-active processes.

Within these processes, theory and practice and external and internal evidence do not pre-exist their interactions. Rather, like all intra-actions they, “extend the entanglements and responsibilities of which one is a part” (Barad, 2007, p. ix). Hence, evidence-based practice cannot be learnt like a package of pre-existing models. Rather, a Baradian approach points to evidence-based physiotherapy as processes of becoming. The circles (apparatuses) within the model are fluid, constantly shifting in their becoming, through ongoing agential cuts. We argue that this approach offers new but also challenging ways to enhance physiotherapy students’ learning of evidence-based physiotherapy.

Acknowledgments

We want to extend our appreciation to the workshop members at the Gendering in Research (GiR) Conference at Aarhus University (Denmark), which took place 23-24 October 2016. We specifically wish to acknowledge Karen Barad for providing inspirational comments engendering the development of our voice in the field of evidence-based practice in physiotherapy education.

References

- Anjum, R. L., Kerry, R. & Mumford, S. D. (2016). Evidence based on what? *Journal of Evaluation in Clinical Practice*, 6(21), E11–E12.
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*: Durham, NC: Duke University Press.
- Barad, K. (2012). Nature’s Queer Performativity. *Kvinder, Køn & Forskning* (2).
- Dahl-Michelsen, T. (2015). Gender in physiotherapy education. A study of gender performance among physiotherapy students and changes in the significance of gender. *Centre for the Study of Professions, Oslo and Akershus University College of Applied Sciences, Oslo. (2015 nr. 4).*

- Ekeland, T.-J. (2009). Hva er evidensen for evidensbasert praksis. In Grimen & Terum (eds.), *Evidensbasert profesjonsutøvelse* (145–168).
- Ekeli, B. (2001). Det vokser ikke pærer på epletrær: Innlegg i debatten om evidensbasert fysioterapi [Pears do not grow on apple trees: Contribution to the debate about evidence-based physiotherapy]. *Fysioterapeuten*, 14, 14–24.
- Ekeli, B.-V. (2002). Evidensbasert praksis: Snublestein i arbeidet for bedre kvalitet i helsetjenesten? Eureka Forlag, Høgskolen i Tromsø.
- Engebretsen, E., Vøllestad, N. K., Wahl, A. K., Robinson, H. S. & Heggen, K. (2015). Unpacking the process of interpretation in evidence-based decision making. *Journal of Evaluation in Clinical Practice*, 21(3), 529–531.
- Fettters, L. & Tilson, J. (2012). *Evidence-based physical therapy*. Philadelphia: F.A. Davis Co.
- Gibson, B. E. & Martin, D. K. (2003). Qualitative research and evidence-based physiotherapy practice. *Physiotherapy*, 89(6), 350–358.
- Greenhalgh, T., Howick, J. & Maskrey, N. (2014). Evidence based medicine: a movement in crisis? *BMJ*, 348, g3725.
- Grimen, H. (2009). Debatten om evidensbasering–noen utfordringer. In H. Grimen & L. Terum (eds.), *Evidensbasert profesjonsutøvelse*. Oslo: abstract forlag.
- Haugen, K. H. (1997). *En utdanning i bevegelse: 100 år med fysioterapiutdanning i Norge*. Oslo: Universitetsforlaget.
- Heggen, K. & Engebretsen, E. (2009). En dekonstruktiv nærlesning av arbeidsbok for sykepleiere. *Sykepleien forskning*, 4(1), 28–33.
- Hebert, R., Jamtvedt, G., Hagen, K. & Mead, J. (2011). *Practical Evidence-Based Physiotherapy*. Churchill Livingstone. London, UK.
- Hofmeijer, J. (2014). Evidence-based medical knowledge: The neglected role of expert opinion. *Journal of Evaluation in Clinical Practice*, 20(6), 803–808.
- Højgaard, L., Juelskjær, M. & Søndergaard, D. M. (2012). The ‘WHAT OF’ and the ‘WHAT IF’ of agential realism–In search of the gendered subject. *Kvinder, Køn & Forskning* (12).
- Jackson, A. Y. & Mazzei, L. A. (2011). *Thinking with theory in qualitative research: Viewing data across multiple perspectives*. London and New York: Routledge.
- Jamtvedt, G., Hagen, K. B. & Bjørndal, A. (2015). *Kunnskapsbasert fysioterapi*. Oslo: Gyldendal Akademisk.

- Juelskjaer, M. (2013). Gendered subjectivities of spacetime matter. *Gender and Education*, 25(6), 754–768.
- Kyvik, S. & Vågan, A. (2014). *Forskningsbasert utdanning?: Forholdet mellom forskning, utdanning og yrkesutøvelse i de korte profesjonsutdanningene*. Oslo: abstract forlag.
- Mumford, S. & Anjum, R. L. (2011). *Getting causes from powers*. Oxford: Oxford University Press.
- Nicholls, D. A. & Cheek, J. (2006). Physiotherapy and the shadow of prostitution: The Society of Trained Masseuses and the massage scandals of 1894. *Social Science & Medicine*, 62(9), 2336–2348.
- Nortvedt, M. W. & Jamtvedt, G. (2009). Engasjerer og provoserer. *Sykepleien*, 7(09), 64.
- Olsen, N. R. (2015). *Evidence-based practice in physiotherapy education*. (PhD), University of Bergen, Bergen.
- Olsen, N. R., Lygren, H., Espehaug, B., Nortvedt, M. W., Bradley, P. & Bjordal, J. M. (2014). Evidence-based practice exposure and physiotherapy students' behaviour during clinical placements: A survey. *Physiotherapy Research International*, 19(4), 238–247.
- Ottosson, A. (2007). *Sjukgymnasten - vart tog han vägen?: En undersökning av sjukgymnastyrkets maskulinisering och avmaskulinisering 1813–1934*. (43), Göteborg Universitet, Göteborg.
- Rowe, M. & Oltmann, C. (2016). Randomised controlled trials in educational research: Ontological and epistemological limitations: short report. *African Journal of Health Professions Education*, 8(1), 6–8.
- Sackett, D. L., Rosenberg, W. M., Gray, J. M., Haynes, R. B. & Richardson, W. S. (1996). *Evidence based medicine: What it is and what it isn't*. London: British Medical Journal Publishing Group.
- Zabrodska, K., Linnell, S., Laws, C. & Davies, B. (2011). Bullying as intra-active process in neoliberal universities. *Qualitative Inquiry*, 17(8), 709–719.

CHAPTER 11

A critical pedagogy for online learning in physiotherapy education

Michael Rowe | Department of Physiotherapy, University of
the Western Cape

Abstract

In order to graduate physiotherapy students who are able to thrive in increasingly complex health systems, professional educators must move away from instrumental, positivist ideologies that disempower both students and lecturers. Certain forms of knowledge are presented as objective, value-free, and legitimate, while others – including the personal lives and experiences of students – are moved to the periphery and regarded as irrelevant for professional education. This has the effect of silencing students' voices and sending the message that they are not in control of their own learning. While the integration of digital technology has been suggested as a means for developing transformative teaching and learning practices, it is more commonly used to control students through surveillance and measurement. This dominant use of technology does little more than increase the

cost-effectiveness and efficiency of information delivery, while also reinforcing the rigid structures of the classroom. Physiotherapy educators who adopt a critical pedagogy may use it to create personal learning environments (PLEs) that enable students to inform their own learning based on meaningful clinical experiences, democratic approaches to learning, and interaction with others beyond the professional programme. These PLEs enable exploration, inquiry and creation as part of the curriculum, and play a role in preparing students to engage with the complex and networked systems of the early 21st century. While the potential for pedagogical transformation via the integration of digital technology is significant, we must be critical of the idea that technology is neutral and be aware that our choices concerning tools and platforms have important implications for practice.

“Intellectual dead zones”: Challenges in higher education

“There is no such thing as a neutral educational process.” (Freire, 1970, p. 34)

Health systems are increasingly being recognised as integrated, complex, and adaptive systems characterised by high levels of uncertainty and constant change (Bleakley, 2010). These features of complex systems make them inherently ambiguous and uncertain, with no clear boundaries and where predictable outcomes are lacking. The knowledge and skills required to work with the kinds of problems found in complex systems are so diverse that it is impossible for a single individual or profession to make any appreciable impact, which means that collaborative teams are essential for success (Bleakley, 2010; Frenk et al., 2010). The ability of these teams to drive change in complex systems is a function of their ability

to connect existing ideas, leading to the development and implementation of new ideas. Not only do these activities take time but they are also highly social, as success depends on how we interact with people and information in dynamic environments. Yet education for the health professions continues to follow traditional lines of thinking based on a pedagogical model that fails to consider the changing context of health systems (Frenk et al., 2010). Our pedagogies are instrumental and geared towards memorisation, conformity and high-stakes assessment, leading to classrooms that are what Giroux (2010) has called “intellectual dead zones”. The positivist ideology in medical and health professions education (Swanwick, 2014) is evident in the way that teachers view knowledge, how it is mediated through teaching practices, and the way they teach students to engage with it (Rowe & Oltmann, 2016). In this paradigm of technical rationality where knowledge is presented as objective and bounded, physiotherapy students are not well prepared for the “messy” and ill-defined reality of clinical practice (Schön, 1987). When knowledge is seen as something that can be neatly packaged and delivered to students, it is necessarily also understood as an external body of information that is produced independently of human beings; universalised, ahistorical, and value-free (Giroux, 2011).

Educators working from a positivist perspective see teaching as an act of depositing information into the minds of students, where the sonority of words is emphasised rather than their transforming power and *teaching* becomes *talking*, an act of producing facts that are received, memorised and repeated by the student (Freire, 2005). This banking model of education cannot prepare students for the spontaneous and emergent learning seen in clinical practice, where the presence of a teacher is not even required for learning to take place (Boud, 2016). When classrooms limit the pedagogical space necessary for imagining what is possible, students are not prepared for the

relatively open-ended and complex learning environments provided by clinical placements (Trede & McEwen, 2016). hooks (1994)¹ suggested that teachers' power over students dulls their enthusiasm and cultivates an obedience to authority and in fact, classrooms seem designed and optimised to keep students under control. The classroom as a place of confinement (Illich, 1970) has not changed much since the emergence of universities about 500 years ago, with a layout ensuring that control and authority are vested in the lecturer – the “legitimate” source of knowledge – and impresses upon students the notion that their words and their personal experiences have no value in their own learning (Freire, 2005). In the context of a professional education that aims to develop within students the collaborative, thoughtful, and assertive dispositions that Trede and McEwen (2016) suggest are essential for responsible and deliberate clinical practice, we must consider alternatives to the dominant paradigm in physiotherapy education.

A higher education – regardless of discipline – should aim to cultivate “citizens who are critical, self-reflective, knowledgeable, willing to make moral judgments, and act in a socially responsible way.” (Giroux, 2011, p. 3). Instead, we find teaching and learning practices that have become fragmented processes reduced to a series of predetermined steps, and utterly disconnected from their philosophical foundations. Educators and students become frustrated by the emphasis of assessment over engagement, management over creative exploration, content over community, and outcomes over discovery (Stommel, 2015). Physiotherapy departments around the world are exploring the use of technology to enable the development of the kinds of transformative and morally responsible curricula necessary to graduate clinicians who are capable of navigating the complexity of modern health systems. But rather than using

¹ bell hooks does not capitalize her first and last name

technology to create socially just spaces for undergraduate education, it is most often used to reinforce a system of authority and control over student learning (Martindale & Dowdy, 2016).

Command and control: The Learning Management System

“We shape our tools and then our tools shape us” (McLuhan, 1994, p. xxi)

The ubiquitous institutional Learning Management System (LMS) has become the de facto standard for online learning in almost all higher education institutions around the world (Wilson, et al., 2006). The integration of this technology into the classroom has enabled lecturers to enhance their lessons with shared online notes and presentations, encouraged the use of digital resources in institutional repositories, and enabled online forum discussion. These are positive but incremental improvements in the flexibility and efficiency of professional education but fall far short of being transformational (Laurillard, 2007). The LMS offers a set of features that facilitate student administration, content storage and dissemination, assessment submission, record keeping, grading, and student tracking (Sclater, 2008). While these features may enhance the management of students and content, it is difficult to see how they improve learning. The implementation of the LMS, often at enormous cost has, in most cases, been little more than a “digital facelift” that makes content distribution more cost-effective and efficient (Arvan, 2009; Campbell, 2009). The LMS is rooted in a teacher-centric model of learning where curricula are pre-determined, collaboration extends only to the boundaries of the institution, and participation is limited to paying students in isolated courses (Martindale & Dowdy, 2016). At its core, the LMS places the course behind a wall where

“The teachers are at the centre. The content is at the center. The learner is not at the center” (Watters, 2014).

In order to better understand the emergence of the LMS as the dominant paradigm of technology use in higher education, it is useful to reflect on the history of the Internet. Castells (2001) has argued that the social and cultural norms within which new technologies are created determine how the technology is used and understood. In other words, the culture of the Internet was derived from the culture of the creators of the Internet. As it grew from an unlikely collaboration between international university-based academics and students and the United States government, Castells (2001) describes the growth of community networks that reflected the culture of freedom and independent thinking that was flourishing across campuses throughout the 1960s and 70s. The Internet thus emerged as a tool of liberation, expressive of the individual freedom that was produced through the practice of openness in both its technical architecture and its social organisation (Castells, 2001). However, the technology was also being influenced by the contributions of government-based entities with an interest in controlling the nascent network, as well as entrepreneurs focused on commercialising it. These entities had little incentive to embrace the openness that was crucial for the Internet to be an instrument for freely acquiring information, sharing knowledge, aiding innovation, and encouraging democratic engagement. Today we see a tension between the historically and theoretically open architecture of the network, and the growth of software and services strongly influenced by capitalist and governmental concerns (Watters, 2014). The vision of the Internet as a democratic space that enabled the free spread of ideas is devolving into a centralised handful of walled gardens controlled by commercial entities that have sole authority to determine what is allowed (Leetaru, 2016). Watters (2014) notes that the open web is fast becoming the corporate web

and that despite the frequent invocation of the “personalisation” of learning, educational technology is increasingly developed by companies that aim to increase shareholder value rather than to enhance student learning.

In the context of higher education, the LMS is the manifestation of a teaching ideology that substitutes centralised control for democratic processes and goals, making both teachers and learners passive. Designed for observation and measurement – rather than learning – it resembles Jeremy Bentham’s Panopticon, a circular prison structure with an observation tower in the middle, from which a guard can observe inmates without their knowledge (1843). The Panopticon is a representation of power in its ideal form, increasing the number of people who can be monitored, recorded, and controlled, while at the same time decreasing the number of people needed to operate it (Foucault, 1977). The LMS functions as an Information Panopticon; a form of centralised power that uses digital technology for observation, data gathering, and control mechanisms that do not rely on physical structures like classrooms and buildings (Berner, Graupner & Maedche, 2014). The software tracks and records students’ online interactions, including the time it takes to complete a task, along with every click along the way. Based on the data that the process generates, a single teacher can monitor many students’ performances and intervene when necessary, leading to a new domain of ethics considerations that educators need to be aware of (Prinsloo & Rowe, 2015). The most common use of technology in higher education is therefore not to enhance or transform learning, but to increase control over students through surveillance and measurement. New communication paradigms should change what can be imagined and expressed and not simply reproduce what has come before. The printing press did not lead to more efficient ways of producing illustrated manuscripts and

the web is not just a more efficient telegraph (Campbell, 2009). Online learning environments should be designed as spaces for students to communicate, create, and innovate without needing permission to challenge the status quo (Gillmor, 2014; Watters, 2014). Critically, we must recognise that technologies are not neutral and that our decisions about the tools and platforms we use have pedagogical implications.

Critical pedagogy: Teaching as the practice of freedom

“The classroom, with all its limitations, remains a location of possibility.” (hooks, 1994, p. 207)

If the integration of technology in physiotherapy education is to transform teaching and learning then educators must stop presenting the discipline as a “citadel of knowledge” guarded by experts (Barradell, 2017). In order to graduate clinicians who can navigate the uncertainty of complex clinical environments, we must move beyond the focus on knowledge, skills and competencies that have for so long been the focus of physiotherapy programmes. Educators must encourage the development of a community of practitioners that is inclusive of different perspectives, and where a wide range of knowledge, behaviors, and dispositions are valued (ibid.). Freire (2005) believed that education offered students the conditions for self-reflection, a self-managed life and critical agency but that these conditions could not be developed under conditions of oppression. Critical pedagogy is an approach to teaching and learning that offers students an opportunity to develop and assert their rights and responsibilities so that they are not simply being governed. They are encouraged to act on the knowledge, values, and social

relations they develop by being responsive to problems that they identify in their own lives (Giroux, 2011). Thus, a critical pedagogy connects learning to social change, challenging students to actively engage with the world in order to make a difference (Giroux, 2010). Under these circumstances, information is not simply delivered to students but is challenged and related to the self in order to produce new knowledge as they learn how to expand their own capacity to act. This could have radical implications for physiotherapy educators who aim to create dynamic and transformative learning spaces that lead to the development of critically reflective practitioners (Patton, Higgs & Smith, 2013). At its most ambitious, critical pedagogy helps students learn how to lead a meaningful life, hold power and authority accountable, and develop the skills, knowledge, and courage to challenge common sense assumptions while working towards a more socially just world (Giroux, 2011).

A critical pedagogy asks that lecturers connect learning tasks to the experiences, histories, and resources that students bring with them to the classroom, and to link these tasks to the goal of increasing students' capacity to be critical agents who are responsive to the social problems that they experience in their own lives (Coles, 2014). In this way, students become critical co-learners in dialogue with the teacher rather than passive learners of facts about the world. The role of the teacher is to thus create *with students* the conditions under which new knowledge is constructed (Freire, 2005). Lecturers and clinical supervisors who provide students with opportunities to engage in a culture of questioning and inquiry, foreground the important issue of who is in control of the students' learning and of what counts as legitimate knowledge. When students see how specific modes of knowledge, identity and authority are constructed by their interactions, they learn to engage critically with others while at the same time

being accountable for their own views and actions (Giroux, 2010). Physiotherapy educators, clinical supervisors and clinicians must work with students to develop a critical perspective on practice that explores how knowledge, truth and power are inherently tied to professional discourse and that these concepts are not objective and value-free (Nicholls, 2012). These challenging interactions may be the impetus to develop within students the bravery and moral courage that are necessary to challenge the idea that the knowledge revealed to them during their studies may not be the only form of knowledge that is legitimate. A critical pedagogy in physiotherapy education sends the message that students' voices and lives are meaningful and powerful, and that by questioning the taken-for-granted assumptions that drive their education, they have the capacity to change it.

A traditional physiotherapy course is a well-defined container for outcomes, learning tasks, assessment and content, and the configuration of these courses determines largely the nature of the interactions that are possible within them. When students and lecturers believe that knowledge is static, stable and something that exists "out there", apart from human beings, teaching and learning take place through the controlled transmission of information from authorities into the minds of passive learners (Giroux, 2011). Within this paradigm, an online learning environment serves only as a container for the components of a course, and facilitates the movement of information from lecturers to students. It is not surprising therefore, to find that the most common use of technology in higher education – the LMS – is to define courses in digital space, where they are used to develop compliance and conformity via the limited number and types of interactions that are allowed. But these centralised, authoritarian and hierarchical structures cannot adapt quickly to change (Cabrera, 2016) and do not enable the learning encounters that develop the characteristics of health

professionals necessary to thrive in the 21st century (Frenk, et al., 2010). Nor do they encourage students and teachers to question the positivist paradigm that promotes a conception of knowledge that is objective and value-free, and upon which much of physiotherapy education is based (Higgs, Richardson & Dahlgren, 2004). If we aim to graduate capable students who are successful in modern clinical practice, we cannot use online learning environments that simply reproduce the rigid, centralised control found in the classroom. We are therefore beginning to see a shift from vertical communication structures that privilege hierarchies of control, to horizontal structures – like networks – that embody coordination, cooperation and collaboration (Bleakley, Bligh, Browne & Brice Browne, 2011). In open and networked learning environments, participants can negotiate the structure of a course, in the context of their own life experiences, values and beliefs. This framework enables content to be built around the critical examination of concepts, hierarchies and assumptions that exist within individuals and the group (Morris & Stommel, 2015). If learning is personal and knowledge is constructed in the context of our own life experiences, then we need online learning environments that not only acknowledge this but are built around it.

A personal learning environment: Creating space for the student's voice

“The truly creative changes and the big shifts occur right at the edge of chaos” (Bilder, in Schwartz, 2014).

Recognising the personalised nature of learning requires an approach to online environments that position the learner at the centre of the process, enabling them to support learning directed at educational goals that they determine for themselves (Wilson

et al., 2006; Martindale & Dowdy, 2016). While some discussions of personal learning environments (PLEs) focus on specific tools and services, the term includes all of the resources that a student uses to answer relevant questions, provide personal context, and illustrate processes that are an inherent part of meaningful learning. In this context, a PLE does not refer to a collection of services or applications but is rather a conceptual framework that describes how students approach the task of learning in online environments (Martindale & Dowdy, 2016). There are no single technology platforms that constitute a PLE and no set framework that describes how they work because they are unique to each individual, emerging as part of the learning experience. Downes (2009) has suggested that a PLE should incorporate a diversity of perspectives, enable student autonomy with respect to guiding the direction of learning, produce new knowledge through the interaction with others, and provide open boundaries that allow new perspectives into the environment. While it is possible for a PLE to be integrated with an LMS, it is also clear that as far as learning within the PLE is concerned, connection is more important than compliance, which creates a tension in the way that the two systems are configured (Wilson, et al., 2006). A PLE may therefore be achieved “using a combination of devices (laptops, mobile phones, portable media devices), applications (newsreaders, instant messaging clients, browsers, calendars) and services (social bookmark services, weblogs, wikis) within what may be thought of as the practice of personal learning using technology” (Wilson et al., 2006, p. 36).

In a PLE, the goal for the student shifts from a need to collect information to a need to draw connections from it – to acquire it, disseminate it and collaborate in its application to their own lives. The student therefore takes responsibility for organising his or her own learning environment instead of operating within one that is

determined by the teacher or the institution (Martindale & Dowdy, 2016). An example of a PLE for a physiotherapy student might include a collaborative workspace in the form of a personal blog where they reflect on meaningful clinical experiences. They should then be able to find and aggregate relevant information from a variety of both formal and informal sources, including clinical supervisors, lecturers, peer reviewed publications and textbooks, as well as practitioner blogs, YouTube and Physiopedia. The PLE should enable the student to reinterpret, combine and edit those resources using their own personal insights derived from clinical practice and then publish these new artefacts that can themselves be integrated as resources into the learning of others (Kop, 2010). In this way, students are not unquestioningly receiving information from authority figures but are actively engaged in a process of creating new knowledge where it is transformed, challenged, and personally relevant (Rowe, 2016). Unlike historical approaches to learning that see students as the recipients of objective and value-free information, the learner-centred nature of PLEs emphasises “participation over presentation, encourages focused conversation...and facilitates innovative explorations, experimentations, and purposeful tinkering that often form the basis of a situated understanding emerging from action.” (Seely Brown & Adler, 2008). Learning, in this context, is not separated from learning how to change one’s personal reality (Giroux, 2010).

