

JOURNAL OF  
**holistic**  
healthcare  
AND INTEGRATIVE MEDICINE



- Health coaching USA
- The missing body
- Back to embodiment
- Touch in the pandemic
- Not all in the mind
- Feldenkreis on prescription
- Embodying emotion
- Body-centred psychotherapy
- Healing birth trauma
- Embodied breathing habits
- Psychedelics and meditation 2
- Research

Embodiment and bodywork



# ARNICA FOR AN ACHY BODY



Warming, soothing, energising

Whether you're training for your next 10k, powering up a hill on your bike, getting match fit, or spending time gardening, arnica delivers deep muscle warmth both before and after your workout or strenuous activity. A range of soothing products, all made from organic arnica. Your perfect recovery partner.

Available from Holland & Barrett, independent health stores and pharmacies or [Weleda.co.uk](http://Weleda.co.uk)



# WELEDA

Since  1921



**Published by the BHMA**

www.bhma.org journal@bhma.org

Reg. Charity No. 289459

Produced in collaboration with the Integrative Health Institute (IHI) at Salem University

**Editor-in-chief**

David Peters  
infoprofpeters@gmail.com

**Editorial Board**

Professor David Peters  
Dr William House  
Dr Antonia Wrigley  
Dr Thuli Whitehouse  
Bruce Cryer

**Production editor**

Edwina Rowling  
edwina.rowling@gmail.com

**Advertising**

The journal of holistic healthcare has a strong online circulation both nationally and internationally with thousands of page views every month. The journal is available in hard copy and online. To advertise email edwina.rowling@gmail.com Products and services offered by advertisers in these pages are not necessarily endorsed by the BHMA.

**Design**

www.karenhobden.com

**Cover illustration**

shutterstock\_1859138065

Unless otherwise stated, material is copyright BHMA and reproduction for educational, non-profit purposes is welcomed. However we do ask that you credit the journal. With this exception no part of this publication may be reproduced in any form or by any other means – graphically, electronically, or mechanically, including photocopying, recording, taping or information storage and retrieval systems – without the prior written permission from the British Holistic Medical Association.

Every effort is made to ensure the accuracy of material published in the *Journal of Holistic Healthcare*. However, the publishers will not be liable for any inaccuracies. The views expressed by contributors are not necessarily those of the editor or publisher.

# Contents

<b>Editorial</b> .....	2
<b>The rise of health coaching in the care continuum – an American perspective</b> .....	4
Bruce Cryer	
<b>Embodiment – a new way of being</b> .....	6
Philip Shepherd	
<b>Where has the body gone?</b> .....	10
Samantha Emanuel & Luke Davies	
<b>Losing touch in the pandemic</b> .....	13
Bella Eacott	
<b>Integrated medicine: some historical reflections and three cases from primary care</b> .....	16
David Peters	
<b>Feldenkrais on prescription – mindful movements for pain relief, inner peace and optimism</b> .....	20
Julia Wrigley	
<b>Treating resistant psycho-physiological symptoms in somatic therapies through emotional embodiment</b> .....	26
Raja Selvam	
<b>Embodiment – the Alpha and the Omega of somatic psychotherapy</b> .....	30
Michael Rupp	
<b>Embodiment in the female pelvis after birth</b> .....	34
Rebecca Davies	
<b>Embodied breathing habits</b>	
<i>Aligning breathing mechanics with respiratory chemistry</i> .....	37
Peter M Litchfield & Sandra Reamer	
<b>Psychedelics and meditation, part 2: lessons from personal exploration</b> .....	43
James Hawkins	
<b>Research</b> .....	47

# Editorial



**David Peters**  
Editor-in-Chief

## Everything alive is embodied

When Carl Jung asked tribal people in Africa where thoughts came from, they pointed to the middle of their chest. The same is reported of other indigenous people. Yet we folk of the industrial-consumer culture sense ourselves as living in our heads. Is this healthy? Is it why medicine's headlong quest to track down biochemical pathways has meant losing sight of the living body? Yet in bliss or suffering, joy or agony, from birth to death the body is the stage on which we perform our lives.

Some religions, deploring the body for its instincts and desires, mistrust and police it, purge and punish it; hedonists revel and rejoice in it; athletes and adventurers push it to its limits; slavers buy and sell it. Is our embodiment, with all its unpredictability and inevitable impermanence, too much for us to cope with? Author and teacher Philip Shepherd declares in this issue of JHH that we have lost our body and need to find it again.

To live is to be embodied. Matter comes to life as if by magic. Organisms are infinitely precise self-organising 3D jigsaws that stack lifeless pieces into the right place – and hey presto! But how is it that life in its myriad forms knows the picture on its particular puzzle-box, and sensing its proper boundary and shape, weaves molecules on the loom of this life-field? Bacterium or blue whale, rotifera or redwood, all organisms share this talent for *sentient* self-embodiment. Life feels itself into existence.

The plain fact is that matter *can* come to life. This seems to me mysterious, awesome even: a cell divides, multiplies and cells flow together to form a sphere, then a central plate, whose three layers will become organs for mind, movement and metabolism. The human embryo, weightless in the warm, dark unfolding life-field reiterates its evolutionary journey until pushed, shocked into a world of sound and light: at birth the infant body is nine months and four billion years old. Utterly helpless at first, it takes a year or so for the complex movements and senses evolved for survival to come online. Day by day the baby, sensing the world outside, begins reaching out, touching the world of objects, to crawl among them until at last her body can stand, walk, run, jump! All the while her nervous system is building itself at a tremendous pace. In her brain, nerves are making myelin sheaths, shaping grey matter; nerve fibres are organising into pathways, motor control descends into the body.

Freud said our first self (not that we can remember it) is a body-self: purely one of sensations – of smell, sound, touch, warmth, hunger, comfort, pain, floating on a cloud of nameless unbounded bliss or howling in storms of distress. An upset baby cannot soothe itself: its cries signal 'someone feed me ... comfort me'. Sensations of being soothed (or otherwise) flow into the brain's right hemisphere, and in time they get ingrained in the body and this will shape the way we *feel* about feelings. And this will determine lifelong our capacity for tolerating them. Not until late in the second year, as pathways form between the right and left brain hemispheres, do we start making any mental sense of the body's emotions.

Only then do we begin to translate feelings into words that express what we feel inside

Bodydynamic psychotherapist Michael Rupp makes clear in his article that the child's mind is embodied, and that it develops in stages in lockstep with the maturing movement body. He explains too that touch and movement have much to offer in the process of psychotherapy. For we don't lose the need for touch as we grow up: when words of comfort are not enough we may need it all the more. Bella Eacott reminds us how disembodied medicine can be, and that this was never more so than during the pandemic when touch was taboo and faces were concealed. In her article she tells us what can be done to help us stay – literally and metaphorically – *in touch* with our patients.

Emotions are not all in the mind, nor is the mind all in the brain. Having dumped the mind-body split, cognitive science has spun 360 degrees and now views the mind and language as inherently embodied. In his influential 1999 book *The Feeling of What Happens* neuroscientist Antonio Damasio proposed that emotions activate different areas of the body, and that by unconsciously sensing these embodied emotion patterns we learn to identify emotion. A 2013 Finland study in which people mapped out where in their bodies they felt different emotions supports this idea. Across cultures people reported happiness and love as stirring up activity across most of the body, whereas depression blunted feelings in the arms, legs and head. Danger and fear provoked strong sensations in the chest, while anger was experienced as activation in the arms (see diagram page 27).

The whole body – its sensations and chemical messengers from the gut and other organs, proprioception (the body in space) and interoception (the constant unconscious monitoring of internal states signalled from skin, muscles, breathing and blood-flow – constantly influence our feelings. The whole body continually reacts to ever-changing predicaments that trigger internal sensations (for example fear and discomfort create tension in muscles and gut). We sense them (more or less) and interpret them in the light of past experiences. In particular, embodied memories of danger influence how we perceive and interpret these sensations (is the pain alarming?). The emotional body also modifies how we view the world and what we make of other people (is that person's glance threatening or friendly?). We truly do see the world through how we feel.

When overwhelming experiences distort and break these information loops, the body's defences against unbearable emotions and memories can manifest as constriction and pain. Childbirth, even at its best, is fraught with uncertainty: medical interventions can be traumatic. Specialist osteopath Rebecca Davies explains the embodied consequences in her article, and how she approaches persistent post-partum pain. Your editor has dipped into his own casebook too and tells of three patients with complicated shoulder pain whose successful integrative treatment untangled some embodied emotions. These patients were effectively stuck in fight and flight mode and, as is often the case, these emotions were

embodied as muscle tension overbreathing. In this issue bio-feedback innovator and physiologist Peter Litchfield delves into the multi-system impacts of disordered breathing patterns.

Some people notice emotions easily; for others, emotions are less accessible. There are many reasons why, genetic tendencies being one of them, but also adversity in childhood, traumatic experiences, dogmatic beliefs, ignorance, false narratives and the sensory and information overload of globalised 21st century life. As individuals and as a culture, we can overrule what our body is trying to tell us. Comfortably numb we may carry on, but there are major downsides. Problem one is medical. When the body malfunctions even though the lab panels and imaging say 'normal', we doctors are confused; the picture on the box shows a person in pain yet the jigsaw pieces are OK. To understand 'stress' and mental illness, the impacts of trauma, 'functional disorders', and the problem of pain we need to comprehend the whole lived body. In this issue, trauma-work pioneer Raja Selvam illuminates how a practice for embodying emotions can be a resource for exploring and treating persistent physical symptoms. Samantha Emanuel and Luke Davies tell us about post-traumatic growth through embodiment, and Julie Wrigley tells how she succeeded in bringing Feldenkrais mindful movement classes into family practice for people with long-term conditions.

The second problem is planetary. Personal, social and cultural numbness and denial can keep us going in our perilous tipping-point world, but they harden us to others' suffering, and to the cry of the Earth. In his closing article

James Hawkins reminds us that the human body is a part of the whole called by us 'Universe'. Albert Einstein described our sense of separation from this wholeness as 'a kind of optical delusion of consciousness'. James explores the possibility that psychedelic medicines may, as Einstein put it, help 'free ourselves from this prison by widening our circle of compassion to embrace all living creatures'.

We will have to come home to the body if our medical system and way of life are not to slide even further into disembodiment. This issue of JHH brings together some important ideas about embodiment and ways of helping mind and body heal by enriching bodily experience. Overstretched healthcare systems tackling the end results of global and local environmental, social and emotional distress are melting down. To be effective in these unprecedented times the best of medicine will have to nurture humankind's profound capacity to embody, adapt and self-heal.

The essence of holism is its aspiration for a paradigm shift that unifies mind, body and the other than human world: for the vision and practice of medicine to stretch from the genome to the biosphere. Thankfully, with this cultural turning already under way, healthcare is slowly catching up, and much of what this journal has promoted over 20 years has already come in from the fringe. The body is now at the forefront of developments in psychotherapy and lifestyle medicine; the social prescribing movement is tapping into groups for nature connection, movement, walking, cooking, mindfulness, yoga and art. Though it is unevenly distributed, these are signs that the future is with us. JHH will continue to bring you despatches from the frontier.



[www.ncim.org.uk](http://www.ncim.org.uk)  
[education@ncim.org.uk](mailto:education@ncim.org.uk)

## Transform your clinical practice, invest in your career and broaden your understanding of Integrative Medicine

Integrative Medicine brings together conventional, lifestyle and holistic approaches in a mutually respectful way to support health and wellbeing. It's underpinned by key concepts of wellness, resilience and whole person health. It's an empowered model of healthcare offering diversity and choice to patients and clinicians.

The National Centre for Integrative Medicine runs a vibrant education programme for healthcare professionals designed to support Continued Professional Development. This includes:

- Two-year accredited Masters Level 7 Diploma in Integrative Healthcare
- One-day Integrative Healthcare Forums
- Accredited Foundation (online) & Advanced Professional and Veterinary Homeopathy training
- One-day Homeopathy Masterclasses & three-day Homeopathy Summer School
- Monthly Holistic Doctor webinars

### BOOK NOW!

Join us at our next online Integrative Healthcare Forum: **Living Well in Later Life (23 September)** to look looking at how integrative approaches can transform health and wellbeing. This Forum offers a day of cutting-edge learning from a wide range of experts. It will help us explore how ready we are for our own or our loved ones' old age and ask, 'what does it mean to age well?' It's for healthcare professionals, students, researchers as well as members of the public [www.ncim.org.uk/event/livingwellinlaterlife](http://www.ncim.org.uk/event/livingwellinlaterlife)

# The rise of health coaching in the care continuum – an American perspective



**Bruce Cryer**

Executive Director,  
Integrative Health Institute  
at Salem University



## Update from our USA collaborators the Integrative Health Institute, Salem University

This spring, the world's health care systems – struggling with tens of millions of cases and in the US alone a million Covid-related deaths – entered a third year of overwhelm and exhaustion. Covid's random ferocity has made us all wonder how to strengthen our immune systems and lessen Covid's impact. Here in the USA one positive outcome of the pandemic is an evident upswing of public concern for self-care and prevention. On the other hand, the lack of a Covid cure may be shaking our trust in the powers of mainstream medicine. Widespread vaccine scepticism suggests it has, but on the other hand it may have boosted interest in integrative and holistic therapies as well.

## Health coaching as a tool for health transformation

Even before the pandemic exposed troubling fissures in US medicine's potency, policy and practice, the absence of ongoing support for individuals dealing with complex chronic conditions or recovering from acute illness was obvious. Many articles published in the last few years have advocated health coaching as a necessary way to fill this critical gap in the US care continuum. A movement advancing health coaching as one of the antidotes has been growing quietly, and one notable trend is already bringing in health coaches or community health advocates to support patients who have long-term conditions, including Long Covid.

Corporations, non-profits and government agencies are now well aware that many of their own employees are dealing with long-term and lifestyle-related illness or coping with the lengthy aftermath of more acute health problems. With the growing recognition that health coaching's toolkit adds value to the work of health practitioners and life- and business-coaches we foresee it becoming an accredited profession.

## Why a health coaching model will be essential in the re-design of US healthcare

The US journal *Physicians Practice* has made some bold statements about the value of health coaching, declaring that health coaching might be the middleman the American healthcare system needs to make reform a reality. The Better Care Playbook advocates integrating health coaches into the care team because they empower patients to play a central role in clinical encounters and to engage in self-management activities at home, work, and school, where they spend most of their lives ([www.bettercareplaybook.org/plays/integrate-health-coaches-care-team](http://www.bettercareplaybook.org/plays/integrate-health-coaches-care-team)).

Employers and employees bear the largest cost of healthcare in the US' largely for-profit system, so it is in the employer's interest to provide extra coaching and support, particularly for those employees on the edge of ill health due to physical, emotional and/or mental health issues, both to ensure higher performance and general

wellbeing but also to reduce healthcare costs. And of course, any employee struggling to maintain job performance and quality while dealing with a serious health issue needs the support, guidance and positivity a health coach can bring. Healthcare design experts have concluded that health coaches can help individuals change the behaviors that create health risks – key drivers of future costs – as well as help them to better self-manage their chronic health conditions and reduce costs ([www.aafp.org/pubs/fpm/issues/2010/0900/p24.html](http://www.aafp.org/pubs/fpm/issues/2010/0900/p24.html)).

## The future of health coaching

The evidence for health coaches and their system-wide value is too strong to be ignored. As long ago as 2016 a qualitative study of how health coaches support patients in making health-related decisions and behavioral changes laid down a conceptual model for effective coaching: firm foundations for designing health coach training and to support health coaches in practice ([www.annfamned.org/content/14/6/509](http://www.annfamned.org/content/14/6/509)).

Universities, seeing this rapid growth of interest in caring for others in new ways, are stepping into the space. Online colleges, Ivy League universities and others in the first tier are already developing health coach training programs, among them the Integrative Health Institute at Salem University. Our integrative health coaching program will graduate highly skilled supportive health coaches able

to help people manage long-term conditions and improve their health. As health coaching spreads its wings, individuals will benefit, but so too will the US healthcare system and the corporate commercial world. And in our troubled times, individuals at risk but outside the health insurance system will perhaps more than ever need what qualified health coaches can provide.

For more information go to [www.salemu.edu/integrative-health-institute](http://www.salemu.edu/integrative-health-institute).

### Some important articles about health coaching

*The growing trend of health coaching in team-based primary care*  
[journals.stfm.org/familymedicine/2018/july-august/gastala-2017-0302](http://journals.stfm.org/familymedicine/2018/july-august/gastala-2017-0302)

*Health coaching: adding value in health care reform*  
[www.ncbi.nlm.nih.gov/pmc/articles/PMC3833544](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3833544)

*Why your medical practice needs a health coach*  
[www.ama-assn.org/practice-management/scope-practice/why-your-medical-practice-needs-health-coach](http://www.ama-assn.org/practice-management/scope-practice/why-your-medical-practice-needs-health-coach)

*The effectiveness of health coaching*  
[www.ncbi.nlm.nih.gov/books/NBK487707](http://www.ncbi.nlm.nih.gov/books/NBK487707)

*Nourishing the Frontline: woodland resilience immersive*

Friday 16 September (5pm) to Sunday 18 September 2022 (ends 4pm).

Experience the restorative power of deep connection with nature with NHS frontline staff

A two-night woodland resilience immersive retreat for NHS frontline staff at Hazel Hill Wood, with David Peters and Marcos Frangos

Prolonged overwork, exhaustion, two years of coping with uncertainty and the pandemic, ever-rising demands, endless online meetings, plus all the day-to-day NHS pressures. This immersive retreat will bring opportunities for creative responses, insights and practical techniques for raising your personal and team-working resilience.

- Solo time in a beautiful late summer woodland
- Forest bathing and mindfulness
- Nature's cycles and teaching about human resilience
- Guided conservation work
- Experience the neurobiological recovery response
- Fire circles for frontline stories in these turbulent times
- Time for resting and for sharing good food

There are 14 places available on this immersive retreat. Single room accommodation in beautiful timber off-grid buildings. Delicious home-cooked vegetarian/vegan food, made with love. Total cost for the retreat: £350 early bird, thereafter £400 per person.

TO FIND OUR MORE AND BOOK YOUR PLACE:  
<https://www.eventbrite.co.uk> or email [infopropeters@gmail.com](mailto:infopropeters@gmail.com)

# Embodiment – a new way of being



## Philip Shepherd

Author, embodiment trainer

My passion for embodiment (which I might also call my passion for freedom in this life) has spurred me in many ways. It led me to write two books, *Radical Wholeness* and *New Self, New World*; to co-author *Deep Fitness*; and to develop the embodied present process (TEPP), which is taught in workshops, retreats and facilitators trainings worldwide. The practices of TEPP help people recognise within themselves the patterning of our disembodied culture and find their way back to the intimacy of true presence. You can discover more at [EmbodiedPresent.com](http://EmbodiedPresent.com).

### Summary

A writer and wisdom teacher who developed The Embodied Present Process writes about growing up in our particular culture and the everyday trauma this too often entails. He deplores the way we educate children's heads while neglecting the body and devaluing feelings or even punishing them. He explains that these learning experiences numb our emotions and dam up vital sources of curiosity and vigour. Our society's ingrained assumptions disconnect head from body, make us less than whole and estrange humankind from the natural world to which we belong.

I learned many lessons during my years in grade school – but as the decades have passed, one overarching lesson of those 12 years has come into focus. I now see that, day after day, what the system was primarily teaching me was to control, suppress and deny my body's energy in order that I might sit still in my chair; and to fill my head with the strategies and facts that would enable me to succeed as a student. Those lessons were reinforced with a system of punishment ('the strap' was still administered in my day) and reward (in the form of good grades if I provided the correct answers). That larger lesson being drilled into me acquired a striking significance as life began to show me the equivalence between the body's energy and the subtle, attuned complexity of its intelligence. Being made to suppress the body's energy, I was also being made to suppress the intelligence it was activated by. But something else was happening at the same time: I was internalising the cultural myth that says thinking is something that happens exclusively in the head.

### Programmed

Coming to terms with the fallacy of that myth has taken me on a long and very personal journey – one that was greatly facilitated by exposure to other cultures. One of the milestones occurred when I was 20 and lived for a time in Japan, studying classical Noh theatre, a 600-year-old art form. There I learned the Japanese word *bara*, which is impossible to translate into English. It literally means 'belly' – but in practice it refers to a grounded intelligence that holds one's deepest truths and is the source of one's most subtly attuned presence. In Noh theatre, every gesture arises from that bottomless realm of knowing; every head that turns to see looks from there. The impossibility of translating *bara* into English is made clear by certain phrases. Where we would say 'He's hotheaded' the Japanese would comment 'His belly rises easily'. We might comment 'She's got a good head on her

shoulders'; the Japanese would say 'She's got a well-developed belly'.

Since that time in Japan I've gained perspective on other possibilities of experience from a range of cultures. The Anangu in Australia understand that people have three centres of intelligence: the head, the heart and the belly. The belly is considered the primary intelligence, and they characterise the thinking of the head as 'a tangled fishing net'. The word for 'insane' in language of the Okanogan culture, in what we call North America, literally translates as 'talking, talking inside the head'. But that's what we in our culture do all day long! It just seems normal.

What I've come to understand is that the ceaseless chit-chat of the head results from living in the head. Larry Mercurieff, a member of the Aleuts of the Alaskan Pribilof Islands, relates that by the age of seven he could go for hours without one word entering his head. That's how hunter-gatherers attuned the world – not by sitting in the head chatting about it to themselves, but by feeling it through the wordless intelligence of the body.

## Wholeness

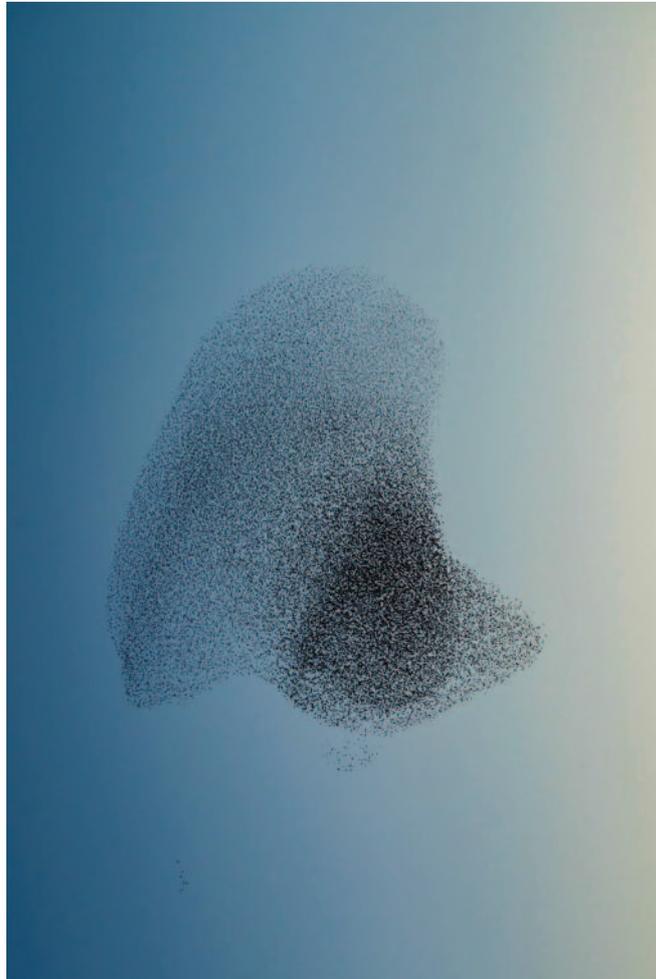
When we aspire to a state of health, mental or physical, it's helpful to remember that our word 'health' derives from the Latin word for wholeness. If we allow the Okanogan and the Latin to join hands, the suggestion emerges that 'talking, talking inside the head' points to a lack of wholeness. And indeed, if 'you' are talking to 'yourself', one part of you is providing the commentary and another part is being addressed. That inner division is the lesson enforced by our school system – and we are so thoroughly habituated to it that it's hard to even imagine sustaining the wordless state described by Larry Mercurieff. Our heads are too busy supervising our experience.

