

Article

The Future of Research in the Feldenkrais Method

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Abstract

This article reflects on the nature of research into the Feldenkrais Method, from the perspective of a Physical Therapist. The FM has enormous potential for helping people with movement difficulties ranging from musculoskeletal pain to neurological disability to geriatric deterioration; all of which are also of concern to the medical profession. I would like to see much of FM technique and philosophy adopted by medical professionals, even though with the adoption will come some adaptation. I suppose the nature of future FM research depends on what we want the future of the FM itself to look like. Do we stay pure and focused, separate and distinct from folks with whom we have common cause? Or do we want the FM to have a prominent place in the everyday practice of medicine and fitness?

Keywords

Feldenkrais Method, research outcomes, teaching, research design, movement benefits

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The Future of Research in the Feldenkrais Method

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I would like to thank Staffan Elgelid and the rest of the editorial staff at the IFF research journal for the invitation to participate in this forum on the future of Feldenkrais research. I must confess to feeling a bit out of my league here, as I'm no expert on research methodology, historical Feldenkrais research or current topics of discussion among people in the know. But, since IFF is looking for eclectic, I'd be happy to put in my two cents worth!

Perspective

I would like to comment mainly from my perspective as a clinical physical therapist and will address primarily the Awareness Through Movement (ATM®) portion of the method. As a health care professional working directly with people and with obligations to insurance companies, referring physicians and professional practice standards, I have dual concerns. One is that I provide the best quality care that I can for each individual, and the Feldenkrais Method (FM) has been a marvelous addition to the care I provide. But I am also answerable to other interested parties that reasonably request some specifics on what I do, why I do it and what evidence I have to back up my methods.

For those of us who would like to see FM/ATM accepted by and integrated into the health care system, having some research to back up our methods would be nice. Boiling it down, research for medical folk comes down to outcomes studies. Come up with some proof that what we do facilitates positive outcomes throughout a wide range of presenting problems (reduced pain, improved transitions, steadier gait, better balance, fewer falls, increased range of motion or strength, faster run, higher jump, finer manual control, etc.) and we can gain more widespread acceptance by health care professionals. The first five research items at the end of this article list some examples of outcomes based research using FM/ATM in treatment of chronic pain, neck/shoulder pain, elderly wellness, fibromyalgia and non-specific musculoskeletal pain.

This is good stuff, and I'd like to see more of these. However, if you look through the next eleven items of that list you will see just a few examples in an avalanche of outcomes research singing the praises of yoga and Tai Chi in the treatment of everything from asthma to zits. Though we are massively outspent and outnumbered by the yoga and Tai Chi folks, we could probably eventually amass enough of these kinds of outcomes studies to get, like yoga and Tai Chi have, the benign acceptance of health care providers. But I don't think that this is enough. What we should be striving for is the integration of FM/ATM concepts, techniques and individual movement sequences into standard health care practice. To do that, health care practitioners need to comprehend and be able to use these concepts and specific movement sequences in their own practice.

The Black Box

One observation a health care professional might make about all of these studies is the “black box” factor. Identify potential uses for your favorite intervention, feed some folks through the magical movement mill and out they pop at the other end with a positive change. But what happened when they were in that black box? What movements were done and why? What are the characteristics of those particular movements that are different from the exercise I’m prescribing now and are the outcomes from those movements demonstrably better? What did I learn in that study that I can take into my own practice and use with my patients? What can I do to help these people other than sending them elsewhere; and to people whose philosophy and methodology I don’t understand?

Most health professionals won’t be taking a lengthy FM training or spending years learning the deep mysteries of yoga or Tai Chi. They might have warm and fuzzy feelings for all three of these integrated movement systems based on outcomes research, but most won’t know enough about them to feel confident referring out to them or teaching them to their patients in lieu of simpler, more logical, seemingly more scientific and more traditional therapeutic exercise. For FM/ATM to infiltrate and subvert current medical orthodoxy, we need to explain to these folks exactly what we are doing, why we are doing it, how research supports it and how they can learn to do it themselves in two days or less. We should do research that encourages people without a FM training to use modifications of our work!