The implementation of PLEs as part of undergraduate physiotherapy programmes is not unproblematic. Because every student’s PLE is different, the provision of training and support is more complex and expensive than providing support for an LMS with its vertically integrated stack of common tools. In addition, the public nature of PLEs brings with it concerns over patient privacy and the exposure of student data (Martindale & Dowdy, 2016). However, instead of choosing systems that “protect” students from these

issues, a critical pedagogy could help them learn how to manage the risks associated with public online practices by, for example, developing professional online identities and ensuring that discussions of clinical interactions protect patient, private and institutional information. Educators interested in online learning would also need to confront the challenges of helping students avoid information overload, making effective use of the digital tools embedded in a PLE, and designing a learning environment that supports self-directed learning (Kop, Fournier & Mak, 2011). This puts more responsibility on students to engage with verifiability and credibility of information, tasks that were previously performed by the teacher but which are increasingly relevant for a profession that emphasises the importance of an evidence base for clinical decision-making. Physiotherapy educators will need to grapple with the tensions that now exist between the traditional, linear, and bounded models that define current educational contexts, and the fluid, unstable and collaborative learning environments that are emerging as technology advances. While the implementation of PLEs in physiotherapy programmes will introduce new challenges, current approaches to professional education may be inadequate to develop the attributes necessary for graduates to thrive in the uncertain clinical environments of modern health systems.

Conclusion

It is easy to convince ourselves that the world in which we find ourselves in is inevitable; that history progresses in a regular, stepwise fashion leading from one rational outcome to another. This may lead us to accept things as they are without considering the possibility that alternatives may even exist. This chapter has suggested a rationale for why we struggle to graduate students who are capable of addressing the problems that arise in complex health systems.

Physiotherapy education traditionally positions knowledge as being independent and objective, separate from the reality of our personal lives and experience, which has implications for teaching and learning practices. This perspective not only informs our classroom activities but also the choices we make with respect to the development of online and digital learning environments. Rather than using the Internet to create a democratic space for learning, we have seen the emergence of a teacher-centric technology that prioritises content and administration above student learning. The LMS is just one example of the idea that technologies are not neutral and that our decisions about tools and platforms in teaching and learning have pedagogical implications.

Critical pedagogy is a pedagogical approach that offers students an opportunity to develop and assert their right to not simply be governed, and may help to create an environment in which they are able to respond to the problems that they experience in their own clinical practice. This integration of professional knowledge, new information, and personally relevant learning helps students develop the capacity to hold power and authority accountable, while working towards a more socially just world. A critical pedagogy in physiotherapy education highlights for students that their lives are meaningful and powerful, and that by questioning the taken-for-granted assumptions that drive their education, they have the capacity to change it. Adopting a technology that serves to reinforce the status quo rather than empower students with the necessary characteristics to challenge it does little to prepare them for the challenges of health care in the 21st century. While the concept of the PLE is a new and evolving construct that is not yet fully understood, it has the potential to disrupt online and digital learning practices in ways that are difficult to imagine, mainly because we have so few examples to draw from. By giving students the chance to explore, question and create as part of the curriculum

we not only provide them with the technical skills to thrive in a digital, networked society, but also demonstrate that professional education includes more than the development of knowledge, skills and competencies. The combination of a critical pedagogy with technology platforms that enable open and networked learning environments may offer exciting opportunities for a professional education that encourages students to develop a healthy disregard for the status quo.

References

- Arvan, L. (2009). Dis-Integrating the LMS. *EDUCAUSE Quarterly*, 32(2).
- Barradell, S. (2017). Moving forth: Imagining physiotherapy education differently. *Physiotherapy Theory and Practice*, 33(6), 439–447.
- Berner, M., Graupner, E. & Maedche, A. (2014). The information panopticon in the big data era. *Journal of Organization Design*, 3(1):14–19.
- Bentham, J. (1843). The works of Jeremy Bentham, published under the Superintendence of his Executor, John Bowring. Edinburgh, William Tait, (1838–1843). Vol. 4.
- Bilder, R. (2014). In Schwartz, K. (2014). On the edge of chaos: Where creativity flourishes. Mindshift: How we will learn. Retrieved from <https://ww2.kqed.org/mindshift/2014/05/06/on-the-edge-of-chaos-where-creativity-flourishes/>
- Bleakley, A., Bligh, J., Browne, J. & Brice Browne, J. (2011). *Medical education for the future: Identity, power and location*. Springer.
- Bleakley, A. (2010). Blunting Occam’s razor: Aligning medical education with studies of complexity. *Journal of Evaluation in Clinical Practice*, 16(4):849–855. DOI:10.1111/j.1365-2753.2010.01498.x
- Boud, D. (2016). Taking professional practice seriously: Implications for deliberate course design. In, F. Trede& C. McEwen (Eds). *Educating the deliberate professional: Preparing for future practices*. Springer.
- Cabrera, D. (2016). *The future of medical education: organizing, teaching, coexisting and learning from artificial intelligences*. Retrieved

- from <https://medium.com/@cabreraerdr/we-are-nothing-but-insects-organizing-teaching-coexisting-and-learning-from-data-a4ce746a6211#.yfayqxaij>
- Campbell, G. (2009). A Personal digital cyberinfrastructure. *EDUCAUSE Review* (44)5. Retrieved from <http://er.educause.edu/articles/2009/9/a-personal-cyberinfrastructure>
- Castells, M. (2001). *The Internet Galaxy*. Oxford, UK: Oxford University Press.
- Coles, T. (2014). Critical pedagogy: schools must equip students to challenge the status quo. *The Guardian*. Retrieved from <https://www.theguardian.com/teacher-network/teacher-blog/2014/feb/25/critical-pedagogy-schools-students-challenge>
- Downes, S. (2009). Learning Networks and Connective Knowledge. In, Hao Yang, H. & Yuen, S. (eds.). *Collective Intelligence and E-Learning 2.0: Implications of Web-Based Communities and Networking*. IGI Global.
- Foucault, M. (1991) *Discipline and punish: The birth of the prison*, London: Penguin.
- Freire, P. (2005). *Pedagogy of the oppressed*. 30th Anniversary Edition. London: Continuum.
- Frenk, J., Chen, L., Bhutta, Z. A., Cohen, J., Crisp, N., Evans, T., ... Zurayk, H. (2010). Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. *Lancet*, 376(9756), 1923–58.
- Gillmor, D. (2014). *Why the indie web is so important*. Retrieved from <http://dangillmor.com/2014/04/25/indie-web-important/>
- Giroux, H. (2010). *Lessons to be learned from Paulo Freire as education is being taken over by the mega rich. truthout*. Retrieved from <http://truth-out.org/archive/component/k2/item/93016:lessons-to-be-learned-from-paulo-freire-as-education-is-being-taken-over-by-the-mega-rich>
- Giroux, H. (2011). *On critical pedagogy*. London, UK: Continuum.
- Higgs, J., Richardson, B. & Dahlgren, M.A (2004). *Developing practice knowledge for health professionals*. Butterworth Heinemann.
- hooks, b. (1994). *Teaching to Transgress. Education as the Practice of Freedom*. New York: Routledge, Taylor & Francis.

- Ilich, I. (1970). *Deschooling society*. New York: Harper & Row.
- Kop, R. (2010). The design and development of a personal learning environment: Researching the learning experience. Paper H4 32 presented at the *European Distance and E-learning Network Annual Conference 2010*, June 9–12, Valencia, Spain.
- Kop, R., Fournier, H. & Sui Fai Mak, J. (2011). A pedagogy of abundance or a pedagogy to support human beings? participant support on massive open online courses. *The International Review of Research in Open and Distance Learning*, 12(7), 74–93.
- Laurillard, D. (2007). Foreword. In H. Beetham & R. Sharpe (Eds). *Rethinking pedagogy for a digital age: designing and delivering e-learning*. Abingdon, Oxon: Routledge.
- Leetaru, K. (2016). The algorithms are taking over: Who controls our online future? Forbes. Retrieved from <https://www.forbes.com/sites/kalevleetaru/2016/01/02/the-algorithms-are-taking-over-who-controls-our-online-future/#539d28e922b0>
- Martindale, T. & Dowdy, M. (2016). Issues in research, design, and development of personal learning environments. In, Veletsianos, G. (Ed.). *Emergence and innovation in digital learning: Foundations and applications*. Edmonton AB: Athabasca University Press.
- McLuhan, M. (1994). *Understanding media: The extensions of man*. Cambridge, MA: MIT Press.
- Morris, S.M. & Stommel, J. (2015). The course as container: distributed learning and the MOOC. In, Layne, P.C. & Lake, P. (eds.), *Global innovation of teaching and learning in higher education: Transgressing Boundaries*. Springer.
- Nicholls, D. (2012). Foucault and physiotherapy. *Physiotherapy Theory and Practice*, 28(6), 447–453.
- Patton, N., Higgs, J. & Smith, M. (2013). Using theories of learning in workplaces to enhance physiotherapy clinical education. *Physiotherapy Theory and Practice*, 29(7), 493–503.
- Prinsloo, P. & Rowe, M. (2015). Ethical considerations in using student data in an era of ‘big data’. In Kilfoil, W. (Ed.) *Moving beyond the hype: A contextualised view of learning with technology in higher education*. Pretoria: Universities South Africa.
- Rowe, M. (2016). Developing graduate attributes in an open online course. *British Journal of Educational Technology*, 47(5): 873–882.

- Rowe, M. & Oltmann, C. (2016). Randomised controlled trials in educational research: Ontological and epistemological limitations. *African Journal of Health Professions Education*, 8(1), 6.
- Schön, D.A. (1987). *Educating the Reflective Practitioner*. San Francisco: JosseyBass.
- Slater, N. (2008). Web 2.0, personal learning environments, and the future of learning management systems. *ECAR Research Bulletin*, No. 13 (June 24).
- Seely Brown, J. & Adler, R. (2008). Minds on fire: Open education, the long tail, and learning 2.0. *EDUCAUSE Review*, 43(1),16–32.
- Stommel, J. (2015). Critical digital pedagogy. Retrieved from <http://www.slideshare.net/jessestommel/critical-digital-pedagogy>
- Swanwick, T. (2014). *Understanding medical education: evidence, theory and practice* (Second edition). Association for the Study of Medical Education. Oxford, UK:Wiley Blackwell,
- Trede, F. & McEwen, C. (2016). Scoping the deliberate professional. In F.Trede & C. McEwen (eds.)*Educating the deliberate professional: Preparing for future practices*. Springer.
- Watters, A. (2014). *Beyond the LMS. Hack education*, September 05. Retrieved from <http://hackededucation.com/2014/09/05/beyond-the-lms-newcastle-university>
- Wilson, S., Liber, O., Johnson, M., Beauvoir, P., Sharples, P. & Milligan, C. (2006). Personal learning environments: Challenging the dominant design of educational systems. In E. Tomadaki & P. Scott (eds.), *Innovative approaches for learning and knowledge sharing*, First European Conference on Technology Enhanced Learning, EC-TEL 2006. Workshops Proceedings , (173–82). Retrieved From <http://ceur-ws.org/Vol-213/ECTEL06WKS.pdf>

Plateau 4

Researching practices

CHAPTER 12

Physiotherapy at the intersection between standardization and individual adaptation

Wenche S. Bjorbækmo | Institute of Health and Society, Faculty of Medicine, University of Oslo

James A. Shaw | Institute for Health System Solutions and Virtual Care, Women's College Hospital / Institute of Health Policy, Management and Evaluation, Dalla Lana School of Public Health, University of Toronto

Abstract

Drawing on the phenomenological tradition, contemporary physiotherapy practice may be understood as an embodied experience; one that requires *standardized* approaches to evidence-based examination, treatment, and evaluation while simultaneously requiring *adaptation* of each of these elements of practice to individual patients. Drawing on material from a study of encounters between physiotherapists and patients, this chapter addresses how the work of reconciling the needs for standardization and adaptation is accomplished in physiotherapy practice. The research approach and analysis of the material draws on a number of scholars in the phenomenological tradition, beginning

with Maurice Merleau-Ponty. The study illuminated the ways in which both explicit and tacit forms of knowing are brought together in the physiotherapy encounter. Physiotherapists use explicit knowledge primarily as a framework for thinking about assessment and intervention; however, it is the inter-subjective, communicative practice of being-with-another from which the therapeutic encounter draws its power. It is this being-with-another that enables the physiotherapist to adapt abstract, explicit knowledge for the individual with whom they co-construct physiotherapy care. The study revealed how the knowledge put into play in physiotherapy depends on the sensitivity and reflective embodied knowledge of the physiotherapist, and their bodily style and developed professional skills. This is the bodily style that in some way transforms the therapist's relation to the world, and especially to various and creative ways of knowledge translation at different moments in the process of practicing physiotherapy.

Introduction

An epistemology of physiotherapy practice that can justify and legitimize the sources of knowledge that underpin the inter-subjectivity of interpersonal relationships as well as the proven use of physical interventions in effective practice has not been fully explored or defined (Edwards & Richardson, 2008, p. 185).

This opening quotation summarizes a longstanding challenge in physiotherapy that represents an important tension in the broader literature on evidence-based practice in the health professions. The tension is between the instrumental, rational thought that accompanies an experimental approach to generating and using research evidence in clinical care, and the interpersonal, lived experience *through which* practical knowledge is

generated and put to use. In conceptual terms, these two ends of the spectrum of clinical knowledge can seem impossible to reconcile. However, one point is clear: many physiotherapists *can* and *do* reconcile these different forms of knowledge in their clinical practice every day. But how can we describe this reconciliation? What are these physiotherapists *actually doing* as they integrate explicit, scientific knowledge with tacit, experiential knowledge in their practices?

Our chapter addresses these questions by drawing on parts of the material from a study of encounters between physiotherapists and patients. The research approach and analysis of this material draws on a number of scholars in the phenomenological tradition in order to articulate the ways in which different forms of knowledge are embodied in clinical encounters. Specifically, we use the concept of “embodiment” to examine the roles of knowledge and interaction, incorporated through the body, into physiotherapy practice. Physiotherapy offers a unique and, we believe, particularly insightful example of the integration of different ways of knowing in practice. This is because physiotherapy relies on the body of the clinician, and the physical interaction between the bodies of the patient and the physiotherapist, *in explicit ways* (e.g., physical cueing while a patient learns a new motor skill). Such explicitly embodied modes of intervention provide ideal grounds for exploring the role of the body in the enactment of different kinds of knowledge in practice. Examining the embodied nature of knowledge in physiotherapy thus provides an entryway into commentary on different forms of knowledge-in-use more generally in the health professions.

The specific conceptual challenge that we hope to address may be summarized as follows: contemporary physiotherapy practice is an embodied experience, often arising from *standardized* approaches to evidence-based examination, treatment, and evaluation which

need *adaptation* to individual patients. The specific question we address is then, “how is this work of reconciling the needs for standardization and adaptation accomplished in physiotherapy practice?” In order to elucidate this question, we first summarize select arguments from the literature on evidence-based practice. We then describe the study methods and specific phenomenological perspectives that informed our analysis. We then present two excerpts from the data and analysis interwoven with phenomenological commentary to illuminate responses to our overarching question, and finish with future directions for this important question.

Prevailing and prominent perspectives of the knowledge at stake in physiotherapy

During recent decades, research within the field of physiotherapy has grown substantially, and has predominantly been based on bio-physiological and biomechanical perspectives that focus on the development of standards regarding treatment (such as “best practice” guidelines) and the assessment of “outcomes” for patients (Nicholls & Gibson, 2010). This growth in research and guidelines raises as many questions as it provides answers. Important questions include the overarching issue of what evidence-based practice means in the context of physiotherapy care, and what are the implications for the epistemologies that underlie physiotherapy as a professional discipline? We begin to address these questions in our review of select arguments from literature on evidence-based practice.

Evidence-based practice (EBP)

The claim for the superiority of evidence-based practice (EBP) is fundamentally inspired by the idea of evidence based medicine

(EBM), which is said to be the parent discipline of EBP (Nicholls & Gibson, 2010). There continues to be a transfer of ideas about evidence and quality of services originating in medicine and spreading into areas not only within health, but also fields like education, social work, management, policy and many others (Bouffard & Reid, 2012; Greenhalgh & Russell, 2009; Standal, 2008; Rousseau, 2006). This has led to an ongoing debate about whether or not the principles of “evidence based everything” (Fowler, 1997) can be imported from medicine to such a variety of other domains (Standal, 2008). We think it is timely to critically examine the importance and significance of applying EBP to physiotherapy and the possible impact on professional practice and research within this field.

EBM, its transmission, and evidence-based physiotherapy

The term “evidence-based medicine” was coined in 1992 by a group of academic physicians at McMaster University in Canada, who claimed that EBM constituted a new “paradigm for medical practice” (Sackett & Haynes, 1995; Mykhalovskiy & Weir, 2006). The basic premise of the EBM approach is now well rehearsed: that medical practice should be based on the conscientious and judicious application of best available research evidence to decision-making regarding clinical care (Sackett, Rosenberg, Gray, Haynes & Richardson, 1996). Although EBM further developed to purportedly incorporate patient preferences and the clinician’s experience, a number of authors suggest that these additional dimensions clearly occupy a lower priority for decision-making in EBM education and practice (Hammel & Carpenter, 2004; Goldenberg, 2006). The primary reason for this devaluing of the personal dimensions of clinical practice arises from the particular philosophical views

bound up in EBM (Hammel & Carpenter, 2004; Grypdonck, 2006; Goldenberg, 2006).

The EBM movement quickly spread across a number of fields, as stated above, leading in health-related literature to a broader conceptualization of “evidence-based health care” (Grypdonck, 2006). The success of the evidence-based health care (EBHC) movement may be attributed to a variety of causes. Grypdonck (2006) outlines three important reasons. The first is that the definition retains a great deal of room for interpretation, as the three elements of best evidence, patient preferences, and clinical experience may be understood in widely different ways. The second is that the approach offers the perception of greater certainty in the decision-making process, which acts as a protection for the decision-making clinician. The third and final reason is that EBHC allows for the objectification of suffering, which creates an impersonal distancing between the clinician and the patient. Other authors add that the power of the medical discourse in influencing thought in a wide variety of other fields is a key reason for the rapid dissemination and popular growth of EBHC (Mykhalovskiy & Weir, 2006).

The profession of physiotherapy was relatively quick to take up the evidence-based discourse, despite the challenges inherent in experimental research designs for physiotherapy interventions (Jette & Haley, 2005). This may relate to the profession’s close alignment with medicine and its general commitment to a positivist perspective (Hammel & Carpenter, 2004).

A growing body of research in physiotherapy examines the skills and knowledge that physiotherapists require to adopt more evidence-based practices, illuminating barriers and facilitators to achieving a more evidence-based approach (Salbach, Jaglal, Korner-Bitensky, Rappolt, & Davis, 2007; Shaw, Connelly, & Zecevic, 2010). Research promoting the use of more evidence-based approaches has tended to take for granted the philosophical

beliefs and ultimate value of the broader EBHC perspective, neglecting to consider whether and how the EBHC approach might conflict with physiotherapy care. However, recent literature has begun to challenge the assumptions of EBHC within the physiotherapy profession (Bjorbækmo & Engelsrud, 2011; Shaw & DeForge, 2012; Smith, Sparkes, Phoenix, & Kirkby, 2012). Some authors have pointed out the need to include qualitative research along with randomized controlled trials if all of the dimensions of EBP are to be brought into the rehabilitation encounter (Hammel & Carpenter, 2004; Carpenter & Suto, 2008). Drawing on literature in both physiotherapy and the broader EBM/EBHC domains, we now provide a brief overview of the philosophical assumptions that we believe need to be further challenged and explored. These assumptions primarily relate to issues of epistemology and the application of knowledge in practice.

Epistemology in EBHC

Anjum et al. (2015) have suggested that criticisms of EBM have tended to focus on one of two key points: either (1) the *epistemology* or (2) the *mechanics* of the evidence-based approach to care. Epistemologically, EBHC is widely recognized as a positivist-informed perspective that orients its inquiry toward the identification of generalizable truths. Mechanistically, this has meant embracing the value of experimental design and the hierarchy of research evidence, in which meta-analyses of randomized controlled trials are at the very top (Morse, 2005; Sackett et al., 1996; Sackett & Haynes 1995). The randomized trial is regarded as the arbiter of causal association, allowing professional disciplines access to the probabilistic knowledge of what causes particular ailments to occur and which clinical interventions can alter the course of disability and disease (Sehon & Stanley, 2003). Embedded in

this perspective is thus a particular type of knowledge about causation, characterized most basically as “explicit” knowledge, and the general lack of recognition of more “tacit”, experiential ways of knowing.

The distinction between tacit and explicit ways of knowing provides a useful heuristic for thinking about the tensions between standardized approaches to treatment in physiotherapy and individualization for patient needs (although we acknowledge that the question of generalizable knowledge extends well beyond the issue of tacit versus explicit knowledge). Polanyi (1967) popularized the distinction between these forms of knowledge by bringing together literatures from both psychology and philosophy. He explained that explicit knowledge is that knowledge which can be stated aloud or written on a page, such as “factual” knowledge, for example, of the muscles of the body. Conversely, tacit knowledge exists within the body differently, and can generally not be written or stated in satisfactory ways. Tacit knowledge is represented by such activities as riding a bicycle, or applying the right amount of pressure during active assisted stretching of a particular patient in physiotherapy care. These are “felt” and “practiced” activities as opposed to those that can be entirely learned in a classroom.

The implications of the tacit-explicit distinction for EBHC have been addressed at length in the literature. A now classic study examining the extent to which medical practice is “evidence-based” identified that clinicians followed “mindlines” as opposed to evidence-based guidelines in their care (Gabbay & le May, 2004). These mindlines represent the tacit dimensions of enacting medical care, defined as “collectively reinforced, internalised tacit guidelines” based on professional networks and clinical experience (Gabbay & le May, 2004, p. 3). Mindlines are not portrayed by these authors as something that need to be combated, but as a central source of knowledge related to enacting medical care.

Similarly, Thornton (2006) suggested that tacit knowledge is the conceptual link that connects the three elements of EBM (best available evidence, clinical experience, and patient preferences). In this sense, tacit knowledge enables the clinical judgment that informs decision-making about medical care (Thornton, 2006). The shift from a focus on explicit, scientific knowledge toward a more concerted effort to understand the ways in which different kinds of knowledge are brought together has led to a stronger focus on *the practice of clinical judgment* in EBHC (Engebretsen, Vøllestad, Wahl, Robinson, & Heggen, 2015; Greenhalgh, Howick, & Maskrey, 2014). In this sense, expert clinical judgment occurs when “rule following gives way to expert judgments, characterized by rapid, intuitive reasoning informed by imagination, common sense, and judiciously selected research evidence” (Greenhalgh et al., 2014, p. 3). However, key questions about the ways in which these processes unfold still remain.

The literature summarized above on clinical judgment as a means to bring together tacit and explicit forms of knowledge provides the starting point for our work. There remains little empirical examination of the ways in which clinicians *actually* bring these forms of knowledge together in practice in physiotherapy, navigating the tension between (more explicit) standardized, evidence-based principles and (more tacit) individualized, personalized approaches to care (Engebretsen et al., 2015). We help to address this gap with our phenomenological investigation into the practice of evidence-based physiotherapy.