And no wonder that's the case. When the body can't commune with the world, the head talks to itself – and messages urging us to live in the head saturate our language, values, customs, architecture, hierarchies and symbols. For instance, the icons for washrooms and

Olympic sports all represent the human being as a head disconnected from the body. The leader of every organisation is invariably referred to as its 'head'. The words 'captain' and 'chief' – which designate leadership roles – come from the Latin word for head. Our economic system, 'capitalism', literally means 'headism'. And while 'a head count' tells you how many people are present,

'a body count' tells you how many dead there are. We casually claim that two heads are better than one, but the deeper truth might be that two hearts are better than one.

Our head-centric culture also helps explain our love affair with the car. Cars are designed to resemble heads on wheels. They have two 'headlights' rather than three, say, just as we have two eyes. And the experience of driving in a car replicates the feeling of living in our heads: the car offers us a private realm, just as the head does, in which you can listen to your personal music as you might walk along the street listening to your private thoughts. And when you sit in a car and look at the world 'out there' through the windshield, it recalls that familiar feeling of sitting in your head, looking at the world 'out there' as though you were somehow set apart from it.



Starling murmuration (Shutterstock)

## Three questions

As a culture we are steeped in, trained into and committed to a disembodied way of being. And that provokes three questions that I'd like to look at. First, isn't it natural to live in the head, when it's where we see, hear and taste from, and happens to be where the brain is? Second, does putting the head in charge create its own set of problems? And finally, what cultural paradigm shift conspired to squeeze us out of the body and into the head?

The first question is a challenging one to address, because what seems like a natural and objective fact to us is actually an expression of a cultural bias. So yes, we do see and hear from our heads, and experience our thinking there – but is that the *reason* we live in our heads, or the *result* of it? The experience of other cultures suggests the latter explanation. The Anlo-Ewe of Africa, for example,

have a word that means to ‘hear from the ear’ – but they are clear that *real* hearing is an experience in which the sounds of the world are felt in the body. We have anointed the conscious thinking of the brain as our supreme faculty and the natural ruler of the self, but in fact the body processes a billion times more information than we can be conscious of. It teems with an intelligence that is continuously attuning to the world. So it may actually be more ‘natural’ to live within the ocean of the body’s intelligence, feeling and thinking from that holistic intelligence, than to extract from it and remain cloistered in the head.

It’s helpful to remember that our word for health derives from the Latin word for wholeness

And that brings us to the second question: does putting the head in charge create its own problems? Consider this: our relationship with our bodies is primary. No relationship is more personal or more basic in shaping your way of being in the world. The way you relate to your body establishes the template for how you relate to everything else. And we learn to relate to the body by putting the head in charge of it, rendering the body’s intelligence opaque and its functioning mechanical. As such the body is something we organise, supervise, and command from above. Our lives are so distant from it that we speak of ‘having a body’, the way we might speak of ‘having a Swiss army knife’. We don’t speak of ‘being a body’ – it is a tool we use to get things done.

This top-down relationship with the body sets the tone for our relationship with the world. We feel similarly distant from the life of the world and understand nature as a machine with many moving parts. We don’t feel it as a miracle; we view it as something that lacks innate intelligence: something to be organised and dominated. Assuming only humans are truly intelligent, we assign ourselves a managerial role: we dominate nature, re-imagine it to suit our narrow purposes, and hammer it into a rectilinear monotony.

When I look at the myriad crises we face around the world, I see the stresses we are inflicting on the world being driven by an imbalance within ourselves: divided against ourselves, we can only be divided against the world. Seeking control over the self, we seek control over the world. As the Jesuit writer Charles Davis observed, *‘the core of disorder lies in the self. The self has to be healed; its attempt to control the universe is a sickness to be cured, not a source of remedy’*.

## Intelligent?

Our top-down approach to self and world has led us to define them both in dangerous and restricted terms: for

example, human intelligence as the ability to reason in an abstract fashion, the very quality that an IQ test measures. It’s as though the verbal-based head intelligence has asserted the definition that is most flattering to itself. And abstract reasoning is certainly one form of intelligence – but I see it as one narrow bandwidth in a vast spectrum. And when I go to name or characterise that spectrum, the word I come up with is *sensitivity*. I believe that any sensitivity is a form of intelligence, whether it’s a sensitivity to a child’s tears, to Mozart, to waves riding into the shore, or to legal argument. The nature of a sensitivity, though, is that it is reactive. If the retina didn’t react to light, for instance, we wouldn’t see. That reactivity has to be grounded in order to become coherent. If I were pressed to define the quality of human intelligence, I would characterise it as the quality of *grounded sensitivity* – a quality that relies on the body.

There is no doubt that we are very, very clever as a culture – we are demonstrably the cleverest culture that has ever been; but we have also demonstrably forgotten how to live intelligently. And that echoes the endemic forgetfulness of the school system we considered earlier, which effectively desensitises our children and leaves them ungrounded. They may come out of the system with enhanced cleverness, but their true intelligence has been assaulted.

Our top-down approach has also restricted our definitions of the world. For instance, we measure it with dimensions that, like the head’s intelligence, emphasise separation and distance, thereby implicitly denying the dimension in which everything is in contact with everything at all times. So we propose three dimensions of space and one dimension of time, and can measure with great accuracy the distance in time and/or space between any two events; but reality keeps leaking out of this framework. For example, one day when a dear friend of mine was a schoolboy, he stood up from his chair in the middle of a lesson, ran out of the classroom, ran out of the school and all the way home, where he burst in the back door to find his mother lying on the kitchen floor in a pool of blood. She looked up at him and said, ‘Thank God you came Jack – I prayed you would’. In many indigenous cultures this would not be considered exceptional; in our culture it is either considered impossible or dismissed as a mere coincidence. Living in the head as we do, we live with a fractured sense of self – and so our eyes see a fractured world around us. And then when we do damage to the subtle, mindful, delicate interconnections that sustain life, we might barely notice.

## Separation

Just as living in the head leads us to see the world as a collection of separate things, it leads us to feel the self as separate among them. We speak of our independence as a virtue and actively seek it. We come to feel the skin as our private boundary, and we have developed our language and customs to uphold that boundary. For example, when

we sit down to eat a meal, we are assigned our chair and our placemat and our cutlery, and they define our private space. If Sally to my left wishes the salt on my right, she is prohibited from reaching through my space to retrieve it for herself. She has to say, 'Philip would you pass me the salt?' and I obligingly pick it up and convey it safely through my space to the boundary of her space. The problem with our cultural insistence on hard boundaries and our assertion of independence is that all boundaries are permeable, and independence is a fantasy. There isn't a single example of independence in all the cosmos – there is only interdependence. When you reflect on our craving for independence, it's revealing to consider what world mythology has to say about it. The great scholar of myth, Joseph Campbell, characterised the mythic tyrant as 'the man of self-achieved independence'. It's a resonant phrase, and to our ears actually sounds pretty attractive.

In fact, that phrase describes the American dream with a poignant accuracy. As a culture we have dedicated ourselves to the tyrant's fantasy.

That mirage of independence is an essentially disembodied state. It is a product of living in the head. When you live in the head you dissociate from what the body most deeply knows, and from what the body most deeply feels, and both of those speak strongly against independence. What the body most deeply understands, in my experience, is that it belongs to the world. When I stand before a tree, for instance, and truly feel its presence, I feel how deeply we belong to each other. The same is true whether I'm looking at a blade of grass or a star in the night sky or a far-off mountain. And what the body most deeply feels is the present. The aliveness and sensitivity of the body's flesh feels the aliveness and sensitivity of what is here now. The body itself is like a singing bowl that attunes with exquisite sensitivity to fluctuations in the field of the present. No part of the body's intelligence is tainted with the fantasy of independence.

## Control

What stokes our fantasy of independence is the desire for control. If you can stand independent of the world then it can't get to you, it can't interfere with you. The impulse that first carried our culture up through the body and into the head was just that: the desire for control and all that it promised. And that raises the third question we posed: what paradigm shift drew us into the confines of the head?

When you look at the arts and reconstructed language of the late Paleolithic and early Neolithic era in Mediterranean cultures, it's clear that, like extant indigenous cultures around the world, they thought and perceived from a centre of awareness in the belly. When agriculture was discovered, everything changed. Imagine the effect of pushing the first seed into the earth and patting it down. Suddenly that green shoot growing up beside your seed is a weed and needs to be killed. Before that moment weeds didn't exist. And as your plant grows,

the little animal coming up to it has to be killed, because it might eat your plant. Before that moment vermin didn't exist. And the plant and the bit of ground it's rooted in belongs to you. Before that moment ownership of land would have been a ridiculous concept. Furthermore, the tree growing beside your plant has to be cut down because it's putting your plant in the shade, and your plant needs sun in order to flourish. Before that moment we didn't seek to control the world, we sought to come into harmony with it. And our most valuable asset in seeking to harmonise with the world was the body's intelligence. Its sensitivity could feel animals in the forest, it could sense where water was, it could feel the medicine waiting in plants. We lost all that as we turned the body into a mere tool.

Beginning with the Neolithic revolution, the centre of our intelligence began to rise through the body as our culture became patriarchal and we turned our attention to remote gods in the sky rather than the immanent goddess of the earth. By 800 BC we find the characters in Homer's epics experiencing their thinking in the chest. By 500 BC the philosopher Parmenides declared that the senses were not to be trusted and that only reason could guide us to the truth, setting the course for Western philosophy for hundreds of years to come. In 350 BC Plato offered an explanation for how the gods created us. As explained in the dialogue *Timaeus*, first they fashioned a divine sphere, based on the orbs of the heavens. But they realised it wouldn't be able to get around in the world, so they grew it a vehicle: arms and legs and a trunk. So there we are, almost 2,500 years ago, and the body is already being described as a vehicle for the head. Since that time our thinking has grown increasingly abstract and out of touch, as we have grown increasingly disconnected from the world that sustains us.

## The return

I think it helps to appreciate how long ago our journey out of the body took place, because it cautions us against underestimating the challenge we face. I think the way forward for humanity is to come back to the body, and through it to feel and come into harmony with the world itself. The world doesn't need us to impose order on it, it needs us to join it in its deep harmony. We may be tempted to think that with a few modifications of our behavior we can carry on with the deep habits of our culture. But those habits are ruinous. What is being asked of us is something different: to create a new way of being. A way of being that listens to the world through the body, rather than listening endlessly to our commentary on our own thoughts. Only when we come out of our age-old division will our intelligence be felt as a coherent whole that thinks hand in hand with the world. And it's only as we drop out of the head and join what the body knows that we'll be able to experience the blessing of that wholeness once again.

# Where has the body gone?



## Samantha Emanuel

*Non-linear movement therapist; Inspire by FM® instructor*

I live in Burgundy in France and recently gave birth to my second daughter, managing a natural birth despite my injured pelvis. I firmly believe my active lifestyle (I taught movement daily until I gave birth) helped me through the pregnancy and labour. I teach dance and movement internationally and collaborate with physiotherapists in a local clinic, teaching balance, rhythm and co-ordination rehabilitation through my non linear approach to movement exploration. [www.samanthaemanuel.com](http://www.samanthaemanuel.com) [vagabondprincess@gmail.com](mailto:vagabondprincess@gmail.com)



## Luke Davies

*Doctor of chiropractic*

I am the founder of Back to Roots (B2R) and teach internationally on the topic of exercise adherence and pain rehabilitation. I lecture on evidence-based rehabilitation on the University of South Wales chiropractic & physiotherapy courses. <https://backtoroots.community>

### Summary

Post-traumatic growth through the lens of embodiment. How having a movement practice acts as a vehicle towards empowerment, creativity and growth in our day-to-day lives. If we lose connection with our physical body how can we expect our structure to look after us as we age? Through our bodies we express, create and make learned skills reality. The authors are creating a community driven by the need to bring the body back into current healthcare practice.

## The night the wall came down and everything changed

Sometimes, in order to start, we need to stop. On the evening of the 23rd of January 2018 everything stopped when I found myself trapped, my pelvis crushing under the weight of a 900kg mirrored wall unit.

It came down on myself and my students during the Pilates class I was teaching.

We suffered serious injuries ranging from crushed vertebrae to punctured lungs and serious head trauma. I took the force of the wall on my side, causing my pelvis to fracture (similar to a side impact in a car accident) multiple bruises, broken ribs, damaged adductors and a fractured left hand. I had tried to stop the wall as it came down so the others could escape. I could not hold the weight. We were eventually pulled out by members of a dance class in another studio and then we had to wait for the ambulances to arrive.

My career as a professional dancer was thrown into question because of the injuries and the psychological trauma.

My understanding of the body meant I could direct my own recovery before I even saw a physiotherapist at the hospital. On day two I had already rigged Pilates bands to the bed to see what my legs could do with a crushed pelvis and damaged adductors. The physio arrived on day ten (the day I was heading home in a wheelchair) by which time he had no advice for me other than to carry on doing what I was already doing.

I was unable to carry my then two-year old daughter. I went through a year of rehab and PTSD therapy counselling, going from wheelchair to Zimmer frame to crutches. I wondered if this was a sign, if this was time to change direction, to stop teaching/performing and go another route professionally but I realised I could not turn my back on movement.

My recovery time (back to the stage) was fast considering the extent of the injuries. I firmly believe this is due to my years of movement study and my ingrained



Balance and co-ordination play in rehab setting. Photo: Samantha Emanuel

sense of personal responsibility in looking after my body, otherwise described as self-efficacy. As I had been actively teaching, performing and studying for 15 years at that point, I had plenty of ideas to try out and I was open to researching new avenues to help me on the way.

Through my recovery I learned I was not willing to quit teaching and this determination pulled me through the dark days of falling into a victim mentality and wanting to give up when it all felt too much. I now work in collaboration with clinicians at a local rehabilitation centre and also teach online, passing on my belief that we can improve people's mental, physical and emotional well-being to develop self-efficacy through a holistic movement practice (Minjung *et al*, 2019).

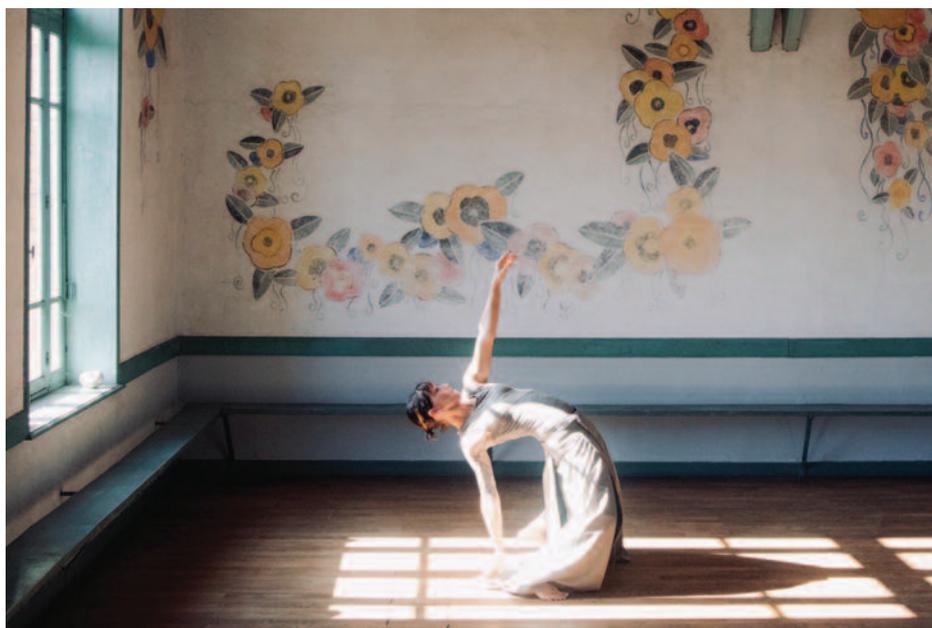
Having a movement practice – as I have proven for myself – is a vehicle towards empowerment, creativity and growth in day-to-day life. If we lose connection with our physical body how can we expect our structure to look after us as we age? Through our bodies we express, create and make learned skills reality.

Ancient medicine taught us to be active players in our own healthcare. Our culture in modern medicine leans heavily on passive interventions; medication, injections and even surgeries. Too often clinical approaches tend to lean towards the body as a machine made of parts to be fixed in isolation

rather than an incredible whole-body orchestra of musicians playing in harmony (Moseley & Butler, 2019). When I read contemporary 'evidence-based' guidelines for the care of musculoskeletal conditions (NICE, 2021), I have to ask *where has the body gone?*

We humans like to overcomplicate things, and in putting people off the idea of movement completely, the fitness industry may have a lot to answer for. The reality is actually very simple: the fact THAT you move is more important than HOW you move (Thompson *et al*, 2020). So the solution when it comes to moving more is simply to find some kind of movement that brings you joy and do that thing (Angel, 2018).

Mrs X suffered a serious stroke in her 30s. She had three young children to care for at home. She came to me after having gone through initial care in hospital. To avoid falling the act of walking required her full focus. We worked over a period of weeks on proprioception, balance and co-ordination through non-linear movement exploration. We worked with a bottom-up and top-down approach through dance, imagery, breathwork, martial arts, parkour and even juggling skills. We focused on the feet as the foundation of balance and awareness-building. Through co-ordination based sequences to music we synthesised auditory, visual and physical components while also training memory capacity and hand-eye-body connection. We explored balance games using external objects and fused strength/resistance training into the sessions, all with the end goal of overcoming the fear she felt in her body: fear of falling, or another stroke, or of not being able to play with her kids. The results were fantastic to witness. She embraced the practice, and now moves with confidence and a fresh perspective on what movement can mean in her day-to-



Dance. Photo: Thomas Brun



Balance and co-ordination task for stroke recovery. Photo: Samantha Emanuel

day life. She is no longer fearful of stairs, enjoys playing physical games with her children and has the tools that enable her to be autonomous in her recovery, allowing her to thrive.

I work alongside individuals with Parkinson's, Alzheimer's, brain tumour and stroke survivors, older people seeking to improve balance and overcome fear of falling, chronic back pain and neuro-degenerative diseases. Time and again I find playful embodiment is key to improving their relationship with their bodies. The feedback I receive from patients and their neurologists/surgeons/cardiologists/GPs is 'whatever it is you are doing with Samantha, keep doing it as it's working'.

I wish for those who have never danced to find connection with their body through playful movement-based games that ignite joyful curiosity and foster a positive body schema. Just like our kids! We can learn a lot by watching young children play, how they fearlessly run, roll, fall and get right back up again. My mission is to bring thoughtless, fearless, relaxed movement into clinical settings globally, to use my experience as a movement professional infused with all that I learned through the accident (Gifford, 2014).

Now I have found a way to put my mission into action through an exciting collaboration with Luke Davies and Back to Roots. Together we are building a community of professionals: doctors, physios, chiropractors, osteopaths, occupational therapists, movement coaches, personal trainers, dancers, yogis, Pilates instructors, martial artists and more. We are working together to create the change we wish to see in health-care through evidence-based practice, pain neuroscience education and non-linear movement pedagogy (Renshaw *et al*, 2019). Our project includes the musculoskeletal rehabilitation curriculum from the University of South Wales, is British Journal of Sports

Medicine (BJSM) approved, and counts towards annual continued professional development (CPD). We have completed two (sold out) seasons and are welcoming intake for season three beginning 12 September 2022. If this speaks to you, then please see more at [www.backtoroots.community/internship](http://www.backtoroots.community/internship).

While I would not want to go through the trauma and pain of the accident ever again, I am thankful for the change in direction it brought about. Now I am able to create positive change to the lives of those I work with directly and also help professionals gain a better understanding in the process of how to move themselves, in order

to help their clients/patients learn the process of being in their bodies, again.

Angel S (2018) Movement perceived as chores or a source of joy: a phenomenological-hermeneutic study of physical activity and health. *International study of qualitative studies on health and wellbeing*, 13(1).

Gifford I (2014) *Aches and pains*. TJ International.

Minjung S, Goodill S & Bradt J (2019) Mechanisms of dance/movement therapy for building resilience in people experiencing chronic pain, *American Journal of Dance Therapy*, 41, 8–112, <http://dx.doi.org/10.1007/s10465-019-09294-7>.

Moseley L & Butler D (2019) *Explain pain supercharged: The clinician's handbook*. NOIgroup Publications.

NICE Guidelines (2021) *Chronic pain (primary and secondary) in over 16s: assessment of all chronic pain and management of chronic primary pain* [online]. Available at: [www.nice.org.uk/guidance/ng193](http://www.nice.org.uk/guidance/ng193) (accessed 6 July 2022).

Renshaw I, Davids K, Newcombe D & Roberts W (2019) *The constraints-led approach; principles for sports coaching and practice design*. Routledge.

Thompson WT, Joy E, Jaworski JAC, Stuhr RM. & Trilk, JL (2020) Exercise is medicine, *American Journal of Lifestyle Medicine*, 14(5) 511–523.



Mobility and contact point exploration using medicine ball. Photo: Samantha Emanuel

# Losing touch in the pandemic



## Bella Eacott

Research manager, *Performing Medicine*

Performing Medicine is an initiative providing arts-based education and training for healthcare professionals and medical students. I am also a practicing massage therapist and student osteopath. I studied history and philosophy of science at University College London, and medical humanities at King's College London. Running through these educational and professional spheres is an interest in conceptions of healthcare as an embodied practice, and cross-disciplinary approaches to healthcare practice, explored through public engagement, education and research projects. I have published chapters in edited collections and in research journals on these ideas.

### Summary

Performing Medicine's Bella Eacott examines some of the norms around the use of touch in healthcare settings and considers how these have been altered by the Covid-19 pandemic.

## Touch is central to healthcare practice

When we visit a hospital or clinic we expect to be touched, by someone who is not our family member or friend. It may be what we most fear in these interactions (a painful procedure) or it may be what we look forward to (some soft tissue massage). The beneficial impacts of touch are multiple: slowing our heart rate, lowering blood pressure, reducing levels of cortisol, boosting immunity and serotonin levels and facilitating emotional connection, supporting pain relief. Fascinating recent research has also shown that we have touch receptors that specifically respond to certain qualities of touch – such as gentle stroking – supporting the idea that the quality of touch really makes a difference (Varlamov *et al*, 2020). Despite this centrality, touch is the subject of relatively little study within healthcare research (Kelly *et al*, 2018). Speaking with many healthcare professionals in my role with performing medicine – an initiative providing arts-based education and training for healthcare professionals and students – we have been surprised to learn that from their perspective, touch is rarely explored in isolation, in education, theory, or practice. Of course palpation,

examination, manual handling, or the use of medical instruments and technologies are all aspects of 'procedural' touch that are taught, and applied in daily practice. Equally widely used are 'communicative' or 'expressive' touch within all interpersonal interactions, but rather than being taught – or even mentioned – this type of touch is understood to be an instinctive, intuitive part of empathic care.