Random or Discriminating?

I have always been a bit queasy about the very nature of a randomized study. In a randomized study, you take a group of people and, accounting for factors like age and gender, divide them randomly into two or more groups. For example, take one hundred people with back pain and give half of them spinal extension and half of them spinal flexion movements; who has the best outcomes? The flaw is in the assumption that everyone has back pain of the same origin and that one treatment should, by golly, fit all.

What if instead of randomly, group members were chosen for their individual needs? If Joe’s back hurts to extend, put him in the flexion group. If Suzie’s back hurts to flex, shuffle her over to the extension crowd. Why not conduct a careful assessment, be discriminating and take into account individual needs? As basic as this idea of providing specific solutions to each individual’s particular movement needs might seem to FM practitioners and to most health care practitioners, this idea doesn’t seem to have been reflected in the research until recently. Check out the last three items on the research list for studies that support customized treatment and the use of tailored movement education approaches for each person. We should jump on this bandwagon.

Perhaps we should be focusing our research money, time and energy into investigating Feldenkraisian concepts; like the concept of individualized movement solutions to individual movement problems instead of standardized movement solutions for each medical diagnosis; or the importance of intension and kinesthetic attention; or reciprocating movements; or relationships of parts to the whole. Perhaps we should put aside our principle of having no principles and make up some provisional principles so that we can better interact on common ground and in common language with the medical community. Perhaps we should think of articulating and investigating both what we teach and how we teach it.

What We Teach

These are obviously some partial lists and I'm confident that brighter minds than mine can help round out the field. I appreciate the diversity of thought and philosophy within the FM community and respect that there might be entirely different lists of provisional principles out there; I'll show you mine if you show me yours.

- Pattern specificity. We teach lessons that explore relationships among different body parts. A movement or exercise that emphasizes a differentiated relationship of hip flexion and back extension is fundamentally different from an exercise that emphasizes a global relationship of hip extension and back extension, even though both feature back extension. Other important differentiated relationships include hip external rotation and knee internal rotation; thoracic extension and cervical flexion; and shoulder external rotation and forearm pronation. Articulate the differences between global and differentiated patterns of movement or posture, explain how a FM/ATM intervention can address that pattern, use research to contrast a traditional global exercise with a FM differentiated movement and make it simple enough that novices would feel confident in trying it out on their patients tomorrow.
- Even distribution of movement. We teach lessons that illustrate the joys of well integrated, whole-body, evenly distributed patterns of movement. Many common musculoskeletal repetitive stress injuries are created by ignoring this important concept. Health care professionals understand that many neck and low back problems can be attributed to localized vertebral instabilities; hence the current infatuation with Pilates and the concept of core strengthening/core stability. Could we describe this FM concept of even distribution of movement in a way that fits this instability model, give some possible FM/ATM solutions and back it up with some research?
- Proportional use of synergists. We teach lessons that encourage the bigger muscles in the body to do more of the work and the smaller muscles to do proportionally less. Compare the use of the big hip muscles vs. use of the belly muscles in controlling the position and stability of the pelvis in low back pain. Contrast quadriceps/vastus medialis strengthening vs. hip abductor training in controlling patellar glide in knee pain. Relate posterior tibialis tendonitis to underused hip rotators. Pick a system (spinal, legs, arms) and find a distal repetitive stress injury, then look for a proximal slacker. Make the connection, propose a FM/ATM solution, contrast with a traditional approach and look for evidence.