Methodology

Methodology refers to the theory behind the method, including the study of what method to follow and why (van Manen, 1990). Our study was approached from a phenomenological perspective

and methodology (Finlay, 2009; van Manen, 2014). Before giving an account of the theoretical perspective and method, we provide a short presentation of the research context.

The current study is a sub study within a larger research program the main purpose of which has been to develop a program of research and build capacity to investigate primary care¹ physiotherapy in Norway². The regional committee for medical research ethics approved the project.

The aim of the present study was to examine what individually adapted physiotherapy is about. Specifically the aim was to gain insight into how physiotherapists experienced tailoring therapy to the individual, and how patients experienced the therapy they receive. The participants (nine physiotherapists and nine patients) were recruited from five clinics in two parts of the country. The physiotherapist participants had several years of work experience, including settings of manual therapy, ergonomics, and other outpatient primary care. All participating patients suffered from long lasting neck problems, defined as muscle-skeletal problems that had lasted for more than one month (inclusion criteria set by the research program). In this chapter, we report findings from physiotherapist data only.

Phenomenological perspective

The phenomenological perspective for this study was informed by the work of Merleau-Ponty (2005), which entails seeing human

1 Primary care physiotherapy involves physiotherapy provided at municipal level by either a private or public practitioner.

2 The program has three main aims: 1. through research create new knowledge about clinical practice. 2. through the development and testing in clinical practice establish methods and tools for systematic and standardized recording of data, relevant for clinical practice. 3 through testing different models of cooperation between clinicians in primary care and researchers create a basis for enduring collaboration environments.

existence as a personal, relational and always situated bodily existence. Of particular significance is the recognition that we both *are* and *have* a body -- which means that we always are both subject and object, never either /or. This duality and ambiguity of our existence in the world is described by Nancy as an existence of always being “singular plural”. He writes: “Being cannot *be* anything but being-with-one-another, circulating in the *with* and as the *with* of this singularly plural coexistence” (Nancy, 2000, p. 3). In line with Nancy, Merleau-Ponty (2005, p. 530) has stated: “Man is but a network of relationships, and these alone matter to him(sic)”.

Within a phenomenological perspective, the only way to understand the function of the living body is by enacting it oneself. As bodily beings situated in a physical and social world, it is always the body that understands and experiences meaning (Merleau-Ponty, 2005). Merleau-Ponty (2005, p. 213) names as “ready-made-meanings” the dominant ways different phenomena are understood and talked about within a certain society and culture at certain times. Such “ready-made-meanings” are pre-understandings, the discourses that constitute the general understandings of a phenomenon at a defined historical time and place – for instance the phenomenon of evidence-based practice is from a health-political perspective considered representing what is best practice.

Method

Phenomenology is best suited to investigating meaningful aspects of lived experience (van Manen, 2014). When examining lived experience, the intent is to explore directly the originary or pre-reflective dimensions of human existence from a first-person perspective. In order to produce knowledge from a first-person perspective, specifically, experiences of practicing physiotherapy, the researcher (first author) had to be with physiotherapists in

their practice and to talk with them. The study data were generated based on 16 close observations of the enactment of physiotherapy care, and interviews with nine physiotherapists and nine of the patients/ persons seeking their help.

One-to-one interviews were conducted with physiotherapists and patient participants in separate rooms at the physiotherapy clinics. They were audio recorded and later transcribed into written text. The interviewer's intention was to follow the description of empathic interviewing (Fontana & Frey, 2005) and that of conversational interviewing (van Manen, 1990). Both empathic and conversational interviewing emphasize partnership between the interviewer and the interviewee as a fundamental condition. During the interviews, the interviewer aspired to be open and interested in what the participants said and to encourage them to reflect on those experiences. Since the interviews and transcriptions are in Norwegian, the first author translated the excerpts from the interviews presented later into English.

During the close observations, the first author attempted to be present in the encounters as an interested party and without actively interrupting therapy. In writing notes after each observation, she sought to capture the lived experience of the observed situations rather than merely reporting what had been seen, done and/or said. The observations were conducted prior to the individual interviews with the physiotherapist and patient.

The phenomenon of practising evidence-based physiotherapy

Our participants, and the data co-produced throughout the course of this study, pointed our analysis toward a particular kind of phenomenology. We began the study acknowledging that we would phenomenologically focus on the role of the human body in the

incorporation (etymologically, to “bring into the body”) of standardized and personalized approaches to physiotherapy care. The tradition of work done by Maurice Merleau-Ponty was thus an obvious starting point. However, our findings encouraged us to move towards strands of phenomenology that even more explicitly examine the nature of inter-subjective experience and its relationship to the being and knowing of *each individual* (and especially the work of Jean-Luc Nancy). In our case, the individual physiotherapist seeking to provide care in an evidence-based way is the individual in question; however, their experience of providing care cannot be separated from the “patient” co-constructing the care provided.

First example

The experience of Lynett conveys the importance of the inter-subjective experience of enacting physiotherapy care. In her interview, she demonstrated the ways in which she shifts her practices of knowing in order to better understand how “standardized” rules and guidelines (i.e., her explicit knowledge) relate to the individualized human experiences of her patients. This shift represents the lived experience, always constructed inter-subjectively, of enacting evidence-based practice in real-life contexts of care.

When asked about how scientific knowledge is important for the quality of care in physiotherapy, Lynett interrupted to change the direction of the conversation:

Yes, [Lynett interrupted] – [But] I think it is a lot about communication -, to listen to the person, to get their picture and understanding of their own situation at the moment, to hear their story, their version is important. I have to understand how that specific person understands her or his own situation and also what they think might help – and what they hope for... And, and I, I spend a lot of time and effort to explain to the individual what I see, think, what I know about the

body, about such pain and the combination of symptoms displayed. It is important; both to listen and to explain.

In this quotation, Lynett conveys the interactive nature of knowing as a tacit, lived experience in the enactment of physiotherapy care. Knowing, or the epistemology of evidence-based physiotherapy, is first and foremost (for Lynett) about establishing a communicative relationship with her patient. The sharing of explicit knowledge only arises after such a relationship is established. She continued explaining the importance of this communicative relationship with each patient through an example:

... Let me give an example. I have two patients, both women, same age and educational level and.... yes,... quite similar lives. Both had received the same surgical treatment for the same kind of knee injury. They both got the same post-operative follow-up program and home program. One of them has followed the home program and done the exercises recommended. The other has also followed the program, but felt it was so painful that she has taken it easy a bit more. How then – How, then, can I use the same approach with both of them?

Lynett explained that standardized approaches to care can only be understood within the context of the lived experiences of individual patients. Her explanation conveys more than a simple “patient-centred approach”; it represents the basis of an epistemology of physiotherapy care.

Jenny Slatman (2014), who is both a physiotherapist and a philosopher, holds that lived embodiment does not simply involve subjective and individual experiences of one’s body; rather, it conditions the meaning of a shared world. She builds her argumentation on the ideas of Merleau-Ponty (2005), who has posited the perceiving, experiencing body as always personal, relational and situated in inter-subjective arrangements (it is *shared*).

The first-person perspective is itself constituted and conditioned by the inter-subjective world it discloses (Slatman, 2014). Slatman states that a first-person perspective on embodied experience cannot be isolated from the *Other's* view of one's body. In the field of health care, and physiotherapy in particular, this is highly relevant. Just as Merleau-Ponty (2005) and Nancy both suggest, being can only be understood in relation to the other human experiences that provide our own individual experience with meaning. The epistemology of evidence-based physiotherapy, therefore, must be based on the primacy of the interpersonal realm as the foundation of being-in-the-world, and hence of engaging in a practice of any kind; or as Nancy (2000) suggests, on "being singular-plural".

In his *Phenomenology of Perception*, Merleau-Ponty (2005) summarizes this latter point with his usual clarity and insight:

The phenomenological world is not a pure being, but the sense which is revealed where the paths of my various experiences intersect, and also where my own and other people's intersect and engage each other like gears. It is thus inseparable from subjectivity and intersubjectivity, which find their unity when I either take up my past experiences in those of the present, or other people's in my own (p. xxii).

The central point to emphasize here is that in order to understand the ways in which physiotherapists reconcile tacit and explicit knowledge in the enactment of evidence-based physiotherapy, we must first understand the primacy of the intersubjective relationship between physiotherapist and patient. By the same logic, we must think more critically about traditional humanist approaches to care delivery (Todres, 2007), which take the individual experience of the patient as their starting point. Knowledge (both tacit and explicit) is the presence of meaning, and as Nancy explains, "there is no meaning if meaning is not shared... meaning itself is the sharing of being" (Nancy, 2000, p. 2). Any understanding

of knowledge as it is mobilized in the physiotherapy encounter must therefore be built upon this fundamental recognition. We now turn to explore the second example, where we gained further insight into the centrality of this intersubjective grounding for the reconciliation of standardized knowledge with individualized approaches to care.

Second example

This example is based on the observations and interview with Catherina. Catherina had been observed in action in three treatment sessions with three different patients. In each observation she appeared to be engaging in similar treatment techniques, and was asked about this in her interview.

Interviewer: I have observed three treatment sessions today and in a way it seems that you have used a quite similar approach in these three encounters?

Catherina: It, it builds on the experience, on clinical experience [She pauses briefly and adds] one has to find one's way...

Interviewer: Even if similar - there was one difference that I particularly noticed today. It was, with the last person; during this session, you asked more than you did of the others - asked this man "how it was" etc.

Catherina: Yes, yes [pause], it was his feedback. It was very, there have been very - it took a really long time before I got him. I felt he did not believe in what we were doing.

Interviewer: How do you notice that?

Catherina: I have to concentrate - try to capture tensions, responses - how what we do is to the actual person - is it Ok, is it uncomfortable,

or... Sometimes I may ask a bit too much – but it's – it is sort of to get confirmation [pause]. With him I was not sure....

Interviewer: I see [pause]. Research does exist that says something about what is recommended as best treatment for people with different diagnoses, ailments and disabilities?

Catherina: Yes, of course but, I must adapt and dose differently – must take into account the individual. It is not – by all means – I do not do the same thing even though people have the same functional problem or medical diagnosis. Even if it might look quite similar.

In this excerpt Catherina emphasizes *communication*. In this sense, communication implies listening and explaining (as Lynette explained previously) and also the *wordless communication in touching and moving* expressed by Catherina. She tries to “capture tensions, responses” that help her to better understand the meaning that is co-created between physiotherapist and patient as they both engage in the encounter. This is an inter-corporal communication; an inter-bodily communication in which she seems to be ready to change and try new ways of doing therapy with individual patients according to their response at the moment. Her experiences and reflections show how therapy is always enacted in the present and constantly co-created between therapist and patient. In order to get in touch with her patient she has to concentrate to attune to her patient, and to be ready to change and improvise in her therapy.

The implicit improvisation described by Catherina here, and echoed by other physiotherapists in this study, represents a form of *reflective practice*. Such reflective practices has been addressed in a variety of fields, including education, management and physiotherapy (Sommerro, Steinsholt, & Juul, 2006). In improvisation, each person is viewed as unique and with his or her own specific potentials that become actualized during the encounter. Each individual's potentials are seen not only as valuable, but as decisively

important for the collective in the actual context – in this case, between physiotherapist and patient as they enact physiotherapy care (Sommerro et al., 2006).

The physiotherapists in this study emphasized the importance of what one (Thomas) called “*getting in touch with*” one another, in order to create common ground and an atmosphere in which a therapy process can develop and flourish. This “getting in touch” or “getting on board” as Thomas explained it, demands that the physiotherapist use more than explicit knowledge (i.e., from guidelines and experimental research). These types of explicit knowledge, generally applicable only to populations of patients as opposed to individuals, cannot be simply and linearly adopted in the encounter with an individual patient. Another physiotherapist participant (Georg) labelled this type of explicit knowledge “frameworks”, suggesting that a different kind of knowledge is necessary to actually transform a framework so that it is useful with a given patient at a given time.

Discussion and conclusion: What this study revealed

Physiotherapists use explicit knowledge primarily as a framework for thinking about assessment and intervention; however, it is the inter-subjective, communicative practice of being-with-another from which the therapeutic encounter draws its power. It is this being-with-another that enables the physiotherapist to adapt abstract, explicit knowledge for the individual with whom they are co-constructing physiotherapy care. In this concluding section, we provide summative comments on the “bringing together” of these forms of knowledge in the constitution of physiotherapy practice, and provide a call for further attention to ways of better understanding what it means for physiotherapy to be “evidence-based”.

In learning to be a physiotherapist, and through practising one's profession physiotherapists refine and develop their professional skills – this means developing embodied knowledge that in different ways transforms their relation to the world. This is a knowledge-based transformation that becomes incorporated into the habitual body and opens up the way for refined and/or new possibilities of acting at a pre-reflective level: knowing what to do in the moment, knowing when to change. “The acquisition of habit” is a “rearrangement and renewal of the corporeal schema”. It is “... the grasping of a significance, ... it is a motor grasping of motor significance”. Habit is “knowledge in the hands”, and it is only forthcoming “when bodily effort is made, and which cannot be formulated in detachment from that effort” (Merleau-Ponty, 2005, pp. 164-166). Human understanding is thus embodied understanding. The two examples presented reveal how *reasoning* in physiotherapy is a bodily activity based on theoretical knowledge, feelings, and embodied habitual physiotherapy knowledge. It is about signifying the inter-corporal experiences in-between physiotherapist and patient.

The primary implication of this work for the practical effort to improve physiotherapy practice and enhance physiotherapy education is this: The profession must acknowledge that standards (such as evidence-based guidelines) are useful as frameworks, but that the most important knowledge necessary to bring those frameworks to life lies in the encounter between physiotherapist and patient. This encounter gives explicit reason *grounding* in tacit, embodied lived experience. The inter-connections between the three components of evidence-based practice (best available research evidence, clinical experience, and patient preferences) remain largely ignored in the literature on this topic. In this chapter, we have begun to unravel the ways in which physiotherapists leverage embodied, relational knowledge-as-practice as they bring these three components

together. Importantly, as we have argued throughout, the “bringing together” of these three components of evidence-based practice constitute a distinct form of practice. These are not simply three distinct ways of working in the world, but constitute instead a new, unified practice. As Gendlin (2004) might say, the physiotherapy encounter is an “unseparated multiplicity”. Van Manen (2007) summarized nicely what we believe physiotherapy as a profession must come to understand:

What distinguishes practice from theory is not that practice applies thought or concepts technically to some real thing in the world upon which it acts. Rather, the phenomenology of practice involves a different way of knowing the world. Whereas theory “thinks” the world, practice “grasps” the world – it grasps the world pathically (p. 20).

There is still very much work to be done to understand how physiotherapists grasp the world and how they might become more sensitive and attentive in doing so. We have provided a starting point for thinking phenomenologically about evidence-based practice and the incorporation of different forms of knowledge into practice, in the context of the encounter between physiotherapist and patient. We encourage other phenomenologically-inclined researchers to further explore the *practice* of the physiotherapy profession, engaging in the effort to produce a physiotherapy that is grounded in an understanding of lived-experience, and that gains inspiration from a variety of ways of knowing.

Acknowledgements

The first author acknowledges financial support provided from The Norwegian Fund for Post-Graduate Training in Physiotherapy through the FYSIOPRIM project.

References

- Anjum, R. L., Kerry, R. & Mumford, S. D. (2015). Evidence based on what? *Journal of Evaluation in Clinical Practice*.
- Bjorbækmo, W. S. & Engelsrud, G. H. (2011). Experiences of being tested: a critical discussion of the knowledge involved and produced in the practice of testing in children's rehabilitation. *Medicine, Health Care and Philosophy*, 14(2), 123–131.
- Bouffard, M. & Reid, G. (2012). The Good, the Bad, and the Ugly of Evidence-Based Practice1. *Adapted physical activity quarterly*, 29(1), 1–24.
- Carpenter, C. & Suto, M. (2008). *Qualitative Research for Occupational and Physical Therapists: A Practical Guide*. Blackwell Publishing Ltd., Oxford, UK.
- Edwards, I. & Richardson, B. (2008). Clinical reasoning and population health: decision making for an emerging paradigm of health care. *Physiother Theory Pract*, 24(3), 183–193.
doi:10.1080/09593980701593797
- Engebretsen, E., Vøllestad, N. K., Wahl, A. K., Robinson, H. S. & Heggen, K. (2015). Unpacking the process of interpretation in evidence-based decision making. *Journal of Evaluation in Clinical Practice*, 21(3), 529–531.
- Finlay, L. (2009). Debating phenomenological research methods. *Phenomenology & Practice*, 3(1).
- Fontana, A. & Frey, J. H. (2005). The interview: From neural stance to political involvement *The Sage handbook of qualitative research* (695–729). Thousand Oaks: Sage publication.
- Fowler, P. (1997). Evidence-based everything. *Journal of Evaluation in Clinical Practice*, 3(3): 239–243.
- Gabbay, J. & le May, A. (2004). Evidence based guidelines or collectively constructed “mindlines?” Ethnographic study of knowledge management in primary care. *BMJ*, 329(7473), 1013.
- Gendlin, E. T. (2004). The new phenomenology of carrying forward. *Continental Philosophy Review*, 37(1), 127–151.
- Goldenberg, M. J. (2006). On evidence and evidence-based medicine: lessons from the philosophy of science. *Social Science & Medicine*, 62(11), 2621–2632.

- Greenhalgh, T., Howick, J. & Maskrey, N. (2014). Evidence based medicine: a movement in crisis?
- Greenhalgh, T. and Russell, J. (2009). Evidence-based policymaking: A critique. *Perspectives in Biology and Medicine*, 52(2): 304–318.
- Grypdonck, M. H. (2006). Qualitative health research in the era of evidence-based practice. *Qualitative Health Research*, 16(10), 1371–1385.
- Hammell, K.W. & Carpenter, C. (2004). *Qualitative Research in Evidence-Based Rehabilitation*. Churchill Livingstone. <http://www.sciencedirect.com/science/book/9780443072314>
- Jette, A. M. & Haley, S. M. (2005). Contemporary measurement techniques for rehabilitation outcomes assessment. *Journal of Rehabilitation Medicine*, 37(6), 339–345.
- Merleau-Ponty, M. (2005). *Phenomenology of perception* (5 ed.). Translated by Landes DA. Abingdon, Routledge.
- Morse, J. M. (2005). Qualitative Research Is Not a Modification of Quantitative Research. *Qualitative Health Research*, 15(8), 1003–1005.
- Mykhalovskiy, E. & Weir, L. (2006). The Global Public Health Intelligence Network and early warning outbreak detection: a Canadian contribution to global public health. *Canadian Journal of Public Health/Revue Canadienne de Sante`e Publique*, 42–44.
- Nancy, J.-L. (2000). *Being singular plural*: Stanford University Press.
- Nicholls, D. A. & Gibson, B. E. (2010). The body and physiotherapy. *Physiotherapy Theory and Practice*, 26(8), 497–509.
- Polanyi, M. (1967). The tacit dimension.
- Rousseau, D. (2006). Is there such a thing as evidence based management? *Academy of Management Review*, 31(2): 256–269.
- Sackett, D. L. & Haynes, R. B. (1995). On the need for evidence-based medicine. *Evidence-Based Medicine*, 1, 5–6.
- Sackett, D. L., Rosenberg, W. M., Gray, J. M., Haynes, R. B. & Richardson, W. S. (1996). Evidence based medicine: what it is and what isn't: British Medical Journal Publishing Group.
- Salbach, N. M., Jaglal, S. B., Korner-Bitensky, N., Rappolt, S. & Davis, D. (2007). Practitioner and organizational barriers to evidence-based practice of physical therapists for people with stroke. *Physical Therapy*, 87(10), 1284.

- Sehon, S. & Stanley, D. (2003). A philosophical analysis of the evidence-based medicine debate. *BMC Health Services Research*, 3(1), 14.
- Shaw, J. A., Connelly, D. M. & Zecevic, A. A. (2010). Pragmatism in practice: Mixed methods research for physiotherapy. *Physiotherapy Theory and Practice*, 26(8), 510–518.
- Shaw, J. A. & DeForge, R. T. (2012). Physiotherapy as bricolage: Theorizing expert practice. *Physiotherapy Theory and Practice*, 28(6), 420–427.
- Slatman, J. (2014). Multiple dimensions of embodiment in medical practices. *Medicine, Health Care and Philosophy*, 17(4), 549–557.
- Smith, B., Sparkes, A. C., Phoenix, C. & Kirkby, J. (2012). Qualitative research in physical therapy: a critical discussion on mixed-method research. *Physical Therapy Reviews*, 17(6), 374–381. doi:10.1179/1743288X12Y.0000000030
- Sommerro, H., Steinsholt, K. & Juul, R. i. (2006). *Improvisasjon: kunsten å sette seg selv på spill*. [Oslo]: Damm.
- Standal, Ø. F. (2008). Celebrating the insecure practitioner. A critique of evidence-based practice in adapted physical activity. *Sports Ethics and Philosophy*, 2(2), 200–215.
- Thornton, T. (2006). Tacit knowledge as the unifying factor in evidence based medicine and clinical judgement. *Philosophy, Ethics, and Humanities in Medicine*, 1(1), 2.
- Todres, L. (2007). *Embodied enquiry: Phenomenological touchstones for research, psychotherapy and spirituality*. Springer.
- van Manen, M. (2007). Phenomenology of practice. *Phenomenology & Practice*, 1(1).
- van Manen, M. (1990). *Researching Lived Experience* (Vol. 1). New York: State University of New York Press.
- van Manen, M. (2014). *Phenomenology of practice: meaning-giving methods in phenomenological research and writing*. Walnut Creek, Calif.: Left Coast Press.

CHAPTER 13

Communication in physiotherapy: challenging established theoretical approaches

Amy Hiller | Department of Physiotherapy, The University of Melbourne

Clare Delany | Department of Medical Education, The University of Melbourne

Abstract

Physiotherapy practice aims to optimize movement in order to improve functional abilities within peoples' lives. Effective communication between patient and therapist is central to achieving these aims. The biopsychosocial model and patient-centred care are two established approaches to health communication and are promoted as frameworks to inform physiotherapy practice. In this chapter, we use empirically derived examples of communication in practice to explore whether and how these approaches are related to communication in physiotherapy. We draw data from two separate qualitative studies of communicative interactions in primary practice physiotherapy settings. Findings from these two studies demonstrated that physiotherapy clinical communication is structured and physiotherapist-directed, and is adaptive and responsive

to the needs of the individual patient. Although communication was structured and clinically orientated, findings suggested that adaptations such as casual conversation, humour, and touch acted as subtle mediating forces. Such communicative adaptations represented dynamic, interpretive, and relational components occurring in patient-physiotherapist interactions. These findings contrast with descriptions of patient-centred and biopsychosocial approaches to communication which focus on how communication should explicitly include the patient's perspective. Our discussion provides possible explanations for the apparent discrepancy between theory and practice of communication in physiotherapy. Taken together, the studies highlight a need for further research examining physiotherapy communication processes to generate interactional theories that both represent and frame physiotherapy clinical communication.

