Restoring Proprioception, Kinaesthesia and Coordinated Movement with The Feldenkrais Method

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The Feldenkrais Method "is not just pushing muscles around, but changing things in the brain itself so that the patient can gradually adjust his whole muscular dysfunction to what we call a normal image... Feldenkrais transmits the image, and you organise your brain to meet it".

Professor Karl Pribram, MD, PhD, Neuroscientist, Stanford University, Nobel Prize nominee (8)





What is the Feldenkrais Method?

The Feldenkrais method is a form of sensory motor education. It helps to restore proprioception and coordinated movement, by combining an understanding of the complexities of movement with an understanding of the learning process.

Founder of the Method

The method was developed by Dr Moshe Feldenkrais, a physicist, engineer and martial artist. He derived his ideas from a range of fields including anatomy, physiology, infant development, psychology, martial arts, systems theory, physics, neurophysiology and learning theories.

Some key features

- focus on function
- introducing new movement options
- modifying habitual patterns of movement
- enhancing kinaesthetic awareness
- engaging the whole body
- ease not effort
- creating an environment that enhances learning
- responsive to individual needs
- enabling the client to become their own expert

SCI testimonials

Many patients report the importance of this method in their Rehabilitation Process, also because it uses their sensitivity and not the often painful muscle training. The general feedback of the patients is very positive. Also Physiotherapist often report better Coordination of Function during Physiotherapie after a Feldenkrais lesson. Markus Meyerhans, PhD, Head of Psychology, Nottwil Paraplegic Centre, Switzerland

I was amazed at how much improved physical function I acquired after having completed the Feldenkrais training program, given that I was over 20 years post SCI at C5 &6 with partial paralysis in all extremities. Edward Muegge, MA, Feldenkrais practitioner

The Feldenkrais method taught me to refine my sensory awareness by combining visualization with intelligent moving, leading to more mobility. Irene Lober, MA, Feldenkrais practitioner

Feldenkrais has made a huge difference for me. I share your view that it has much to offer people with SCI. Gary Karp; BArch; Guest Speaker, 1st NZ Spinal Conference; 2007 NSCIA Spinal Cord Injury Hall of Fame Inductee as **Disability Educator**

You feel so relaxed, and at the same time, you're doing something really good for yourself in a physical sense. Andrew Hall, BAgCom, CEO NZ Spinal Trust

It never ceases to amaze me how after one session with Cindy, I notice dramatic improvements in body awareness, often in places where I have little sensation or movement. Feldenkrais should be a mandatory part of the

Research evidence

Multiple sclerosis, pain, stroke, able-bodied:

- improved body awareness (6,7,20)
- improved mobility (1,6,18,23)
- \cdot improved stability (1,4,21,24)
- improved coordination (19,25) and ease of movement (22,18)
- improved posture (13)
- improved balance confidence (5,24)
- decreased pain (2,14,15)
- improved mood (17)
- improved breathing (20)
- improved well-being and quality of life (15,22)
- reduced fatigue (20)
- improved sleep (20)
- reduced anxiety and stress (10,11,12,15)
- improved self efficacy (15) and health locus of control (20)
- improved self image (15)
- decreased medical costs (2)
- greater recruitment of the affected part of the motor cortex (stroke) (16)

Ten case studies with SCI



rehabilitation process I believe. Claire Freeman, BDesHons, PG Dip Rehab, NZ Spinal Trust Design Team

The consistent patterning practice of Feldenkrais, whether the movement was a visualization or actual hands on work with a practitioner, enabled my body to keep reclaiming more of itself. Molly Hale, BS (Psychology); Keynote Speaker, "Endless Possibilities" Conference, G.F. Strong Rehab Hospital, Vancover, 2005; Aikido 3rd degree black belt; Olympic torch bearer, 2002

My first session with Cindy was incredible... I am very grateful to Cindy for introducing Feldenkrais to me. Anthea Gunner; PA to South Island Manager, **CourierPost**

I have a new awareness of my body which I feel not only benefits my wellbeing but also helps with my posture and balance. Hamish Ramsden; BAgCom; Spinal Network News Editorial Team; company administrator

I came to the Feldenkrais Method (in 1997) nine years after my SCI. It has been and continues to be valuable to my ease in movement. Rich McLaughlin, BA

I totally recommend the ideas and techniques that Cindy offers. Johnny Bourke, Psychology student, Massey University; Spinal Network News **Editorial Team**

I was surprised that unexpected movements were possible again. Michael Willems



Participants:

- three people with ASIA A injuries; two to five months after injury
- five people with incomplete SCI $2\frac{1}{2}(3)$; 10(9), 12, 16 and 24 years after injury
- two people with complete SCI; 10(9) and 12 years after injury

Benefits reported included:

- improved proprioception (10/10)
- improved coordination and ease of movement (10/10)
- improved posture and stability (9/10)
- · decreased spasm (7/10)
- decreased pain (6/10)
- improved well-being (6/10)
- increased feeling of confidence (5/10)
- improved breathing (2/10)