## The Covid-19 pandemic

The pandemic and subsequent policy adaptations and restrictions have both shone a light on, and in some cases exacerbated, pre-existing injustices and challenges across society, from work security or insecurity, to systemic racism and access to health and social care. Within healthcare settings, social distancing, the use of personal protective equipment (PPE) and using video consultation technologies have also served to highlight features of healthcare that may not have been previously visible, shining a light in particular on the non-verbal aspects of healthcare practice. The ways that Covid-19 adaptations impact on non-verbal cues in healthcare are myriad and often cumulative. For instance, we have spoken to security guards in emergency medicine departments who have noticed that now they are wearing masks, the touch they are used to applying skilfully and effectively in de-escalation situations is interpreted as far more aggressive by the recipient, who can now not see their facial expressions. And while many of the activities involving touch in healthcare have of course remained as a necessary part of everyday healthcare practice, the pandemic has also forced decisions to be made about what is vital touch and what is not. When touch is restricted, what can we lose: hugs between colleagues, a reassuring hand when guiding a patient through a corridor? A recent article exploring touch during Covid-19 has argued that it is 'back-stage'

touch – which happens outside of clinical activities, a hand on a shoulder as a GP guides a patient through a corridor, for instance – that has been most affected by the pandemic; as opposed to ‘front stage’ touch – that happens within the consultation, which still remains (Pype *et al*, 2021). However we must also acknowledge that many types of touch are occurring at once during ‘front-stage’ touch and these may be affected by Covid-19. For instance, while performing a procedural task like drawing blood, the phlebotomist will also be touching the patient and that touch will communicate something: care, control, empathy, reassurance (Cocksedge *et al*, 2013). And this communication will also be affected by other contextual factors such as wearing gloves or a mask, or the socially distanced greeting the patient received upon arrival. The quality of touch, though perhaps ‘complex and multi-layered’, is always important, and Covid-19 brought this to our attention (Kelly *et al*, 2018).

## Trouble with the T-word

Healthcare education might prefer to break down touch into specific activities, using a variety of pseudonyms, but its importance to patient experiences and outcomes is hard to underplay (Pype *et al*, 2021; Singh and Leder, 2012). The pandemic’s explicit restrictions and the imperative to manage touch in healthcare could be seen as an opportunity to pay attention, to explore the qualities and roles of touch more deeply, and create intentional ways of addressing, adapting, developing flexibility around how we use it. There is often an assumption that touch skills cannot be learned or taught, as there was with communications skills more generally, until relatively recently. But there are educational needs around touch: learning to be explicit about what is touch and where it appears, why and how we use touch, and differences between disciplines, and what the risks are (Kelly *et al*, 2018). With that said, here are a few thoughts on some of aspects of touch worth considering, in relation to distance, intimacy, power and language.

## Distance and intimacy

When we use the word ‘touch’ in our workshops, the room sometimes very subtly recoils. Why is the word ‘touch’ something that most healthcare professionals would shy away from? To understand this, I think we have to look at the longstanding tension between distance and intimacy in medicine. The ‘clinical gaze’ that Foucault describes was based on a history of empirical techniques

of diagnosis and investigation: the medic as scientist, perceiving their objects (patients) from a third rather than a first person perspective, ideally using diagnostic or interventional technologies to stand in place of the clinician’s own body – overriding their subjective untrustworthiness. The clinician’s own body and subjectivity is unreliable, fallible, and so touch – relying so heavily on the clinician’s feelings – is not to be trusted. The low status of touch is clear when we use language like ‘touchy-feely’ to describe the arts, for instance; it is not thought of as robust or thorough. Instead, using an object or instrument to mediate between the clinician’s own subjectivity and the patient-as-object, creating an ‘absent touch’, is preferable (Singh and Leder, 2013). But even these objects – including

the gloves so widely used during the pandemic – and their textures, materials, sensations,

also have impacts on patient experiences

and outcomes. Brilliantly, a few years

ago a group of sex toy designers

set out to redesign the speculum:

an instrument that –

considering its objective is to

look inside vaginas – is

horribly cold, uncomfortable,

and cranky. They understood

that the texture of this object

– replacing cold metal with

soft silicon – would of course

have an impact on how it is

experienced by people with

vaginas, and that this would

actually support the efficiency of

the task that the object is trying to

achieve, by making people more

comfortable and relaxed.



Clod Ensemble, *Under Glass* (2017) Photo: Manuel Vason

## Touch and power

The avoidance of the word ‘touch’ may also be due to its association with power dynamics, and status. These exist both within healthcare professions themselves – as we find in general nurses are more willing to talk about role of touch than doctors – but also between patients and providers. The directionality of the power dynamics in healthcare settings is so obvious it’s almost invisible: have you ever touched your nurse or doctor? Or do they just touch you? I think perhaps it is the absoluteness of the directionality of touch that stops it from being openly named: we obviously don’t want to associate other forms of touch that also have strong power dynamics – non-consensual or abusive – with healthcare. Of course, clinicians themselves are actually also being touched while touching – they are inevitably affected by their interactions with patients. We describe being ‘touched’ by an interaction – as in being emotionally moved – and of course this metaphor is grounded in an understanding that physical touch can have this impact. But the widespread denial of this direction of touch – from patient to healthcare



Clod Ensemble, *An Anatomie in Four Quarters* (2011) Photo: Hugo Glendinning

professional – in healthcare education and training in particular, is part of a wider culture which encourages disembodiment and the denial of healthcare professionals' own needs and physicality. Perhaps this contributes to the high levels of burnout we see in the healthcare professions today. The truth is though, however much we use alternative language to disguise it, or avoid talking about it – touch is everywhere in healthcare. So much so that it is definitely worth thinking about more carefully.

## Teaching touch

There are influential clinicians, such as Professor of Medicine at Stanford, Abraham Verghese, advocating for the continued importance of touch to healthcare practice. But we need not stop at simply maintaining the approaches to touch that already exist in healthcare education and practice, but also ask how we can improve on these, expand our understanding and physical vocabularies and really maximise the potentially very positive affects of touch in healthcare. One way to achieve this is by drawing on a whole range of somatic techniques and arts practices.

Performing Medicine recently started two new research projects, funded by the British Academy and the Arts and Humanities Research Council, to explore different ways that the pandemic affected healthcare professionals' non-verbal communication, and ways that arts-based approaches can address these. It's always difficult finding words for explicitly non-verbal experiences like touch. However, in many movement, dance, or somatic practices such as yoga, Feldenkrais or contact improvisation, there is nuanced appreciation of the different qualities of touch: non-intentional, intentional, neutral touch. Working with artists and practitioners from these fields, we can bring some of these ideas into healthcare settings as a way to explore touch outside of its immediate 'procedural' or 'task-based' clinical applications.

In our workshops we encourage healthcare professionals to first get 'in touch' with themselves, which we see as the starting point for both self-care and for communication with colleagues and patients alike:

knowing about your own physicality and emotional state will have an impact on how you then communicate non-verbally and impact on those around you. A body scan exercise – in which healthcare staff will scan their body from their heads to their toes – can help staff to notice where they hold tension. By then moving or touching parts of their bodies – placing a hand to a furrowed brow, for instance to ask 'am I frowning?' – we develop self-awareness which we can then consider when interacting with others. We also do exercises which practice ways of touching: working in pairs to move someone's arm in different ways, with different levels of pressure, speeds, or intentions, to understanding the varied responses that these ways of touching, moving, or rolling may elicit. In this exploratory space it becomes very clear to participants the differences between 'having something done to you', rather than with you, or for you. These kinds of exploration take time, however, and lend support to the argument that there needs to be more space in medical and nursing training and education to explore ideas around non-verbal cues and touch, before immediately applying them to clinical scenarios.

Cocksedge S, George B, Renwick S, Chew-Graham CA (2013) Touch in primary care consultations: qualitative investigation of doctors' and patients' perceptions. *British Journal of General Practice* 63(609) e283-e290. <https://doi.org/10.3399/bjgp13X665251>.

Kelly MA, Nixon L, McClurg C, Scherpbier A, King N & Dornan T (2018) Experience of touch in health care: a meta-ethnography across the health care professions. *Qualitative Health Research* 28(2) 200–212. <https://doi.org/10.1177/1049732317707726>.

Pype P, Pype K, Rowlands A, George R & Devisch I (2021) COVID-19 and touch in medical encounters. *Patient education and counseling* 104(3): 464–466. <https://doi.org/10.1016/j.pec.2020.10.023>.

Singh C & Leder D (2012) Touch in the consultation. *British Journal of General Practice* 62(596):147–148. <https://doi.org/10.3399/bjgp12X630133>.

Varlamov AA, Portnova G & McGlone F (2020) The C-tactile system and the neurobiological mechanisms of 'affective' tactile perception: the history of discoveries and the current state of research. *Neuroscience and Behavioral Physiology* 50, 418–427. <https://doi.org/10.1007/s11055-020-00916-z>.



Photo: Benedict Johnson

# Integrated medicine: some historical reflections and three cases from primary care



**David Peters**  
Editor-in-Chief

## Summary

A family doctor who was much involved in pioneering integrative healthcare in the UK reflects on its early promise in a GP's 'effectiveness gaps'. He offers examples of using IM in three clinical cases of resistant musculoskeletal pain whose recovery depended significantly on restoring a broken relationship between mind and body. Traumatic events were significant in two cases, all three women had associated breathing pattern disorders, and depression contributed in one instance. Treatments integrated acupuncture, osteopathic bodywork, relaxation techniques and supportive psychotherapy alongside conventional treatment in two of the patients.

## Introduction

Long ago, in the far-off 1980s, I was a conventionally trained family doctor (GP). All the same I had a few additional skills and had been using medical acupuncture, homeopathy and nutritional medicine for a decade, and I knew several doctors with similar extended toolkits. I suppose jack-of-all-trades GPs like us were early explorers of an emerging version of holistic medicine. Freshly qualified in osteopathy I joined a new central London NHS primary care centre in 1987. GP-osteopaths were rare (and still are), and back then only a handful of non-medical complementary therapists (CT) had found ways into the UK's NHS.

When he established Marylebone Health Centre (MHC) Dr (now Prof) Patrick Pietroni changed all this. Based in the repurposed crypt of Marylebone parish church and with funding from the Waites Foundation we set out to explore innovation in inner city primary care: two GPs who were joined for a day a week by an acupuncturist, a massage practitioner, and a homeopath. Twice a week I shape-shifted from GP to osteopath, and the whole care team (including two part-time psychotherapists and a social worker) met weekly to share food and discuss clinical problems and progress our embryonic research. Patrick founded the BHMA around then too, and at the time both of us were teaching medical students about general practice at St Mary's Medical School. We worked together at MHC for over a decade, and after that at the University of Westminster, where our explorations of health and social care were shaping the Centre for Community Care and Primary Health (CCCCPH) which eventually became the School of Integrated Healthcare.

For a brief spell in the 1990s and early 2000s MHC was the national prototype for a radical new take on multi-professional primary care: an early form of what we now call integrative medicine (Peters *et al*, 2001). By the mid 1990s, with public interest booming, complementary medicine was on the rise in the NHS. Surveying England's primary care services in 2002 we found nearly half were spending significant sums on complementary therapies. To our surprise there were 67 public sector-funded CT services around London (Wilkinson *et al*, 2004). Since then, sad to say, funding cutbacks have pushed complementary therapies out of the state sector, frustrating for a while the many doctors who had found

them helpful, especially for patients caught in one of primary care's 'effectiveness gaps' (Fisher *et al*, 2004) where GPs and patients feel conventional treatments are often unsatisfactory.

Topping the list of these common conditions is musculoskeletal pain – just the kind of problem where the CT's low-tech and high-touch approaches are (according to clinical experience, public testimony and pragmatic outcome studies) said to be highly *effective* (Artus *et al*, 2007). But far too little research has been done to establish the objective *efficacy* of these practices for, unlike well-defined, objective and easily measurable drug-like interventions, their outcomes depend greatly on individual practitioners' technical skills and human engagement. These subtle and holistic elements that nudge the body's healing processes into action and are so fundamental to complementary therapies are difficult to quantify and tricky to control for. In fact the medical community's gold standard for evidence – the randomised double blind controlled trial (RCT) – is designed quite properly and explicitly to bracket off the powerful non-specific effects of these human variables. One might reasonably argue therefore – and many have – that RCTs are a poor fit for evaluating complementary therapies. This is a wicked problem wherever skilful techniques and collaborative therapeutic relationships are involved and even more so with the IM's individualised complex packages of mind, metabolism and movement. Let's hope future research into IM's value and risks will be conducted in ways that don't bend it out of shape.

'Hard' evidence for our complex care is thin on the ground. We have instead a mass of 'anecdotal evidence': stories about patients with persistent problems whose prior conventional 'treatment as usual' had failed. Here I present three examples of apparent effectiveness from my own casebook; all women with atypical shoulder and arm pain, whose recovery was against the odds. All three were seen in Central London where, as an NHS doctor and osteopath, I saw many patients with similar long-term pain. There are common themes: disabling acute or chronic pain without gross neurological signs, high anxiety, a degree of over-breathing, myofascial trigger points, and treatment involving acupuncture, osteopathy

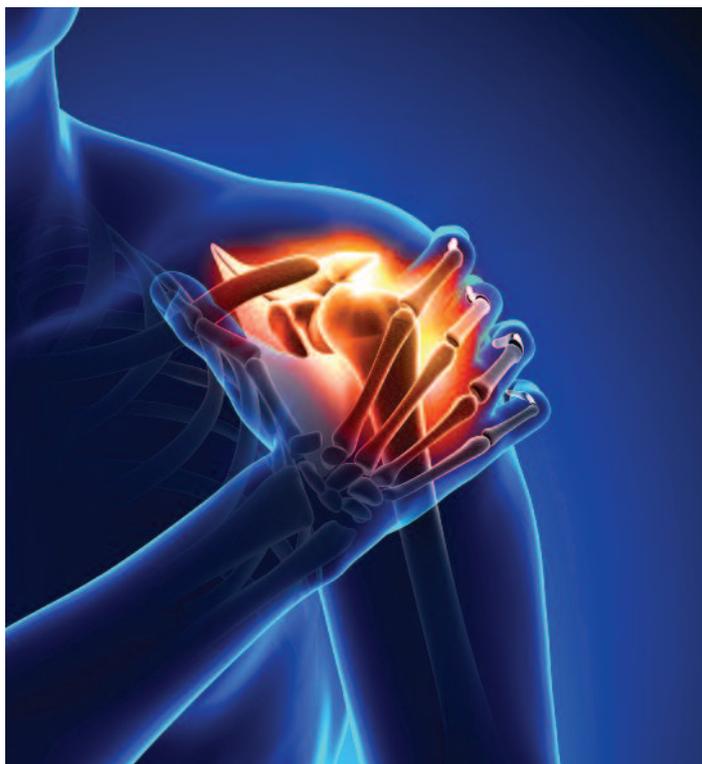
and relaxation techniques. Two patients were found to have histories of significant traumatic events.

## Three women with atypical shoulder and arm pain

### Patient 1 Vicious circles

A 30-ish mother of two young children had felt stiff in her right shoulder for about a year. Lately, after suddenly over-reaching eight weeks before, it was worse. Now she described a severe and disabling poorly delineated pain in the back of her arm down to the wrist. Her GP had diagnosed frozen shoulder and though his cortisone injection (near the supraspinatus) had initially helped her mobilise, it left the pain unaffected. On the advice of a friend and with her GP's begrudging consent, she sought me out.

At her first visit, she was near to tears, rating her morning pain level as 5 out of 6, by lunchtime 3/4, and in the evening 6 (= 'as bad as she could possibly imagine'). She couldn't sleep nor, with her arm clasped close to her side, could she wash properly, nor raise it much herself, but she could actively rotate in both directions. Frozen shoulder seemed a reasonable label, but there



were some very sensitive trigger points in the trapezius and upper sternomastoid: when I pressed on them pain spread into her arm, neck and head. She was at that point much relieved to learn that her pain had a definitive cause.

Clinically this was neither acute capsulitis nor a 'frozen shoulder', but myofascial pain and dysfunction (MFP&D) – something we don't usually learn about at medical school. It isn't due to inflammation in a joint or tendon but rather arises in tense, irritable and highly localised 'trigger points' in muscles. Curiously, the typical sites where the trigger sites form quite often correspond with major acupuncture points. Initially I had considered a better-placed cortisone injection, but after soft tissue stretching, soft tissue work plus local acupuncture to various tender trigger points (trapezius, supraspinatus, infraspinatus and traditional 'channel points' on her arm and hand) she could abduct half way.

My patient was obviously hyperventilating when she came in, in fact her whole shoulder girdle was tensing up

with upper chest breathing. I taught her a simple relaxation technique and asked her to pay attention to her out-breath. As she relaxed, perhaps sensing that her arm was at last eligible to leave her side, she reported her pain much reduced. Two days later she returned, more comfortable still: pain level 3 at worst, 1 at best, and she had slept, which in itself reduced her anxiety and tension. She looked and said she felt much calmer. I treated her three more times at longer intervals until she was pain free, instructing her along the way in how to restore strength in her disused muscles, reminding her that tense muscles response to stress, and to beware the vicious circle of tension, pain and over-breathing.

I assume that needling stimulates local circulation and produces bursts of gamma fibre and mechanoreceptor nerve impulses, allowing more freedom of movement and breaking the pain spasm cycle. It can release pain-relieving endorphins too. Whatever the mechanism, myofascial trigger point pain can often be relieved by some simple acupuncture.

### **Patient 2 The body remembers**

A woman in her early 40s presented with several weeks of severe left arm pain that had spread into her hand. She was not from the UK and had lived here alone for some years, separated from her ex-husband and two children who still lived abroad. The pain, though not worse on exertion, made her understandably fearful of a heart attack. But because it worsened when she tried to lift her arm to brush her hair I reassured her the pain was musculoskeletal. She found it frightening nevertheless and had been increasingly anxious. After her sister visited recently, this tendency had dialled up into episodes of near panic, and she was descending into an all too familiar melancholy.

Her heart rate was 110; respirations 20 a minute; BP 160/90. The story did not suggest cardiac ischaemia; the movement-related elements, and the extremely tender point I found in her left trapezius was a clue to what was going on. I noted her 'fear posture' (shoulders up, head slightly extended, rapid upper chest breathing), how she braced her body as though anticipating a blow; that she was recruiting her scalene and sterno-mastoid (anterior neck) muscles and how little her belly moved in with each upper chest-breath. I explained to her what was happening in her anxious body (though I suspected she had little free attention available to take my words in): that the pain was from muscle spasm in her shoulder and that her panic, over-breathing and pain were locked together in a pain-spasm loop. I let her know that the pain was neither a heart attack nor some disembodied psychic illusion, but the result of trapezius trigger point pain which I fully expected to reduce. When my pressing on the point reproduced her pain and spread it down her arm she visibly relaxed; then burst into (potentially therapeutic) tears. I suggested we try acupuncture, which she had used years before and which she knew had helped her friend. Fortunately she was an 'acupuncture strong responder', so her body visibly quietened down

once I had inserted some needles locally and into traditional calming points. Osteopathic soft tissue techniques on the muscles of her neck relieved some of the tension and stiffness. Manipulating her cervical spine enabled more normal neck movement, and with this her arm pain reduced.

Her anxiety had been so extreme that I asked her to take 2 mg of diazepam three times a day for three days as a muscle relaxant and to help her sleep. Three days later she seemed more in control but during this session she had a sudden memory of a time when she was fleeing a war zone with her children and husband. She recalled he had punched her and dragged her by her left arm to the departing plane. This abrupt and highly charged intrusion of a traumatic body-memory shocked us both. We sat, taking time to notice the impact and let our bodies relax again. Subsequently, needing to integrate the reverberations of this forgotten event, and old repressed feelings about her sister, she sought the help of a counsellor.

I often find trigger points in anxious people, though they often don't realise they are the source of their diffuse referred pain. Sometimes I am the first to make the connection, and this can be highly reassuring in someone who was fearing that a crucial diagnosis was being missed. It's important too for anyone working on the body to be prepared for buried emotions to surface and to know how to deal with their resonance and reverberations.

### **Patient 3 Medically unexplained symptoms**

A woman of 70 with right-sided chest and arm pain and disabling headaches came with her daughter. The GP had referred her to me 'to see if acupuncture could help'. Over the previous three years – dating back to a knee replacement, closely followed by a hernia repair which had broken down – her episodic chest pain had been extensively investigated. Though her blood pressure was up a bit the pain was not thought to be cardiac: the provisional diagnosis was gastro-esophageal reflux disorder (GORD). She had been prescribed three anti-hypertensives, a statin, plus a proton pump inhibitor for the reflux. She had weaned herself off long-term antidepressant medication some months before although she had no appetite and was waking early which suggested clinical depression was a possibility.

She felt short of breath, dizzy, unable to concentrate and frightened. Her squeaky and unsteady voice was another sign of over-breathing. When I inquired about any severe shocks she burst into tears and looked even more terrified. With some difficulty I was able to calm her down and pull her out of dissociation. Only then could I set about identifying the myofascial component of her pain, deal with her over-breathing, and show her the connection between the pain and her upper chest and neck tension. Once I had explained that the pain was from tense muscles and 'not all in her mind', she slowly relaxed and was able to breathe a little better and with abdominal diaphragm. As her breathing slowed and the pain eased a

little, to everyone's surprise, her voice became more normal. We agreed to try acupuncture to help control the pain and tension. Her homework involved diaphragmatic exercises and slow 7 in/11 out breathing. I urged her to start her anti-depressants again.

Perhaps as many as two-thirds of people eventually diagnosed with depression first present to the GP with bodily symptoms: pain, fatigue, sleep disturbance. This woman had the full set yet so far medication had made no difference. Progress was slow despite my seeing her weekly, though she was sure she felt better after every treatment. Positive transference will have been an important factor in her recovery, but let's not dismiss this as a placebo effect: we know for sure that human effects can trigger physiological shifts. No doubt the gradual increase of anti-depressants helped and I suspect in this case that homeopathy did too. I recognised in her a pattern of characteristics corresponding to the symptom picture of white arsenic poisoning. She was anxious, obsessively tidy, sleepless and so restless that she was compelled to get up and walk around at night, plus her dyspepsia improved (weirdly) with hot drinks. I gave her the matching homeopathic remedy in high dilution. A placebo? She was definitely suggestible and very certain the little white pills made a difference each time she took them.

But here's the thing: though we never discussed the detail, in addition to pain and depression there were intimations of an unspeakable, shameful long-ago traumatic event. My assumption is that her experience of peri-operative trauma and helplessness three years before had restimulated old, deeply repressed but embodied feelings. The outer manifestations were her physical anxiety and depression, as well as gut and myofascial dysfunction. We might also speculate that post-traumatic flight-and-fight responses had over-activated her sympathetic nervous system and pushed her blood pressure up. It took six months to pull her out of the mind-body tailspin she had fallen into.

Would a talking therapy or anti-depressant meds alone have been as effective as integrative medicine? I think not: osteopathy and acupuncture entail touching and feeling the person in their suffering body. As manual approaches they oblige one to take the patient's embodied experience at face value, to explore how the body is actually behaving, to ask why and make some narrative sense of it. This is *talk-and-touch therapy* but it also involves doing things to the body that invite relaxation. These brief spells of pain relief are opportunities for the person to break out of their bodily prison. Sometimes when tensions are released so too are bottled up emotions. Fortunately this woman's own GP knew another local practitioner who was using the Human Givens (NLP-like) 'trauma rewind technique' in his NHS clinic. In ways beyond my ken, this method can take the traumatic sting out of a painful memory. I have seen eye movement desensitisation reprogramming do this too. Two sessions made the embodied memory much less overwhelming.

## Afterthought

It has been said of doctors' work that 'life is short but the art is long'. Fortunately for us occasionally certain patients are sent to wake us up and propel us on deep learning journeys into 'the art'. So it was for me. My encounters with these three women left me wondering about their constricted, tense post-traumatic bodies and the associated unrelentingly anxious or absent mind. I pondered on how aftershock might be shaping these patterns in order to wall off unbearable memories of overwhelm and why, although these emotions often fade over time (most people who experience a traumatic event don't go on to develop long-term PTSD), they sometimes loop together in persistent cycles of pain-tension-anxiety and dissociation. So I became fascinated by these all too common syndromes of under- and over-arousal. Might they be the bedrock of chronic pain and somatic functional disorder? I offer my gratitude to these suffering women for the direction my clinical work took because of our meetings and in hope that I was able to help them.