Introduction

A recognised tenet and philosophy of physiotherapy practice is that all aspects of treatment are grounded in and guided by relevant theory and available evidence (Hills & Kitchen, 2007; Moseley, Herbert, Sherrington & Maher, 2002; Trede & Higgs, 2009). This ideal extends to the communicative processes and deliberative thinking required for clinical reasoning, and ethical and reflective communication. Theories and evidence about skills, knowledge, and values inherent in physiotherapy practice provide conceptual explanations of how and why procedures and treatment paradigms work (Reeves, Albert, Kuper & Hodges, 2008). Similarly, theories of communication in physiotherapy should help practitioners to clarify how, when, and in what format, to obtain information from a patient and how to give information, advice, educational material, and support back to the patient (Schiavo, 2007).

To continue to advance understanding and practice in health communication applied to physiotherapy, a mix of inductive (derived from actual practice) and deductive (derived from a research base or philosophical theory) analysis is required (Schiavo, 2007). This chapter has four main sections. We begin by presenting findings from research about communication occurring in the private practice patient-physiotherapist encounter that were largely inductively derived. Second, we present key features of two established theoretical approaches to communication: the patient-centred and biopsychosocial approaches. Third, we analyse whether and how our empirical findings relate to these theoretical approaches and discuss likely reasons for the resultant discrepancies. Finally, our conclusions highlight the need for theoretically-driven work regarding the specifics of optimal communication in physiotherapy practice.

Communication is integral to physiotherapy practice

Communication is included as one of the core professional competencies in physiotherapy codes of conduct (Health & Care Professions Council, 2013; Physiotherapy Board of Australia, 2014; WCPT, 2011). Through their communicative interactions, physiotherapists can educate, motivate, empower or disempower, express empathy or authority, demonstrate interest, and build trust (Hiller, 2017). Physiotherapists' processes of questioning can direct the amount and type of information they obtain about a person's condition and circumstances and facilitate or impede patients' capacities to express what matters to them about their health and wellbeing (Afrell & Rudebeck, 2010).

The process of communication between therapist and patient is increasingly recognised as therapeutic in itself, because of its

potential to directly influence patient outcomes (Hall, Ferreira, Maher, Latimer, & Ferreira, 2010; Jeffels & Foster, 2003; Klaber Moffett & Richardson, 1997). For example, there is growing research interest in the effects of particular communicative techniques, such as motivational interviewing and counselling, on outcomes of physiotherapy treatment (Lonsdale et al., 2012; O'Sullivan, 2012). Studies have also shown that patients perceive that therapists' communicative capacity is a pivotal characteristic of good physiotherapy (Cooper, Smith, & Hancock, 2008; Potter, Gordon & Hamer, 2003).

Two studies of communication in physiotherapy

The studies presented in this chapter draw from two PhD projects (Delany, 2005; Hiller, 2017) that examined how physiotherapists communicate with their patients. The studies were independently conducted (12 years apart). Both collected audio-recordings of the one-on-one communication between patients and physiotherapists in primary practice treatment settings in Australia. Although some aspects of these studies have been published (see Hiller, Guillemin, & Delany, 2015; Hiller, 2017; Delany, 2005), the research findings have not previously been combined.

Study 1 (completed in 2005) investigated how physiotherapists provide information to their patients and obtain their informed consent to treatment (Delany, 2005). The data comprised seventeen transcripts of audiotaped treatment encounters and interviews with the participating physiotherapists. Recording and analysing the communication was conducted using an interpretivist methodology (Packer & Addison, 1989). The focus was on how physiotherapy communication in the private practice setting

reflects the ethical ideal of communication that respects a patient's autonomy.

The aims of study 2 (completed in 2016) were to describe communication occurring in practice and to compare findings with established approaches to healthcare communication (Hiller et al., 2015; Hiller, 2017). Drawing from the same interpretivist framework, study 2 used aspects of ethnographic and grounded theory methodologies and incorporated observations and audio-recordings of 52 patient-physiotherapist consultations. Data were analysed inductively with steps involving transcription, data coding, memo-writing, and concept mapping described by Braun and Clarke (2007) and Charmaz (2006).

Ethics approval for both studies was granted by the Human Research Ethics Sub-committee at the University of Melbourne: ethics ID DPH 1/2003 (study 1) and ethics ID1238974 (study 2). Informed consent was obtained from all participants in both studies. These two studies had similar methods but different aims. We, the authors, met several times to compare and contrast the findings of each study. Our analysis of these findings highlighted strikingly similar patterns of communication occurring in physiotherapy private practice. These patterns included:

- A consistent and repeatable structure of communication transitioning through phases of the treatment session;
- an overall tone of directiveness on the part of the therapist, and prominence of the physiotherapist's agenda;
- a level of responsiveness and preparedness to adjust to the individual patient to facilitate understanding and build rapport.

Table 1 presents the key themes derived during analysis of the audio-recorded observational data from each study that are then explained in the text.

Table 1: Findings from studies of physiotherapy communication

Study	Theme	Explanation and interpretation
Study 1 (2005)	Structured communication: “building fences”	<ul style="list-style-type: none"> • Content and focus was consistent across treatments • Consistent and recognisable communicative structure that correlates to descriptions of clinical reasoning patterns • Physiotherapists communicated as an authoritative, problem-solving and/or helping figure • Assumption from the therapist that the patient will comply • The metaphor of building a fence represents the idea that the therapist was separate to the patient as evidenced by a clear and consistent pattern and structure to their communication
	Gaps in the fence	<ul style="list-style-type: none"> • Gaps existed in this communicative structure • Physiotherapists attended to cues from each patient by watching and listening during conversations • Intuitive reasoning or personal judgement was used by physiotherapists to respond to individual patients
Study 2 (2017)	Physiotherapist-led communication	<ul style="list-style-type: none"> • Physiotherapists provided a consistent structure • Physiotherapists provided communicative direction • Physiotherapists made decisions • Content consistently focussed on physical aspects and pain
	Adapting to build rapport	<ul style="list-style-type: none"> • Physiotherapists intuitively adjusted elements of communication for individual patients, including: <ul style="list-style-type: none"> - Body language and eye contact - Touch - Casual conversation - Humour • Our interpretation was that communication was often adapted in order to build rapport with patients

The theme “structured communication: building fences” from study 1 depicted the consistent patterns of communication occurring in patient-physiotherapist encounters. Physiotherapists directed the biomedically focused content of communication and used a consistent structure as described by Jones, Jensen, and Rothstein (1995). A key feature of the structured approach was methodically gathering information to form hypotheses, and to continue to test those hypotheses. The language used in this approach reflected objectivity and precision and often included short, closed questions from the therapist with similarly short responses from the patient. This communicative approach has also been found in other authors’ descriptions of the communicative and cognitive processes of clinical reasoning (Jensen, Shepard & Hack, 1990; Parry, 2004; Talvitie & Reunanen, 2002).

The structured pattern is evident in the following example:

Physiotherapist: What sort of pain?

Patient: Um, it’s like a sharp pain.

Physiotherapist: Is it there all the time?

Patient: No. Umm.

Physiotherapist: So it just comes back?

Patient: Sort of when I twist, when I’m twisting or moving.

Physiotherapist: Twisting and moving?

Patient: Yeah.

(Study 1, treatment encounter 5)

An overall message of expertise, authority, and certainty was conveyed through the physiotherapists’ structured communication. There was also a corresponding, but largely unstated assumption that the patients would comply with the therapist’s agenda. This pattern is demonstrated in the following example:

Physiotherapist: Alright. Then. You have come to the movement...test. So I would like to look at your middle back first.

Patient: Mmm.

Physiotherapist: If you would like to put your hand like this. Right. Is there any pain?

Patient: No.

Physiotherapist: Okay. Try and keep your elbows together, and try to point it up towards the ceiling. That's good.

Patient: I'm feeling it sort of now.

Physiotherapist: Try and go a bit further. There, okay?

Patient: Yep.

Physiotherapist: How about trying to touch your opposite shoulder with your elbow. Does that still hurt?

Patient: No, that feels fine.

Physiotherapist: Elbows out like this. Try to turn. Anything?

Patient: No.

(Study 1, treatment encounter 8)

A second theme about communication in study 1 was the idea of communication breaks, or “gaps in the (communication) fence”. These were described as subtle gaps in the structured communication occurring between patient and therapist. Physiotherapists incorporated strategies such as watching and pausing to listen in order to perceive patients' level of comfort, engagement and reactions during treatment sessions. Subtle changes in communication, such as the use of open questions, were used to tailor the interaction to the individual patient and to allow an opportunity for the patient to incorporate their agenda. Physiotherapists, however, rarely directly asked the patients for their opinion or perception, and they controlled almost all the gaps and adjustments in the communication fence.

The example below demonstrates one of these gaps. It included an open question from the physiotherapist that was then followed by space for the patient to answer. This extract is characterized by pauses that suggest the physiotherapist was listening and encouraging the patient to elaborate.

Physiotherapist: How have you been since last week?

Patient: Well after my workout with you, that night it was terrible, I got home and I, before I went to bed, I did those...the exercises and might have done it too much, I'm just not sure...um, you know...and that was a bad night, but then the night before last I found I could lie on my side.... And whenever I think of it I'm doing my tummy pulling, but I found that very difficult to do.... I'm thinking of it.

Physiotherapist: Good....

Patient: You, know. I'm thinking of my posture a lot more too.

Physiotherapist: Well done. It will probably get easier to do it when you're doing activities as well and I guess it's, as much as anything it's almost on the return from bending over that you need to draw the tummy in to support the spine.

(Study 1, treatment encounter 14)

The process of creating gaps in the fence by adjusting the routine structure seemed to represent a way of providing a space for the patient to speak more. It was a technique commonly used by participants in the study.

Two central themes were also developed in study 2. The theme “physiotherapist-led communication” encapsulated how physiotherapists directed many aspects of communication. Physiotherapists were observed as creating a consistent structure to the treatment session that involved an initial greeting, conversation about the presenting problem, physical assessment, treatment and education, and finally, closure. Within this structured interaction, physiotherapists further directed the communication by initiating conversation, asking predominantly closed questions, sometimes interrupting or redirecting communication, and using biomedical language. In addition, physiotherapists made almost all decisions that were communicated during treatment encounters. Such decisions included: goals of treatment, type and amount of treatment, home exercise programs, and when the patient should return for

their next appointment. As an example, in the following extract, the physiotherapist set goals, and made decisions about the patient's exercises, home activities, and when he should return for further treatment.

Physiotherapist: So your goals for me mainly are – to add another day of walking.

Patient: Yeah.

Physiotherapist: Continue doing the exercises.

Patient: Yeah.

Physiotherapist: Um... and... yeah and we'll touch base in the new year and see how your back is feeling then. And I also want you to keep an eye on how the mornings are going.

Patient: Yeah.

(Study 2, treatment encounter 40)

The physiotherapist-led communication theme also incorporated a consistent focus on pain and biological aspects of patient conditions. The following example demonstrates a physiotherapist repeatedly asking closed questions about pain.

Physiotherapist: Pain here when I touch?

Patient: Not much, no.

Physiotherapist: Not much? What about here?

Patient: Nup.

Physiotherapist: Is that pain now?

Patient: A little bit, not much.

Physiotherapist: But if I touch here there is pain?

Patient: Yep (*slightly pained*).

Physiotherapist: Okay, it's the muscle.

(Study 2, treatment encounter 1)

These transcript extracts also demonstrate how physiotherapists directed the communication by initiating all questions and conversation, with the patient generally providing short responses.

The second central theme from study 2, “adapting to build rapport”, depicted many elements of communication occurring during patient-physiotherapist encounters that were responsive to the needs of individual patients – and appeared to be aimed at developing rapport. For example, touch was adapted through adjustments in therapist hand positions, rhythm, and pressure during manual treatment. In the following transcript example, the physiotherapist’s touch adapted to the patient’s cues.

Patient: Ah he he he he (*laughing*)... Ohhh that’s really sore (*in a pained expression*) ah he. So um.

Physiotherapist: Very gentle (*hands observed to soften and slow in response*).

Patient: Thank... Yes you are [name of physiotherapist]. Ah he he. I just know my, my um, muscles are sensitive.... As I said I wouldn’t come back if I didn’t have full confidence with you... and I know in the end it feels better in the long run you know. Ah he he.

Physiotherapist: Ah (*slight smile*).

(*Study 2, treatment encounter 17*)

In addition, a form of “caring” touch, such as a rubbing the patient’s shoulder, was observed to be incorporated by physiotherapists as an adaptive form of communication that conveyed empathy.

Observations also established that physiotherapists: changed their body positions to reflect and accommodate those of their patients; engaged or disengaged eye-contact regularly, depending on perceived patient comfort; engaged in casual, social conversation with patients; and incorporated humour. Patients, in turn, adjusted their communication in response to physiotherapists, using their body positions, head nodding and notably, humour, to demonstrate their engagement and position within the encounter.

These communicative tools were dynamically included in treatment encounters between patients and physiotherapists in conjunction with the physiotherapist-led aspects of communication.

The similarities in how therapists communicate with their patients derived from these two studies are significant, given that they were conducted a decade apart and with different overall study goals. The themes “structured communication: building fences” and “physiotherapist-led communication” highlight a therapist-controlled communication style that has also been captured in other studies. For example, research from Denmark and the United Kingdom demonstrated that decisions within treatment sessions are made by physiotherapists with minimal patient involvement (Dierckx, Deveugele, Roosen, & Devisch, 2013; Jones et al., 2014). Other communication research has shown that physiotherapists drive goal-setting processes (Parry, 2004); talk twice as much as patients (Roberts & Bucksey, 2007); use closed questions (Cruz, Moore, & Cross, 2012; Opsommer & Schoeb, 2014); focus predominantly on pain and understanding the clinical condition (Cruz et al., 2012; Opsommer & Schoeb, 2014); and limit incorporation of the patient perspective (Josephson & Bülow, 2014; Opsommer & Schoeb, 2014).

The communicative dominance of physiotherapists, however, is complemented by another strong finding of “adaptation” (study 2) and “gaps in the fence” (study 1). These findings suggest that nuanced communicative approaches are also occurring within patient-physiotherapist encounters. Despite being led by the physiotherapist, the interaction contains dynamic, interpretive, and relational components. While the structured clinical orientation of the communication acts to control the overall direction of the communication, there are subtle mediating forces at work. These forces or influences include the use of casual conversation and humour, and the use of touch not only as a form of therapy,

but also to convey interest, care, and attention. The findings of these two studies portrayed physiotherapy communication as a combination of structured, directed, negotiated, and adaptive interactions. There is, however, a need for further research to examine therapists' explanations of these styles and their impact on patients.

Other research has similarly highlighted an often tacit, but responsive aspect in physiotherapy clinical communication (Bjorbaekmo & Mengshoel, 2016; Tasker, Loftus, & Higgs, 2011; Thornquist, 1991). Tasker and colleagues (2011) explain how casual conversation and active listening are used to develop responsive relationships between patient and physiotherapist in the community setting. The responsive nature of physiotherapists' communication is also clearly demonstrated in the work of Bjorbaekmo and Mengshoel (2016) who describe the types and impact of touch in the therapeutic encounter. Thornquist (1991) described physiotherapists' use of eye gaze to convey interest in each patient and to inform the constant adjustments made to both patient and therapists' body positions in physiotherapy consultations. In conjunction with our results, these findings affirm that an adaptive, responsive component exists within patient-physiotherapist communication. Tasker and colleagues (2011) emphasise that this responsiveness creates a human connection, or rapport, between patient and therapist.

Unlike these studies where the authors attributed a particular purpose to therapists' communication, the key question this chapter seeks to address is how our empirical findings relate to, or are represented by, prominent approaches to healthcare communication. In the second half of this chapter, we detail some of the main features of patient-centred and biopsychosocial approaches to enable this analysis.

Key features of biopsychosocial and patient-centred theoretical approaches to communication

In physiotherapy, as in other healthcare professions, patient-centred and biopsychosocial approaches are established as the guiding frameworks for how practitioners and patients should communicate with their patients (Pinto et al., 2012; Sanders, Foster, Bishop & Ong, 2013). A biopsychosocial approach to healthcare is premised on the idea that poor health or physical dysfunction is not only grounded in a physical problem, but is influenced by a person's feelings, their ideas about health and events and circumstances in their lives (Engel, 1977). Extrapolated to health communication, a biopsychosocial approach requires a practitioner to incorporate biological, social, and psychological factors when assessing, diagnosing, providing treatment, and interacting with their patient (Engel, 1978; Epstein et al., 2003). Each of these three inter-related components of communication should be purposefully included and integrated within clinical interactions. Roter and colleagues (1997) described biopsychosocial communication as evidenced by a practitioner including more social talk and fewer practitioner questions in order to achieve some balance between psychosocial and biomedical content. More recently, Smith and colleagues (2013) suggested that the use of open-ended questions illustrates this approach in practice.

The patient-centred approach to communication is closely related to the biopsychosocial approach. Overarching features are that communication is explicitly used to share information and responsibility, reduce perceived power differences and incorporate the needs and perspectives of individual patients (Bensing, 2000; Mead & Bower, 2000). Within a patient-centred approach, communication is used to demonstrate respect for, and inclusion

of, each individual patient's knowledge and experience (Bensing, 2000; Byrne & Long, 1976). Being patient-centred requires the use of communicative strategies to elicit and incorporate the patient's narrative and experiences to inform and shape the encounter (Epstein & Street, 2011). Decisions about care are shared and the patient-practitioner relationship is viewed as a collaborative alliance. Specific communicative features include the use of open-ended and non-directive questions; including and responding to emotional aspects of a person's experience; and avoiding interrupting patients (Epstein & Street, 2011; Grol, de Maeseneer, Whitfield, & Mokkink, 1990; Mead & Bower, 2000; Smith, Fortin, Dwaamena & Frankel, 2013; Winefield, Murrell, Clifford, & Farmer, 1996).

Does communication in physiotherapy practice align with the biopsychosocial and patient-centred approaches?

Physiotherapy literature and codes of conduct suggest physiotherapists should aspire to incorporate biopsychosocial and patient-centred approaches into their clinical communicative practice (National Physiotherapy Advisory Group, 2009; Physiotherapy Board of Australia, 2014; Pinto et al., 2012; Sanders et al., 2013). One interpretation of the research findings presented in this chapter is that this may not be explicitly and purposefully happening. The findings demonstrated a distinct communicative focus on the biomedical aspects of a patient's presenting problem: therapists paid little overt attention to psychosocial aspects of their patients' condition or experience. Physiotherapists also controlled the communication by using closed questions, initiating conversations, interrupting patients and making decisions. These physiotherapist-directed styles of communication and the biomedical focus align more closely with practitioner-centred and biomedical

approaches than biopsychosocial and patient-centred approaches to health communication. Documented communication features of a patient-centred approach such as open questions, minimal interruptions, and shared decision making (Bensing, 2000), were not overtly incorporated into observed physiotherapy treatment encounters. Other scholars of physiotherapy communication have also reached similar conclusions about the predominance of communication that represents biomedical and practitioner-centred approaches (Cruz et al., 2012; Josephson, Woodward-Kron, Delany, & Hiller, 2015; Opsommer & Schoeb, 2014).

The data did, however, demonstrate the presence of adaptive or responsive communication. This style of communication is closer to a patient-centred approach because it involves adjusting to the perceived needs of the individual patient, although these adaptations did not derive from the patient's perspective. Rather, the key function of adaptive communication seemed to be instrumental, that is, to build rapport between patient and therapist. This focus distinguishes adaptive communication from a patient-centred approach where the communication content and direction should draw from the patient's stated needs. Touch and other forms of non-verbal communication were prominent features of adaptive communication (particularly in study 2), and are not documented as features of biopsychosocial or patient-centred theories.

Why is there a discrepancy between communication theory and communication in practice?

Research demonstrates that physiotherapists find biopsychosocial and patient-centred approaches difficult to implement in practice (Mudge, Stretton, & Kayes, 2013; Sanders et al., 2013; Singla, Jones,

Edwards, & Kumar, 2015). Studies have shown that physiotherapists recognise and acknowledge the need to incorporate patients' perspectives and psychosocial factors and understand broad features of both patient-centred and biopsychosocial approaches (Hiller, 2017; Sanders et al., 2013; Singla et al., 2015). Despite this awareness, however, how to practically integrate these elements remains elusive, and physiotherapists' "fall back" position is to focus on biomedical aspects of a patient's presenting condition (Mudge, Stretton, & Kayes, 2013; Singla et al., 2015). The challenge of practical translation of these models resonates with previous critiques. For example, Cooper and colleagues (1996) suggested that there has been little theorisation regarding how the three domains within the biopsychosocial model might be integrated, including how they are relate to and influence each other, and whether they are regarded as equally valuable for each health encounter. Other authors have stated that the biopsychosocial approach is an ideology and a vision for practice, rather than a clear clinical method (Epstein & Borrell-Carrio, 2005; McLaren, 1998). It is left to the health practitioner to determine how to include and combine each of the biological, social, and psychological dimensions.

Similarly, some critiques of patient centred care suggest it is a "fuzzy concept" that is poorly defined and therefore difficult to operationalize (Bensing, 2000, p. 21; Nolan et al., 2004). The patient-centred approach was derived from an impetus to shift away from medicalization toward individual personalization of medical care for each patient (May & Mead, 1999). Pulvirenti and colleagues (2011) suggest that if care is to be defined by a patient rather than by the health professional, patients will need active support and empowerment from practitioners. Interactive components of patient centred care have been specified as: validation of the patient's experience, consideration of their broader context, working towards mutual understandings between the health

professional and patient and taking a partnership approach to the therapeutic encounter (Stewart et al., 2003). These more specific components, however, were not visible in the data presented in this chapter and have not been actively translated to physiotherapeutic theories that capture how to communicate with patients.

A second explanation for why there may be a discrepancy between communication theory and practice is that the physiotherapy profession has focused on generating evidence and aligning their clinical practice techniques and outcomes of treatment with biomedical constructs (Chipchase et al., 2006). This biomedical and “practitioner as expert” focus, has permeated physiotherapy communication research which demonstrates that physiotherapists predominantly practice in a practitioner-centred manner. It is possible that physiotherapists have neglected to consider strategies that might help them understand the individual patient perspective and achieve psychosocial aspects of communication (Sanders et al., 2013; Singla et al., 2015).

A further possible reason for the discrepancy between communication practice and theory in physiotherapy is that both the patient-centred and biopsychosocial approaches were originally developed for medicine. A psychiatrist, Engel (1978), first formally described the biopsychosocial approach. He challenged the biomedical perception within medicine and proposed that social and psychological aspects of each patient be incorporated into medical practice and communication alongside the biological content (Engel, 1978).

Despite the obvious similarities between medicine and physiotherapy as healthcare professions aiming to alleviate pain and other symptoms, aspects of physiotherapy communicative practice differ considerably from its medical counterpart. For example, physiotherapists use touch as a responsive and central communicative tool (Nicholls & Holmes, 2012), and this is notably different from medical

practice. Used as a form of communication in physiotherapy, touch can assist understanding, perception of, and preparation for movement; demonstrate care; and form a core part of treatment and education (Roger et al., 2002). In physiotherapy, touch establishes a physical relationship that has been described as a sensitive, responsive, and expressive bodily conversation (Bjorbækmo & Mengshoel, 2016; Poulis, 2007; Roberts & Bucksey, 2007).