How to Teach

- Kinesthetic self-awareness. We spend a lot of time getting people to pay attention to what they are doing while they are doing it. Kinesthetic self-awareness training is a fundamental characteristic of the FM. Can we prove that awareness is important in the acquisition or improvement of motor skills? Does paying attention during exercise make a difference in balance, incidence of falls, reduction of pain or length of stride? There might already be some "cognitive exercise" research out there that backs this up, perhaps we can piggyback
- Reciprocating movements. We teach a lot of reciprocating movements; rolling up and down; looking left and right; stepping forward and back; breathing in and out. Can we explain this characteristic of FM/ATM as a way of balancing antagonistic muscles and re-calibrating a truer middle, then back it up with evidence? Will postural ease or muscle antagonist balance improve more as a result of an exercise system that features reciprocating movements, or does repetitive movement in just the "right" direction do the same thing?

- Change of venue. We teach the same patterns or relationships of movement in a number of different positions, different relationships to gravity and with varying functional intent. Can we explain this characteristic as a way of helping an individual better perceive and improve balance or efficiency of habitual movement and postural patterns, then back it up? Is there better motor control carry-over from one activity to another (lumbar stability in vacuuming or pull starting a lawn mower; scapular coordination in pushing open a door or moving from hands and knees to side sit) after a series of FM/ATM interventions in comparison to traditional therapeutic exercise and “imitate and repeat” ergonomics instructions?
- Other FM characteristics that relate to how we teach might include: going slowly and gently, the use of constraints and specific language cues, introduction of deliberate error and judgment based on choice.

Tall Order

I realize I’m probably asking for a lot here. Research design for any of these ideas sounds like a nightmare and I’m glad I’m a clinician instead of a researcher! But I think that in order for us to get beyond the magical movement mill label and get our foot in the door, we will need to back up the concepts we use, not just the technique. Pilate’s technique and philosophy is making headway among both physical therapists and the general public because they have sold a concept: core stability. Individual yoga postures have been morphed into therapeutic exercise and fitness classes in dribbles and drabs, but the overall lack of any coherent concept or philosophy that appeals to western minds has limited its inroads. Tai Chi is rooted in traditional eastern thought and so tight lipped about the whys and wherefores of the movements they do that it also has little chance of becoming a significant factor in western medicine or exercise. Pilate’s concepts are metastasizing into and integrating with medical thought and popular fitness while yoga and Tai Chi are outside the system looking in. Where do we want the FM to be?

The FM has enormous potential for helping people with movement difficulties ranging from musculoskeletal pain to neurological disability to geriatric deterioration; all of which are also of concern to the medical profession. I would like to see much of FM technique and philosophy adopted by medical professionals, even though with the adoption will come some adaptation. I suppose the nature of future FM research depends on what we want the future of the FM itself to look like. Do we stay pure and focused, separate and distinct from folks with whom we have common cause? Then let’s do black box outcome studies to gain respectability for our closely held technology and maintain our exclusive franchise. Or do we want the FM to have a prominent place in the everyday practice of medicine and fitness? Then let’s show how we can modify the FM to accommodate for medical or fitness system realities, let’s reinforce the concept of individualized movement education for different pattern types and let’s do studies that articulate and research FM concepts or specific techniques and that helps people outside our tribe to play with our stuff.