Artus M, Croft P & Lewis M (2007) The use of CAM and conventional treatments among primary care consultants with chronic musculoskeletal pain. *BMC Primary Care* [online]. Available at: <https://bmcprimcare.biomedcentral.com/articles/10.1186/1471-2296-8-26> (accessed 6 July 2022).

Fisher P, Van Haselen R, Hardy K, Berkovitz S & McCarney R (2004) Effectiveness gaps: a new concept for evaluating health service and research needs applied to complementary and alternative medicine. *Journal of Alternative and Complementary Medicine* 10(4) 627-632.

Peters D, Chaitow L, Morrison S & Harris G (2001) *Integrating complementary therapies: a practical guide for primary care*. Harcourt Brace.

Wilkinson J, Peters D & Donaldson J (2004) Clinical governance for complementary therapies in primary care. Final report to the Department of Health and the Kings Fund. University of Westminster.



**First You**  
Caring for those who care for us

<https://firstyou.org>

## A hand-picked collection of wellbeing resources for healthcare workers.

We imagine a world in which everyone is happy and healthy; where healthcare professionals take care of themselves first and are therefore able to take care of others.



# Feldenkrais on prescription – mindful movements for pain relief, inner peace and optimism



## Julie Wrigley

*Practitioner of the Feldenkrais Method*

As a mind/body movement educator, trained in the Feldenkrais Method, I enjoy seeing the difference that small, gentle movements can make to transform someone's experience of themselves, from the inside out. Busy minds start to slow down. Anxiety and tension dissipate, and persistent pain eases. I wanted to write about my project to show that people living with a wide range of conditions could take part in awareness through movement classes on their own terms and that classes could be a tool for them to grow their confidence, self-knowledge and optimism.

### Summary

The Feldenkrais Method works with the whole of a person, their thoughts, feelings, sensations and movements. Students are taken on an inward journey within their own experience, as a sensory-movement adventure unfolds. An increased immersion in the present moment and sense of embodiment develops. The mindful moves project taught Feldenkrais-style classes to people with long-term conditions, referred by social prescribers at the GP. Benefits included: reduced tension; a sense of calm and relaxation; the ability to apply strategies for pain relief, difficult emotions or insomnia; and the confidence to start other activities or classes.

I am a Feldenkrais practitioner, trained in a movement method that works with the whole of a person – their thoughts, feelings, sensations and their movements.

This method brings to students a growing awareness of their sensory experiences in the moment and leaves them with an increased sense of embodiment and a rebalanced mind/body relationship.

For me, its purpose can also be to:

- improve our understanding of ourselves
- increase our sense of agency
- enhance our health, satisfaction and potential.

### The Feldenkrais view of health... and learning

Moshe Feldenkrais, the 20th century founder of the method, was extremely interested in the notion of health. He was a polymath scientist and judo master who initially developed his method to help himself in the face of an inoperable knee injury. He went on to work over many decades with people with neurological, developmental and musculo-skeletal conditions (MSK), in addition to elite musicians, actors, directors and dancers.

His core concept of health was that of resilience: the ability to recover equilibrium after a shock such as an illness, injury or trauma. Health, for him, also included wider social, psychological and emotional elements such as relationship satisfaction and self-actualisation:

*‘If a human being needs no medical services for years and has no complaints of pains or aches, is he or she healthy? If, on the other hand, this same person leads a dull, uninteresting life with marital difficulties that end up with suicide – is that a healthy person?’\**

and:

*‘Health is the ability to realise our avowed and unavowed dreams.’*

Feldenkrais identified that the means to health was a special type of sensori-motor lifelong learning, begun when we are babies on a mat, waving our arms and legs around and – if we are lucky – continuing to the end of a fulfilling life:

*‘Even in our culture a number of us succeed in continuing their health life process to an old age... The outstanding difference between such healthy people and the others is that they have found by intuition, genius, or had the luck to learn from a healthy teacher, that learning is the gift of life. A special kind of learning: that of knowing oneself. They learn to know “how” they are acting and thus are able to do “what” they want – the intense living of their unavowed, and sometimes declared, dreams.’*

## How Feldenkrais is done – what happens

I am a movement facilitator or guide who works in a class format called Awareness Through Movement (in-person and online) as well as one-to-one.

In class I ask the students to lie down on the floor on a mat. I guide them how to adjust to being on the floor, to choose their position and use cushions or props that may relieve their pain.

Then they close their eyes, listen to my voice and are taken on an inward journey within their own experience. I bookend each lesson with an improvised body scan, inviting students to compare if sensations of themselves have changed along the way.

The main section of each lesson is a cunningly structured sensory-movement adventure, where the destination is not seen as important. At first, I ask the students to try out for themselves a simple move, a few times, slowly, as they feel the effects of that on other parts of their body. For example, if I ask them to bend their legs and lift a foot from the floor, I may ask:

- what happens to their other foot?
- do they feel their pelvis roll or is the movement only of the thigh with everything else held still?
- are some new parts of their back pressing into the ground as the foot lifts each time?
- is it time now to let your foot and leg rest fully back down on the floor?

In this way they are guided to shift their weight, roll and wriggle, reach, lift, lower, turn and rest themselves.

Throughout 45 minutes simple moves are imperceptibly developed into slightly more complicated patterns.

Students discover how to do new things with their limbs, with their whole selves, all while using only the minimum of effort that each action requires. Old habits of bracing, protection and other forms of chronic tension can start to loosen their grip, leaving room for ease, satisfaction and optimism to arrive instead.

## The joy of teaching students with challenges

I had started to notice that the students who were most engaged by my classes were often those who were navigating health challenges. Perhaps they were working with persistent pain, fatigue, fibromyalgia, experience of trauma, MSK surgeries or mobility limitations. They also proved to be lively, motivated, open-minded and curious. So I enjoyed teaching them.

Before joining me they may have tried or still be practising yoga, Pilates, meditation or mindfulness; or attended physiotherapy, counselling or osteopathy. They were on a quest to keep active, to re-learn how to move well, to settle their own nervous systems and relieve pain. In short, they wanted to feel more at home in their bodies and minds.

For these students my classes function in a number of ways:

- as a complement to their other activities and forms of healthcare
- as a stepping stone back into eventually resuming their original activities
- or as a substitute and solace if they can no longer manage their other activities.

I love teaching them how to:

- be more comfortable and take care of themselves in the moment
- move gently, mindfully and with less pain
- let go of excess muscular tension and find looser, pleasurable movement as a result
- learn about themselves from the inside out
- have a different experience of themselves during class and when they stand up at the end.

One of my great satisfactions is seeing their realisation dawn that they really can do the class, can enjoy it, with no need to worry about perceived deficits related to their illness or failing to match up to the teacher’s expectations.

## Applying for funding to work with social prescribing patients

I already knew about social prescribing as a form of community referral that sought to help people address their health and wellbeing needs in a holistic way and to



take greater control of their health. I wondered if my classes could be suitable, so emailed (unsuccessfully) and looked out for information locally about how to get involved.

In my area, social prescribing is run by a group of organisations operating under one umbrella made up of the city council, the local GPs and the local council for voluntary services. By chance, in August 2021, I spotted a tweet from them, inviting interest in bidding for funding:

*'We're encouraging York-based charities, social enterprises, voluntary & community groups to apply to the new cultural and social prescribing grant scheme for grants of up to £5,000.'*

The deadline was only a few days away and I was unsure about applying as it seemed I might not be suitable. I am not a charity, as they requested, but a sole trader. After exploring the website and reviewing their aims, I decided to go ahead. The aims I believed I could help to address were:

- reduce isolation
- emotional wellbeing
- healthy lifestyles
- improve physical health through social initiatives
- physical activity.

The project guidelines I received included an invitation to ring the co-ordinator before sending in my submission. I highly recommend taking up this opportunity if it is offered. I had not yet had time to formulate my offer and was nervous to speak to them. They put me at my ease, helping me to understand what they were looking for and develop my own thinking to clarify the nitty gritty details of what I would propose. We covered a range of questions:

- would it be in-person or on Zoom?
- how would I respond to changing Covid circumstances?
- would my offer be open to all or more tightly defined?

- would the sessions be drop-in or structured as a course?
- would I offer transport to my venue?
- how would I promote the sessions and invite or recruit people to take part?

I was also given a very useful tip – that I should make sure in my bid to cost sufficiently for all of my admin and preparation time as well as contact hours spent teaching.

## Mindful Moves – the project

I developed my project called Mindful Moves as a six-week course for people with movement or mental health difficulties. This was my plan, for which I was lucky enough to receive funding.

The attendees could be:

- experiencing injury, stiffness or pain – yet looking to regain confidence in moving
- experiencing stress, anxiety.

I also advised that, as the method would be a new way of thinking to them, coming with an open mind was essential.

The courses would run throughout the six months of the project, with four rounds of six weeks in all. Varied material was planned for each six-week course, with time allowed for settling in at the beginning and care given to the ending phase, including discussions of how or whether the students wished to progress. The sessions were mostly to be spent lying down, with students following my directions for gentle, guided movement explorations. All they would have to do was listen, sense themselves and follow along. Discussions would take place among the group where they could share self-care strategies or reactions to the lesson.

Audio recordings of each lesson would be made available as would a bank of resources that I would build over the period, in response to the interests and questions of students. As it turned out the topics covered included:

- pain science
- learning to learn principles
- balance, falling and vestibular issues
- comfort
- flow
- improvisation and play
- Zen Buddhism and Daoism
- stress and the autonomic nervous system
- neuroplasticity.

To accommodate Covid and to allow for people with different capabilities, I offered each course in two modes: in-person in the studio or online.

Students joining in person would have more opportunity to interact socially, including in the on-site café afterwards. They could become familiarised with a gym environment in case this was something they wanted to pursue in future.

Students joining at home for the Zoom sessions could choose to stay in their own safe, comfortable space and

have their own props to hand. These sessions were particularly suitable for those who were housebound due to mobility or anxiety issues. Anyone unable to get down easily to the floor could lie on their bed instead.

### Receiving referrals

I liaised with the local social prescribers, also known as link workers. They were working within GP practices, at the council for voluntary service and in deprived neighbourhoods as local area co-ordinators. They put me in contact with patients who may be interested in joining me.

I had an intake interview chat with everyone referred to check we were a good fit. I explained the course, found out if they remained interested and heard about their challenges, hesitations and aspirations. I asked some standard baseline questions to give a benchmark by which I could make comparisons at the end of the project. I found out if certain positions or movements were particularly challenging for them so I could be ready with alternatives and modifications.

### Mindful Moves students with physical challenges

Students described in their own words a range of physical challenges, often reporting more than one of these simultaneously:

- experiences – chronic pain, fatigue, limited mobility, use of wheelchair, extensive scar tissue, breathing problems, restricted night and day to a recliner
- areas affected – neck, back, hip, knee, pelvis, shoulder, discs
- conditions – arthritis, congenital spinal condition, fibromyalgia, myalgic encephalomyelitis or chronic fatigue syndrome (ME/CFS), bowel condition, nerve pain syndrome, colitis, neuropathic damage, Meniere's disease, vestibular migraine, osteoarthritis, reflux
- past interventions – hip replacements, bone grafts, spinal fusions, knee replacement.

Their most frequently hoped-for physical results were for help with pain, with relaxing, releasing tension and with improving physical confidence.

*'That I might be able to find a way to exercise that doesn't make my pain any worse.'*

and:

*'I hope to work on my physical confidence, because my illness destroyed it completely.'*

### Mindful Moves students with social, emotional or nervous system challenges

Students also described their experiences of social, emotional or nervous system challenges, which in most cases co-existed alongside physical challenges:

- experiences – loneliness, no social contact, bereavement, stress, calm then angry, isolated, low mood, family problems

- conditions – depression, mental health, trauma, anxiety disorder, perimenopause.

Some hoped to leave their house and start socialising again, to have contact with others. Another common preoccupation was the desire for improved ability to relax themselves (mind and body) and feel connected (mind and body). Common aspirations were for 'peace' and 'calmness', along with self-help strategies for managing their illness.

### Giving feedback to the funders

Part of the condition of funding was to produce a summary report including:

- numbers of people who attended
- demographic data, if available
- how outcomes are recorded
- case studies.

At the end of the course I asked attendees to complete a short follow-up questionnaire about their experiences. This could be completed online (anonymously, if wished) on my website or on a paper copy. Half of the participants did complete the questionnaire.

### Physical benefits

Physical benefits reported included increased self-knowledge about what exacerbates pain; having a positive experience of 'exercise'; feeling a pleasant reduction in muscular tension; and profound relaxation.

*'I learned to stop when it hurts and work around it. Gentleness...release expectations. I learned my right shoulder is probably driving the rest of my back/neck pain.'*

*'I feel more comfortable doing exercise without hurting too much.'*

*'Nice to have an experience of becoming unknotted, one side at a time.'*

*'That was amazing. I was nearly asleep. I feel very relaxed. My whole body relaxed, I felt everything go, felt my head tingle. Felt breathing down to toes and back up... It was amazing. I have never been so relaxed.'*

### Social, emotional and nervous system benefits

Social, emotional and nervous system benefits reported by students included: being more open to trying new activities; feeling and enjoying how to slow down the mind; using strategies for insomnia, managing difficult emotions and for pain relief; understanding responses to different movements and a sense of safety in the small group.

*'It felt alien to go so slow at first, then I started to find how it made my mind slow down...'*

*‘My head felt it had just calmed down. I’m normally fretting, going from one thing to the other. It was nice for an hour not to be doing anything. It was a really nice feeling.’*

*‘The other night I couldn’t get to sleep, had a lot going round in my head. I used the techniques of feeling how my body was touching the bed, some of the things you have said, and it helped, helped calm me down as well... It was useful.’*

*‘It is something I can use as a distraction... a different way of managing my feelings...’*

*‘I have learnt how to pause, realise if I am in pain and stop or do something else.’*

*‘It was very valuable experience for me, so thank you for that... I learned more about my body and reactions to movements. I learnt that even a small movement can make me feel different – it made me more aware.’*

*‘I really enjoyed the small group. I felt really safe during the classes. The atmosphere was safe and supportive and adjusted to the ability of the participants. You adjusted to my needs and I could do it in seated position.’*

**What was surprising**

Students were asked to compare the course with their expectations or with other classes they had taken. They had been surprised by a new way of thinking, a new way of ‘doing’ mindfulness, an ease in moving to their own satisfaction and gratitude for a caring environment:

*‘It is a new angle on thinking about the body.’*

*‘I have done mindfulness, but I like how you do it... how your body is feeling at the end.’*

*‘Very good, not what I was expecting at all. I thought it would be more strenuous. I was comparing it to yoga. It’s not like that at all, where it is difficult to get into the right positions... I found it very relaxing. It has been really good.’*

*‘Surprising to feel hope and warmth from someone offering to help me...’*

*‘I didn’t know what to expect but found the sessions very restful and the tutor was obviously concerned for my welfare.’*

*‘The resources are inspiring and generous. I will keep doing the recordings.’*

**Next steps for students**

As the course was a brief intervention of only six weeks, I included discussions with the groups about their ideal next steps. What might they try? What could they imagine themselves doing now to help foster their wellbeing?

We spoke of activities they used to do or new ones they wanted to try. The students sometimes helped each other by swapping suggestions and information about local classes and volunteering opportunities.

By the end of the six-week course, almost every student had already joined at least one new activity or was enthusiastically making plans for how they would do this. The wide range of choices included physical classes, social events or more Feldenkrais. See Table 1.

**An expanded sense of self**

More subtle, yet profound, changes were also discernible in the way the students referred to themselves, in their expanded or renewed sense of self. They felt relieved to be seen as a person in a new context, beyond their mental health or physical diagnosis.

*‘Nice to be with people not just for mental health.’*

*‘As someone with limited mobility it is a wonder to feel like I am doing something physical and mindful but within my limits. The emphasis on finding ways to be comfortable is very valuable to my everyday life.’*

They felt that long-held and restrictive attitudes of mind were loosening up, in a way that was as surprising as it was enjoyable. And they felt a coming home – to be like themselves once more.

*‘I think I’m changing my attitude... it changed my way of thinking.’*

*‘I feel like myself again.’*

\* All quotes on Feldenkrais and health from: Moshe Feldenkrais, “On Health” Dromenon, Vol. 2, No. 2, August/September 1979, accessed from <https://feldenkrais.com/67862-2/>

**Table 1: Activities undertaken by students after mindful moves**

Physical	Social, emotional, nervous system	Feldenkrais
Walking group	Volunteering	Audio mindful moves lessons
Re-joined a gym	Music and dance	Awareness Through Movement classes
Pilates (& seated Pilates)	Counselling	One-to-one session
Aerobics	Baking	
Nordic walking		
Exercise on prescription		

**Case study – Diana\*: experiencing pain, disc degeneration and depression**

Diana (30s) had been working in York for a few years far from home and family. She was used to being active and sport had been a big and successful part of her life throughout her teens and 20s, when she played several team sports such as volleyball. She had a pressurised job and had been working hard, from home, during the Covid pandemic. For several years she had been experiencing ongoing, constant pain which had been attributed to degenerative disc disease. The pain and restrictions were found in her back, neck and right hip and impacted a variety of day-to-day activities and movements, such as standing still, walking and sitting on a 'normal' chair.

This had a huge impact on Diana's mental health, for which she was prescribed antidepressants. Following an MSK investigation, the specialist prescribed 10mg/day Amitriptyline and provided a report of their findings:

- straightening of lumbar spine
- some sciatic symptoms
- disc dehydration – L3/L4, L4/L5, L5/S1
- mild facet joint changes.

Diana has been motivated to try out lots of different measures to help herself. She saw a physiotherapist but found the exercises painful and, so far, unproductive. She

used to enjoy swimming, had tried Pilates and yoga – appreciating their mindful component, but finding the movements difficult to do. She attended and enjoyed sessions run by a mental health charity on anxiety, confidence, mindfulness, assertiveness and peer support.

Diana attended the Mindful Moves course in-person and followed up with a one-to-one and some Zoom classes. Diana really hoped to get 'some pain-free movement in my day' and 'learn what positions / movements trigger pain.'

Her main benefits were understanding herself better and discovering strategies that could help:

- gentleness [worked]
- I learned to stop when it hurts and work around it
- I released expectations
- I learned my right shoulder is probably driving the rest of my back/neck pain.

Diana booked a one-to-one to explore the physiotherapy exercises she had been given. Together, she and I discovered ways to do the exercises in a more Feldenkrais way and make them more manageable, less painful. The strategies included: adopting less of an attitude of forceful, mindless repetition... instead going slowly, with awareness, prioritising comfort and introducing variety.

Next, Diana planned to meditate, do music and dance, along with continuing her Mindful Moves lessons via audio recordings.

\*Not her real name

**Power Up the Art of Holistic Healthcare the Scientific Way**

**B2R INTERNSHIP 2022**

**12 Weeks - Aches & Pains**

- NonLinear Movement Ed with Samantha Emanuel + a Roster of Movement Experts
- BJSM Certified CPD
- B2R University of South Wales Rehab Curriculum
- Taking Play Serious, Why You & Your Patients Should
- Clinical & Business Model for Private Practice with Pixel Haze
- Working Online, Critical Thinking, Whole Person Clinical Reasoning, Loading, all Facilitated by Luke Davies + Industry Experts
- Lifetime Material Access + Like-minded Multi-disciplinary Community.

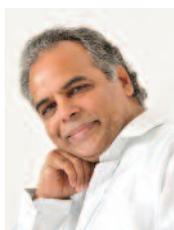
**“ Double down on Luke & Paul's classes ”**

*Craig Liebenson*  
 Author of *Rehabilitation of the Spine*

For more information on this truly innovative project, now in its THIRD season, view at:

[www.backtoroots.community/b2r-internship-2022](http://www.backtoroots.community/b2r-internship-2022)

# Treating resistant psycho-physiological symptoms in somatic therapies through emotional embodiment



## Raja Selvam

*Clinical psychologist*

I am a licensed clinical psychologist from California, a senior trainer in Peter Levine's Somatic Experiencing (SE) professional trauma trainings, and the developer of Integral Somatic Psychology (ISP), a science-backed and body-based approach designed to reduce treatment times and improve diverse outcomes in all therapy modalities through building a greater capacity to tolerate emotions, especially unpleasant ones, through the body. For me, developing the practice of embodying emotions has been extremely rewarding, personally as well as professionally, and equally so, reminding me that we teach what we need to learn.

### Summary

The science-backed and body-based practice of embodying emotions is described and offered as a tool for exploring and treating persistent physical symptoms with psychological cause in osteopathic and other somatic treatment modalities.

### Introduction

It is not uncommon for somatic therapists (understood broadly to include osteopaths, chiropractors, bodyworkers, physical, manual, energy therapists, and other hands-on therapists) to encounter people with resistant physical symptoms such as tension-type headaches, irritable bowel syndrome (IBS), fibromyalgia and pain syndromes. After medical professionals have ruled out organic causes, and the problems have defied the best efforts of somatic therapists, the conclusion is often drawn that their cause might be psychological. Such symptoms are now referred to as psycho-physiological symptoms instead of psychosomatic symptoms, because the latter came to imply something negative like 'it is all in one's mind' requiring

nothing more than cognitive change for cure. The current term psycho-physiological symptoms is less stigmatising and thankfully acknowledges that, in addition to psychological cause, there is actual physiological dysfunction involved. The growing literature on psycho-physiological symptoms shows that up to 25% of physical symptoms seen in primary care medical practice are psycho-physiological (Landa *et al*, 2012).

When somatic therapy practitioners run into clients with such symptoms, they often refer them to mental health professionals out of scope of practice concerns. Psycho-physiological symptoms, even when their cause might be purely psychological to begin with, eventually become physical in nature. It is becoming increasingly recognised that effective treatments for treating psycho-physiological disorders need to involve both psychological and somatic components. Unfortunately, the extent to which mental health professionals work with the body in their practice continues to be extremely limited. Given this situation, somatic therapists, by incorporating the proposed practice of embodying emotions into their work, can play a valuable function in reducing the suffering caused by psycho-physiological symptoms, without veering too far from their scope of practice. Symptoms might resolve in a somatic practice with the combination of somatic work and even a rudimentary practice of embodying emotion described here. And even when the symptoms do not resolve, and the scope of practice issue dictates a referral to mental health professionals, both the client and the mental health professional they are referred to stand to gain from psychological insights gathered.

## Emotions as the primary cause of psycho-physiological symptoms

There is increasing neuroscientific evidence that affective experiences (defined broadly to include emotions, feelings, drives such as sexuality, moods, and even temperaments such as pessimism) are the primary influencers of verbal and non-verbal behavior including body states such as posture as well as all acts of cognition including attention and perception, evaluation and meaning, memory and language (Dukes *et al.*, 2021), as opposed to earlier times when cognition and behavior were widely believed to determine affective experiences instead. These recent findings put emotion (the more common term 'emotion' is used in the practice of embodying emotions to refer to all above-mentioned affective experiences) at the center of psychological life, as its primary mover.

Emotions can be broadly classified as pleasant and unpleasant emotions. Human beings are inherently averse to pain and attracted to pleasure, as identified by Sigmund Freud in his theory called the pleasure principle. We tend to form psychological defenses such as denial ('This is not happening to me') and physiological defenses such as constriction to cope with unpleasant emotional experiences such as heartache as well as unacceptable pleasant emotional experiences such as sexuality because they often have unpleasant emotional consequences such as shame and fear. And it is well known in body psychotherapy approaches from the time of Wilhelm Reich that physical defenses such as constriction in the body are used by human beings from the time we are in the womb to cope with unbearable physical and emotional experiences. Integral somatic psychology (ISP) identifies seven categories of physiological dynamics such as constriction, arousal, and movement that can contribute to generation as well as defense of emotions in the body (Selvam, 2022). We use physiological defenses throughout our lives but their use is more instinctual and dominant when we are younger when our psyche is less developed to use psychological defenses to cope with intolerable experiences.