The significance of touch and other types of physiotherapy-specific communication, including extensive education and advice, and the reliance on active patient involvement (Poulis, 2007), means that any discussion and analysis of communication in physiotherapy should include these interactional dimensions.

Conclusions

This chapter has compared physiotherapy communication as it occurs in physiotherapy treatment encounters, with two common theoretical approaches to healthcare communication: the biopsychosocial model and patient-centred care. These two established approaches emphasise the importance of shifting traditional provider authority from the practitioner to the patient and the need to incorporate each patient's perspective and preferences within communication exchanges. These focuses were not evident in our studies, conducted in physiotherapy private practice settings. Instead, our findings demonstrated that despite physiotherapists being responsive and open to include a patient's individual needs and concerns, the dominant model of interaction was a practitioner-centred approach. Although the physiotherapy profession supports the ideals of patient-centred and biopsychosocial approaches (National Physiotherapy Advisory Group, 2009; Physiotherapy Board of Australia, 2014), our findings suggest that therapists' approaches to treatment and

communication (in the primary practice setting) are firmly grounded in biomedical models of practice.

Our aim in this chapter has been to stimulate further debate and discussion and promote an interest in theorising physiotherapy communication. The features, goals, and styles of physiotherapy communication need to be thoroughly described and analysed to examine possibilities for physiotherapy-specific adaptation of biopsychosocial or patient-centred approaches, or alternative approaches that capture the distinct communicative goals of physiotherapy treatment. The findings lead to questions that future research should address. These questions include: How is physiotherapy communication used to educate, motivate, empower, disempower, express empathy, authority, humility, and interest in a range of clinical situations? How effective are physiotherapy communication strategies according to patients? What type of communication theory could frame and support the practice of communication in physiotherapy professional practice?

The comparison between communication in theory and in practice in this chapter also provides opportunities for physiotherapy educators to consider how other behavioural and social science theories (many of which are discussed in this book, see also Schiavo, 2007) might be used to frame and clarify the goals and strategies of communication.

References

- Afrell, M. & Rudebeck, C.E. (2010). 'We got the whole story all at once': physiotherapists' use of key questions when meeting patients with long-standing pain. *Scandinavian Journal of Caring Sciences* 24(2): 281–289. doi:10.1111/j.1471-6712.2009.00718.x
- Bensing, J. (2000). Bridging the gap. The separate worlds of evidence-based medicine and patient-centered medicine. *Patient Education and Counseling*, 39(1), 17-25. doi:10.1016/s0738-3991(99)00087-7

- Bjorbaekmo, W. S. & Mengshoel, A. M. (2016). "A touch of physiotherapy" – the significance and meaning of touch in the practice of physiotherapy. *Physiotherapy Theory and Practice*, 32(1), 10-19. doi: 10.3109/09593985.2015.1071449
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa
- Byrne, P. S. & Long, B. E. L. (1976). *Doctors talking to patients: a study of the verbal behaviour of general practitioners consulting in their surgeries*. London, United Kingdom: Her Majesty's Stationery Office.
- Charmaz, K. (2006). *Constructing grounded theory: a practical guide through qualitative analysis*. London, United Kingdom: SAGE Publications Ltd.
- Chipchase, L., Galley, P., Jull, G., McMeeken, J., Refshauge, K., Naylor, M. & Wright, A. (2006). Looking back at 100 years of physiotherapy education in Australia. *Australian Journal of Physiotherapy*, 52(1): 3-7.
- Cooper, K., Smith, B. H. & Hancock, E. (2008). Patient-centredness in physiotherapy from the perspective of the chronic low back pain patient. *Physiotherapy*, 94(3), 244-252. doi:10.1016/j.physio.2007.10.006
- Cooper, N., Stevenson, C. & Hale, G. (1996). The biopsychosocial model. In N. Cooper, C. Stevenson, & G. Hale (eds.), *Integrating perspectives on health* (1-17). Buckingham, England: Open University Press.
- Cruz, E. B., Moore, A. & Cross, V. (2012). Clinical reasoning and patient-centred care in musculoskeletal physiotherapy in Portugal - A qualitative study. *Manual Therapy*, 17(3), 246-250. doi:10.1016/j.math.2012.02.007
- Delany, C. (2005). *Informed consent: ethical theory, legal obligations and the physiotherapy clinical encounter* (Doctoral dissertation, The University of Melbourne). Retrieved from <https://minerva-access.unimelb.edu.au/handle/11343/39061#files-area>
- Dierckx, K., Deveugele, M., Roosen, P. & Devisch, I. (2013). Implementation of shared decision making in physical therapy: observed level of involvement and patient preference. *Physical Therapy*, 93(10), 1321-1330.

- Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine. *Science*, 196(4286), 129-136.
- Engel, G. L. (1978). The biopsychosocial model and the education of health professionals. *Annals Of The New York Academy Of Sciences*, 310, 169-187.
- Epstein, R. M., Morse, D. S., Williams, G. C., leRoux, P., Suchman, A. L. & Quill, T. E. (2003). Clinical practice and the biopsychosocial approach. In R. M. Frankel, T. E. Quill & S. H. McDaniel (eds.), *The biopsychosocial approach: past, present, future* (33-66). Rochester, New York: The University of Rochester Press.
- Epstein, R. M. & Borrell-Carrio, F. (2005). The biopsychosocial model: exploring six impossible things. *Families, Systems & Health: The Journal of Collaborative Family HealthCare*, 23(4), 426-431. doi:10.1037/1091-7527.23.4.426
- Epstein, R. M. & Street, Jr. R. L. (2011). The values and value of patient-centered care. *Annals of Family Medicine*, 9(2), 100-103. doi:10.1370/afm.1239
- Grol, R., de Maeseneer, J., Whitfield, M. & Mookink, H. (1990). Disease-centred versus patient-centred attitudes: comparison of general practitioners in Belgium, Britain and The Netherlands. *Family Practice*, 7(2), 100-103.
- Hall, A. M., Ferreira, P. H., Maher, C. G., Latimer, J. & Ferreira, M. L. (2010). The influence of the therapist-patient relationship on treatment outcome in physical rehabilitation: a systematic review. *Physical Therapy*, 90(8), 1099-1110.
- Health & Care Professions Council. (2013). *Standards of proficiency –Physiotherapists*. London: Health & Care Professions Council. Retrieved from http://www.hpc-uk.org/assets/documents/10000DBCStandards_of_Proficiency_Physiotherapists.pdf
- Hiller, A. (2017). *Toward relationship-centred care: patient-physiotherapist interaction in private practice*. (Doctoral dissertation, The University of Melbourne). Retrieved from <https://minerva-access.unimelb.edu.au/handle/11343/129510>
- Hiller, A., Guillemin, M. & Delany, C. (2015). Exploring healthcare communication models in private physiotherapy practice. *Patient Education & Counseling*, 98(10), 1222-1228. doi:10.1016/j.pec.2015.07.029

- Hills, R. & Kitchen, S. (2007). Toward a theory of patient satisfaction with physiotherapy: exploring the concept of satisfaction. *Physiotherapy Theory and Practice*, 23(5), 243-254.
- Jeffels, K. & Foster, N. (2003). Can aspects of physiotherapist communication influence patients' pain experiences? A systematic review. *Physical Therapy Reviews*, 8(4), 197-210. doi:10.1179/108331903225003208
- Jensen, G.M., Shepard, K.F. & Hack, L.M. (1990). The novice versus the experienced clinician: insights into the work of the physical therapist. *Physical Therapy* 10(5), 314-323.
- Jones, M., Jensen, G. & Rothstein, J. M. (1995). Clinical reasoning in physiotherapy. In J. Higgs & M. Jones (Eds). *Clinical reasoning in the health professions* (72-87). London, United Kingdom: Butterworth-Heinemann.
- Jones, L. E., Roberts, L. C., Little, P. S., Mullee, M. A., Cleland, J. A. & Cooper, C. (2014). Shared decision-making in back pain consultations: an illusion or reality? *European Spine Journal*, 23(Suppl 1), S13-S19. doi:10.1007/s00586-014-3187-0
- Josephson, I. & Bülow, P. H. (2014). Utilization of patient resources in physiotherapy interventions: analysis of the interaction concerning non-specific low back pain. *Communication & Medicine*, 11(2), 125-137.
- Josephson, I., Woodward-Kron, R., Delany, C. & Hiller, A. (2015). Evaluative language in physiotherapy practice: how does it contribute to the therapeutic relationship? *Social Science & Medicine*, 143(October 2015), 128-136.
- Klaber Moffett, J. A. & Richardson, P. H. (1997). The influence of the physiotherapist-patient relationship on pain and disability. *Physiotherapy Theory and Practice*, 13(1), 89-96.
- Lonsdale, C., Hall, A. M., Williams, G. C., McDonough, S. M., Ntoumanis, N., Murray, A. & Hurley, D. A. (2012). Communication style and exercise compliance in physiotherapy (CONNECT). A cluster randomized controlled trial to test a theory-based intervention to increase chronic low back pain patients' adherence to physiotherapists' recommendations: study rationale, design, and methods. *BMC Musculoskeletal Disorders*, 13(104), 1-15. doi:10.1186/1471-2474-13-104

- May, C. & Mead, N. (1999). Patient-centredness: a history. In C. Dowrick & L. Frith (eds.), *General Practice and Ethics* (76-90). London, United Kingdom: Routledge.
- McLaren, N. (1998). A critical review of the biopsychosocial model. *The Australian and New Zealand Journal of Psychiatry*, 32(1), 86-92.
- Mead, N. & Bower, P. (2000). Patient-centredness: a conceptual framework and review of the empirical literature. *Social Science & Medicine*, 51(7), 1087-1110. doi:10.1016/s0277-9536(00)00098-8
- Moseley, A. M., Herbert, R. D., Sherrington, C. & Maher, C. G. (2002). Evidence for physiotherapy practice: a survey of the Physiotherapy Evidence Database (PEDro). *Australian Journal of Physiotherapy*, 48(1), 43-49.
- Mudge, S., Stretton, C. & Kayes, N. (2013). Are physiotherapists comfortable with person-centred practice? An autoethnographic insight. *Disability and Rehabilitation*, 36(6), 457-463. doi: 10.3109/09638288.2013.797515
- National Physiotherapy Advisory Group (NPAG). (2009). *Essential competency profile for physiotherapists in Canada*. Retrieved from <http://www.physiotherapyeducation.ca/Resources/Essential%20Comp%20PT%20Profile%202009.pdf>
- Nicholls, D. A. & Holmes, D. (2012). Discipline, desire, and transgression in physiotherapy practice. *Physiotherapy Theory and Practice*, 28(6), 454-465. doi:10.3109/09593985.2012.676940
- Nolan, M. R., Davies, S., Brown, J., Keady, J. & Nolan, J. (2004). Beyond 'person-centred' care: a new vision for gerontological nursing. *Journal of Clinical Nursing*, 13(3a), 45-53. doi:10.1111/j.1365-2702.2004.00926.x
- Opsommer, E. & Schoeb, V. (2014). 'Tell me about your troubles': description of patient-physiotherapist interaction during initial encounters. *Physiotherapy Research International*, 19(4), 205-221. doi:10.1002/pri.1585
- O'Sullivan, P. (2012). It's time for change with the management of non-specific chronic low back pain. *British Journal of Sports Medicine*, 46(4), 224-227.
- Packer, M. J. & Addison, R. B. (1989). *Entering the circle: hermeneutic investigation in psychology*. New York, New York: State University of New York Press.

- Parry, R. H. (2004). Communication during goal-setting in physiotherapy treatment sessions. *Clinical Rehabilitation*, 18(6), 668-682. doi:10.1191/0269215504cr745oa
- Physiotherapy Board of Australia. (2014). *Code of Conduct for registered health practitioners*. Retrieved from <http://www.physiotherapyboard.gov.au/Codes-Guidelines/Code-of-conduct.aspx>
- Pinto, R. Z., Ferreira, M. L., Oliveira, V. C., Franco, M. R., Adams, R., Maher, C. G. & Ferreira, P. H. (2012). Patient-centred communication is associated with positive therapeutic alliance: a systematic review. *Journal of Physiotherapy*, 58(2), 77-87.
- Potter, M., Gordon, S. & Hamer, P. (2003). The physiotherapy experience in private practice: the patients' perspective. *Australian Journal of Physiotherapy*, 49(3), 195-202.
- Poulis, I. (2007). The end of physiotherapy [Editorial]. *Australian Journal of Physiotherapy*, 53(2), 71-72.
- Pulvirenti, M., McMillan, J. & Lawn, S. (2011). Empowerment, patient centred care and self-management. *Health Expectations*, 17, 303-310. doi:10.1111/j.1369-7625.2011.00757.x
- Reeves, S., Albert, M., Kuper, A. & Hodges, B. D. (2008). Why use theories in qualitative research. *British Medical Journal*, 337(7670), 631-634.
- Roberts, L. & Bucksey, S. I. (2007). Communicating with patients: what happens in practice? *Physical Therapy*, 87(5), 586-594.
- Roger, J., Darfour, D., Dham, A., Hickman, O., Shaubach, L. & Shepard, K. (2002). Physiotherapists' use of touch in inpatient settings. *Physiotherapy Research International*, 7(3), 170-186.
- Roter, D. L., Stewart, M., Putnam, S. M., Lipkin, M., Stiles, W. & Inui, T. S. (1997). Communication patterns of primary care physicians. *Journal of the American Medical Association*, 277(4), 350-356. doi:10.1001/jama.277.4.350
- Sanders, T., Foster, N. E., Bishop, A. & Ong, B. N. (2013). Biopsychosocial care and the physiotherapy encounter: physiotherapists' accounts of back pain consultations. *BMC Musculoskeletal Disorders*, 14(65), 1-10. doi:10.1186/1471-2474-14-65
- Schiavo, R. (2007). *Health communication: from theory to practice*. San Francisco, California: John Wiley & Sons, Inc.

- Singla, M., Jones, M., Edwards, I. & Kumar, S. (2015). Physiotherapists' assessment of patients' psychosocial status: are we standing on thin ice? A qualitative descriptive study. *Manual Therapy*, 20(2), 328-334. doi:10.1016/j.math.2014.10.004
- Smith, R. C., Fortin, A. H., Dwamena, F. & Frankel, R. M. (2013). An evidence-based patient-centered method makes the biopsychosocial model scientific. *Patient Education and Counseling*, 91(3), 265-270. doi:10.1016/j.pec.2012.12.010
- Stewart, M., Brown, J.B., Weston, W.W., McWhinney, I.R., McWilliam, C.L. & Freeman, T.R. (2003). *Patient-centered medicine: transforming the clinical method (Second ed.)*. Oxford, England: Radcliffe Medical Press.
- Talvitie, U. & Reunanen, M. (2002). Interaction between physiotherapists and patients in stroke treatment. *Physiotherapy*, 88(2), 77-88. doi:10.1016/s0031-9406(05)60931-5
- Tasker, D., Loftus, S. & Higgs, J. (2011). Mindful embodied dialogues in community-based physiotherapy. *International Journal of the Humanities*, 9(12), 175-186.
- Thornquist, E. (1991). Body communication is a continuous process: the first encounter between patient and physiotherapist. *Scandinavian Journal of Primary Health Care*, 9(3), 191-196. doi:10.3109/02813439109018517
- Trede, F. & Higgs, J. (2009). Models and philosophy of practice. In J. Higgs, M. Smith, G. Webb, M. Skinner, & A. Croker (eds.), *Contexts of physiotherapy practice* (90-101). Chatswood, Australia: Elsevier Australia.
- Winefield, H., Murrell, T., Clifford, J. & Farmer, E. (1996). The search for reliable and valid measures of patient-centredness. *Psychology & Health*, 11(6), 811-824.
- World Confederation for Physical Therapy (WCPT). (2011). *Policy statement: description of physical therapy*. Retrieved from <http://www.wcpt.org/policy/ps-descriptionPT>

CHAPTER 14

What's in a number? Progress and body shame in lifestyle programs for adolescents

Karen Synne Groven | Institute of Health and Society, University of Oslo / Department of Physiotherapy, Oslo and Akershus University College of Applied Sciences

Nicole M. Glenn | Institut de recherche en santé publique de l'Université de Montréal, Département de médecine sociale et préventive, Université de Montréal

Jenny Setchell | Bloorview Research Institute, Holland Bloorview Kids Rehabilitation Hospital and School of Health / Rehabilitation Sciences, The University of Queensland

Abstract

There is frequent messaging in scientific and popular discussions that point to a childhood “obesity epidemic” worldwide. There have been significant responsive efforts to combat this (perceived) public health problem. These have primarily taken the form of individual, lifestyle interventions (i.e., diet and exercise). In this study, we considered the experiences of adolescents enrolled in a lifestyle intervention (aimed at weight control) organized by a specialized health service in Norway. We drew on interviews with two young women to answer the ques-

tion: How do adolescents experience group-training sessions, regular weight screening, dietary counselling, and fitness testing? In this chapter, we critically analyse how the adolescents made sense of their bodies in relation to and through the lifestyle intervention. We focus on the practice of regular testing and show how feelings of shame emerged in relation to the testing. This was particularly evident when the young women did not achieve significant “progress”. In our analysis, we adopt a critical embodiment approach drawing from the work of phenomenological scholars, including Merleau-Ponty’s notion of the body as a primary means of experience and Luna Dolezal’s writing on shame in the clinical encounter. We integrate poststructuralist perspectives to challenge contemporary hegemonic ideas about weight (loss) and fatness. Considering our findings on how shame can be exacerbated as well as avoided, we argue that lifestyle interventions should be implemented with caution. Moreover, we suggest that physiotherapists should exercise care when employing body measurement tools in these contexts. Focusing on enjoyment, meaning, and fulfilment could offer alternatives to more traditional measures of progress.

Introduction

When considering the notion of shame in relation to weight loss interventions, it is easy to look to *The Biggest Loser*, an American reality television show that is now franchised across the globe. This popular series publicly shames people with obesity into changing their “lifestyle” – namely diet and exercise – with the ultimate goal of losing weight (Domoff et al., 2012). In this regard, many contestants are successful during the taping. However, the often-dramatic weight loss achieved by contestants has incited controversy – popular media has claimed that eating disorders and other health issues have resulted (e.g., Bricker, 2014; Evans & Elliot, 2015). Past contestants have also experienced weight re-gain and stated, “we are all

fat again” (Evans & Elliot, 2015). Body shaming at the core of the public weight loss journeys documented in *The Biggest Loser* aligns with contemporary neoliberal ideals of responsibility, self-control, body regulation and discipline (Lupton, 2013). The widespread popularity of the show reveals how entrenched these ideals are in our collective psyche.

Media representations of health, illness, and bodies create public perceptions of particular conditions and embodied realities (Lyons, 2000), including “obesity” (Boero, 2007). In this way, *The Biggest Loser* re/enforces popular understandings of fat bodies as problematic, deviant and in need to fixing, and normalizes shame as a means by which to “motivate” weight loss (Lupton, 2013). What is more, it shows weight reduction via lifestyle modification as achievable and “fun” when in fact research has confirmed that the exact opposite is true. That is, sustained weight loss through diet and exercise is nearly impossible (Weiss, Galuska, Khan, Gillespie & Serdula, 2007) and shame can result in worsened health among obese individuals and interferes with the success of weight loss interventions (Puhl & Suh, 2015, Rugseth, 2011). Nevertheless, frequent testing and weight screening persist as part of lifestyle-oriented programs in both public and private health care settings and there is little discussion of failure and shame in reference to such interventions (Dolezal, 2015). Clearly, there is a need for more focused research in the area, which can inform the creation of healthcare practices that better support individuals in achieving health and wellness (independent of body weight). This is of particular relevance for physiotherapists who are frequently involved in such anti-obesity programs (Snodgrass, Carter, Guest, Collins, James et al., 2014). With this goal in mind, we used a critical-embodiment lens to examine experiences of a lifestyle intervention for teens. We asked: what is the connection between measurement, testing, “progress,” and shame within this context?

Within the face-to-face encounter that occurs in the context of weight loss interventions, shame and failure are often unspoken, hidden, or repressed (Rugseth, 2011; Glenn, Raine, & Spence, 2015; Knutsen 2011). This is not to say, however, that they do not exist. As a participant observer in a lifestyle program for adults, Rugseth (2007) noted that shame was present in the room as a relational phenomenon, that is, there was a shared sense of discomfort and exposure that nobody talked about. This was particularly evident when weight was measured:

My sense of discomfort being part of another persons' weight screening was unavoidable. We shared and took part in the shame. We felt shamefully involved and at the same time curious as to the result of the weight screening. (p. 138, our translation)

The weight measurement described by Rugseth as a source of shame is also a prominent fixture in anti-obesity programs involving children and adolescents. Critical scholars have voiced concerns about calls for regular weight monitoring (among adults and children) as part of on-going campaigns against the “obesity epidemic” by health authorities across the globe (Gard & Wright, 2005). Concerns include the potential unintended harms caused by construction of an “epidemic” in relation to obesity whereby health professionals are expected to intervene in the management of people’s weight; particularly among people under 18 years of age who are thought to be the “responsibility” of the state (as well as parents). Interventions include the establishment of lifestyle programs designed to “help” young people categorized as overweight or obese.

Critical embodiment perspective

In this chapter, we take a critical embodiment approach to understanding adolescents’ lived experiences of various testing situations

that were part of a lifestyle intervention aimed at weight control. This involved questioning established weight control and measurement practices by privileging first-hand accounts and embodied experiences, as expressed and reflected on during interviews with the first author. Our goal was to unpack and challenge the potentially hidden effects of testing and weight control and highlight the role of shame therein. We were inspired by Merleau-Ponty's (1945/2002) phenomenology, which posits the body as central to all human experiences. According to Merleau-Ponty, it is through the body that we come to know, make meaning of, and relate to the world around us. For example, it is the feel of the breeze on our cheek rather than a description from a book that transforms an abstract idea like wind into something knowable and concrete.

Dolezal (2015) draws on these ideas to explore experiences of body shame. She writes that shame is an embodied and relational phenomenon that is likely to happen when individuals are concerned with how they are seen and judged by others:

Body shame can be understood to be shame that arises as a result of some aspect of the body or bodily management, perhaps appearance, bodily functions or comportment. It is shame that is centred on the body where the subject believes their body to be undesirable, inadequate, or unattractive, falling short of social depictions of the "normal," the ideal or the socially acceptable body. (p. 569)

At the same time, shame (as a self-conscious emotion) can affect an individual's sense of *agency* (i.e., the ability to inter-act with and on one's surroundings). Dolezal argues, "When faced with shame common reactions include hiding, escaping, disappearing from view and shrinking into the floor" (p. 569). In other words, people find their own ways of avoiding or relating to shame, which involves some kind of action.

Body weight has become a global obsession in the service of overcoming the "obesity epidemic" (Gard & Wright, 2005; Lupton, 2013).