References

1. Bearman D, Shafarman S. The Feldenkrais Method in the treatment of chronic pain: a study on efficacy and cost effectiveness. *American Journal of Pain Management* 1999 Jan; 9(1):22-7.
2. Lundblad J, Elert J, Gerdle B. Randomized controlled trial of physiotherapy and Feldenkrais interventions in female workers with neck-shoulder complaints. *Journal of Occupational Rehabilitation*, Sep 1999; 9(3):179-94.
3. Stephens J, Pendergast C, Roller BA, Weiskittel RS. Learning to improve mobility and quality of life in a well elderly population: The benefits of Awareness Through Movement. *Feldenkrais Research Journal* #2. 2005.
4. Gard G. Body awareness therapy for patients with fibromyalgia and chronic pain. *Disability and Rehabilitation*. 2005 Jun 17;27(12):725-8.
5. Malmgren-Olsson EB, Branholm IB. A comparison between three physiotherapy approaches with regard to health-related factors in patients with non-specific musculoskeletal disorders. *Disability and Rehabilitation*. 2002 Apr 15; 24(6):308-17.
6. Li F, Harmer P, Fisher KJ, McAuley E. Tai Chi: improving functional balance and predicting subsequent falls in older persons. *Medicine and Science in Sports Medicine*. 2004 Dec;36(12):2046-52.
7. Twang WW, Hui-Chan CW. Effects of exercise on joint sense and balance in elderly men: Tai Chi versus golf. *Medicine and Science in Sports Medicine*. 2004 Apr;36(4): 658-67.
8. Xu D, Hong Y, Li J, Chan K. Effect of tai chi exercise on proprioception of ankle and knee joints in old people. *British Journal of Sports Medicine*. 2004 Feb;38(1):50-4.
9. Wolf SL, Barnhart HX, Kutner NG, McNeely E, Coogler C, Xu T. Reducing frailty and falls in older persons: an investigation of tai chi and computerized balance training. *Journal of American Gerontological Society*. 2003 Dec;51(12):1794-803.
10. Hart J, Kanner H, Gilboa-Mayo R, Haroeh-Peer O, Rozenthul-Sorokin N, Eldar R. Tai Chi Chuan practice in community-dwelling persons after stroke. *International Journal of Rehabilitation Research*. 2004 Dec;27(4):303-4.
11. Bastille JV, Gill-Body KM. A yoga-based exercise program for people with chronic poststroke hemiparesis. *Physical Therapy*. 2004 Jan;84(1):33-48.
12. Galantino ML, Bzdewka TM, Eissler-Russo JL, Holbrook ML, Moqck EP, Geigle P, Farrar JT. The impact of modified Hatha yoga on chronic low back pain: a pilot study. *Alternative Therapies in Health and Medicine*. 2004 Mar-Apr;10(2):56-9.
13. Oken BS, Zajdel D, Kishiyama S, Bourdette D, Carlsen J, Haas M, Hugos KC, Kraemer DF, Lawrence J, Mass M. Randomized controlled trial of yoga and exercise in multiple sclerosis. *Neurology*. 2004 Jun 8;62(11):2058-64.
14. Williams KA, Petronis J, Smith D, Goodrich D, Wu J, Ravi N, Doyle EJ Jr., Gregory Juckett R, Munoz Kolar M, Gross R, Steinberg L. Effect of Iyengar yoga therapy for chronic low back pain. *Pain*. 2005 May;115(1-2):107-17.
15. Kolasinski SL, Garfinkel M, Tsai AG, Matz W, Van Dyke A, Schumacher HR. Iyengar yoga for treating symptoms of osteoarthritis of the knees: a pilot study. *Journal of Alternative and Complementary Medicine*. 2005 Aug;11(4):689-93.
16. DiBenedetto M, Innes KE, Taylor AG, Rodeheaver PF, Boxer JA, WR HJ, Kerrigan DC. Effect of gentle Iyengar yoga program on gait in the elderly: an exploratory study. *Archives of Physical Medicine and Rehabilitation*. 2005 Sep;86(9):1830-7.
17. Long A, Donelson R, Fung T. Does it matter which exercise? A randomized control trail of exercise for low back pain. *Spine*. 2004 Dec 1;29(23):2593-602.
18. Descareaux M, Normand MC, Laurencelle L, Dugas C. Evaluation of a specific home exercise program for low back pain. *Journal of Manipulative and Physiological Therapeutics*. 2002 Oct;25(8):497-503.

19. Wang WT, Olson SL, Campbell AH, Hanten WP, Gleeson PB. Effectiveness of physical therapy for patients with neck pain: an individualized approach using a clinical decision-making algorithm. *American Journal of Physical Medicine and Rehabilitation*. 2003 Mar;82(3):203-18.