Emotions can be broadly classified as pleasant and unpleasant emotions. Human beings are inherently averse to pain and attracted to pleasure, as identified by Sigmund Freud in his theory called the pleasure principle. We tend to form psychological defenses such as denial ('This is not happening to me') and physiological defenses such as constriction to cope with unpleasant emotional experiences such as heartache as well as unacceptable pleasant emotional experiences such as sexuality because they often have unpleasant emotional consequences such as shame and fear. And it is well known in body psychotherapy approaches from the time of Wilhelm Reich that physical defenses such as constriction in the body are used by human beings from the time we are in the womb to cope with unbearable physical and emotional experiences. Integral somatic psychology (ISP) identifies seven categories of physiological dynamics such as constriction, arousal, and movement that can contribute to generation as well as defense of emotions in the body (Selvam, 2022). We use physiological defenses throughout our lives but their use is more instinctual and dominant when we are younger when our psyche is less developed to use psychological defenses to cope with intolerable experiences.

The use of physiological defenses in the brain and the body against painful sensations and emotions, by

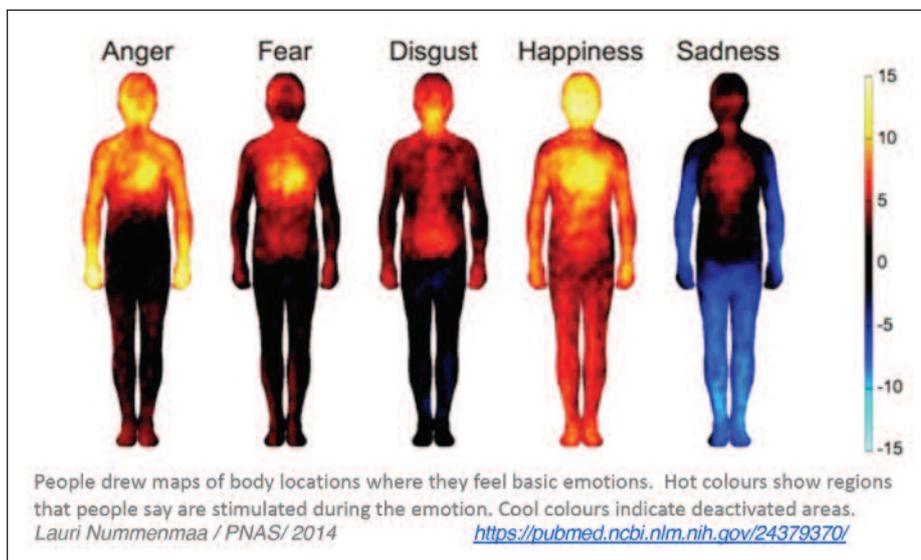
disrupting blood, nervous system, lymphatic, interstitial, electromagnetic and quantum mechanical flows, flows that are commonly understood as vital for an organism's self-regulation and wellbeing, lead to dysfunction in the biology and cause the physical component of psycho-physiological symptoms (Selvam, 2022). To treat such symptoms effectively, a therapist or a team of therapists

has to know how to undo the physiological and psychological defenses against emotions as well as how to help clients access and process the emotions thwarted by the defenses.

People who have had many traumas or adverse childhood

experiences, who have poor access to their emotions and who have limited psychological insight, have been found to be more likely to form psycho-physiological symptoms (Nakazawa, 2015; Scaer, 2014; Psychophysiological Disorders Association, nd online). On the face of it, because those who form psycho-physiological symptoms tend to have above-mentioned precursors, it would seem better if they were treated by a mental health professional than a somatic therapist. However, because of the lack of psychological insight, the high level of suffering caused by the psycho-physiological symptoms, and their medical appearance, such clients are more likely to see medical professionals or somatic therapists for relief than to see mental health professionals. When medical tests reveal no gross abnormalities, they tend to be labeled as medically unexplainable physical symptoms (MUPS). Their routine management, cognitive behaviour therapy (CBT) and medication, has been found to be far from satisfactory (Husain & Chalder, 2021).

A person's capacity to access emotions and their capacity for psychological insight is a function of how much support they had from others to develop both capacities when they were growing up. Clients in somatic therapies with psycho-physiological symptoms who had adequate support for both capacities often spontaneously access emotions as well as psychological insights when somatic therapists work on their bodies to regulate them and undo the physiological defenses against emotions. Clients with psycho-physiological symptoms, because they are likely to have had less support for both growing up, are unlikely to be able to access their emotions or the necessary psychological insights by themselves, and they



are more likely to be motivated to see a mental health professional for help if their somatic therapist is able to connect their psycho-physiological symptoms to their emotions or their psychological situation through their experience at least to some degree, instead of just hearing that their resistant symptoms might be psychological in nature. Here, the practice of embodying emotions can be of much value to somatic therapists as well as psycho-therapists because it recognizes and works with a wide range of emotional experiences (including the most universal emotional experiences of just feeling good or bad that are almost always easy to access) that can be of great help in assisting clients to access their emotional life in short order. Let us now turn to a short description of the practice of embodying emotions that can be of immediate use for somatic therapists facing clients with resistant psycho-physiological symptoms.

## The practice of embodying emotions

The practice of embodying emotions is simply the expansion of the conscious experience of emotions to as much of the brain and body physiology as possible. For example, if one were to experience an emotion such as anxiety in the chest, one would then try to expand the conscious experience of the anxiety to as much of the rest of the brain and body physiology as possible. Such a practice, according to the evidence-based scientific findings from multiple disciplines, has the potential to reduce treatment times through increasing the capacity to tolerate the hidden emotional experiences that are often necessary for the resolution of psycho-physiological symptoms. In addition, it has the potential to improve cognitive, emotional, behavioral, physical, energetic, relational, and spiritual outcomes in all somatic, energetic, psychological, and spiritual modalities. *The practice of embodying emotions: A guide for improving cognitive, emotional, and behavioral outcomes* (Selvam, 2022) gives more details of the method and an in-depth treatment of the scientific findings on which the practice of embodying emotions is based. Even though there have been no randomised controlled studies of the method vis-a-vis other methods such as CBT, our experience with the method in over a dozen countries is that it delivers benefits consistent with the predictions of the science on which it is based.

The four steps of the practice of emotion are the situation, the emotion, the expansion/regulation of body and emotional experience, and the integration. The extent of the width and depth of expansion of emotional experience in the brain and body physiology, the level of emotional experience and its intensity, the depth of the psychological process, and the duration of the emotional experience necessary to bring about change in the psycho-physiological symptoms are highly variable, depending on the complexity of the psychological process needed and the level of capacity for emotional suffering in the client.

In the rest of the paper, the focus will be on how even somatic therapists who do not engage their clients in emotional processing can add a short and simple version of the practice of embodying emotions to their approach that does not involve all of the four steps (only involving steps three and four) to help clients with psycho-physiological symptoms, something that readers can use immediately with their clients as well as themselves.

Unfortunately the extent to which mental health professionals work with the body in their practice continues to be extremely limited

It is important to clarify the difference between tracking the experience of emotions as opposed to sensations in the body. This is because the tool of tracking body sensations from meditation practices has been used widely in psychology to regulate the brain and the body in the last 30 years. The experience of emotion in the body is a meaningful higher-order image of available body sensations that gives us a quick assessment of the impact a situation is having on us. The process is analogous to seeing a meaningful face in a cloud made up of water particles. Our brain is capable of such categorical higher-order processing (Barrett, 2017). Emotions in the body are made from sensations but not all sensations are emotions. Tracking an experience of anxiety in the body is not the same as tracking sensations such as constriction and arousal that might be the basis of the experience of anxiety. Therefore, when we are expanding the experience of anxiety in the body, we are not tracking and expanding the experiences of constriction and high arousal in the body. If we were to track the underlying constriction and arousal instead, and operate on them to transform them, we might regulate the body back to normal and regulate the emotion away without ever becoming aware of them.

For our purpose, let us assume that the resistant psycho-physiological ailment is a stomach ache. We can ask the client to sense into the ache, feel how bad or awful it is (a basic universal emotion that almost anyone can access), and express the bad or awful feeling in a vocalisation and a facial expression that expresses the bad or awful feeling present in the ache. Research has shown that involving the throat and face areas in the emotional experience in the brain or the rest of the body enables the brain to process the emotion as well as the context of the emotion more effectively (Niedenthal, 2007). We can also do it with them to help support them but also to sense what emotions might be involved. Vocal expression, because it is always accompanied by some non-verbal expression, can also help in facilitating the expansion of the emotion to more places in the body and make the emotion more bearable because its impact is distributed more widely. Further, infantile affect states that are often

involved in psycho-physiological states are easier to access through vocalisation than through verbal description. If the client were too inhibited to engage in vocalisation or facial expression, we could have them just imagine someone else or themselves vocalising and facially expressing the bad feeling. Vocalisation and facial expression are also effective in accessing and expanding emotions because their inhibition is a powerful defense against emotions throughout the brain and body.

Because vocalisation and facial expression have been suggested as tools for accessing emotions and expanding them in the body, and because there are somatic therapies that combine emotional release in their work, a word of caution is in order. In order to resolve resistant psycho-physiological symptoms, we need to increase the capacity in clients for emotions that are driving the symptoms, so that clients can become resilient (non-symptomatic) in the face of those emotions when they arise again in the course of their life. Emotional expression, even though its repression can powerfully inhibit access to one's emotions and their embodiment, can become a mere cathartic release or discharge without leading to affect tolerance, symptom resolution, and resilience. Affect tolerance is more about experiencing and tolerating the emotional experience in the physiology of the brain and body as a felt sense experience than about expressing the emotional experience vocally, with or without language.

In addition to or instead of using vocalisation and facial expression to access and expand emotional experience in the brain and body physiology, powerful tools for working with psycho-physiological symptoms, we can ask the client if they can expand the bad or awful feeling in the stomach ache to more of the abdominal area and then to the adjacent areas of the chest or the legs. We can motivate them with a simple analogy. An emotion is an assessment of the impact a situation has on our whole organism. When we expand the impact to more places in the body than holding it and fighting with it in one or two places, we suffer more, just as it is harder to lift a heavy bag with one arm than with both arms. We can support this through whatever somatic work we know to undo the physiological defenses that are restricting the ache and bad feeling locally to the abdomen as well as to undo the physiological defenses that are preventing the bad feeling from spreading to the adjacent areas of the chest or the legs, constriction defenses at the respiratory and pelvic diaphragms for example. Once the client is able to expand the simple emotion of feeling bad or awful to more places in the body, because feeling bad or awful is a foundational experience of all unpleasant emotions, more differentiated emotions such as fear, sadness, or loneliness often emerge to shed further light on the emotional and other psycho-physiological causes of the ache in the abdomen.

In order to help ease the difficult experience of accessing and expanding unpleasant emotional experiences, we can ask clients to bring their awareness from time to time to the positive developments that can be theoretically expected to accompany the expansion.

This step is called the integration in integral somatic psychology (ISP). The integration at the somatic level can be improvement in breathing, less tension in muscles, more energy in some places, or more balance in the distribution of energy in the body. It can also be positive developments in cognition and behavior but pursuing these might be beyond the scope of practice of many somatic therapists.

## The science behind the practice of embodying emotions

A detailed treatment of the science of the practice of embodying emotions is outside the scope of this paper. In a nutshell, the expansion of emotion in the body, by spreading the impact of a situation on the organism in the body, leads to greater affect tolerance or capacity to be with the emotion for a longer period. This allows the brain more time to process the emotion cognitively, emotionally, and behaviorally. This can lead to better outcomes in all three realms. Greater tolerance for emotion also allows the body to be free of constraints imposed on it from defenses against emotions. The body that is more open, available, and connected to the environment is able to participate better in the functions of cognition and behavior that are now known to also depend on the body and its environment, according to the science of embodied and embedded cognition in cognitive neuroscience and psychology (Fincher-Kiefer, 2019). With the body and energy freer of constraints, they are able to connect more with the archetypal resources of the collective to not only bring about more healing resources to the individual but also connect the individual more spiritually to the collective.

Barrett LF (2017) *How emotions are made: The secret life of the brain*. Mariner Books.

Dukes D, Abrams K, Adolphs R, Mohammed EA, Beatty A, Berridge KC, Broomhall S, Brosch T, Campos JJ, Clay J, Clément F, Cunningham WA, Damsio A, Hanna D, D'Arms J, Davidson JW, de Gelder B, Deonna J, de Sousa R... Sander S (2021) The rise of affectivism. *Nature Human Behavior*, 5, 816–820.

Fincher-Kiefer R (2019) *How the body shapes knowledge: Empirical support for embodied cognition*. American Psychological Association.

Husain M & Chalder T (2021) Medically unexplainable symptoms: Assessment and management. *Clinical Medicine*, 21(1), 13–18, <https://doi.org/10.7861/clinmed.2020-0947>

Landa A, Peterson BS & Fallon BA (2012) Somatoform pain: A developmental theory and translational research review. *Psychosomatic Medicine*, 74, 717–727.

Nakazawa DJ (2015) *Childhood disrupted: How your biography becomes your biology, and how you can heal*. Atria Books.

Niedenthal P (2007) Embodying emotion. *Science*, 316, 1002–1005.

Psychophysiology Disorders Association (nd) Available at: <https://ppdassociation.org/> (accessed 7 July 2022).

Scaer RC (2014) *The body bears the burden: Trauma, dissociation, and disease*. Routledge.

Selvam R (2022) *The practice of embodying emotions: A guide for improving cognitive, emotional, and behavioral outcomes*. North Atlantic Books.

# Embodiment – the Alpha and the Omega of somatic psychotherapy



## Michael Rupp

*Bodydynamic trainer*

From the time I started doing therapy for the first time, back in 1988, and soon after when I started embarking on my educational path towards becoming a psychotherapeutic practitioner, it became clear to me that most of our emotional issues are closely linked to how we experience our body. The humanistic approaches like Gestalt and bioenergetics provided me with some of the answers I had been looking for. But as I graduated as a healing practitioner for psychotherapy working in private practice as well as in two pedagogic healing centres for children with special needs, I still felt that important 'pieces' were missing. It was only some time later that bodydynamic provided what I was looking for: a holistic somatic psychology that had developed a precise scientific approach to working with developmental and shock trauma. Since many years now I have been a bodydynamic trainer and supervisor training and teaching this wonderful method to students in Germany and abroad.

### Summary

Michael Rupp describes Bodydynamics, a highly developed body-centred approach to psychotherapy, which maps how the sense of self develops alongside parallel stages of change in the maturing young body. If this psychological development is interrupted the body expresses this break as specific changes in movement and muscles. Adding an embodied dimension to the therapist-client relationship augments its therapeutic potential. The example of narcissistic character structure illustrates how a combination of focused sensation and specific developmental movements can be used to help clients restore developmental resources.

### Introduction

Bodydynamic or bodydynamic analysis is generically a somatic, developmental psychology; the Bodydynamic Institute was founded in the early 1980s under the leadership of Lisbeth Marcher and has been active in such diverse countries as Scandinavia, central, eastern and southern Europe, the Americas, Japan and recently India ([www.bodydynamic.com](http://www.bodydynamic.com)). In her ground-breaking research of over 10 years Lisbeth, has looked deeply into the psychomotoric development of children, ending with the age of puberty. Every developmental age is closely linked to a central psychological theme, eg existence, need, autonomy, will, love and sexuality, opinion and solidarity/performance. In every phase the growing child's interactions with its caretakers and the world are mediated by specific movements and muscles. At the end of her research, Lisbeth was able to precisely link more than 120 muscles with their corresponding psychological theme (Marcher & Fitch, 2010). Modern brain research was additionally used to help confirm the functional unity of the body/mind. From this understanding bodydynamic has developed a unique approach to working with developmental and shock trauma putting great emphasis on the healing potential of an embodied, resonant therapist/client relationship).

### Developing in relationship

Relationship of any kind – including the relationship each of us has to a sense of 'self', to an 'I' – can only be fully understood if we include the relationship (or lack of it) to

the body and our capacity for body awareness. Whether we are aware of this or not, from the most casual to the most intimate, it is through the body that we sense and consequently feel ourselves (or not) in relation to others. All our social skills, how we communicate with people, the way we come into contact through the body with others, is predicated on the psycho-motor development in our childhood.

To begin with, a child's experience as she interacts with her parents, others and the physical world is primarily one of sensations, emotions ('setting into motion') and movements. The dawning of embodiment, of the emerging physicality of one's lived experience, is an intricate process spanning the early and most formative years as mind and movement evolve *together*, as in phase after phase the maturing nervous system allows new muscles to 'switch on'.

Though this natural psycho-motoric process is innate, it still entails a giant developmental effort, which may be joyful, but sometimes will be difficult or even painful. By the age of four, the age of will (the fourth of seven bodydynamic developmental phases) the primary embodiment process is complete. With the foundation of what bodydynamic analysis calls the body ego most children will have landed fully in the material/physical world.

## Meeting the world

This opens up a whole range of new modalities for meeting the world and engaging with people. As the body lengthens and we more fully employ our diaphragm, greater emotional expression is possible: we can 'put our foot down', claim ownership, choose to walk in a certain direction and make a decision. We can maintain a better balance with our body, and also socially as we begin to experiment with roles and 'shoulder' responsibilities in our family system.

In bodydynamic analysis we refer to the core sense of self as the body ego. Around it successive levels of self-awareness (higher ego-organisations) can build up: the individual ego, then the role ego, the observing ego and finally the integrating ego. Although not all psychotherapy schools of thought pay enough attention to the body,

most would agree it's through the body that we learn (for good or ill) how to be in the world and navigate it; equally that our sense of self – of 'ego' or being an 'I' – takes shape in response to our manifold interactions with our early caregivers and the world.

Bodydynamics views this developmental drive as fundamental. When it thrives, it serves the need for mutual connectedness on the one hand and individuation on the other. If the drive is thwarted we struggle to be in relationship with the world and people, because essential

resources of the body ego did not fully develop or were lost later perhaps because of developmental deficits, lack of support, insecure attachment or above all due to traumatic experiences.

Ultimately in all its many forms, psychotherapy aims at helping people to open relationships. This is the essence of therapy to make sense of and to heal the impact of adverse develop-

ment and trauma. From the bodydynamic perspective such detrimental conditions as well as a widespread societal disregard or even contempt for anything bodily leads to a deep-seated loss of embodiment. In consequence we 'lose touch' with the most basic aspect of ourselves. Alienated from our body ego, we feel estranged from ourselves and others, and disturbed by a pervading undercurrent of emptiness; that nothing makes sense in our lives. Arguably much of modern unhappiness and neurotic behaviours, the rise of narcissism, of addictions and compulsive consumerism of all kinds that seek to fill this existential emptiness all stem from this original loss; perhaps especially with narcissism.

## Narcissism and the body ego

Here we refer to a whole spectrum of character type, and not just to the hardened grandiose narcissist or narcissistic personality disorder. It can be interpreted as an attempt to fill a lack of inner sensation and the replace the partial loss of body ego with a sense of 'false self' (Lowen, 1985). But it is not just alienation from one's body awareness that leads to the narcissistic defence, but also that specific *embodied* character-structures develop that seek to replace and compensate for this. These defensive structures or embodied 'positions' constitute the



The joy of embodied contact



Embodiment provides safe contact

narcissistic behaviour on the physical level, and so root them in the body and body ego.

I offer here a simplified example of bodily narcissistic defence and the resulting distortions of body ego. A basic characteristic of the narcissistic condition is an inflated or even a grandiose sense of self at the expense of the perception of other people's needs, wishes and boundaries. This is closely related to events during the age of autonomy, from eight months to two-and-a-half years, a time when an independent sense of self is emerging. At this time the child will be developing its mobility, first beginning to creep and crawl and later to walk, and to start exploring its immediate surroundings. Typically, a narcissistic child is someone who won't have experienced safe attachment to its parents, and, in adapting to repeated painful or even traumatic experience, will increasingly stop sensing and feeling itself. The consequence will be a gradual erosion, a hollowing out of the sense of self at a very fundamental level. This loss of a deeper sense of self-experience and the resulting emptiness and resignation to the absence of natural attachment will form the core of the narcissistic inner dynamic. In consequence, the child will start to use motor activity as a way of avoiding close contact and so avoid feeling deprived and manipulated. To this end the toddler will tense up or 'hyperactivate' its deep and superficial trunk muscles, eg the psoas, quadratus lumborum, rectus abdominis, obliques etc and thus may create a narrow waist – a kind of division between upper and lower body. This division, which further separates the child from its own centre and core and its movements, will

accordingly become disconnected from deeper experience. In the limbs, the push-off from the ground mediated by the deep and superficial calf muscles, soleus and gastrocnemius, and the spreading out of the arms will give the child a natural sense of elevation and greatness at the same time. This will in turn result in broader shoulders (tense deltoid, pars medialis, supraspinatus and serratus anterior). The narcissistic personality will usually be a very active (or even hyperactive) person, superficially excited, but not in deeper contact with herself or others, her sense of self-value or self-importance deriving instead from what she can *do* in the world alone and not from what she *is* and *can sense* in relation to others.

## Finding our way back

What is the way back: as Lisbeth Marcher (Marcher & Fich, 2010) asks, can we wake our body egos again? A central method or tool of bodydynamic analysis to strengthen our body ego and ego functioning is in fact body awareness. When trained, body sensation as part of body awareness functions as a bridge between thought, emotion, action and the body ([www.bodydynamic.com/blog/scientific-validation-of-the-bodydynamic-system](http://www.bodydynamic.com/blog/scientific-validation-of-the-bodydynamic-system)). It allows us to become aware of the patterns of involuntary responses in our mind/brain and body that bodydynamics calls 'closed' or 'coded' behaviours. The bodydynamic practitioner, in contact, helps the client to sense specific movements and muscles consciously: the theory being that as these responses become voluntary it can alter somatosensory mapping in the brain and consequently change unhelpful emotional behavioural patterns for the better (Damasio, 2004).



Embodiment helps us to relax (and start to trust) together in a group

In therapy especially a combination of focused sensation and the experience of specific developmental movements in relation to particular therapeutic issues helps the client access relevant skills (eg how to make contact). In practice this might entail a repeated exercise in which the client reaches out slowly with his hand. He is then met by the therapist's hand, which he pulls towards his chest/heart area against resistance. The 'right' resistance equals the 'right' contact. The client is encouraged to increase his ability to differentiate subtle and specific sensations of hypo- and hyper-responses in muscles as they are activated in the movement (in this example, first in the frontal part of the deltoid, the subscapularis etc, then the upper, inner part of the biceps, the finger flexors, etc) while he pulls back and finally receives contact when the hand of the therapist comes to rest on his sternum.

## We embody our defences

This is one example of how to facilitate awareness of the psycho-motoric embodying of how contact is made, kept and received at an early age, and which may persist and possibly distort later developmental stages. If contact was 'broken' early in our lives, eg by loss, deprivation or violence, it directly hit our body ego in the form of specific imprints or coding in the corresponding muscles. The muscles have two ways of 'defending against' the experience, either by giving up and becoming slack, or by tensing up and resisting. In regards to our example from above this could result in 'hanging, passive' arms on the one hand, or 'held back, slightly pulled in' arms on the other, later in life. That is, we also embody our defences. And these structures, too, are an integral part of our embodied ego. In bodydynamic the sum total of these structures is called 'character structure'.

In this way, developmental resources can be activated in very precise ways without overwhelming or ever retraumatizing the client. The increasing sensory differentiation also improves the client's ability to test reality (his grounding), develop a healthy and cohesive body image, distinguish inside and outside (perceiving one's boundaries) and finally sense a source (centring) from which the self originates. Bodydynamic names 11 such ego functions.