Consistent with neo-liberal principles of individualism and personal responsibility, people are categorized and compared to putative norms via measurements (weight screening; i.e., “obese” or “overweight” based on Body Mass Index [BMI]). These are purported as necessary components of the “war on obesity” and often carried out under the supervision of health professionals (Guthman, 2013; Lupton, 2013). BMI categories are somewhat arbitrary since there is no clear relationship to clinically meaningful outcomes (Flegal Kit, Orpana, & Graubard, 2013). For example, in research conducted by Flegal and colleagues (2013), being “overweight” by BMI category was associated with a reduced all-cause mortality rate when compared to “normal” BMI, and “grade I obesity” had the same mortality rate as “normal” BMI. Drawing on Dolezal’s (2015) argument that shame is relational arising in and through our interactions with others, moments of comparison, such as those that occur in the context of anti-obesity programs, are ripe for the production of shame. Moreover, as noted by Lupton (2013), shame can also develop in socio-cultural contexts (e.g., healthcare systems), where “overweight” people are made to feel indebted to the citizenry because of the “cost” of their fatness on others. In what follows, we explore the embodiment of shame in reference to a weight control intervention and provide a vital, critical perspective to this burgeoning area of scholarship. To our knowledge, no prior research has questioned the impact of measurement and testing within the context of a clinical lifestyle program, among adolescents. We hope these findings will inform practice – to shift healthcare (including physiotherapy) away from potentially body shaming practices.

Context

We take as our analytic starting point the experiences of young women who participated in a group based lifestyle program for adolescents in Norway. The one-year program was publicly funded and ran at an out-patient clinic. Entry into the program was usually

via referral from a general practitioner or school nurse based on a BMI of more than 35 Kg/m². Participation involved attending two exercise sessions per week, as well as monthly nutrition sessions. The program was interdisciplinary, run by physiotherapists and dietitians. The first author conducted individual, semi-structured interviews with ten participants in the program. In the interviews, she asked participants to talk about the reasons they attended the program as well as their experiences within it. In addition, she asked about their experiences of physical activity and food and eating in other settings. Interviews were recorded, transcribed, and the first author translated relevant excerpts into English.

For the analysis, we drew on elements of Mattingly's (1998) narrative-phenomenological approach and Kvale and Brinkman's (2009) critical analysis. We carefully read excerpts from the transcripts related to the young women's experiences of participating in the program and of testing and measurement situations. We searched for recurrent or unique themes and discussed these to reach consensus. We then crafted narratives, borrowing from narrative-phenomenological writing traditions (Mattingly, 1998; Zaner, 1993). The narrative influence can be seen in the arc of the stories, the threading through time, and provision of contextual details. The phenomenological influence is apparent in the reliance on Merleau-Ponty's (1945/2002) embodiment (i.e., body as primary to experiences), which was reflected in the anecdotes (i.e., experiential moments) we crafted from the participants' stories (Mattingly, 1998; Zaner, 1993). Participant narratives were then subjected to critical interpretation, which involved contextualizing the stories in terms of existing critical scholarship on embodied fatness, weight loss and shame as well as prevailing cultural, social, medical, and institutional understandings (e.g., Boero, 2007; Dolezal, 2015; Gard & Wright, 2005; Lupton, 2013). We focused on two young women's stories/experiences because

they highlighted the complex and divergent ways the experience can be lived, and provided sufficient data to achieve a depth of understanding and experiential resonance, which was the aim this exploratory study.

Alva's story: I do not regard myself as overweight

Alva was 15 years old when a doctor recommended that she participate in the program. Reflecting on this conversation, Alva expressed surprise and anger directed at the doctor because she did not see herself as overweight. "I am not overweight. I am totally sure of that. . I hate being called that and I am not overweight. I do not regard myself as overweight." The discrepancy between her sense of her body and the doctor's assessment was upsetting. Alva said it made her want to scream, "I am NOT overweight!" However, in the clinical encounter with her doctor, she said she did not voice her dissent because she feared it would prevent her getting what she really wanted: a referral for breast reduction surgery. Imagine her surprise when the doctor told her she needed to lose weight instead:

I had to reduce my BMI to get breast surgery. And that is why the doctor referred me here. So that I could get help and guidance with regards to diet and exercise and things like that.

Alva said she reluctantly agreed to participate in the program even though she maintained she was not overweight. This notion was challenged again upon entry to the program, this time by one of the health professionals: "The first time I came here they told me that I was overweight and then I thought, 'am I really that big because I cannot see that myself?'" This led her to question, "Am I overweight?" After her first encounter with the group she concluded,

“No. I’m not!” Comparing herself to the other teenagers made her feel uncomfortable. She explained:

I recall coming here the first time, feeling like an outsider, that I did not fit in, because I am not overweight. . . I had tears in my eyes and things like that because I felt that I did not fit in at all. . . this is perhaps a bit mean of me to say, but there were many others there who were much bigger than me.

At first, Alva said she was ashamed to be part of the program, to be grouped with these “bigger” others, and kept it a secret from her friends. However, as the weeks passed, she described how she enjoyed participating in the group. In particular, she said she felt enthusiastic about the exercise sessions. She said that she found some activities more meaningful than others; she liked feeling strong and capable, and she frequently felt like this during weight-training. The physiotherapists commented on her efforts, and she pointed out: “I do get cred. They talk positively about me, because I am so strong. They find it sort of impressive.” Alva noted this experience was in stark contrast to her experience from physical education class at school. Compared to her school-mates, Alva felt less capable because she could not keep up. In that context, she saw her body as problematic, clumsy, and less skilled than the others. She found strategies to avoid participating. She explained: “So I rarely participate with the class. I exercise alone in the weight room.”

In contrast to physical education at school, Alva said she found exercise sessions at the clinic meaningful. She explained that she could sense that she was making progress and saw evidence of this in the biweekly testing, for which program participants were responsible. For example, during testing, the participants worked in pairs but kept track of their own results. The physiotherapist(s) did not conduct the tests, but were present, observing and

encouraging the participants. Alva emphasized feeling inspired by this encouragement:

About 2-3 weeks ago, I managed to lift 42 kilos. Which means I have improved, increasing my record by 2-3 kilos. And that is empowerment. And then I noticed that all my exercising has given me results. And I am a competitive person, so I want to do better every time.

By the end of the program, Alva said she had gained enough self-confidence to try exercising in a fitness centre, although, she said she would have preferred to stay in the program:

I am determined to start exercising at a local fitness centre near my new home. But I would have preferred continuing here. Because I do enjoy being here. The place and the physiotherapists – I have a bond with them. They are very motivating.

According to Alva, the physiotherapists were able to help her progress in her strength training by being positive and encouraging. “Yes you can do it, come on, great work, keep up the good work Alva,” were examples of the kinds of praise she received. She said they also supported her pursuit of other activities she found meaningful (like weight lifting). Alva also mentioned that she really appreciated that the physiotherapists never commented on her weight:

Nobody talks about us being overweight, they never use that word, and I am happy with that, because I am not overweight.

Alva's description of her experiences of the monthly weigh-ins was quite the opposite. Indeed, Alva said she felt she was scrutinized and mistrusted when she had not lost weight:

I do not lose weight no matter what I do – nothing happens. . . And I exercise a lot, I eat less and more healthy, but nothing happens. But it seems like [the nutritionist] is not really convinced that I have changed

my diet. But I have changed my diet, I have. I have made drastic changes actually. Previously, I used to skip breakfast or I ate some crappy stuff like yoghurt or stuff like that, not that it is crappy, but now I eat yoghurt with oil, nuts and spinach, and all of that, but it has been challenging and now I only eat salad with chicken or fish for lunch and we eat a healthy dinner, so I have really changed my diet. And my weekend sweets are frozen strawberries, and nuts, that is my candy, because when I feel like eating candy I eat that instead. So I am almost totally avoiding sugar.

Alva said that she had done everything she could have in terms of exercise and changing her diet. Nevertheless, rather than supporting her and emphasizing the progress she made, Alva highlighted that the nutritionist questioned whether she tried hard enough. Weight loss was the professionals' barometer of Alva's success in the program. Alva, however, discussed that she felt otherwise:

But muscles weigh more than fat. My muscles have grown significantly. So in that sense, I am satisfied with the result, because I have lost 10 centimetres around my waist since I started here. And 10 centimetres is a lot. I cannot sense that I have lost 10 centimetres there, but I saw it when I was measured around the waist. I saw the numbers. So that means that I have tightened up there, and I am pleased with that [change]. And I do not care how much the scale shows, how much I weigh, I only care about the way I look, my body shape in a way. Because, as far as I am concerned I might weigh 90 kilos as long as I am happy with my appearance and my body, because muscles are important to me.

For Alva, BMI and the numbers on the scale were irrelevant because she could feel progress in other ways – she finished the program with a fitter, stronger, and more muscular body. Her sense of achievement was tied to gains in strength and fitness – that is what she could do – as well as how she appeared, not how much she weighed. Nevertheless, Alva still reproduced the notion of “fat as shameful” even while she worked to reformulate what “counted” as fat.

She did this by claiming she was not overweight, nor one of the “big” people in the group. She also argued that her body composition and shape changes were positive because they marked a loss in fat even though her weight had not declined.

Hannah's story: The scale never lies

Hannah entered the lifestyle program because she was afraid of future illness. She discussed her fear of becoming diabetic because both of her parents had the disease: “I was worried and wanted to do the right things. . . So the school nurse was there as a support . . . she told me about this program and managed to get me in.” Hannah said she had lost and then regained weight during the program, which led her to seek advice from the nutritionist. Hannah was offered a detailed eating plan, yet she described that adhering to it was challenging. She discussed having “relapses” and described how getting on the scale every month caused her anxiety. Her fear was tied to the possibility of weight regain, or lack of weight loss. She explained: “The scale never lies. Unfortunately, it is scary, in a way, to think that you actually weigh so much, kind of . . . It seems a bit hopeless.” At the same time, she expressed ambivalence about the salience of numbers as an outcome or indicator of her (lack of) progress: “You get yourself so stuck on a number that it means everything, in a way, and I do not really want that.” Hannah said that stepping on the scale occasionally initiated negative thoughts, like considering making herself vomit. “*I could get rid of the bad food this way,*” she explained. This behaviour is consistent with advice in the literature on eating disorders, which encourages avoiding the quantification of weight as a measure of health (e.g., Burns & Gavy, 2004). Although we do not know if Hannah actually purged, thoughts of self-harming behaviour are concerning in and of themselves.

Hannah reported that she enjoyed the exercise sessions in the program and experienced them as “fun,” “entertaining,” and “artistic.” She found that the positivity and playfulness of the physiotherapists contrasted sharply with the demeanour of the nutritionists who conducted the weigh-ins. Hannah’s enthusiasm can be interpreted as a sense of pride. She could do much more than she had thought:

I like the exercise sessions here. I am very satisfied because I am able to do more than I thought I could do. Because the physiotherapists are so positive and you see in a way, I personally feel that the group is good for me, I feel good and I am very proud of it. It is kind of “exercising is super easy, it is super fun, it is entertainment art, I can do more with it”. The food is much harder, because then you are on your own. Then there is nobody holding your hand.

Hannah explained that she was progressing even when it was not visible on the scale. She *felt* better, she explained:

Even though you do not see the results with your eyes, or those eyes, it is in a way, it is because if you are going to see progress, I feel that I have better endurance and all of that, so I feel very good about that.

“Feeling” progress was not something that was quantitatively measured but rather embodied for Hannah. It developed not because of, but rather in spite of, stepping on the scale. Hannah also experienced changes in her everyday life: running to the bus, train station and school were suddenly easier. She explained:

And this is not how things used to be; then it was like, huff and puff, huff and puff (breathes heavily in the interview). It used to be like that; I used to breathe like that for about 15 minutes, and then get the rhythm back again.

Regardless of her felt experience of progress in terms of fitness, since starting in the program Hannah had become more focused

on and critical of her weight and appearance. She expressed disappointment in herself and continued to worry about developing diabetes. She indicated that a lot was at stake:

I feel for the first time in my life that I am dissatisfied with what I see. I think it is a bit harder now, not because they weigh me but because I focus on it, that I am actually trying to do something about it. Previously I was not disappointed over gaining weight. . . . But now that I want to do something about it is much more disappointing. . . . because I want to be better. It is the health aspect of it too. I do not want to become ill like my parents.

Hannah's account suggests a young woman who was very concerned about weight and the health related consequences. As such, a weight loss and regain, although only a few kilos, triggered feelings of failure, worry and sadness because she thought she had let down herself and the people caring for her. Hannah identified that "the numbers", that were central to the program's understandings of progress, rather quickly began to affect how she viewed herself regardless of her embodied experiences of wellbeing and progress. Although exercise sessions were associated with positive experiences, she noted a strong sense of disappointed that she did not lose the weight she wanted to lose.

The meaning of numbers

Our findings, from the exploration of two adolescent women's accounts of measurement within a lifestyle weight loss program, illuminate the potential impact of these forms of body scrutiny, and how responses can differ with regards to how shame is embodied, expressed, and resisted. In what follows, we draw on Dolezal's (2015) theorization of shame, which she builds on Merleau-Ponty's (1945/2002) ideas of embodiment to better understand how

measurement and “progress” within a lifestyle program can create opportunities for shame and pride among adolescent women.

Both participants made changes to their lifestyle in response to the program, although neither lost any weight. These two young women expressed quite different ways of making sense of their experiences. Through Alva’s account we saw agency and resistance in the way she redefined success on her own terms. While she complied with “disciplinary lifestyle choices and practices” (Dolezal, 2015, p. 572), Alva refused to judge her body based on weight (loss) and instead focused on the pleasures and pride she derived from movement and newly gained physical strength. Hannah, on the other hand, saw herself as failing to sufficiently comply with the requisite “disciplinary lifestyle changes” (Dolezal, 2015). Unlike Alva, Hannah openly discussed feelings of shame, particularly in relation to her experiences of being weighed within the program. We see in Hannah’s account that “although it can have a clear cognitive dimension, shame for the most part is an embodied response” (Dolezal, 2015, p. 570), which was exemplified through her urge to purge consumed food. There is also a self-protective dimension to her shame; for example, through non-disclosure of the challenges she faced with the program’s nutrition plan. Dolezal describes this dimension: “The individual feels exposed and this leads to a (paralyzing) inner scrutiny, a moment of extreme self-consciousness” (p. 569). Social encounters such as those in a clinical setting can trigger shame, particularly when they involve an explicit bodily focus (Dolezal, 2015). Hannah’s experience of shame may have been exacerbated by her sense of personal responsibility for having chosen to join the program, and the significance of weight loss to her as a way of avoiding future illness. Dolezal explains that the closer the connection between illness and personal responsibility for self-control (or lack thereof) the greater the potential there is for shame to arise.

While there were differences in Hannah and Alva's responses to being measured, there were also similarities. Both young women described being compared to a putative norm where they felt they, "did not measure up" (Gibson, 2016). Alva responded by moving the goal posts to make them consistent with her pre-program understanding of her body, she highlighted that improvements in her exercise capacity were more important to her than weight (loss). She described feeling pride rather than shame, regardless of the numbers or what others said. Given that Hannah came to the program with a very different view of her body (as an object of risk), it was perhaps not surprising that she had a different response. Her feelings of self-worth shifted according to the context – when she was being weighed she felt bad about herself, yet when she was moving in the exercise sessions she felt accomplishment and renewed confidence.

The differences between these two young women's experiences could be due, at least in part, to the internalization of discourses equating weight with health, and the acceptance of BMI and other medical categorisations as meaningful. Although Alva and Hannah both described gaining physical capacity and "feeling progress" through their abilities to do more, they were also aware that according to the primary goal of the program (i.e., weight loss) they had come up short. In contrast to Hannah, however, Alva put little value in losing weight because she rejected the program's conflation of weight and health as well as being categorized as "obese." This may explain her feelings of pride in her accomplishments even while "failing" to meet programmatic goals.

It is not surprising that neither Hannah nor Alva lost weight despite largely adhering to the program protocol. There is burgeoning literature that demonstrates the relative ineffectiveness of lifestyle programs (Doutketis, 2005; Franz et al., 2007). Given the lack of evidence to its efficacy, in addition to the blame and

shame involved in measuring weight, the ethics of recommending weight loss within the healthcare realm has been critiqued elsewhere (Glenn, 2013; Hoffmann, 2016), including within “lifestyle” weight loss programs for adolescents and children (Holm et al., 2014; Evans & Colls, 2009; Foresight, 2007).

Although the measurement of fitness appeared less traumatizing for Hannah and Alva than weigh-ins, it too could be interpreted as a practice that reduces the body to an object to be measured and compared to a putative norm. Other research with children and adolescents has shown that repeated body testing can result in diminished self-worth (Bjorbaekmo & Engelsrud, 2011). Moreover, measurement in a group setting unavoidably elicits comparison regardless of the sharing/not sharing of results (Evans & Colls, 2009). We see this in Alva and Hannah’s accounts where they compared themselves to others in the program. This, in turn can create a competitive and evaluative space where bodies can be compared to each other and/or a norm. Thus the stage is set for the possibility of success or failure (Evans & Colls, 2009). With the continued focus on testing, these young women learned to connect their sense of achievement and self-worth (at least partially) to *external* measures. Although they commented on how they felt stronger and fitter, they also focused on how much they had improved according to their monthly test scores and measurements (including waist circumference). One is compelled then to question the value and consider the potential risk of measurement within the context of lifestyle programs such as this one.

Instead of focusing on measurement and numbers on a scale, we suggest that these programs could be reimaged. Reflecting on Hannah and Alva’s experiences, we wonder what a program would look like that did not involve comparison to norms or quantified outcomes. We argue that programs could focus instead on the joy of movement, feelings of physical strength and endurance, and on

increased capacity to participate and enjoy activities that are part of everyday life (e.g., running for the bus, walking the dog, carrying the groceries up the stairs). A shift in focus such as this might provide an avenue to strengthen the body and one's self-worth. For physiotherapists, there are lessons here about the pitfalls of promoting bodily change that could ultimately do more harm than good. While the physiotherapists in this study did not measure weight, there are many that do, and this study shows that this should be undertaken with caution.

We also wish to bring attention to the potential negative effects of measurement *per se*. Alternative approaches might focus more on individual needs, desires, and preferences and build on what is valued and enjoyed while acknowledging fears and challenges. This diverges from following a set of standard approaches, norms, and/or outcomes. Such lessons are important to consider in physiotherapy practice and also curricula. Calls for less shaming approaches to obesity have been made in the context of training physiotherapy students and include: shifting the focus from diet and exercise as sole contributors to obesity, using collaborative styles of communication, and incorporating understandings of weight stigma (Setchell, Watson, Jones & Gard, 2015; Setchell, Watson, Gard & Jones, 2016). Physiotherapists could also benefit from critical reflection on the possible negative impacts of using weight-based outcome measures such as BMI on the people (particularly young people) who seek their care.

In conclusion, through a critical phenomenological examination of the experiences of two young women undergoing a group-based weight loss intervention, we have highlighted that such "lifestyle interventions" should be implemented with caution. In a current context of growing global stigmatisation of bodily fatness, shame is a key consideration. Physiotherapists and other health

professionals could use our findings to help attend to experiences of shame and how they might be exacerbated as well as avoided. In particular, we suggest that physiotherapists exercise caution when employing tools of body measurement in the context of lifestyle interventions. A shift of focus away from body weight or behavioural changes to considerations of enjoyment, meaning, and fulfilment could offer alternatives to more traditional measures of progress.

References

- Bjorbaekmo, W. S. & Engelsrud, G. H. (2011). Experiences of being tested: A critical discussion of the knowledge involved and produced in the practice of testing in children's rehabilitation. *Medicine Health Care and Philosophy*, 14(2), 123–131. doi:10.1007/s11019-010-9254-3
- Boero, N. (2007). All the news that's fat to print: The American "obesity epidemic" and the media. *Qualitative Sociology*, 30(1), 41–60.
- Bricker, T. (2014, March 1). Jillian Michaels finally breaks silence on Biggest Loser controversy: Rachel Frederickson "lost too much weight". *eNews*. Retrieved from <http://www.eonline.com/au/news/516004/jillian-michaels-finally-breaks-silence-on-biggest-loser-controversy-rachel-frederickson-lost-too-much-weight>
- Burns, M. & Gavey, N. (2004). 'Healthy weight' at what cost? 'Bulimia' and a discourse of weight control. *Journal of Health Psychology*, 9(4), 549–565.
- Dolezal, L. (2015). The phenomenology of shame in the clinical encounter. *Medicine, Health Care and Philosophy*, 18, 567–576.
- Domoff, S. E., Hinman, N. G., Koball, A. M., Storfer-Isser, A., Carhart, V. L., Baik, K. D. & Carels, R. A. (2012). The effects of reality television on weight bias: An examination of The Biggest Loser. *Obesity*, 20(5), 993–998. doi:10.1038/oby.2011.378
- Douketis, J. D., Macie, C., Thabane, L. & Williamson, D. F. (2005). Systematic review of long-term weight loss studies in obese adults: Clinical significance and applicability to clinical practice. *International Journal of Obesity*, 29(10), 1153–1167. doi:10.1038/sj.ijo.0802982

- Evans, B. & Colls, R. (2009). Measuring fatness, governing bodies: The spatialities of the Body Mass Index (BMI) in anti-obesity politics. *Antipode*, 41(5), 1051–1083. doi:10.1111/j.1467-8330.2009.00706.x
- Evans, S. J. & Elliot, A. F. (2015, January 27). 'We are all fat again!' *Daily Mail*. Retrieved from <http://http://www.dailymail.co.uk/femail/article-2927207/We-fat-Former-Biggest-Loser-contestants-admit-controversial-regained-weight-endure-lasting-health-issues.html>
- Flegal, K. M., Kit, B., K., Orpana, H. & Graubard, B. I. (2013). Association of all-cause mortality with overweight and obesity using standard Body Mass Index categories: a systematic review and meta-analysis. *Journal of the American Medical Association*, 309(1), 71–82. doi:10.1001/jama.2012.113905
- Foresight. (2007). *Tackling obesities: Future choices* (Project report, 2nd ed.). Retrieved from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/287937/07-1184x-tackling-obesities-future-choices-report.pdf
- Franz, M. J., VanWormer, J. J., Crain, A. L., Boucher, J. L., Histon, T., Caplan, W., . . . Pronk, N. P. (2007). Weight-loss outcomes: A systematic review and meta-analysis of weight-loss clinical trials with a minimum 1-year follow-up. *Journal of the American Dietetic Association*, 107(10), 1755–1767. doi:10.1016/j.jada.2007.07.017
- Gard, M. & Wright, J. (2005). *The obesity epidemic: Science, morality and ideology*. London, UK: Routledge.
- Gibson, B. E. (2016). *Rehabilitation: A post-critical approach*. Boca Raton, CA: CRC Press.
- Glenn, N. M. (2013). Weight-ing: The experience of waiting on weight loss. *Qualitative Health Research*, 23(3), 348–360. doi:10.1177/1049732312468795
- Glenn, N. M., Raine, K. D. & Spence, J. C. (2015). Phenomenological reflections on mandatory weight loss during the wait for bariatric surgery. *Qualitative Health Research*, 25(1), 51–61. doi:http://doi.org/10.1177/104973231459478
- Guthman, J. (2013). Fatuous measures: The artifactual construction of the obesity epidemic. *Critical Public Health*, 23(3), 1–11. doi:10.1080/09581596.2013.766670

- Holm, J. C., Nowicka, P., Farpour-Lambert, N., O'Malley, G., Hassapidou, M., Weiss R. & Baker, J. (2014). The ethics of childhood obesity treatment. *Obesity Facts*, 7, 274–281.
- Kirk, S.F., Price, S.L., Penney, T.L., Rehman, L., Lyons, R.F., Piccinini-Vallis, H., ... & Aston, M. (2014). Blame, shame, and lack of support: A multilevel study on obesity management. *Qualitative Health Research*, 24(6), 790–800. doi:10.1177/1049732314529667
- Knutsen, I. R. (2012). *Striving towards normality. Power and empowerment in treatment of patients diagnosed as morbidly obese*. (Doctoral thesis, University of Oslo, Oslo, Norway).
- Kvale, S. & Brinkman, S. (2009). *Interviews: Learning the craft of qualitative research interviewing*. Thousand Oaks, CA: SAGE Publications.
- Lupton, D. (2013). *Fat*. London, UK: Routledge.
- Lyons, A. C. (2000). Examining media representations: benefits for health psychology. *Journal of Health Psychology*, 5(3), 349–358.
- Mattingly, C. (1998). *Healing dramas and clinical plots: The narrative structure of experience*. Cambridge, UK: Cambridge University Press.
- Mattingly, C. & Lawlor, M. (2000). Learning from stories: Narrative interviewing in cross-cultural research. *Scandinavian Journal of Occupational Therapy*, 7(4); 4–14.
- Merleau-Ponty, M. (2002). *Phenomenology of Perception* (C. Smith, Trans.). New York, NY: Routledge. (Original work published 1945)
- Puhl, R. & Suh, Y. (2015). Health consequences of weight stigma: Implications for obesity prevention and treatment. *Current Obesity Reports*, 4(2), 182–190.
- Raisborough, J. (2016) *Fat Bodies, Health and the Media*: London, UK: Palgrave Macmillan.
- Rugseth G. (2011). Overvekt som livserfaring. Et empirisk-teoretisk kunnskapsbidrag [Obesity as lived experiences: An empirical-theoretical contribution] (Doctoral thesis, University of Oslo, Oslo, Norway).
- Rugseth, G. (2007). Overvåkning av vekt [Surveillance of body weight]. In G. Engelsrud, & K. Heggen (eds.), *Humanistisk sykdomslære* [Humanistic perspectives on illness] (128–147). Oslo, Norway: Universitetsforlaget.