- Batson, G., & Deutsch, J.E. (2005). Effects of Feldenkrais Awareness Through Movement on balance in adults with chronic neurological deficits following stroke: A preliminary study. Complementary Health Practice Review, 10 (3), 203-210.
- Bearman, D., & Shafarman, S. (1999). The Feldenkrais Method in the treatment of chronic pain: A study of efficacy and cost effectiveness. American Journal of Pain Management, 9(1), 22-27.
- Bost, H. (1997). Case description: Michael-incomplete paraplegia after a motorbike accident-A five-year learning process. Retrieved August 28, 2008, from http://www.helgabost.de/Dokumentation/case_study/case_study.html
- Buchanan, P.A., & Vardaxis, V.G. (2000). Effects of Feldenkrais Awareness Through Movement on balance during standing. Journal of Athletic Training, 35, S-81.
- Connors, K.C., Galea, M.P., & Said, C.M. (2007). Feldenkrais Method balance classes improve balance confidence and mobility in older adults: a pilot study. Abstract of the Australian Physiotherapy Conference, Cairns, October, 2007.
- Dunn, P.A., & Rogers, D.K. (2000). Feldenkrais sensory imagery and forward reach. Perceptual and Motor Skills, 91, 755-757.
- Elgelid, H.S. (2005). Feldenkrais and body image. IFF Academy Feldenkrais Research Journal, 2.
- Fox, C. (1978). The Feldenkrais phenomenon. Quest, No. 7, Dec./Jan. 1978-79
- Ginsburg, C. (1980). On plasticity and paraplegia: Some clinical observations on the ability to recover from severe injury to the spinal cord. Somatics, Autumn, 34-
- Johnson, S.K., Frederick, J., Kaufman, M., & Mountjoy, B. (1999). A controlled investigation of bodywork in multiple sclerosis. The Journal of Alternative and Complementary Medicine 5(3): 237-43.
- Kerr, G.A., Kotynia, F., & Kolt, G.S. (2002). Feldenkrais Awareness Through Movement and state anxiety. Journal of Bodywork and Movement Therapies, 6(2), 11. 102-107.
- Kolt, G.S., & McConville, J.C. (2000). The effects of a Feldenkrais Awareness Through Movement program on state anxiety. Journal of Bodywork and Movement 12. Therapies, 4(3), 216-220.
- Lake, B. (1992) Photoanalysis of standing posture in controls and low back pain: Effects of kinaesthetic processing (Feldenkrais Method) in posture and gait. In 13. Woollocott M, Horak, F. (eds) Control Mechanisms VII. Eugene, OR: University of Oregon Press.
- Lundblad, I., Elert, J., & Gerdle, B. (1999). Randomized controlled trial of physiotherapy and Feldenkrais interventions in female workers with neck-shoulder complaints. Journal of Occupational Rehabilitation, 9(3) September, 179-194.
- Malmgren-Olsson, E.B., & Branholm, I.B. (2002). A comparison between three physiotherapy approaches with regard to health-related factors in patients with 15. non-specific musculoskeletal disorders. Disability & Rehabilitation, 24(6), 308-317.
- Nair, D.G., Fuchs, A., Burkart, S., Steinberg, F.L., & Kelso, J.A. (2005) Assessing recovery in middle cerebral artery stroke using functional MRI. Brain Injury; Dec. 16. 19(13):1165-76.
- Netz, Y., & Lidor, R. (2003). Mood alterations in mindful versus aerobic exercise modes. Journal of Psychology, 137(5), 405-419.
- Ruth, S., & Kegerreis, S. (1992). Facilitating cervical flexion using a Feldenkrais Method Awareness through Movement. Journal of Orthopaedic & Sports Physical 18. Therapy, 16(1), 25-29.
- Schon-Ohlsson, C., Willen, J., & Johnels, B. (2005). Sensory motor learning in patients with chronic low back pain A prospective pilot study using optoelectronic movement analysis. Spine, 30(17), E509-E516.
- Stephens, J. (2000). Feldenkrais method: background, research, and orthopaedic case studies. Orthopaedic Physical Therapy Clinics of North America, 9(3), 375-20.
- Stephens, J. (2007). Future directions for research on the Feldenkrais method. IFF Academy Feldenkrais Research Journal, 3 21.
- Stephens, J., Call, S., Evans, K., Glass, M., Gould, C., & Lowe, J. (1999). Responses to ten Feldenkrais awareness through movement lessons by four women with 22. multiple sclerosis: improved quality of life. Physical Therapy Case Reports, 2(2), 58-69.
- Stephens, J., Davidson, J., Derosa, J., Kriz, M., & Saltzman, N. (2006). Lengthening the hamstring muscles without stretching using "awareness through movement". Physical Therapy, 86(12), 1641-1650.
- Stephens, J., DuShuttle, D., Hatcher, C., Shmunes, J., & Slaninka, C. (2001). Use of awareness through movement improves balance and balance confidence in 24. people with multiple sclerosis: a randomized controlled study. Neurology Report, 25(2), 39-49.
- 25. Stephens, J., Pendergast, C., Roller, B.A., & Weiskittel, R.S. (2005). Learning to improve mobility and quality of life in a well elderly population: the benefits of awareness through movement. IFF Academy Feldenkrais Research Journal, 2.