And here we must return full circle to our question: what is it that is embodied? Are we only our character structure, responding primarily from our defences, living in a mechanistic, deterministic world of push and pull reaction only: or are we more? The different wisdom traditions give different names for the 'being' or 'essence' behind our experiences and our relating to others. This essence can make conscious choices, but only when actively present, rather than passive or unconscious and constrained by embodied defences and habits. Self-sensing and embodiment, self-agency and a more conscious way of living are all inextricably linked together. By deeply sensing ourselves we enable conscious choice and empower ourselves to experience real contact with ourselves, others and the world. Regular, correct practice of sensing and embodiment can open the way to knowing ourselves in the true sense of the word – holistically; to more fully sense and feel ourselves, and be more actively present, which is to say consciously embodied in our own physical reality. This perhaps is what 'mindfulness' really means, the embodied foundation from where we may gain access to the deeper reality of OUR being and the ultimate reality of greater being.

Damasio A (2004) *Looking for Spinoza, the feeling brain*. Vintage.

Lowen A (1985) *Narcissism – denial of the true self*. Simon & Schuster.

Marcher L & Fich S (2010) *Body encyclopedia: a guide to the psychological functions of the muscular system*. North Atlantic Books.

- ✓ Do you work in healthcare and feel that it's important to keep your life in balance?
- ✓ Will you allow yourself more inner peace, focus and kindness?
- ✓ Would you like to be inspired by **experienced and renowned meditation teachers** who also work in healthcare as professional, researchers or management?
- ✓ Do you desire more quiet moments of mindfulness, reflection and contemplation?
- ✓ Would you like to receive tips on how to train and integrate focus and compassion into your daily life and activities?



<https://ccmm.care/meditations>

# Embodiment in the female pelvis after birth



## Rebecca Davies

*Osteopath*

I am a practicing osteopath with a specialism in women's health based in the UK. Before studying osteopathy I completed a degree in psychology and worked in telecommunications for 10 years. During this time I went on my own journey with women's health and it was my own personal experiences which drew me to the women's health and osteopathy two-year postgraduate diploma and then to working in this specialty. I have since woven a unique path in this field, training with various teachers around the world blending women's health, pregnancy, trauma healing, sexuality, spirituality. I am a holistic pelvic care practitioner, an ecstatic birth coach, an energy medicine practitioner and an NLP practitioner. I have worked with spiritual teachers and teachers of Tantra and I blend and weave all this into my professional work and the expansion of my work goes hand in hand with my personal expansion.

### Summary

Surveys suggest one in four women experience persistent pelvic pain and dysfunction long after childbirth, sometimes complicated by PTSD. Women may think their predicament is normal or be reluctant to seek help or find that doctors have little to offer. Yet the life-changing – and sometimes lifelong – physical and psychological impacts of post-partum pain can profoundly affect relationships with partners and offspring. The author finds and treats persistent patterns of tension in internal pelvic muscles, and helps heal the emotional shock of labour, traumatic delivery and obstetric intervention.

### Introduction

When asked if I would like to write something on embodiment and the loss of the inhabited body I jumped at the chance. Helping women come back home to their bodies feels like the essence of the work that I do. Women come to see me for many different reasons – for fertility issues, recovering from miscarriage, pregnancy support, postpartum support or wanting relief from chronic pelvic pain, vulvadynia, dyspareunia and issues with orgasm. In this article I will focus on my approach to postpartum support.

### The problem

Postpartum dysfunction of some kind of is common – estimated in the US at 23.7% prevalence of at least one pelvic floor disorder (Hallock & Handa, 2016). I suspect this figure is on the rise as levels of intervention in labour increase. But be that as it may, much of it goes undiagnosed, even though the associated problems, if untreated, tend to worsen with age and menopause. Approximately one in five women will undergo surgery for genital prolapse or urinary incontinence by the age of 85 (Milsom & Gyhagen, 2019).

Where post-partum pelvic dysfunctions are concerned, medical professionals are not necessarily the experts who know best. We need to find better ways to put women front and centre. Because if their physical and emotional trauma is not understood, or ignored and not taken into account, their care will at best be suboptimal, at worst re-traumatising. Many women tell me they had no adequate postpartum check. Others have only done so after they specifically requested it or after their problems

were particularly severe or got worse over time. And none of them have been offered what I would call a holistic approach to their problems. Consequently there must be many women who have for all sorts of reasons never spoken up about their experiences: shame is very common, blaming oneself and feeling at fault is another but perhaps above all, simply not knowing there may be help out there and who to turn to.

## My work

My approach is very different to the mainstream approach which to my mind is sadly failing women. The holistic healing methods I use aim to help a woman become more embodied. My approach is a synthesis of the various modalities I have trained in but at its centre osteopathy and holistic pelvic care. Osteopathy's core principles of tapping into the body's innate healing capacity, the reciprocal relationship between function and structure, the principles of fluid dynamics in finding optimal balance of pressures between the cavities of the body and the connectivity of the bodies fascial systems play into my approach using visceral, cranial and structural osteopathy. Holistic pelvic care, a modality created and taught by Tami Lynn Kent, author of

*Wild Feminine*, is a form of vaginal massage used to balance pelvic floor muscles. In this approach I identify tensions and imbalances in tone and strength and presence in the vagina and pelvic floor muscles and around the cervix. Becoming present is key as I find the body and perhaps especially this most intimate part of the body holds memory imprints as tension patterns that we can start to release when we become aware of them.

I see many women with pain and dysfunction following difficult births. Their suffering is both physical (with pelvic pain, pelvic floor dysfunction, prolapse and urinary incontinence) and emotional (feeling disconnected, disturbed emotionally, upset and not at peace with what they went through). Many of the women who come to me are holding this trauma in their bodies and their vaginas. They may attribute this to intrusive experiences during

childbirth after medical procedures which they felt had taken away their autonomy and boundaries were unknowingly overstepped when they were feeling overwhelmed and helpless. In the aftermath of a birth trauma they come to me, sometimes feeling powerless and distressed, and the core of my work is in helping them reconnect and be present to what is happening in their body so they can begin processing embodied residues of distressing memories and transmute them into something positive.

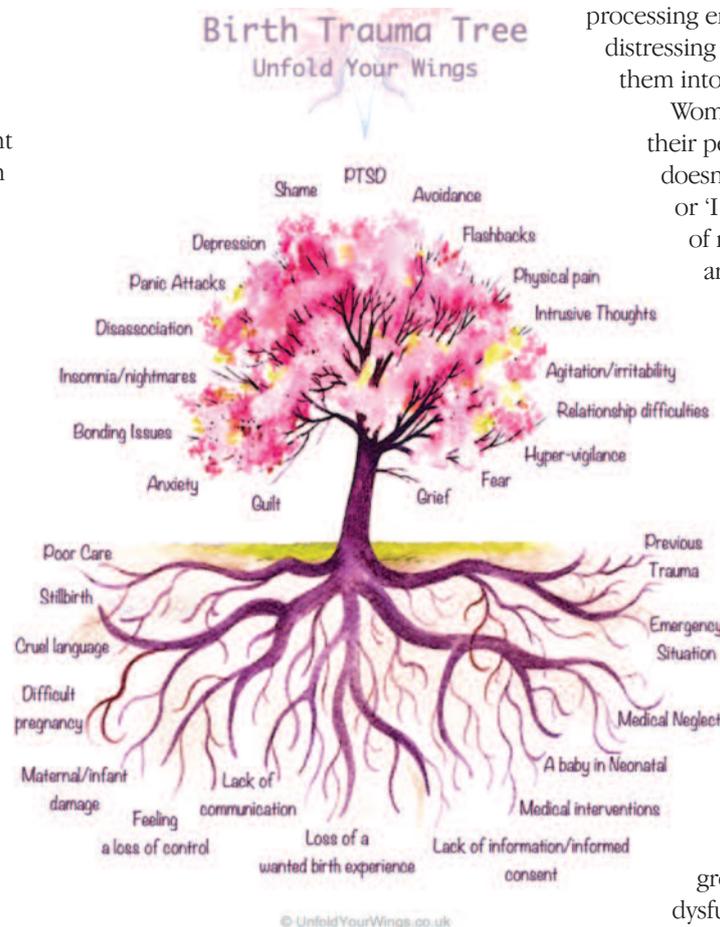
Women who feel separated from their pelvic bowls might say 'it doesn't feel like my body anymore' or 'I never think about that part of my body'. This disconnect and numbness can have an effect on physical function (leading to urinary

incontinence or reduced sensation in the vagina) but also a direct impact on a woman's vitality and sense of herself as a woman. Very commonly the only thing a woman has been told to do is pelvic floor squeezes; some are told to use an app that reminds them to do it. This won't get to the root of the problem and in my experience can lead to greater disconnect and dysfunction. For optimal function of the pelvic floor all four muscular quadrants (front/back/left/right) must

be able to activate. If the pelvic floor is not acting as a balanced whole then simply telling a woman to do more pelvic floor squeezes may actually compound her problem. I have found that both a felt sense of embodied presence and muscle balance are crucially important: a woman won't be able to connect with and activate the parts she can't bring into presence. A single session of balancing and clearing and bringing in pelvic presence can improve pelvic floor function. As a first step, becoming present with what is happening in this part of her body can be profound and may even be the first time a woman has ever fully connected with her own vagina and pelvic bowl.

## In clinic

Women find they relate very differently to their experience of the birth process in the course of this work. At the beginning of a session I may ask a woman to respond to



the statement 'I am safe, my baby is safe and the birth process is complete'. Initially if she didn't feel this was so, by the end of the session when I ask again, she will feel differently and possibly at greater peace and with more acceptance of the birth experience. This shift will have a positive influence on her relationship with her child. There will be changes too in pelvic floor function. A woman who finds it very hard to contract her pelvic floor or even connect with it will at the end of the session say she can contract it in a stronger, deeper and more connected way than before.

6 The holistic healing methods I use aim to help a woman become more embodied

On a physical level I look for tone and strength, examining internally the four muscular quadrants (front/back/left/right) and in the superficial/middle and deep layers. I compare tone and strength in each quadrant, and identify areas of tenderness or numbness, and whether there is tension and balance around the cervix, uterus, urethra and bladder. I check how a woman connects with the energy of her vagina, ovaries and uterus. Areas of tenderness, numbness or disconnect and weakness are common, and all have a story behind them so I give space in the session and help guide a woman to release these patterns. A woman's body and mind have to be completely ready for this work and working with this most intimate area of her body I must be deeply respectful of the wisdom she is holding. I do this in a way that holds sacred space for her, honouring her in this process of healing.

At the start of the session a woman can have a very minimal contraction, say on the right side of her pelvic floor, find it very hard to engage the muscles and sustain a contraction and has to really think about contracting it. By the end of a session I always see significant improvements – the muscles engage much more easily this time without the same effort, they can contract for longer periods and they can engage the parts of the pelvic floor they had difficulty connecting with at the beginning. There is always less tenderness at the end of a session and greater sensitivity where there was numbness. The result of this is more connection and feeling in this area leading to a greater ability to experience pleasure and a sense of wholeness. Once presence and balance is there then it is possible to work on exercises to encourage strength and agility in this area and the exercises I give help a woman learn to exercise control over the different parts to increase her proprioceptive awareness of this area and I combine this with breathwork and visualisations. This can all have an effect to reduce stress and urge incontinence. This powerful work is still in its infancy and I hope to see more research into studying the effects of this work. For

further reading with case histories I point you to the books *Mothering from your Center* and *Wild Feminine* by Tami Lynn Kent.

My work helps to bring a woman home to her body, present to her sacred nature and to help bring her back to an awareness of her wholeness. When presence returns to our pelvic bowl and deep emotions held there are processed, tensions are released and with that strength and tone returns.

## The future of holistic post-partum healing work

I believe we have a long way to go in women's health in the mainstream approach to supporting postpartum women. Keys are helping a woman to become fully embodied and connected after a birth which didn't go to plan. I would love to see every woman given the opportunity to be seen and heard after her birth – from the outside her birth story might not seem traumatic but it is how she has interpreted it, how safe she feels, how safe she feels her baby is that is important. Holding sacred space and applying some of the tools I have briefly outlined here can go a long way to help heal a woman both emotionally and physically and help her significantly on her way to restoring optimal function. This will help to future-proof her body as she ages and goes into menopause. I have also heard and seen firsthand many times how this work helps to change the relationship they have with their child. I have seen mothers go from being anxious about their baby and children to feeling peace love and acceptance. This in turn helps our next generation to grow up embodied.

At its roots my approach holds reverence for the human body, I listen to it and I let it guide me and I help women to become more connected and learn to become more conscious of and able to listen to their bodies. While I would love to see less intervention at birth which would lead to fewer postpartum issues I would also love to see a holistic preventative approach to women's health which could have a significant positive impact on a woman's state of being and health and help prevent serious problems down the line. I would encourage any woman who feels disconnected with her pelvic bowl or that things just aren't quite right to seek a holistic approach – see a practitioner who deals with this approach and use the exercises described in *Wild Feminine*. I would also encourage women and the medical system to stop viewing postpartum pelvic dysfunction as 'normal'. Doing so only leads women to accept the status quo and suffer unnecessarily.

Hallock J & Handa V (2016) The epidemiology of pelvic floor disorders and childbirth: an update. *Obstetrics and Gynecology Clinics of North America*, 43(1) 1–13. doi:10.1016/j.ogc.2015.10.008

Milsom I & Gyhagen M (2019) Breaking news in the prediction of pelvic floor disorders. *Best Practice Research Clinical Obstetrics & Gynaecology*, 54, 41–48. doi: 10.1016/j.bpobgyn.2018.05.004

# Embodied breathing habits

## *Aligning breathing mechanics with respiratory chemistry*



### Peter M Litchfield

*President, Professional School of Behavioral Health Sciences*

I became immersed in psycho-physiology, behavioral pharmacology, and behavioral medicine after getting my PhD in experimental psychology (1972) and while serving as a tenured assistant and then associate professor of psychology (1970–1981). This led to my fascination in how physiological reconfiguration, based on behavioral principles of learning and motivation, is fundamental to the biology of life. This understanding, I believed, was a serious missing link in healthcare at large. In 1984 I began my journey in breathing science, providing education and developing technology, as a powerful way of communicating this message to others.



### Sandra Reamer

*Director of Education, Professional School of Behavioral Health Sciences*

I have a special interest in intuitive process. I always have had. This interest grew into a passion during the 20 years that I earned international recognition both as an artist-painter (fantastic realism) and as an athlete (judo). It culminated in my finding a way to bring intuition formally into the fields of health and performance. Breathing science was the perfect nexus. Since 2001, I have played a pioneering role in the development of breathing behavior analysis. I now consult with, teach, and supervise practitioners interested in bringing breathing science into their professions.

### Summary

We all have breathing habits, some of which may compromise respiration where breathing mechanics become misaligned with respiratory chemistry. Their effects on physiology can be profound, resulting in debilitating physical symptoms, psychological changes, and performance deficits. Unfortunately, habits that compromise respiration are rarely identified, their effects mistakenly attributed to other causes, and their resolutions prescriptive in nature where focus is on symptoms rather than on causes, eg relaxation techniques. Understanding breathing as behavior governed by both physiological and behavioral principles puts these shortcomings into perspective and offers solutions based on breathing behavior analysis.

### Introduction

Breathing and its potential effects on our lives, positive and negative, are enormous. Appreciating this enormity is significantly enhanced by learning about the amazing physiology of breathing, which together with understanding breathing as motivated behavior, can account for the profound and far-reaching effects of breathing on health and performance (Litchfield, 2006, 2010, 2017).

Millions of people from around the world include breathing learning interventions in one way or another in their professional and/or personal lives for a multitude of reasons, for example relaxation. Most of them, however, focus exclusively on mechanics of breathing (external respiration), for example slow breathing, without understanding and addressing their profound impact on the chemistry of respiration (internal respiration), for example acid-base regulation (pH) of extracellular fluids (eg blood plasma).

#### **Understanding the regulation of this chemistry helps to:**

- 1 avoid misguided breathing interventions that can have adverse effects
- 2 avoid faulty conclusions about the nature of breathing interventions and their outcomes
- 3 identify dysfunctional breathing habits that can seriously compromise respiration and precipitate myriad symptoms and deficits

- 4 teach and learn breathing habits that optimize respiration, that is, align breathing mechanics with respiratory requirements
- 5 expand the scope and effectiveness of breathing interventions for personal use as well as for practitioners consulting with clients and patients.

The effects of compromised respiratory chemistry, brought on by breathing habits that misalign mechanics with chemistry, can be immediate and disturbing. Statistics suggest that millions of people worldwide suffer with the profound and misunderstood symptoms and deficits brought on by *overbreathing*, that is, breathing habits that lead to *hypocapnia* (CO<sub>2</sub> deficit). Surveys suggest that 60% of ambulance runs in the major USA cities are a result of acute symptoms brought on by hypocapnia (Fried, 1999). Unfortunately, these kinds of dysfunctional habits are rarely identified by healthcare practitioners, their effects mistakenly attributed to other causes, and their resolutions prescriptive in nature where focus is on symptoms rather than on causes, for example drug prescriptions.

Breathing behavior analysis can provide a solution to this challenge where dysfunctional breathing habits, ie learned physiological reconfigurations, are identified including their effects, triggers, behavioral components, motivation, reinforcement (outcomes that sustains them), and etiology. Precisely the same principles by which people learn these habits can also be implemented for overcoming these same habits and/or learning new breathing habits that enhance health, learning, performance, awareness, creativity, and communication. Learning about how mechanics and chemistry work together is fundamental to understanding the effects of both unconscious breathing habits and intentional breathing training protocols on health and performance, such as effects on cerebral blood flow. This article provides a brief overview of these considerations, while introducing some basic respiratory physiology relevant to improving the effectiveness of both personal and professional breathing learning applications and interventions.

## Breathing and respiration

Breathing and respiration are not the same. Respiration is a subset of breathing. Besides providing for respiration, breathing serves us in many and diverse ways, eg speech. Thinking of breathing as behavior forever changes the way we understand it. The notion of 'breathing habits' emerges and with it an accounting of how breathing mechanics can become disconnected from respiratory reflexes, resulting in compromised health and performance.

Respiration can be subdivided into three phases: external, internal, and cellular. *External respiration* is about breathing mechanics, moving air in and out of the lungs, eg slow/fast, deep/shallow, mouth/nose, diaphragmatic/chest, and more. *Internal respiration* is about oxygen transport and distribution to tissues, carbon

dioxide management, and acid-base regulation (pH and electrolyte balance) of extracellular body fluids (eg blood plasma). *Cellular respiration* is about creating adenosine triphosphate molecules (ATP) in the mitochondria of cells, which are then subsequently broken down by cells for energy. Carbon dioxide generated during cellular respiration is a precious gas that ultimately makes possible precision moment-to-moment acid-base regulation.

**Breathing is behavior.** It serves us in powerful and unsuspecting ways. Breathing habits, good and bad, are learned unconsciously and sometimes consciously, for self-regulating emotions, cognitions, personality, coping styles, physiology, health, performance, and consciousness. Breathing is psychological in the sense that experience sets the stage for its reconfiguration. Embedded in this psycho-physiological reconfiguration is a personal history that regulates breathing based on the principles of learning, perception, motivation, reinforcement (benefits), attention, and memory. The richness of the psychology of breathing provides for both its far-reaching benefits and for its, all too frequent, profoundly debilitating effects.

**Respiration is reflexive.** External respiration is about regulation of breathing mechanics by brainstem reflex chemo-regulatory mechanisms. Although breathing mechanics continuously shift, as a function of being bored or excited, stressed or relaxed, upset or pleased, and meditative or physically challenged, respiration generally remains within an optimal respiratory chemistry envelope. Unless an unconscious habit or intentional manipulation gets in the way, respiratory requirements will dictate the coordination of breathing mechanics in the context of other interacting behaviors such as eating and talking. Compromised respiration during times of challenge is usually a result of learned and specifically triggered breathing habits, not simply a result of fight-flight autonomic nervous system changes.

## Respiratory chemistry

Many people believe that good breathing is about moving as much oxygen (O<sub>2</sub>) as possible into the blood, while simultaneously eliminating (excreting) as much carbon dioxide (CO<sub>2</sub>) as possible from the blood, through 'the right' breathing mechanics. This view is both uninformed and potentially dangerous. Yes, O<sub>2</sub> delivery to body cells is essential, of course, but the best way to accomplish this is not so obvious. And yes, excretion of excessive CO<sub>2</sub> is critical, but not all of it, only some of it. Contrary to the belief of many, CO<sub>2</sub> is a precious body substance and its ever-presence is required not only for health but for life itself.

External respiration (breathing mechanics) is regulated from breath to breath by chemo-regulatory reflexes located in the brainstem (Levitzky, 2007; Khoo, 2011), based on pH, CO<sub>2</sub> concentration, and O<sub>2</sub> concentration of arterial blood plasma and other extracellular body fluids (not including O<sub>2</sub>). These reflexes operate through the diaphragm and the external intercostal muscles while at

rest. This is one reason if chest breathing predominates, based on having unconsciously learned a breathing habit (where 'feeling in control' may take precedence over allowing for the reflexes), that diaphragmatic training can be so fundamentally important, ie clients learn to prefer mechanics consistent with good respiratory chemistry.

Internal respiration plays a key role in acid-base physiology. It regulates the pH of extracellular fluids (arterial blood plasma, lymph, interstitial, and cerebrospinal fluids) by changing the relative proportions of bicarbonate ( $\text{HCO}_3^-$ ) and carbon dioxide ( $\text{PCO}_2$ ) concentrations (eg  $\text{HCO}_3^-/\text{PaCO}_2$ ).

Bicarbonate concentration ( $\text{HCO}_3^-$ ) is regulated by the kidneys and the arterial  $\text{CO}_2$  concentration by breathing. When either concentration changes, extracellular acid-alkali balance (eg in blood plasma) will immediately shift up or down. Breathing can immediately affect pH level, within seconds, positively by the action of reflex mechanisms and positively OR negatively by learned breathing habits.

Brainstem reflexes (external respiration) change breathing mechanics (rate and depth) so as to regulate the pH of extracellular body fluids. However, respiratory chemistry can also be radically influenced by both voluntary self-interventions and unconsciously learned breathing habits comprised of powerful emotional, motivational, cognitive, and other psychological properties. Consequently learned breathing habits can get in the way of these reflexes leading to insidious, outcomes that are typically unidentified and misunderstood by both practitioners and their clients. The predominate behavioral outcome is overbreathing, breathing that results in *hypocapnia* ( $\text{CO}_2$  deficit) and *respiratory alkalosis* (pH higher than 7.45). Hypocapnia can result in profound physiological changes that manifest as a wide range of symptoms and deficits, both short term and long term, which are all too often 'medically unexplained'.

*Hypercapnia* (excessive  $\text{CO}_2$ ) – chemically the opposite ie *respiratory acidosis* (pH lower than 7.35) – is uncommon.

*'Contrary to the belief of many,  $\text{CO}_2$  is a precious body substance and its ever presence is required not only for health but for life itself.'*

Brainstem reflex mechanisms regulate breathing mechanics (external respiration) such that the correct  $\text{CO}_2$  concentration is maintained in the alveoli of the lungs (where gas exchange takes place). This ensures that blood moving through the pulmonary capillary network returns to systemic circulation with a  $\text{CO}_2$  concentration that keeps pH within normal limits. Thus, when one intentionally over-ventilates by taking large breaths, slow or fast, diaphragmatically or in the chest, or through the nose or the mouth,  $\text{PaCO}_2$  concentration can drop and drive pH upward toward respiratory alkalosis. Simultaneously, the  $\text{CO}_2$  concentration drops in red blood cells with a subsequent rise in the pH of its cytosol, resulting in unfriendly stingy hemoglobin (Bohr Effect, Levitzky 2007) that more sparingly delivers it oxygen and nitric oxide (NO, a potent vasodilator) to the blood plasma. These

combined changes, plasma and red blood cell alkalosis, lead to reduced oxygen and glucose supply to tissues in need, especially the brain and heart.