- Setchell, J., Watson, B. M., Jones, L. & Gard, M. (2015). Weight stigma in physiotherapy practice: Insights from patient perceptions of interactions with physiotherapists. *Manual Therapy, 20*, 835–841.
- Setchell, J., Watson, B., Gard, M. & Jones, L. (2016). Physical therapists' ways of talking about weight: Clinical implications. *Physical Therapy Journal, 96*(6), 865–875. doi:10.2522/ptj.20150286
- Snodgrass, S. J., Carter, A. E., Guest, M., Collins, C. E., James, C., Kable, A. K., . . . Plotnikoff, R. C. (2014). Weight management including dietary and physical activity advice provided by Australian physiotherapists: A pilot cross-sectional survey. *Physiotherapy Theory & Practice, 30*(6), 409–420. doi:10.3109/09593985.2013.877112
- Weiss, E. C., Galuska, D. A., Khan, K., Gillespie, C. & Serdula, M. K. (2007). Weight regain in U.S. adults who experienced substantial weight loss, 1999–2002. *American Journal of Preventative Medicine, 33*(1), 34-40.
- Zaner, R. M. (1993). *Troubled voices: Stories of ethics and illness*. Cleveland, OH: The Pilgrim Press.

CHAPTER 15

Using narrative perspectives in the clinical setting of physiotherapy. Why and how?

Birgitte Ahlsen | Department of Physiotherapy, Oslo and Akershus University of Applied Sciences

Kari Nyheim Solbrække | Institute of Health and Society, University of Oslo

Abstract

The aim of this chapter is to show the potential of narrative approaches in the practice of critical physiotherapy. By combining a narrative approach with gender perspectives, we focus on the significance of social context and gender for how illness stories may develop in the clinical encounter. The empirical data are drawn from interviews with 10 men undergoing a rehabilitation program for chronic pain in Norway. The findings highlight how the men's stories usually present pain in terms of a localized physical disruption caused by forces outside the men's influence and control. Their stories adhere to a traditional norm of masculinity which highlights the importance of staying independent and in control. However, the men's stories also refer to changes at work, worries about sick children, divorce and loss of contact

with children: in other words, social disruptions and relational and emotional distress. In the men's recovery stories, a traditional masculine emphasis on the importance of building muscle strength is intimately interwoven with a profound human need for relational support and help from others. By focusing on how the men's stories are told, the chapter reveals how changes in family relations and working conditions enter into the men's illness narratives through a process of ongoing negotiation between interviewer and participant. We argue that narrative perspectives are important to critical physiotherapy as a way of promoting individualized treatment and care that transcend traditional gender norms.

Introduction

The stories people tell about their own experiences of illness and disability can provide powerful insights into the meaning of illness in an individual's life (Kleinman, 1988; Mishler, 1984). In medicine and the health care sciences, the patient's illness narrative is generally discussed as being a valuable source of knowledge – in addition to knowledge from research and the therapist's own professional experience – in clinical reasoning and decision-making (Edwards, Jones, Carr, Braunack-Mayer, & Jensen, 2004; Greenhalgh, 1999). For clinicians, the patient's story provides an essential means of translating generalized knowledge, based on research involving many patients, into strategies that address the particular needs of individual patients (Montgomery, 2006). Clinical reasoning implies interpretation – of the patient's story as well as physical findings.

Emphasizing the importance of interpretation work in clinical practice, a body of research in the field of physiotherapy argues for the use of narrative as a pedagogical tool, one that can help students

and clinicians develop a capacity for critical reflection about their own experiences as well as those of their patients (Cruz, Caeiro & Pereira, 2014; Greenfield et al., 2015). Specifically, these studies argue for the usefulness of narrative skills in facilitating patient-centred care in clinical practice. The aim of this chapter is to show the potential of narrative approaches in critical physiotherapy. We demonstrate *why* a narrative approach is important in physiotherapy – and *how* it may be performed. Combining narrative approaches with a gender-sensitive perspective on the illness narrative of men with chronic muscle pain, we focus on the significance of social context and gender for how illness stories are expressed and unfold in the clinical encounter. The chapter comprises two parts. In part one, we present our theoretical framework on illness narratives and gender, a framework principally informed by social constructivist perspectives. Here we develop our case for the need to combine narrative and gender perspectives, arguing that illness narratives often end up analysing people's stories as if there were no gender patterns in the larger social environment. We also show how studies of gender and illness often end up claiming that men and women represent illness in very different ways. We find the latter to represent an essentialist, binary perspective on gender, one out of step with the idea of gender as a social (and therefore mutable) entity (West & Zimmerman, 1987; Butler, 1990). Instead, we argue for a combined application of narrative and gender perspectives towards viewing a patient's illness story as both deeply personal and shaped by their social environment, including changes at work and within the family. In part two, we use this theoretical viewpoint to analyse the narratives told by ethnic Norwegian men about their experiences of chronic muscle pain and recovery. By combining a narrative approach with a non-essentialist (constructional) conception of gender, we hope to make visible the ways in which cultural norms of masculinity manifest themselves in the men's needs

and values, as expressed in the illness stories they tell in the clinical setting. We argue that our approach has the potential to open up physiotherapy to new possibilities for individualized treatment and care, ones that capture social structures and reach beyond traditional cultural gender norms. In doing this, we aim to show that narrative perspectives can make a valuable contribution to critical physiotherapy.

Part one: Theories on illness narratives and gender

The illness narrative

The term “narrative” is used in a variety of ways by different disciplines (Chase, 2005). In this chapter, we emphasize narrative as verbal actions and accomplishments. This means, rather than focusing on the events or the reality to which the narrative refers, we focus on the reality shaped by the narrative. Specifically, we focus on how the men’s selves, experiences and reality are shaped through their accounts of illness experiences (Bruner, 1991; Chase, 2005).

The narrative is a fundamental way of giving meaning to experience. As such, narratives are part of people’s everyday life. However, when someone falls ill, the need for a story becomes particularly important. This is particularly the case with chronic illness, which seriously affects people’s lives and sense of self (Bury, 1982; Williams, 1984). Based on interviews with relatively young people who had just been diagnosed with rheumatoid arthritis (RA), Bury (1982) conceptualized chronic illness as a major “disruptive experience”, impacting an individual’s relationship with their body, their selfhood and the people around them and provoking them to ask such questions as “Why me?” and “Why now?” Research by Williams (1984), also involving participants with RA, showed how

the informants sought to explain their illness by finding a legitimate and meaningful space for RA in their lives. Williams concluded that by enabling individuals to rewrite their own biography so as to achieve coherence between past, present and future, self and society, illness narratives offer a way of repairing the disruption between body, self and the world (Williams, 1984, p. 197).

It does indeed seem the case that patients construct their own illness stories as a way of repairing the self and making sense of their illness experiences. At the same time, individual narratives are nourished and shaped by common stories that circulate within a specific culture (Riessman, 2008; Frank, 1995). Personal illness narratives are therefore, on the one hand, individual and particular and, on the other, common and shared; they convey something about the surrounding world (Gubrium & Holstein, 2009). This is the basis for Atkinson and colleagues' criticism of what they call a "narrative turn" in the health sciences (Atkinson & Delamont, 2006). Here they criticize what they see as a sentimental and romantic vision of illness narratives—the notion that narrators reveal their authentic selves and speak only in their own voice, as if those selves and voices were not already mediated by their social context. In line with others, these authors argue that individual stories do not simply mirror some antecedent reality; rather they help create that reality through the way they are told.

The view of illness narratives as socially constructed embraces the gendered aspects of illness: the existence of different cultural expectations to live up to according to one's gender, precisely because of which illness narratives are permeated with cultural gender norms. In critical physiotherapy research, we would stress the need to take an interest not only in the content of the story—*what* the story is about—but also in *how* the story is told. It is important to explore *how* people communicate meaning through a range of linguistic and social practices; *how* their stories are

embedded in the interaction between the researcher and the patient; *how* they make sense of personal experience in relation to cultural norms; and *how* they draw on, resist or transform those discourses as they narrate their experiences (Chase, 2005; Riessman, 2008). In addition, we argue that narrative approaches can help clarify what physiotherapy may be able to accomplish for individual patients.

Gender

One aspect of illness narratives, until now largely neglected within the field of physiotherapy, is precisely how such narratives may be influenced by gender—that is, the socially constructed norms and performances of femininity and masculinity (West & Zimmerman, 1987; Butler, 1990). For example, research on women coping with and recovering from long-term conditions such as chronic pain and fibromyalgia suggests that the women negotiate stereotypical presumptions associating femininity with weakness (Grape et al., 2017; Werner & Malterud, 2003). Studies have explored how women living with chronic pain (pain that is medically unexplained) engage in performative work during medical encounters to prove they are really sick in an attempt to counteract “the stereotype medical discourse of the crazy, lazy, illness-fixed or weak woman” (Werner et al., 2004). Broader-based sociological investigations have shown how notions of femininity infuse medical knowledge and specific diagnoses (Annandale & Riska, 2009). For example, Lian and Bondevik (2015) found that diagnoses of conditions such as Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS) – conditions carrying connotations of a lack of individual strength – seemed to resonate with historical constructions of femininity that remain entrenched in medical knowledge and clinical practice (Lian & Bondevik, 2015).

This suggests that studies of gender in the medical context have considerable relevance for physiotherapy, given that norms regarding femininity and masculinity are likely to affect therapists' clinical reasoning and decision-making.

Recent studies have drawn attention to the risks attached to a one-sided focus on women in gender research on illness and health. As Annandale and Clarke (1996) note, by ignoring men and treating women as a priority distinct from men, such a focus ends up constructing women's health as "poor" against the implicit assumption that men's health is "good". Given such a binary perspective, "women 'cannot' be well and importantly, men cannot be ill; they are 'needed' to be well to construct women as sick" (Annandale & Clark, 1996, p. 32).

Research on the illness narratives of men with chronic muscle pain has challenged such assumptions and offered a corrective to the one-sided focus on women. Ahlсен and colleagues suggest that the tendency of previous studies of people with chronic muscle pain to use phrases such as "women's experiences" and "women's needs" may be misleading; in fact such experiences may represent profound *human* needs in the context of chronic illness (Ahlсен, Mengshoel & Solbraekke, 2012; Ahlсен, Mengshoel & Solbraekke, 2012; Ahlсен, Bondevik, Mengshoel & Solbraekke, 2014). Such studies address the past tendency to draw sharp distinctions between men and women, suggesting that for men just as much as for women, chronic illness involves a fundamental experience of change of self, one which needs to be addressed in physiotherapy practice (Ahlсен et al., 2014; Paulson et al., 2002).

At the same time, distinct gendered social transformations do shape how illness experiences are understood and narrated. One example is the transformation that takes place in people's lives when a loving relationship changes from being a stable, secure phase of life to an unstable, risk-ridden entity that may end in

divorce (Beck & Beck-Gernsheim, 1996). We would argue that this alteration merits strong social and emotional support for both women and men in the context of illness and recovery. Taking into account that men's identity and values have traditionally been connected to work, sport and public life, we claim that there is a need to focus on the ways in which men's illness experiences might be embedded in family relations and the private sphere. Based on empirical studies of families in Norway, Aarseth (2009) argues that the current heteronormative "gold standard" of the modern family structure (comprising a working mother and a working father) allows fathers greater involvement in parenting than was the case when they were the sole breadwinner in the partnership. However, fathers, like mothers have long experienced, now find themselves in a situation where they are required to be both an emotionally competent parent *and* a strong, reliable employee (Aarseth, 2009). In other words, modern parents need a trustworthy, intimate relationship in order to stay close to their children, and they need an intimate, fulfilling family life to help them cope with growing pressures at work. Yet, we believe the implications of this intensified experience of private life on men's experiences of illness and recovery, especially when these intensified relations disrupt, are under-researched. In line with our critical narrative understanding of illness, in which social constructs such as gender are seen as to have profound implications for how physiotherapists understand and treat their patients, we advocate a more thorough investigation of the ideas and practices relating to men's emotional life.

With these perspectives as our point of departure, we now explore how different aspects of masculinity are played out in the illness and recovery narratives of men with chronic muscle pain. Our intention is to illustrate how these gendered narratives can be used as resource in the practice of physiotherapy.

Part two: Unpacking gendered aspects of men's narratives of recovery from chronic pain

The analysis that follows is based on data collected as part of a larger study on the illness experiences of Norwegian men and women in rehabilitation because of chronic pain. The study was conducted in line with the Helsinki Declaration act, and was approved by Norway's Research Ethics Committee of Medicine (Ref. 2009/1017).

A total of 10 men and six women participated in the study. All were attending, or had recently attended, a multidisciplinary chronic pain rehabilitation program at a clinic in Norway. The rehabilitation clinic specializes in treating people with musculoskeletal pain. The treatment offered was developed by a multi-disciplinary team consisting of professionals with expertise in various fields of medicine, including physiotherapy, nursing, and psychology; others were specialists in nutrition and sports.

The data discussed in this chapter came from qualitative interviews with the 10 male patients, most of whom were on full-time sick leave because of their pain. Their ages varied from 28 to 47 years. Although most were skilled workers, a few were craftsmen, and one had tertiary education. All were of Norwegian ethnicity.

We regard interviews as active interactions between interviewer and participant (Gubrium & Holstein, 2003). In order to encourage participants to speak about what was important to them in their own world, the interviewer asked open questions where possible. She then asked follow-up questions to draw out the specific features of each narrative, with participants (for example) invited to elaborate on their treatment experiences. The interviews were conducted by the first author, a physiotherapist – a fact that the participants were made aware of.

Interview quotations presented below were translated from Norwegian into English by the authors.

Overall, the men's illness narratives conveyed vulnerability and suffering. Their stories referred to a number of painful events and difficult life situations, including the serious illness of a child, conflicts or unhappiness at work, unfaithfulness on the part of a spouse, and divorce. At the same time, emotional experiences were usually downplayed in favour of an emphasis on concrete, objective facts: for example, an accident or a physical impairment. In order to unpack gendered aspects of the illness narrative of men with chronic pain we will present three different narratives: 1) "blows to the head" and "backs that lock", 2) social and emotional disruptions and losses, and 3) recovery as a rebuilding of body, self and social connections.

"Blows to the head" and "backs that lock"

Rupert, a divorced father in his 50s, worked as a plumber in the oil industry. His narrative placed great emphasis on the neck pain he currently suffered following an accident at work. He described what happened thus:

There is a damaged disc in the neck. It was damaged, not last year, but the year before, in December—or at the end of November, I think it was—when I banged my head against a girder at work... We'd gone back and forth under that girder for a whole week, but I was in a hurry that day, and I went too far up ...and then I bumped my head against the girder, and my head was jerked backwards.

When narrating their pain experiences, most participants likewise emphasized a sudden physical collapse or malfunction as a result of powerful external forces beyond the men's control. As such, the men's stories invoked a masculine self that is constructed as

habitually autonomous and in control of events and where chronic pain is associated with heavy work and powerful physical forces.

Jim, a married man in his 30s, had three children, one of whom was seriously ill. Jim worked as a helicopter pilot but was currently on a sick leave due to back pain. While Jim articulated considerable worry and concern about his sick child, the plot of his illness narrative was firmly linked with physical injuries he had suffered:

There are two incidents that may have contributed [to me being here]. The first time I strained my back was when I was doing some redeco-rating four years ago. [...] I lifted some boxes of tiles in order to place them in the back of the car. They were heavy, and then my back was completely locked. That was the first time [...] The next was in May 2007. I was working all day with a rotary cultivator on a hillside, and my back became numb. Later that day, I sneezed while sitting in my car. And then it happened: I could not move.

Jim's example illustrated how participants' illness stories, while often conveying emotional pain and distress, presented pain as definite, localized and linked to the physical body. In this type of plot, the men's need for help was to identify the injury. Presenting oneself as an active agent in this process, as Jim did in this extract, was very striking:

[...] After a couple of weeks, I took action by going to see my GP. I got an MRI, which showed a problematic area in L4, L5[...]What I really was after was a clinic that could rehabilitate me. I have a couple of friends who have been here [to the clinic] and recommended it, and then I got the doctor to refer me [to the clinic].

As Jim's story revealed, participants' illness narratives usually couched a need for help in terms of the men adhering to traditional masculine norms by taking action. The need for help was typically first conveyed as a need for medical investigation, such as an X-ray

or an MRI scan. The illness narrative then concluded with the identification of a localized physical problem, and efforts to fix it.

Social and emotional disruptions and losses

In addition to descriptions of sudden blows and other bodily incidents, the men's stories contained elements that suggested they perceived pain as more than simply an event arising within the body and caused by "external forces". In this section, we will unpack these fragmentary references to social and emotional disruption and loss. We wish to clarify that emotional and social aspects of the men's pain and illness in this study were not articulated directly during interviews. It was when reading the transcripts that we were struck by the implicit presence of a social interaction (Gubrium & Holstein, 2003), which manifested itself in avoidance of any talk about emotional aspects of the illness by both the female interviewer and the male informants. Such avoidance could be seen as a traditional way of performing illness and masculinity in the medical encounter. We noted that several interviews were characterized by a form of "circular talk" revolving around "the body", "the causes of the pain" and "the working conditions", to the exclusion of other topics.

As we explored the interview transcripts closely, we identified that the men were taking small steps (or dropping hints) to redirect conversations: towards the idea of their suffering having some connection with disruptions or losses in their social and emotional lives. Disruptions and losses primarily related to two social arenas— work and family life – and the dynamic between them.

Rupert's story illustrated this dynamic well. Rupert, 45 years old and the divorced father of one child whom he saw every fourth weekend, worked in the construction industry. His worksite was far from home, and his pattern was to work for two weeks, followed

by four weeks off work. Rupert mentioned these contextual factors during the interview, but when the interviewer asked how he dealt with the situation he simply replied, “It’s okay.” Still, the story he went on to tell, in some detail, described constant changes of location at work:

I’m not on one specific platform. I’ll be on a platform once, and then I can be on another the next trip, and another next time. [...] It may take a year before I’m back on the same platform. So it’s very varied. I meet new people, more and more new people [...] But in this way, you lose a sense of belonging. You notice the fact that those who are permanently on the platform are united as a group. For those of us who are there only a few times.... And the first time I’m there, I’m a little unsure as to whether I have taken someone’s place.

Rupert’s story is thought provoking when read in the light of the widely held notion that men develop and confirm their identity by virtue of their access to paid work and work-based camaraderie. As we read it, Rupert’s “lack of belonging” may be linked to the phenomenon of increasingly “greedy” working institutions, and growing pressure at work that heightens employees’ need for a compensatory personal sphere.

Towards the end of the interview, the interviewer raised the subject of Rupert’s divorce. He then discussed his emotional discomfort following his former wife’s leaving him for another man, a situation he described as resulting in “a whole year of being constantly on edge.”

A close reading of how the men’s narratives unfolded during the interviews therefore revealed moments when masculine ideals of self-control and independence were transcended, illuminating other qualities such as vulnerability, and a need for belonging.

If the men’s stories of pain and recovery are viewed as a whole, several forms of social disruption emerged. In Tony’s narrative,

his daughter's illness, and unstable family situation were gradually shown to be very emotionally distressing:

Tony: I have a sick daughter, who is struggling terribly. I accompanied her to the doctor's yesterday, and she had a collapse, you may say, at the doctor's office, and it was no fun. And as I told you, it has been very hard lately [...]

Interviewer: What kind of disease is it?

T: I do not know if you are familiar with it, but she has been diagnosed with ME fatigue syndrome. You might have heard about it, and it's no fun. There's very little that can be done about it, really. In our despair we try everything, but it...

I: Well, that must be a desperate situation. She lives permanently with you or ...?

T: No, we had shared custody, but now she lives mostly with her mom. And then, unfortunately... Last summer it was revealed that she has a particularly difficult relationship with my new live-in partner. I was not aware that it was so bad.

I: It sounds like you're in a terrible squeeze.

T: Yes, that's what the psychologist also said. "You're in a thumbscrew," she said. So, of course, all this has not made my back problems any better. Because you tie yourself up—mentally—quite unconsciously, you do.

While most of the men's stories focused on physical damage, Tony's story had a different emphasis, one that set it apart from the "external mechanical forces leading to internal pain" plotline. As we see it, Tony's story was explicitly about "being battered emotionally": physical pain was entangled with his daughter's illness and difficult family relations. Illness stories tend to have a turning point. In Tony's case, the turning point was primarily emotional, rather than to do with his physical condition. As he explained:

[It was] after the holiday, we [my live-in partner, my child and me] had been together for 14 days. Then I took a battering, because she [the daughter] said, "Sorry, Dad...I can't stay with you as long as she [the live-in partner] is there." I felt like I almost had to choose between my daughter and my partner... no fun. [...] I think it was so sad when she told me that she did not want to live with me that I reported sick, because I was at a loss about what to do.[...]My back was completely locked. I could not drive the car. I couldn't even manage to get out of bed. I couldn't do anything.

This part of Tony's story clearly expressed human suffering and emotional distress as part of his illness experience. Tony felt emotionally "battered" by his daughter's not wanting to live in his house. A careful reading of his story suggests that this loss may be interrelated with his back becoming "completely locked."

In addition to physical disruption, expressed in terms of an injury, the illness narratives of men in rehabilitation for chronic pain demonstrated other types of disruption: relational breakdowns, losses, and enduring emotional distress. Such expressions of despair and fragility suggested that a de-construction of gender was taking place in the men's narratives. In our exploration of how the men's stories unfolded during interviews, we became aware of how their narratives emerged through a process of close, dynamic cooperation between participant and interviewer. What came to the fore during an interview, and what was left in the background, seemed to result from an ongoing negotiation between the two. Participant and informant appeared to work collaboratively to find a way for social disruption and emotional loss to enter the illness narrative.

In the next section, we show how the men's recovery stories convey needs that extend far beyond simple repairing of physical damage.

Recovery as a rebuilding of body, self and social connections

Bury's (1982) conception of chronic illness as involving a major disruption of the relationship between body, self and environment resonates within the experiences of our participants, as expressed in their illness narratives. In our analysis of the men's recovery narratives, we found three particularly relevant aspects. Replete with references to pain and physical problems, the stories first conveyed changes in the men's relationship to their own body. Second, by referring to emotional blows, a sense of loss and moments of bewilderment, the accounts pointed to a changed perception of self. Third, the narratives told of disruptions in the men's social networks: for example, no longer having a sense of belonging at work, or losing contact with children following divorce.

In terms of their bodily condition, the men commonly discussed a need to rebuild muscle strength. For example, Rupert here spoke enthusiastically about the training program:

There's a lot of group training for fitness, and spinning and strengthening exercises. But there [is] also individual training, with three, four, five exercises. Three exercises for the neck in a sling [...]. It has helped a great deal. And then ... The stiffness in my arms... has become better, too. So, fitness and everything has become better after coming here [to the clinic].

Jim's story of recovery emphasized a need to strengthen his back muscles:

I really need help for my back pain, and they [the physiotherapists] have set up an exercise program for me, and they have seen that I'm very weak, very weak—those stabilizing muscles at the back [are] very unstable.

Training and exercises held a dominant place in the men's recovery narrative. Even so, this focus on training did not entirely conceal other aspects of recovery. Although physiotherapists and other health professional were often referred to in terms of their professional expertise, the men's stories also showed a more emotional aspect, in particular their desire to be accepted and cared for by these professionals. As Rupert put it:

The expertise here is very good. And it turns out that they're very forthcoming. I listen to and notice those who are new in the group, and then when we start the group session, they [the therapists] say, "Do as much as you can" and things like that. If someone has a neck problem, they can do the exercises in the way that best suits them, and then they [the therapists] follow up if you have questions. They answer your questions and help you with the exercises and correct you if you do them wrong [...] You are looked after all the time... you are valued as [the person] you are, in the shape you are, with the problems you have.

The need to be cared for, revealed by Rupert's noting that his therapists asked those attending group sessions how they were doing, was a frequent, if rarely explicit theme in the men's stories of recovery. The men's need for comfort and care was often linked with physical training and muscle building: traditional masculine notions of recovery.

Mike, an unmarried teacher in his 30s on sick leave because of persistent headaches, spoke of his need to be comforted when he felt afraid:

Sometimes I react negatively to training. Often not straight away, but it comes the day after, or in the evening or something, and it's very good to have someone to talk to about it. [I] could tell them [the therapists], for instance, what has happened and simply be reassured that it's not

dangerous, because I'm afraid to turn bad into worse, and then I get the message: "Do an easy workout today and see how it goes." It's given me confidence in how to exercise correctly.

A close reading of how the men's illness narratives unfolded revealed individual experiences and personal needs that challenged traditional cultural notions of men as self-reliant and independent. In fact, the men's recovery narratives spoke to a profound human need to rebuild a disrupted self through care and support. While health professionals figured most prominently in the men's stories, other factors were seen as aiding the project of reconstructing the self. Rupert was buoyed up by some comments he got in the locker room:

Sometimes I occasionally hear when I enter the locker room... some of the elder men... one of them said to me, "Yes, you are much stronger than me," he says. He nearly always mentions that I'm in good shape. He thinks I'm in much better shape than him. Well, we've been [training] for a while, so we do get in better shape as we keep going.

The men's illness narratives also expressed a need for others as they continued their rehabilitation. As Aarseth (2009) notes, creating a self requires self-reflection, and this in turn depends on close relations with others. Given the men's narrative inclusion of professional and personal relationship difficulties, relational and emotional support was likely to be important in the physiotherapy treatment of men with chronic pain. Like other participants in our study, Mike voiced a profound human need for a sense of connection with others:

It's not bad having this arrangement to go to when you're on sick leave. I try to do something every day and not just stay at home. Doing exercises, getting good follow-up and meeting others with the same problems—it's pretty good. At work, my friends... aren't in the same

situation. It's good to have someone to talk to who has the same experiences as I do.

In summary, the recovery narratives of men in rehabilitation for chronic pain carried many layers of meaning. While the men overtly emphasised the importance of physical training, there were also suggestions of a human need for connection with others. Traditional norms of masculinity therefore appeared to co-exist with other types, ones that seemed out of step with stereotypical and essentialist readings of gender.

Conclusion

In this chapter, we sought to highlight the potential of narrative approaches in critical physiotherapy. By combining a narrative approach with gendered perspectives on the illness narrative of men with chronic pain, we demonstrated how people's communication of their experiences of illness and recovery cannot be separated from social context, including prevailing gender norms. Our analysis showed how men's illness narratives were shaped by cultural expectations that men be strong and independent, by presenting pain as a definite condition in the body and a need to build muscle strength. At the same time our analysis showed how men's illness narratives included less typically masculine aspects, such as relational disruptions and emotional distress, and a need for comfort and care. Importantly, our study showed how the narrator and listener constructed gender norms collaboratively. In 'individual' illness narratives, what comes to the fore and what remains in the background was a matter of continual negotiation. Given these findings, an uncritical acceptance of dominant gender norms by therapists may contribute towards keeping the men's needs veiled with regard to physiotherapy and health care. Our work thus highlights that the patient's illness narrative is an important source of

knowledge in physiotherapy practice. A narrative approach, which includes not only *what* is communicated in a clinical setting, but also *how* individual experiences are shaped, can contribute to ensuring the physiotherapist's clinical reasoning and decision-making processes suit the needs of the individual patient.

References

- Aarseth, H. (2009). From modernized masculinity to degendered lifestyle projects: Changes in men's narratives on domestic participation 1990–2005. *Men and Masculinities*, 11(4), 424–440.
- Ahlsen, B., Bondevik, H., Mengshoel, A. M. & Solbraekke, K. N. (2014). (Un)doing gender in a rehabilitation context: A narrative analysis of gender and self in stories of chronic muscle pain. *Disability and Rehabilitation*, 36(5), 359–366. doi:10.3109/09638288.2013.793750 [doi].
- Ahlsen, B., Mengshoel, A. M. & Solbraekke, K. N. (2012a). Shelter from the storm; men with chronic pain and narratives from the rehabilitation clinic. *Patient Education and Counseling*, 89(2), 316–320. doi:10.1016/j.pec.2012.07.011.
- Ahlsen, B., Mengshoel, A. M. & Solbraekke, K. N. (2012b). Troubled bodies - troubled men: A narrative analysis of men's stories of chronic muscle pain. *Disability and Rehabilitation*, 34(21), 1765–1773. doi:10.3109/09638288.2012.660601 [doi].
- Annandale, E. & Clark, J. (1996). What is gender? Feminist theory and the sociology of human reproduction. *Sociology of Health and Illness*, 18(1), 17–44.
- Annandale, E. & Riska, E. (2009). New connections: Towards a gender-inclusive approach to women's and men's health. *Current Sociology*, 57(2), 123–133.
- Atkinson, P. & Delamont, S. (2006). Rescuing narrative from qualitative research. *Narrative Inquiry*, 16(1), 164–172.
- Beck, U. & Beck-Gernsheim, E. (1996). Individualization and 'precarious freedoms': perspectives and controversies of a subject-oriented sociology. In P. Heelas, S. Lash, & P. Morris (eds.), *Detraditionalization* (23–48). Oxford, UK: Blackwell Publishers Inc.

- Bruner, J. (1991). The narrative construction of reality. *Critical Inquiry*, 18(1), 1–21.
- Bury, M. (1982). Chronic illness as biographical disruption. *Sociology of Health and Illness*, 4(2), 167–182.
- Butler, J. (1990). *Gender Trouble*. New York, NY: Routledge.
- Chase, S. E. (2005). Narrative Inquiry; Multiple Lenses, Approaches, Voices. In N.K. Denzin & Y. S. Lincoln (eds.), *The SAGE Handbook of Qualitative Research* (Third ed., 651–679). Thousand Oaks, CA: SAGE Publications.
- Cruz, E. B., Caeiro, C. & Pereira, C. (2014). A narrative reasoning course to promote patient-centred practice in a physiotherapy undergraduate programme: A qualitative study of final year students. *Physiother Theory Pract*, 30(4), 254–260. doi:10.3109/09593985.2013.863415 [doi].
- Edwards, I., Jones, M., Carr, J., Braunack-Mayer, A. & Jensen, G. M. (2004). Clinical reasoning strategies in physical therapy. *Physical Therapy*, 84(4), 312–330.
- Frank, A. W. (1995). *The wounded storyteller; Body, illness and ethics*. Chicago and London: The University of Chicago Press.
- Grape, H. E., Solbraekke, K. N., Kirkevold, M. & Mengshoel, A. M. (2017). Tiredness and fatigue during processes of illness and recovery: A qualitative study of women recovered from fibromyalgia syndrome. *Physiother Theory Pract*, 33(1), 31–40. doi:10.1080/09593985.2016.1247933.
- Greenfield, B. H., Jensen, G. M., Delany, C. M., Mostrom, E., Knab, M. & Jampel, A. (2015). Power and promise of narrative for advancing physical therapist education and practice. *Physical Therapy*, 95(6), 924–933. doi:10.2522/ptj.20140085.
- Greenhalgh, T. (1999). Narrative based medicine: narrative based medicine in an evidence based world. *BMJ*, 318(7179), 323–325.
- Gubrium, J. F. & Holstein, J. A. (2003). *Postmodern interviewing*. Thousand Oaks, CA: Sage Publications.
- Gubrium, J. F. & Holstein, J. A. (2009). *Analyzing narrative reality*. Los Angeles, CA: Sage.
- Kleinman, A. (1988). *The Illness Narratives. Suffering, Healing & the Human Condition*. New York, NY: Basic Books.

- Lian, O. S. & Bondevik, H. (2015). Medical constructions of long-term exhaustion, past and present. *Sociology of Health and Illness*, 37(6), 920–935. doi:10.1111/1467-9566.12249 [doi].
- Mishler, E. G. (1984). *The discourse of medicine: dialectics of medical interviews*. Norwood, NJ: Ablex Publishing.
- Montgomery, K. (2006). *How Doctor's Think. Clinical Judgement and the Practice of Medicine*. Oxford, UK: Oxford University Press.
- Paulson, M., Danielson, E. & Soderberg, S. (2002). Struggling for a tolerable existence: The meaning of men's lived experiences of living with pain of fibromyalgia type. *Qualitative Health Research*, (2), 238–249. doi:10.1177/104973202129119865.
- Polkinghorne, D. E. (1988). *Narrative knowing and the human sciences*. Albany, NY: State University of New York Press.
- Riessman, C. K. (2008). *Narrative methods for the human sciences*. Los Angeles, CA: Sage Publications.
- Werner, A. & Malterud, K. (2003). It is hard work behaving as a credible patient: Encounters between women with chronic pain and their doctors. *Social Science and Medicine*, 57(8), 1409–1419.
- Werner, A., Isaksen, L. W. & Malterud, K. (2004). 'I am not the kind of woman who complains of everything': Illness stories on self and shame in women with chronic pain. *Social Science and Medicine*, 59(5), 1035–1045.
- West, C. & Zimmerman, D. H. (1987). Doing Gender. *Gender & Society*, 1(2), 125–151.
- Williams, G. (1984). The genesis of chronic illness: Narrative re-construction. *Sociology of Health and Illness*, 6(2), 175–200. doi:10.1111/1467-9566.ep10778250.

Biographies

Editors and chapter authors

Barbara E. Gibson is a physical therapist and bioethicist whose research investigates how social, cultural, and institutional practices intersect in producing health, inclusion/exclusion, and identity with disabled young people. She has led two books aimed at transforming rehabilitation practices, *Rethinking Rehabilitation Theory and Practice* (co-editor) and *Rehabilitation: A Post-critical Approach*, and is a co-founder of the Critical Physiotherapy Network. She has over 60 peer reviewed publications and holds the Bloorview Children's Hospital Foundation Chair in Childhood Disability Studies. *E-mail: barbara.gibson@utoronto.ca*

David A. Nicholls is an Associate Professor in the School of Public Health and Psychosocial Studies, AUT University, Auckland (New Zealand). He is a physiotherapist, lecturer, researcher and writer, and the founder of the Critical Physiotherapy Network. His research focuses on the past, present and future for physiotherapy. David has published and presented widely over the last 25 years, including the first book-length critical history of physiotherapy title *The End of Physiotherapy*, published by Routledge in mid-2017. *E-mail: david.nicholls@aut.ac.nz*

Jenny Setchell holds conjoint Research Fellowships at the School of Health and Rehabilitation Sciences, The University of Queensland (Australia), and Bloorview Research Institute, Holland Bloorview

Hospital (Canada). Her research interests include critical perspectives on healthcare broadly, and physiotherapy specifically. Jenny's PhD was in psychology, focussing on weight stigma in physiotherapy. She has 20 years of diverse clinical physiotherapy experience, primarily in the musculoskeletal and sports sub-disciplines. Jenny is a founding member of, and co-chairs, the Critical Physiotherapy Network. She has also been an acrobat and a human rights worker. *E-mail: j.setchell@uq.edu.au*

Karen Synne Groven is an Associate Professor in the Department of Physiotherapy at Oslo and Akershus University College of Applied Sciences, and holds a postdoctoral position in the Institute of Health and Society at the University of Oslo, where she is currently engaged in a project exploring children's and adolescents' experiences of participating in group-based lifestyle programs. Groven's research interests are in the fields of obesity, long-term illness and pain. In her research, Groven is inspired by theoretical perspectives in the areas of phenomenology, ethics and post-critical theories. *E-mail: karen-synne.groven@hioa.no*

Chapter authors

Ukachukwu Abaraogu is a Lecturer at the University of Nigeria, Department of Medical Rehabilitation (Nigeria), and PhD candidate at the Glasgow Caledonian University, School of Health and Life Sciences, (United Kingdom). He has cumulative 9 years experience in the clinical musculoskeletal, cardiopulmonary, and women health physiotherapy. Ukachukwu's research interest is currently focused on complex interventions in non-communicable disease, and critical physiotherapy thinking. He has more than 35 original journal articles. Ukachukwu is currently a co-applicant in a Chief Scientist Office Scotland funded research grant. *E-mail: Ukachukwu.Abaraogu@unn.edu.ng and Ukachukwu.Abaraogu@gcu.ac.uk*

Birgitte Ahlsen is an Associate Professor at the Department of Physiotherapy, Oslo and Akershus University of Applied Sciences. Her research interests include critical perspectives on medicine, healthcare and physiotherapy. Birgitte's PhD focused on the role of gender in narratives of chronic muscle pain. Her present research project focuses on knowledge production and -translation in physiotherapy practice. She has 25 years of diverse clinical experiences. She is a specialist in (Norwegian) psychomotor physiotherapy, with responsibility for continuing professional development courses in this area of expertise. *E-mail: birgitte.ahlsen@hioa.no*

Wenche S. Bjorbækmo is a researcher at the Institute of Health and Society, University of Oslo, Norway. Her research interests include phenomenological research approaches, body and movement, function as ability/ disability and physiotherapy theory and practice with a special focus on knowledge expressed, developed and shared in clinical practices. Wenche's PhD was in health sciences, focussing on children defined as disabled and their experiences with moving in different contexts. She has a speciality in physiotherapy with children, and several years of work experience. *E-mail: w.s.bjorbakmo@medisin.uio.no*

Tone Dahl-Michelsen is an Associate Professor at the Department of physiotherapy at Oslo and Akershus University College of Applied Science. In her PhD, she explored the significance of gender in physiotherapy education. Her research interests in particular concern physiotherapy education, including topics as the interaction of the past and present history of the physiotherapy profession, evidence-based practice, ethics and gender issues. Her interests also include students learning, internationalization, curriculum design and learning outcomes. *E-mail: tone.dahl-michelsen@hioa.no*

Clare Delany is an Associate Professor in the Department of Medical Education, Melbourne Medical School, Australia.

In clinical education, Clare's research and publications cover clinical reasoning, professional ethics and resilience in health professional learning. Clare also works as a clinical ethicist at the Royal Children's Hospital Children's Bioethics Centre in Melbourne conducting clinical ethics consultations and research in paediatric bioethics, with a particular focus on ethical challenges encountered by allied health professionals. *E-mail: c.delany@unimelb.edu.au*

Blaise Doran originally trained and worked in the UK. He is a physiotherapist and the coordinator for the Children's Pain Management Clinic at the Royal Children's Hospital in Melbourne, Australia. Previously he worked predominantly in adult neurological rehabilitation. Prior to undertaking his physiotherapy degree, he worked for ten years as a professional actor, primarily in subsidised regional theatres in the UK. He is a member of the Critical Physiotherapy Network. *E-mail: blaise.doran@rch.org.au*

Nicole M. Glenn is a Canadian Institutes of Health Post-Doctoral Fellow in the Department of Social and Preventive Medicine in the School of Public Health at the Université de Montréal where she works under the direction of Dr. Kate Frohlich. She completed her PhD at the University of Alberta in the Faculty of Physical Education and Recreation. Her research interests include understanding experiences related to socio-spatial health inequities, body weight (loss), and bariatric surgery. She conducts qualitative research and often uses phenomenological methods. *E-mail: nicole.glenn@umontreal.ca*

Amy Hiller is an Australian Physiotherapy Association titled musculoskeletal physiotherapist with over ten years of clinical experience. Through her clinical and educator roles, Amy developed a particular interest in the interactional aspects of physiotherapy. Her research primarily focuses on developing knowledge about

how patients and physiotherapists communicate with each other. Currently, in addition to her research, Amy teaches qualitative research methods and approaches to physiotherapy practice in the Department of Physiotherapy at The University of Melbourne, Australia. *E-mail: amyjmhillier@gmail.com*

Roger Kerry is Associate Professor in the Faculty of Medicine and Health Sciences at University of Nottingham, UK. He is a Chartered Physiotherapist and an honorary Fellow of the UK's Musculoskeletal Association of Chartered Physiotherapists. His clinical research focuses on adverse events of physiotherapy interventions. His academic research is on the philosophy of science, investigating the nature of causation in the health sciences. He is the UK lead of the CauseHealth project. Roger also plays guitar and banjo in one of the UK's leading Skiffle bands. *E-mail: roger.kerry@nottingham.ac.uk*

Fiona Moffatt is a Chartered Physiotherapist and Assistant Professor in the Division of Physiotherapy and Rehabilitation Sciences at the University of Nottingham, UK. Her clinical and research interests are in critical care, dysfunctional breathing, implementation science, and productivity. She is also a social scientist and sociologist with an interest in sociology of the professions, Foucauldian governmentality and identity. She has published and presented in internationally recognised fora and is motivated by understanding the social dimensions and impact of the profession. *E-mail: fiona.moffatt@nottingham.ac.uk*

Anna Ilona Rajala is a physiotherapist finishing her philosophy PhD at the Centre for Applied Philosophy, Politics and Ethics, School of Humanities, University of Brighton, where she also teaches part-time. Anna is interested broadly in healthcare, critical philosophy and humanities. Her current research interests include

theories of recognition, the body, dialectics, medical humanities, Shakespeare, and Frankfurt School critical theory. Her peer-reviewed publications include a book chapter “On the value of embodied long-term care” written in Finnish. She also writes a regular column for the Finnish Association of Physiotherapists.
E-mail: a.rajala.12@alumni.ucl.ac.uk

Michael Rowe is an Associate Professor in the Department of Physiotherapy at the University of the Western Cape (South Africa). He conducts research into the use of digital technologies in the classroom and their influence on teacher and student relationships as part of teaching and learning practice. His PhD evaluated the use of technology-mediated practices for clinical education, and led to the development of design principles for blended learning environments in the health professions. He is the editor of *OpenPhysio*, an open access journal with a focus on physiotherapy education.
E-mail: mrowe@uwc.ac.za

James A. Shaw is a Scientist at the Institute for Health System Solutions and Virtual Care at Women’s College Hospital, and an Assistant Professor at the Institute of Health Policy, Management and Evaluation at the University of Toronto, Canada. His research focuses on the institutions that govern health systems and the ways in which those institutions reinforce the status quo or encourage system change. He draws on a variety of theoretical perspectives in his work, including neo-institutional theory and recent advances in Science and Technology Studies (STS).
E-mail: jay.shaw@wchospital.ca

Kari Nyheim Solbrække holds a Dr. polit in sociology and is professor at the Institute of Health and Society, University of Oslo. Her main research interests are medical sociology, critical gender studies, narrative approaches to health and illness, medicalization and

assisted reproductive technology. Her latest publications include “Our genes, our selves: hereditary breast cancer and biological citizenship in Norway” in *Medicine, Health Care and Philosophy* and “Breast-cancer-isation explored: Social experiences of gynaecological cancer in a Norwegian context” in *Sociology of Health and Illness* (2016). *E-mail: k.n.solbrakke@medisin.uio.no*

Tobba Therkildsen Sudmann is Associate Professor affiliated to Department of Occupational Therapy, Physiotherapy and Radiography, and to the Center for Care Research, both at Western Norway University of Applied Sciences. Tobba also has a part-time position as riding physiotherapist. Her research interests focus on patient-therapist relations, micro-interaction and structural conditions for social participation, and include anti-oppressive practice in dementia care, outdoor physiotherapy, technology in healthcare, and priority setting in health care. Her clinical experience is from hospital departments of neurology/orthopedics/neurosurgery, as supervisor and as head of the physiotherapy departments. *E-mail: tsu@hvl.no*

Karen Yoshida is Professor, Department of Physical Therapy, Rehabilitation Science Institute and the Dalla Lana School of Public Health, University of Toronto. She received her PhD in Community Health (Sociology of Health) in 1991 at the University of Toronto. Karen Yoshida is a Critical Disability Studies (CDS) and feminist scholar, ally and activist. Her teaching of CDS and research is community and partnership-based with various disability communities. Her research interests include Disability History, arts-based research, disability leadership, embodiment, and disabled women and their health. *E-mail: karen.yoshida@utoronto.ca*