## Compromised respiration

Taking charge of breathing triggered by an unconsciously learned breathing habit, or brought on by a misguided conscious breathing intervention, can easily result in overbreathing (hypocapnia) and its associated physiological consequences: immediate, long term, and widespread (Fried, 1987, 1993; Laffey & Kavanagh, 2002; Maramattom & Wijdicks, 2007), many of which are listed in **Table 1** (Hypocapnia: physiological effects).

**Table 1: Hypocapnia ( $\text{CO}_2$  deficit, brought about by overbreathing)**

### Physiological effects

- Antioxidant reduction
- Bicarbonate deficiency (long-term kidney effect)
- Bronchial constriction (airway resistance)
- Calcium migration into muscle cells (fatigue, spasm)
- Cerebral excitatory and inhibitory disturbances
- Cerebral hypoxia, hypoglycemia, ischemia
- Cerebral vasoconstriction (increased pH)
- Compromised  $\text{O}_2$  distribution (hemoglobin chemistry)
- Compromised nitric oxide distribution (hemoglobin chemistry)
- Coronary (vascular) constriction
- Dishabituation and habituation ( $\text{CO}_2$  set point?)
- Gut smooth muscle constriction
- Ionized magnesium reduction (tetany and cardiac compromise)
- Hemoglobin, compromised  $\text{O}_2$  and NO delivery
- Hypokalemia (potassium deficiency)
- Hyponatremia (sodium deficiency, long-term effect)
- Increased neuronal excitability & contractility
- Increased overall vascular resistance (smooth muscle constriction)
- Myocardial electrophysiology disturbances
- Neuronal acidosis (lactic acid)
- Plasma alkalinity, effects on endothelial NO production
- Reduced ocular blood flow
- Reduced lung compliance
- Reduced splanchnic organ perfusion (hepatic and renal arteries)
- Sodium and potassium migration into cells (excitability)
- Stress hormone release (ACTH)
- Thrombosis, platelet aggregation
- Tissue inflammation

The symptoms and deficits caused by these physiological changes can be profound, even devastating, and may include physical (eg brain fog), emotional (eg anger), cognitive (eg attention deficit), personality (eg sense of self), and behavioral (eg test taking) changes. Some of these symptoms and deficits (Fried, 1987, 1993; Laffey & Kavanagh, 2002) are listed in **Table 2** (Hypocapnia: symptoms & deficits). These effects are all too often mistakenly attributed to other causes or are identified as “unexplained symptoms” by practitioners unaware of the impact of compromising breathing habits on health and performance.

### Table 2: Hypocapnia (CO<sub>2</sub> deficit brought about by overbreathing)

#### Symptoms and Deficits

- Abdominal: nausea, vomiting, cramping, bloatedness
- Autonomic-stress: acute fatigue, chronic fatigue, headache, muscle pain, weakness
- Cardiovascular: palpitations, tachycardia, arrhythmias, angina symptoms, ECG abnormalities
- Cognitive: attention deficit, learning deficits, poor memory, brain fog, inability to think
- Consciousness: dissociation, state change, dizziness, fainting, confusion, hallucinations
- Emotional: anxiety, anger, fear, panic, phobia, apprehension, worry, crying, low mood
- Movement: diminished coordination, reaction time, balance, perceptual judgment
- Muscles: tetany, hyperreflexia, spasm, weakness, fatigue, pain, difficult to swallow, chest discomfort
- Performance: sleep apnea, anxiety, rehearsal, focus, endurance, muscle function, fatigue, pain
- Peripheral: tingling, numbness, trembling, twitching, shivering, coldness, sweatiness
- Psychological: shifts in personality, self-esteem, memory, emotion, thought
- Respiratory: shortness of breath, airway resistance, bronchial constriction, asthma symptoms
- Sensory: blurred vision, sound seems distant, reduced pain threshold, dishabituatation, dry mouth
- Smooth muscles: cerebral, coronary, bronchial, gut, ocular, Splanchnic, and placental vasoconstriction

These same physiological changes may also trigger (eg epilepsy), exacerbate (eg asthma), and prolong (eg nausea during pregnancy) symptoms and deficits of all kinds brought on independently by physical and psychological conditions unrelated to breathing. These interactive effects are almost invariably overlooked by practitioners and their clients. Examples of these conditions are listed in **Table 3** (Hypocapnia: exacerbation of health issues and complaints).

Optimal respiratory health means maintaining a stable chemical axis of breathing wherein internal respiratory

### Table 3: Hypocapnia (CO<sub>2</sub> deficit brought about by overbreathing)

#### Exacerbation of Health Issues and Complaints

- Behavioral: performance issues, speech, singing, task challenges
- Cardiovascular: angina, heart attack, arrhythmias, ECG abnormalities
- Chronic pain: injury, disease, systemic inflammation
- Cognitive: learning disabilities, ADD, ADHD
- Drug efficacy: shifts in pH and electrolyte balance alter absorption
- Emotional: anger, phobias, panic attack, anxiety, depression
- Fitness issues: endurance, muscle strength, fatigue, altitude sickness
- Gastric: irritable bowel syndrome (IBS), non-ulcer dyspepsia
- Neurological: epilepsy
- Neuromuscular: repetitive strain injury (RSI), headache, orthodontic
- Pregnancy: fetal health, premature birth, symptoms during pregnancy
- Psychological: trauma, PTSD, drug dependence
- Psychophysiological disorders: headache, chronic pain, hypertension
- Respiratory: asthma, emphysema, COPD
- Sleep disturbances: apnea
- Unexplained conditions: fibromyalgia, chronic fatigue
- Vascular: hypertension, migraine, ischemia, hypoglycemia/ocular, Splanchnic, and placental vasoconstriction

requirements are immediately and expeditiously addressed, despite the highly variable acrobatics of breathing mechanics during daily life that may be serving us in many other important ways such as talking. Aligning mechanics with chemistry, or not, addresses the most fundamental, practical, and profound factors that account for:

- the far-reaching debilitating effects of breathing habits that compromise respiratory chemistry, such as disturbed extracellular pH (eg blood plasma), deregulated electrolyte balance (eg bicarbonate), compromised blood flow (eg brain and heart), unfriendly hemoglobin (compromised delivery of O<sub>2</sub>), compromised muscle function (eg jaw tension and pain), fatigue, mood changes, and performance deficits (Fried, 1987, 1993; Laffey & Kavanagh, 2002, Maramattom & Wijdicks, 2015)
- the surprising benefits of breathing habits and breathing self-interventions that support optimal respiratory chemistry, such as improved physical performance (eg sports), symptom abatement (eg panic), improved cognition (learning, memory, and attention), enhanced task performance (eg test taking), successful

management of emotions and stress (eg anxiety, anger), expanded consciousness (eg being present), improved self-awareness (eg sense of self), and better overall health (balanced pH chemistry).

## Self-interventions and self-regulation

**Self-interventions** (techniques) are useful for managing, blocking, and avoiding dysfunctional breathing habits along with their troubling symptoms and deficits. Practitioners from diverse disciplines and perspectives focus on self-interventions for achieving beneficial outcomes that involve ‘doing the breathing’ in prescribed ways. One of the outcomes of prescriptive breathing, however, is not infrequently deregulated respiration, and unfortunately even the acquisition of dysfunctional habits where both practitioners and clients may misinterpret the outcomes and their associated physical and mental changes. This is because habits, ie the psychophysiology of breathing, are typically not identified and specifically addressed, nor is the alignment of so-called ‘good’ mechanics with healthy respiratory chemistry understood and evaluated.

**Self-regulation** is about identifying, disengaging, modifying, and/or replacing existing breathing habits with new ones. Useful solution-oriented interventions for learning new breathing habits are based on phenomenological exploration, the development of self-observation skills, and the principles of behavioral analysis including desensitisation, negative practice, cognitive learning, operant conditioning, CapnoLearnin, and multimodal biofeedback, eg CO<sub>2</sub>, HRV, and EMG. Simplistic mechanical solutions do not address psychological variables such as motivation and reinforcement, eg mouth breathing causes overbreathing. Mouth breathing, in fact, often restores good respiratory chemistry because it reduces air hunger and clears worry about getting enough oxygen.

Healthy breathing habits provide for self-regulation of mechanics in the service of respiratory chemistry, where self-intervention is not required, except when it is intentionally manipulated for reasons such as:

- identifying breathing habits and exploring their effects (ie breathing behavior analysis)
- exploring consciousness for personal awareness and therapeutic outcomes, eg holotropic breathing (Grof & Grof, 2010).

Self-regulatory breathing means ‘allowing the breathing’, unencumbered by unconscious habits and intentional manipulation, while simultaneously breathing for meeting other objectives, eg talking, meditating, relaxing, exploring. ‘Allowing’, although excellent advice often leading to temporary alignment of mechanics with chemistry, may also lead to ‘allowing’ unconsciously learned breathing habits (physiological reconfigurations) that need to be addressed first.

## Respiration and consciousness

Hypocapnia (CO<sub>2</sub> deficit) can result in radical cerebral vasoconstriction (Laffey & Kavanagh, 2002) leading to reductions in blood flow and volume of up to 40% to 50% or more within less than a minute (Brian, 1998). Oxygen and nitric oxide distribution by hemoglobin may be significantly compromised as per the Bohr Effect. Sodium and potassium ions migrate from cerebrospinal and interstitial fluids into neurons in exchange for hydrogen ions (H<sup>+</sup>), thus increasing neuronal metabolism, excitability, and contractility. All these factors together set the stage for brain hypoxia (oxygen deficit), brain hypoglycemia (glucose deficit), and metabolic (lactic) acidosis in neurons which may profoundly alter overall brain function in diverse ways, both subtle and obvious (Pardo & Miller, 2018; Laffey & Kavanagh, 2002).

The unfortunate outcomes of these physiological compromises include physical outcomes such as headache, ischemia, and the possible triggering of neurological syndromes as well as immediate effects on attention, perception, motivation, emotion, cognition, learning, memory, personality, performance, sense of self, and consciousness. It is these kinds of abrupt and disconcerting outcomes (Table 2) that motivate people to call 911 (emergency) for help (Fried, 1999).

Examples of psychological changes, from a downside perspective, include: emotional (deregulation) vulnerability, anxiety, anger, fear, panic, phobia, apprehension, worry, crying, low mood, dissociation, disorientation, dizziness, fainting, confusion, hallucinations, attention deficit, learning deficits, poor memory, brain fog, inability to think, low self-esteem, and undesirable shifts in personality (Fried, 1987; Fried & Grimaldi, 1993). On the other hand, from a consciousness perspective these kinds of ‘negatives’ can lay the groundwork for important ‘positives’ through individualized guided breathing explorations such as holotropic breathing.

The ways in which a specific person responds to these physiological changes are highly variable and are dependent on personal health, life circumstances, personality, immediate social environment, and especially personal psychological history. For example, disorientation and dizziness, as a function of oxygen deficit, may trigger fear or anxiety in one person and relief or relaxation in another. These differences are based on personal histories, including emotional, perceptual, and cognitive learning.

State change and dissociation are key to understanding how people respond to breathing mediated physiological changes. Breathing-induced states change may serve the individual in both positive and self-defeating ways, much in the same way as do psychoactive substances that provide for access and experience of self, others, and the world from new, different, and sometimes revealing perspectives. Intentional state change through overbreathing can set the stage for life-altering experiences, including:

- uncovering traumatic memories that provide for processing and reframing painful episodes in life

and/or

- discovering dysfunctional breathing habits and their associated effects triggered by specific places, times, people, tasks, emotions, thoughts, social circumstances, challenges, and physical feelings based on unique personal learning histories.

Unintentional breathing-mediated state changes, brought on by hypocapnia, are common. These state changes can serve people in powerful and unique ways, outside of their awareness, based on a personal history that gives specific meaning to such changes. These state changes can be habit-forming in the sense that they may provide for:

- avoidance of thoughts, emotions, and memories

or

- access to a different and preferable sense of self (personality). State-dependent learning and memory, and their role in drug addiction for example, have been extensively researched in both humans and animals and are described in thousands of articles in numerous behavioral science journals, eg *Behavioural Pharmacology*.

## Concluding comments

Anyone who provides breathing education and/or training with clients can benefit immensely by knowing some of the basics of respiratory physiology and how changing breathing mechanics immediately, profoundly, and precisely alters respiratory chemistry. A truly practical understanding, however, of the dynamics of breathing physiology, how it is ultimately governed, how it affects us, and how we interact with it *requires knowledge of its psychology*, not just the details of its mechanics and chemistry.

Everyone has learned breathing habits, positive and negative. Habits are solutions triggered by specific experiences (stimuli) that are sustained by their outcomes (reinforcements). That is, breathing not only serves respiratory requirements (external respiration), but very importantly serves a host of other behavioral and psychological objectives, most of them unconscious. Examples of conscious objectives include: talking, emotional control, relaxation, meditation, psychotherapy, consciousness exploration, and cultivating self-awareness. Examples of unconscious objectives include: accessing secondary gain (eg headache), feeling in control, accessing emotions (eg anger) for controlling others, anxiety reduction, avoiding memories, disconnecting from challenges, and many others. Unconscious objectives are achieved through learning breathing habits based on specific experiences, eg feeling air hunger while wearing a mask during times of Covid. Everyone has learned breathing habits, self-enhancing or self-defeating, regulated by specific triggers based on their own personal histories.

Breathing mechanics and respiratory chemistry weave together in a dance. While embracing the daily diverse circumstances of our lives, breathing is designed to take care of us by aligning mechanics with chemistry in the service of health, performance, and consciousness. The ‘chemical axis’ of breathing generally remains within the optimal respiratory envelope, thus meeting oxygen, carbon dioxide, and acid-base balance requirements. Breathing habits that disturb the H-H equation, however, deregulate this dance. Assisting people with identifying and learning new breathing habits requires a detailed breathing behavior analysis where both the physiology and psychology of breathing are phenomenologically explored by clients with guidance from their practitioners.

The relationship between breathing and respiration, mechanics and chemistry, cannot be fully appreciated without understanding the psychological nature of physiology itself. Breathing, like any other behavior, is motivated and changes as a function of its outcomes. Breathing isn’t simply mindless automation of physiology to be somehow consciously manipulated in the name of self-help. It is truly so much more than this. Simply manipulating breathing physiology for well-intended purposes, without regard to its psychological nature, does not do justice to the richness and complexity of breathing.

Brian JE (1998) Carbon dioxide and the cerebral circulation. *Anesthesiology*, 88, 1365–1386.

Fried R (1999) *Breathe well, be well*. John Wiley & Sons.

Fried R (1987) *Hyperventilation syndrome: research and clinical treatment*. John Hopkins University Press.

Fried R & Grimaldi J (1993) *The psychology and physiology of breathing in behavioral medicine, clinical psychology, and psychiatry*. Plenum Press.

Grof S & Grof C (2010) *Holotropic breathwork: a new approach to self-exploration and therapy*. State University of York Press.

Gross SS & Lane P (1999) Physiological reactions of nitric oxide and hemoglobin: A radical rethink. *Proceedings National Academy Science USA*, 96 (18) 9967–9969.

Khoo MC (2011) Carbon dioxide and the control of breathing: a quantitative approach. In: Gravenstein JS, Jaffe MB, Gravenstein N & Paulus DA (eds) *Capnograph*. Cambridge University Press.

Laffey JG & Kavanagh BP (2002) Hypocapnia. *New England Journal of Medicine*, 34 (1) 43–53.

Levitzky MG (2007) *Pulmonary physiology* (7th edition). McGraw Hill.

Litchfield PM (2010) CapnoLearning: respiratory fitness and acid-base regulation. *Psychophysiology Today*, 7(1).

Litchfield PM (2017) *Breathing: alignment of mechanics with chemistry*. International Breath Foundation Newsletter, June.

Litchfield PM & Tsuda A (2006) Good breathing, bad breathing. *L’Esprit D’aujourd’hui*, 8(1) 47–57.

Maramattom E & Wijdicks FM (2015) Neurology of pulmonology and acid-base disturbance. In: Schapira A, Byrne E, Frackowiak R, Mizuno Y & Silberstein S (eds) *Neurology and Clinical Neuroscience*. Mosby.

Pardo MC & Miller RD (2018) *Basics of anesthesia* (7th edition). Elsevier.

Thomson WST, Adams JF & Cowan RA (1997) *Clinical acid-base balance*. Oxford University Press.

This article is a revised version of the author’s newsletter essay, *Breathing: alignment of mechanics with chemistry*, that appeared in the *International Breath Foundation Newsletter*, June 2017.

# Psychedelics and meditation, part 2: lessons from personal exploration



## James Hawkins

Medical psychotherapist

I read philosophy, then changed to medicine, qualifying as a doctor in 1975. I worked as a yoga and meditation teacher and group facilitator. I also trained in and used a wide variety of conventional and complementary approaches working through a charity I set up in Edinburgh. In the early 1980s I was on the working group that launched the BHMA. In the last decade or two I have focused particularly on psychotherapy and wellbeing. More recently I helped found the Psychedelic Health Professionals Network as an educational non-profit organisation to encourage safe, effective use of these special medicines.

*‘A person is a spatially and temporally limited piece of what we call the “universe”. He experiences himself and his feelings as separated from the rest, an optical illusion of his consciousness. The pursuit of liberation from this bondage is the only object of real religion.’*

### Summary

In the first of this pair of linked articles – *Psychedelics & Meditation, part 1: research on potential synergy* in the last edition of JHH – I gave a brief overview of research highlighting the possible synergy between meditation practice and psychedelic use. In this second article of the pair – *Lessons from Personal Exploration* – I talk more about personal experience and the practicalities of combining psychedelics with meditation. I hope these two rather different lenses – descriptions of research and of personal practice – will complement each other in helpful ways.

I trained both as a medical doctor and as a psychotherapist. Going up to university in the late 1960s, it’s no surprise that I’m intrigued by the re-emergence and therapeutic potential of psychedelics. I have written and lectured a good deal about these topics – see for example on my own website at [goodmedicine.org.uk](http://goodmedicine.org.uk) > good knowledge > psychedelics or on the psychedelic health professionals’ site at [psychedelicnetwork.org.uk](http://psychedelicnetwork.org.uk) > lectures-and- tutorials. Over two years ago, I helped found the PHP Network and we’re currently in the process of setting ourselves up as an educational charity. Do visit the PHP website for information about a wealth of opportunities. We provide including a weekly newsletter, podcasts, journal clubs, a linked book club, orientation/integration groups, supervision, lectures and also (legal) psilocybin retreats in the Netherlands.

I very much agree that ‘The plural of anecdote is not data’, but sometimes personal experiences and qualitative studies can act as scouts scoping out the countryside and suggesting territory that might later be worth exploring further both by individuals and by the slower moving heavy artillery of randomised and other formal research trials. I want to comment on five areas here: first, and a bit more fully, how I personally have found psychedelics and meditation enhance each other; second the value of trying different settings/activities when using psychedelics; third the question of whether one trips with a sitter or friend or group or alone; fourth the potential helpfulness of using some form of recording device to make notes during the trip; and fifth a brief discussion of ways I have found helpful for personal integration.

My personal psychedelic experience involved a number of LSD trips in the late 1960s and early 70s. Then after a long gap I took a series of legal psilocybin truffle

trips in the Netherlands. I have visited the Netherlands on a series of occasions and, of course, other psychedelic drugs are readily available there too. I am not a hugely experienced ‘psychonaut’ but I have ‘journeyed’ on various psychedelic substances 30 to 40 times in my life. I have also meditated regularly for more than 50 years, have gone on a series of meditation retreats, visited a variety of monasteries and ashrams, and for a while taught meditation. I’m very fortunate – self-assessment using the Mystical Experience Questionnaire (MEQ) (Barrett *et al*, 2015) suggests I am nearly always blessed with ‘a full mystical experience’ when I trip. This seems rather a high frequency and I am very confident that long meditation experience greatly helps me to approach these journeys in a state of humility, calmness and surrender. Probably too, secure childhood ‘attachment’ and a fortunate life course/situation also contribute. Intriguingly, I suspect that tracking ‘ego-dissolution’ through most of my trips (see charts and other details below) also helps me navigate deeper. As has been said, ‘What gets measured, gets managed’, although ‘managed’ is rather a poor description for what feels more like nudging the prow of the boat repeatedly into the centre of the river when on a trip.

Besides ‘ego dissolution’, it seems probable that another good predictor of long-term benefit in general population participants is intensity of positive emotions – for example, love, beauty, reverence and gratitude – experienced at times during the trip (McCulloch *et al*, 2022). I personally have found that including these qualities in one’s initial trip intentions and then using practices like breath focus, compassion meditation and gratitude practices during the trip itself, can often deeply enhance these experiences.

How have I personally found psychedelics and meditation can enhance each other? Talking with a friend recently, I said, ‘Maybe one way of looking at it is that, if one went on a week’s meditation retreat say, you might reach places that you very rarely, if ever, reach in your daily practice of meditation. But somehow having swum out into that bigger lake enriches your daily practice. It gives it a context; it changes how you see it a bit. I think psychedelics are like that for me.’ For most of us, high dose psychedelics are very likely to produce profound learning opportunities. As the meditation teacher Sam Harris put it so memorably (riffing on a well-known remark by the ethnobotanist Terence McKenna), ‘If you teach someone to meditate or to do yoga or to go on pilgrimage to some holy mountain, nothing is guaranteed to happen. Yet if you are given five dried grams of magic mushrooms or DMT or some other potent psychedelic, whoever you are, a freight train of significance is going to be coming your way in a matter of moments.’

Nowadays, both when taking psychedelics and when meditating, I use the same process of ‘letting go of everything’. This involves a psychological process of surrender which seems so centrally important (Russ & Elliott, 2017; Russ *et al*, 2019) and this is mirrored in repeated physical release of the body and its boundaries (Dambrun, 2016).

I’m reminded of the poet e e cummings’ wonderful words: ‘Seeker of truth – follow no path – all paths lead where – truth is here’. On high dose psilocybin nearly three years ago now, this truth/experience hit me pretty much like a train in what was then the deepest spiritual experience of my life.

And this is interesting. I do feel that psychedelic experience has deepened the surrender, depth and dissolution of my regular meditation practice... and has done something similar for dance and love-making and when in relationships or in nature. But more important, I suspect, is not just the effects while engaged in various activities, but also what feels like a shift in my internal structure. So again, speaking with a friend, I said something like, ‘I’m already so very fortunate in my life situation (relationships, work, health) – it’s a bit like living in a rather beautiful house. What it feels psychedelics have done is to open all the doors and windows... I feel both bigger and smaller... softer, emptier, more loving.’ It’s a wonderful thing to feel and I hope there is at least some truth to it!

So, ego dissolution feels central to psychedelics’ benefits. This is the territory highlighted by the Einstein quotation at the start of this article... ‘liberation from this bondage (of apparent separation) is the only object of real religion’. Savouring and simply being present is another related potential benefit – both while meditating and in life more generally. Over 50 years ago, at university, during a particularly special LSD trip, I wrote, ‘Everything is and almost bursts with being so’. Huxley described this so well in his book *The doors of perception*. And so central as well to exploration of psychedelics and meditation is ‘the river of kindness’ that has been a repeating theme in trips over these last years.

So, psychedelics have infused my day-to-day meditation practice and vice versa. And most importantly, both psychedelics and meditation for me underline the centrality of letting go of everything, of savouring, gratitude and being present, of opening the doors of the heart even further, and of support for living more fully what feels true. And I am not any kind of saint and I tumble into all kinds of self-centredness and other foolishness very regularly, and I think I am also less dismissive of the so-called ‘ego’ and find these internal ‘executive structures’ are often a helpful, kind caretaker.

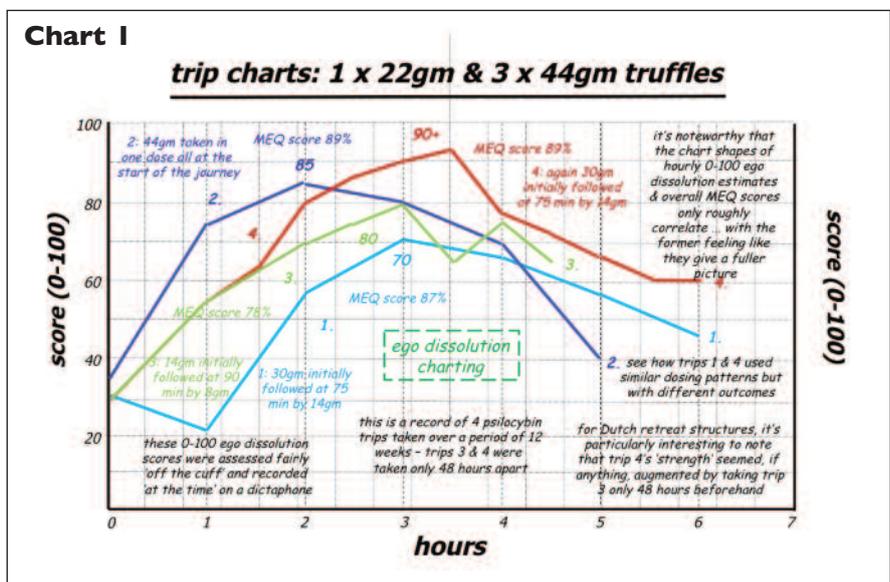
As well as these comments about how I personally have found psychedelics and meditation enhance each other, I also want to say a little about settings, company, note-taking, and integration. As for settings and activities, I understand that most recent research on psychedelics has involved lying down with eye mask and playlist. This is fine, but other settings and activities are very well worth exploring too. Being in nature, dancing, relating to others and for me especially, meditating while on psychedelics are further ways of going forward with these practices. There is some evidence that psychedelic experience may especially affect activities that one practises while taking the psychedelic – so Kettner *et al* (2019) in their paper

From *egoism to ecoism* comment, 'The frequency of lifetime psychedelic use was positively correlated with nature relatedness at baseline. Nature relatedness was significantly increased two weeks, four weeks and two years after the psychedelic experience. This increase was positively correlated with concomitant increases in psychological well-being and was dependent on the extent of ego-dissolution and the perceived influence of natural surroundings during the acute psychedelic state.' If psychedelics especially nourish nature-connectedness when one has been out in nature during the trip itself, it seems likely that psychedelics may especially infuse meditation practice if one meditates while tripping. This is certainly my experience and the way I personally spend most of my time when on psychedelics. On a high dose, it can feel that sitting and walking meditation are too difficult and one just wants to lie down. Lying down is fine, but with a little practice sitting meditation and some walking meditation are likely to come more easily as well.

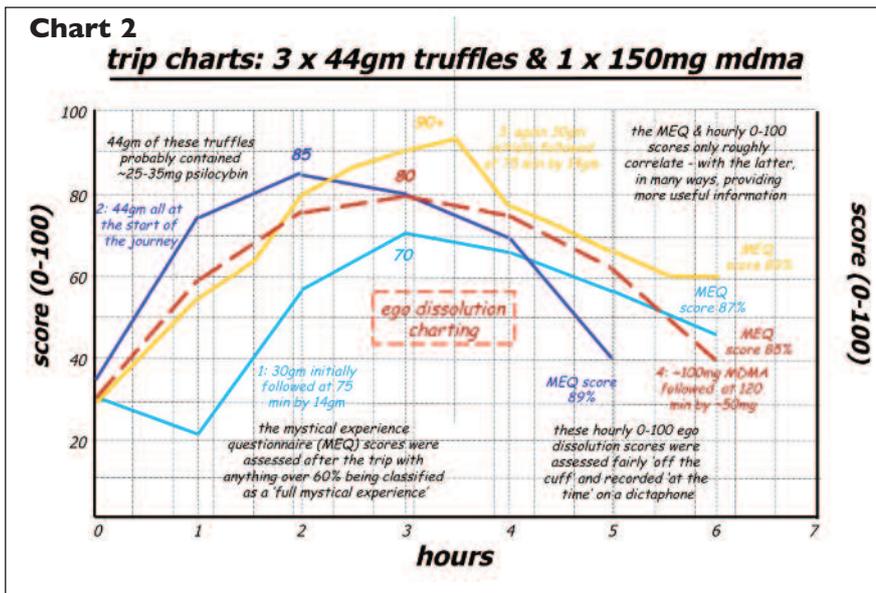
Third, what about tripping with others or on one's own? A metaphor I think of here is the similarity to walking in the Scottish mountains. I have often been into the mountains with friends, I have trained with guides to learn how to look after myself in these potentially dangerous environments, and I have had many journeys into these wonderful hills on my own. All have been precious and being on my own or with others lead to overlapping but different experiences. Going into these potentially wild, mountain regions without planning, maps, knowledge and fitness would be foolish (especially on one's own). To me, it seems much the same for journeys into the psychedelic mountains.

The fourth area I want to say a little about is the possible use of a recording device – for example a mobile or a dictaphone – while one is tripping. The first time I tried this, it felt clunky, difficult and, at times, a bit sacrilegious. As with other challenges, I am surprised how quickly one can learn to 'function' while tripping. Yes, sometimes I'm blown so out of time and space that there isn't a functioning component of myself to operate a dictaphone, but mostly I can manage. This is made much easier because I usually trip sitting meditating, not lying down with a playlist. I typically record a brief set of comments – maybe a minute or less – roughly every half hour. Usually this includes off-the-cuff 0 (none) to 100 (extreme) estimates of ego dissolution, emotional intensity, and challenge. After the trip I transcribe all the comments and sometimes make a chart of particularly ego dissolution changes over the course of the trip. I find working with the recorded comments when I come to integrate my experiences to be wonderfully helpful.

And lastly, I want to say a few things about post-trip integration. Psychedelics induce neuroplasticity (de Vos *et al*, 2021; Lepow *et al*, 2021) which potentially makes the process of taking lessons from trips into one's life a good deal easier. I nearly always go into a trip with one or more intentions. There is some evidence this promotes better outcomes (Haijen *et al*, 2018), as long as the intentions are held lightly and paralleled by an openness to possibly finding that the trip's major lessons may be unexpected and surprising (Russ *et al*, 2019; Wolff *et al*, 2020). I use the recordings I have made as a major help with integration. I may – in the first day or so afterwards – describe the trip to a friend and record the description so that I can revisit what I have said. Quite frequently I draw the trip as a picture. I may well write a poem about it. I sometimes commission artworks to remind myself of key lessons. I may well incorporate these lessons too into meditation practices that I use several times daily. In altered states of consciousness, I can revisit the feelings of the trip (Lynn & Evans 2017; Amigó, 2021). I may well make action intentions too. Some are fairly well known like gratitude and appreciation practices and nature walks. Some will be more idiosyncratic and specific to the messages of the trip. I'm a great believer in the remark made to me by a psychedelic guide and friend, 'If you don't change, you don't change'. Wanting to alter longstanding personal patterns is common and typically ineffective (Miller *et al*, 2019; Baranski *et al*, 2019). As Hudson wrote in *You have to follow through* (Hudson *et al*, 2018), 'Participants provided self-report ratings of their personality traits and were able to freely accept and complete weekly 'challenges' – pre-written behavioural goals that would pull their thoughts, feelings, and behaviours in line with their desired traits ... only actually completing challenges (ie performing trait-typical behaviours) predicted trait change over time. Thus, merely wanting to change does not appear to be sufficient to evoke trait growth; successfully changing one's personality traits may require actively and successfully implementing behaviours to change oneself.'



In these two articles on psychedelics and meditation, I have mentioned much of the recent relevant research in this area. I have also said a bit about my own experiences, as sometimes this more qualitative approach can throw up useful leads and insights. Chart 1 illustrates four trips using psilocybin truffles. These are the quantities that we use on the PHP network retreats that we run in the Netherlands, so it's encouraging to see the high mystical experience questionnaire scores. Chart 2 illustrates that MDMA can also induce strong mystical experiences too, especially with the right kind of set and setting.



I mentioned that sometimes I write poems after trips. *Asking Three Times* links with psilocybin. I would like to quote the final words:

*And the blessing:*

*This is the countryside where the outbreath is infinite.*

*This is the direction of letting go.*

*This is the last staging post... where we can meet our brothers & sisters*

*as they take off the last of their egos... smile.... smile... at each other...*

*at our good fortune... as we step forward to swim out into nothingness.*

*Going beyond space & time... on the shore and beyond the shore...*

*giving up all these molecules and atoms into the universe...*

*and realising that's how it already is... we don't own this space.*

*There are no walls... they're illusions. Boundaries... they're illusions.*

*Swimming out into the vastness, until there's nobody swimming.*

*This is the countryside where the outbreath is infinite.*

*Swimming out into the vastness, until there's nobody swimming.*

Amigó S (2021) *Inducing effects of illegal drugs to improve mental health by the self-regulation therapy: A pilot study*. Preprints. doi: 10.20944/preprints202109.0134.v1

Baranski E, Gray J, Morse P & Dunlop W (2019) From desire to development? A multi-sample, idiographic examination of volitional personality change. *Journal of Research in Personality*, 85. doi: 10.1016/j.jrp.2019.103910

Barrett FS, Johnson MW, Griffiths R (2015) Validation of the revised mystical experience: questionnaire in experimental sessions with psilocybin. *Journal of Psychopharmacology*, 29(11) 1182–1190. doi: 10.1177/0269881115609019

Dambrun M (2016) When the dissolution of perceived body boundaries elicits happiness: The effect of selflessness induced by a body scan meditation. *Conscious Cogn* 46, 89–98. doi: 10.1016/j.concog.2016.09.013

de Vos CMH, Mason NL, Kuypers K (2021) Psychedelics and neuroplasticity: A systematic review unraveling the biological underpinnings of psychedelics. *Frontiers in Psychiatry*, 12(1575). doi: 10.3389/fpsy.2021.724606

Haijen ECHM, Kaelen M, Roseman L *et al* (2018) Predicting responses to psychedelics: A prospective study. *Frontiers in Pharmacology*, 9(897). doi.org/10.3389/fphar.2018.00897

Hudson NW, Briley DA, Chopik W & Derringer J (2018) You have to follow through: Attaining behavioral change goals predicts volitional personality change. *Journal of Personality and Social Psychology*, 117(40) 839–857. doi: 10.1037/pspp0000221.

Kettner H, Gandy S, Haijen E & Carhart-Harris R (2019) From egoism to ecoism: Psychedelics increase nature relatedness in a state-mediated

and context-dependent manner. *International Journal of Environmental Research and Public Health*, 16(24) 5147. /doi.org/10.3390/ijerph16245147

Lepow L, Morishita H & Yehuda R (2021) Critical period plasticity as a framework for psychedelic-assisted psychotherapy. *Frontiers in Neuroscience*, 15(1165). doi.org/10.3389/fnins.2021.710004

Lynn SJ & Evans J (2017) Hypnotic suggestion produces mystical-type experiences in the laboratory: A demonstration proof. *Psychology of Consciousness: Theory, Research, and Practice*, 4(1) 23–37. doi.org/10.1037/cns0000105

McCulloch D, Grzywacz MZ, Madsen M, Jensen P *et al* (2022) Psilocybin-induced mystical-type experiences are related to persisting positive effects: A quantitative and qualitative report. *Frontiers in Pharmacology*, 13. doi.org/10.3389/fphar.2022.841648

Miller TJ, Baranski EN, Dunlop W & Ozer D (2019) Striving for change: The prevalence and correlates of personality change goals. *Journal of Research in Personality* 80, 10–16.

Russ SL, Carhart-Harris RL, Maruyama G & Elliott MS (2019) Replication and extension of a model predicting response to psilocybin. *Psychopharmacology*, 236, 3221–3230. doi: 10.1007/s00213-019-05279-z

Russ SL & Elliott MS (2017) Antecedents of mystical experience and dread in intensive meditation. *Psychology of Consciousness: Theory, Research, and Practice*, 4(1) 38–53. doi.org/10.1037/cns0000119

Wolff M, Evens R, Mertens L *et al* (2020) Learning to let go: A cognitive-behavioral model of how psychedelic therapy promotes acceptance. *Frontiers in Psychiatry*, 11(5). doi.org/10.3389/fpsy.2020.00005

## Optimism, lifestyle, and longevity

Participants from the Women's Health Initiative (159,255) completed a validated measure of optimism and provided other demographic and health data at baseline. Causal mediation analysis explored whether lifestyle-related factors mediated optimism-lifespan associations. Higher optimism was associated with longer lifespan and a greater likelihood of achieving exceptional longevity overall and across racial and ethnic groups. The contribution of lifestyle to these associations was modest. Optimism may promote health and longevity in diverse racial and ethnic groups. Future research should investigate these associations in less long-lived populations.

<https://pubmed.ncbi.nlm.nih.gov/35674052/>

## Bed sharing for mental health

Although many adults do not sleep alone, associations between bed sharing and sleep parameters in community samples are not well known. The study explored whether sharing a bed was associated with sleep duration and quality and mental health factors. Data was obtained as part of the Sleep and Health Activity, Diet, Environment, and Socialization (SHADES) study of 1,007 working-age adults from south-eastern Pennsylvania. Sleeping with a partner/spouse is associated with better sleep quality and mental health overall. Sleeping with a child, on the other hand, was associated with worse sleep in general.

<https://doi.org/10.1093/sleep/zsac079.009>

## Meditation changes brain structure in Alzheimer's disease dementia

According to the 2021 report by Alzheimer's Disease International (ADI), dementia affects 55 million people worldwide. The figure is expected to be 78 million by 2030. There is growing evidence that meditation practices have neuroplastic effects on the brain and delay cognitive decline in older adults. Meditation is also known to improve levels of telomerase – a cellular biomarker of aging and improve inflammation and antiviral activity.

This study exploring changes in thickness of brain cortex and grey matter volume taught meditation on people new to meditation with mild cognitive impairment (MCI) or mild Alzheimer's disease (AD) and after long-term meditation intervention. The meditation group completed training sessions over two weeks, under the guidance of a trainer. Four meditation procedures were taught; a full-body relaxation technique, meditation on peace, witnessing the breath, and witnessing of thoughts. Each meditation protocol was treated as an independent unit and generally one protocol was taught to the patient per class on a one-to-one basis. After four sessions over a two-week period, a handout was provided to the patient describing the procedures in detail and a recording of the guided meditation provided for practice at home. Each session of guided meditation lasts about 30 min (1 min to settle down, 7 min per technique including around 10 seconds of transition time between each technique and 1 min to come out of meditation), which the patient was required to practice daily for the next 6 months.

The results of the study point out that long-term meditation practice in persons with MCI or mild AD leads to salutary

changes in cortical thickness and grey matter volumes. Most of these changes were observed in the brain areas related to executive control and memory that are prominently at risk in neurodegenerative diseases.

<https://pubmed.ncbi.nlm.nih.gov/34867239/>

## Vegan diets improve rheumatoid arthritis...

Vegan diets improve joint pain and other symptoms from rheumatoid arthritis, according to a study published by Physicians Committee researchers in the *American Journal of Lifestyle Medicine*. Forty-four participants diagnosed with rheumatoid arthritis followed a vegan diet or took a placebo with no diet change for 16 weeks, then switched places after a four-week washout phase. The diet group also eliminated common pain-trigger foods and reintroduced those foods one by one over the next nine weeks to assess participants' reactions. Joint pain, the number of painful joints, and pain severity improved more in the diet group than in the placebo group. These results support similar findings between plant-based diets and improved arthritis symptoms.

<https://journals.sagepub.com/doi/abs/10.1177/15598276221081819>

## ...and reduce the risk of knee osteoarthritis

Plant-based foods reduce the risk of knee osteoarthritis, according to a study published in *Scientific Reports*. Diet questionnaires from patients with diagnosed knee osteoarthritis and control participants without arthritis showed that those who ate the most phytochemicals from fruits and vegetables such as kale, broccoli and sprouts lowered their risk for arthritis by 65% when compared with those who ate the least amount of plant foods. These foods help manage inflammation and may help reduce the odds of developing arthritis.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9156685/>

## Near-death experiences 'are real'

Scientific advances in the 20th and 21st centuries have led to a major evolution in the understanding of death. At the same time, for decades, people who have survived an encounter with death have recalled unexplained lucid episodes involving heightened consciousness and awareness. A multidisciplinary team representing many medical disciplines, including the neurosciences, critical care, psychiatry, psychology, social sciences and humanities have published the first peer-reviewed consensus statement for the scientific study of recalled experiences surrounding death.

So-called near-death experiences (NDE) share common themes and are nothing like hallucinations or illusions. The common NDE narrative arc includes the separation of the body and a heightened sense of consciousness before travelling to a destination where there is a meaningful review of the life and finally being taken to a place that feels like 'home'. EEG brain scans with high gamma activity and electrical spikes recorded in the dying or dead brain suggest heightened states of consciousness when the reverse would be expected. The evidence shows that physiological and cognitive processes don't end with death, and studies have been unable to disprove the NDEs of resuscitated patients.

<https://nyaspubs.onlinelibrary.wiley.com/doi/10.1111/nyas.14740>

Starting  
Oct 14  
2022

A part-time personal & professional  
development course  
over 7 weekends

# QUIETUDE®

## Practitioner Training

Spiritual Care for those on the  
journey of death & dying

led by Annie  
Blampied-Radojcin.

Painting: *Angel*,  
by Ninetta Sombart  
© Photo: Raffael-Verlag

To apply please visit:  
[www.emerson.org.uk/quietude](http://www.emerson.org.uk/quietude)



A part-time, 3-year professional training  
Starting 28 Jan 2023

# English Training in ANTHROPOSOPHIC MEDICINE

Based In The UK,  
Open To Doctors Worldwide

Internationally Accredited by  
the Medical Section at the Goetheanum

With Dr Michael Evans, Dr James Dyson,  
Dr. Matthias Girke, Anna Hubbard  
& Prof. David Martin,

Painting:  
*Summertime II*  
By Artist Richard Heys

To apply please visit:  
[www.emerson.org.uk/anthroposophic-medicine](http://www.emerson.org.uk/anthroposophic-medicine)



JOURNAL OF

# holistic healthcare

AND INTEGRATIVE MEDICINE

## About the BHMA

In the heady days of 1983 while the Greenham Common Women's Camp was being born, a group of doctors formed the British Holistic Medical Association (BHMA). They too were full of idealism. They wanted to halt the relentless slide of mainstream healthcare towards industrialised monoculture. They wanted medicine to understand the world in all its fuzzy complexity, and to embrace health and healing; healing that involves body, mind and spirit. They wanted to free medicine from the grip of old institutions, from over-reliance on drugs and to explore the potential of other therapies. They wanted practitioners to care for themselves, understanding that practitioners who cannot care for their own bodies and feelings will be so much less able to care for others.

The motto, 'Physician heal thyself' is a rallying call for the healing of individuals and communities; a reminder to all humankind that we cannot rely on those in power to solve all our problems. And this motto is even more relevant now than it was in 1983. Since then, the BHMA has worked to promote holism in medicine, evolving to embrace new challenges, particularly the over-arching issue of sustainability of vital NHS human and social capital, as well as ecological and economic systems, and to understand how they are intertwined.

The BHMA now stands for five linked and overlapping dimensions of holistic healthcare:

### Whole person medicine

Whole person healthcare seeks to understand the complex influences – from the genome to the ozone layer – that build up or break down the body–mind: what promotes vitality adaptation and repair; what undermines them? Practitioners are interested not just in the biochemistry and pathology of disease but in the lived body, emotions and beliefs, experiences and relationships, the impact of the family, community and the physical environment. As well as treating illness and disease, whole person medicine aims to create resilience and wellbeing. Its practitioners strive to work compassionately while recognising that they too have limitations and vulnerabilities of their own.

### Self-care

All practitioners need to be aware that the medical and nursing professions are at higher risk of poor mental health and burnout. Difficult and demanding work, sometimes in toxic organisations, can foster defensive cynicism, 'presenteeism' or burnout. Healthcare workers have to understand the origins of health, and must learn to attend to their wellbeing. Certain core skills can help us, yet our resilience will often depend greatly on support from family and colleagues, and on the culture of the organisations in which we work.

### Humane care

Compassion must become a core value for healthcare and be affirmed and fully supported as an essential marker of good practice through policy, training and good management. We have a historical duty to pay special attention to deprived and excluded groups, especially those who are poor, mentally ill, disabled and elderly. Planning compassionate healthcare organisations calls for social and economic creativity. More literally, the wider use of the arts and artistic therapies can help create more humane healing spaces and may elevate the clinical encounter so that the art of healthcare can take its place alongside appropriately applied medical science.

### Integrating complementary therapies

Because holistic healthcare is patient-centred and concerned about patient choice, it must be open to the possibility that forms of treatment other than conventional medicine might benefit a patient. It is not unscientific to consider that certain complementary therapies might be integrated into mainstream practice. There is already some evidence to support its use in the care and management of relapsing long-term illness and chronic disease where pharmaceuticals have relatively little to offer. A collaborative approach based on mutual respect informed by critical openness and honest evaluation of outcomes should encourage more widespread co-operation between 'orthodox' and complementary clinicians.

### Sustainability

Climate change is the biggest threat to the health of human and the other-than-human species on planet Earth. The science is clear enough: what builds health and wellbeing is better diet, more exercise, less loneliness, more access to green spaces, breathing clean air and drinking uncontaminated water. If the seeds of mental ill-health are often planted in an over-stressed childhood, this is less likely in supportive communities where life feels meaningful. Wars are bad for people, and disastrous for the biosphere. In so many ways what is good for the planet is good for people too.

Medical science now has very effective ways of rescuing people from end-stage disease. But if healthcare is to become sustainable it must begin to do more than just repair bodies and minds damaged by an unsustainable culture. Holistic healthcare practitioners can help people lead healthier lives, and take the lead in developing more sustainable communities, creating more appropriate models of healthcare, and living more sustainable ways of life. If the earth is to sustain us, inaction is not a choice.

"The Journal of Holistic Healthcare...

a great resource for the integration-minded,  
and what a bargain!"

Dr Michael Dixon

Want to contribute to the journal? Find our guidelines at:  
<http://bhma.org/wp-content/uploads/2016/07/JHH-Essential-author-information.pdf>

Standard BHMA membership of £37 a year gives unlimited access to online journal. Print copy subscription +£20

## Editorial Board

Professor David Peters

---

Dr William House

---

Dr Antonia Wrigley

---

Dr Thuli Whitehouse

---

Bruce Cryer

---



**Published by the BHMA**

[www.bhma.org](http://www.bhma.org)

[journal@bhma.org](mailto:journal@bhma.org)

Produced in collaboration with the Integrative Health Institute (IHI) at Salem University



### Join the BHMA to get the journal and other benefits

The Journal of Holistic Healthcare and Integrative Medicine is free to all BHMA members. For just £37 a year members get unlimited access online, regular email newsletters, discounts on events and access to a closed Mighty Networks group (optional). The concessionary rate (students/unemployed/receiving state benefits or state pension) is £17. If you prefer to have a printed copy of the journal which is published three times a year, there is an additional £20 fee. Supporter membership is just £70 a year.

**Finished with your journal?** Please donate it to your local GP surgery, community centre, library etc so others can read about holistic healthcare and the importance of looking after the whole person, not just their immediate symptoms.

## Re-imagining healthcare

