

THE FELDENKRAIS METHOD[®] OF SOMATIC EDUCATION – MOVING BEYOND HABITS

In sport, the arts and indeed in any field of human endeavour involving movement, we aim for a smoothness of action that we consider to be good form. We want our movements to be efficient, graceful, effortless and powerful. Top athletes and performers understand that these elements are an integral part of producing a consistently high level of performance and that they also help in the prevention of injury. However those of us who are less 'naturally' gifted consider the amazing coordination and ability of top performers and athletes to be innate – a gift that they are born with – and we believe that they raise their performance levels only through hours of dedicated practice and effort in the gym. While it is true that most of us will never match the grace and ease displayed by sportsmen such as Roger Federer or Tiger Woods, we have an innate potential for graceful action far beyond that we can imagine – if only we could learn how to realise it!

By Catherine McCrum

DR MOSHE FELDENKRAIS

Dr Moshe Feldenkrais (1904-84), a Russian-born physicist, martial arts expert, and mechanical engineer, developed the modality that bears his name in order to cure his own debilitating knee injury. Drawing from his background in these various fields, as well as his observations of developmental movements, he used his own body as a laboratory, experimenting with many different ways of doing everyday actions, and carefully noting the results. After months of exploration, he concluded that it was his particular individual neuromuscular patterns and rigidities which had contributed to his injury. He refined his kinaesthetic perception to such an extent that he

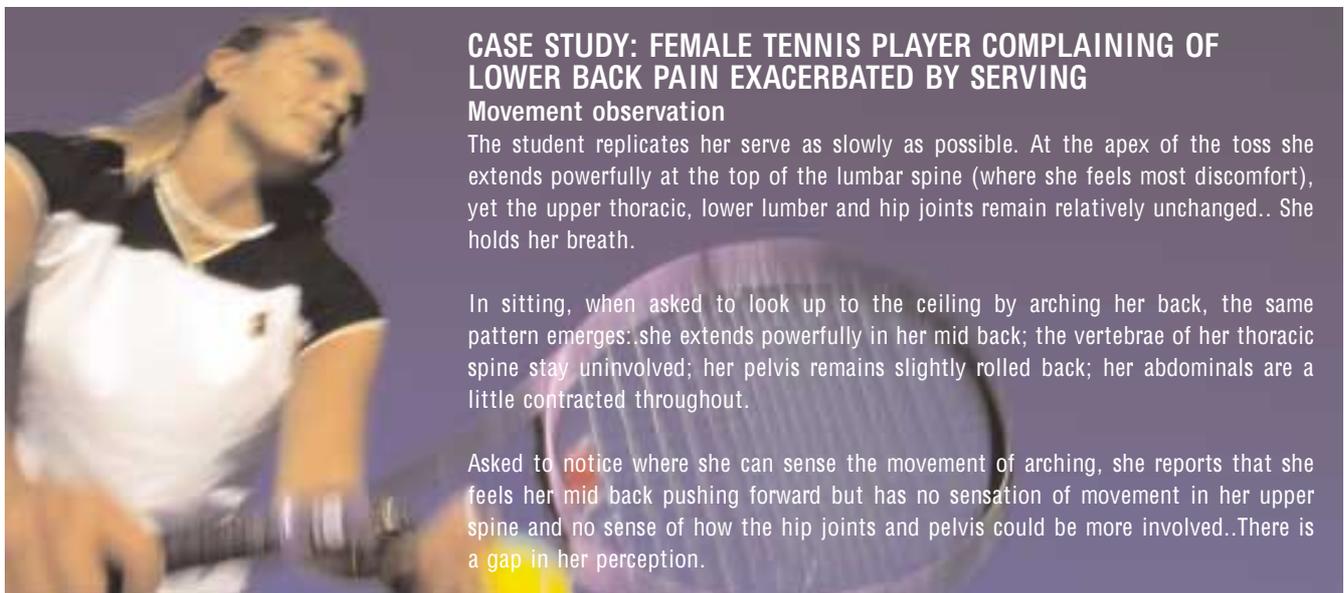
could clearly sense the unconscious habits that had led to his injury. More importantly, he discovered experientially how to move most optimally and regained full use of his knee. He concluded that: 'Only when you know what you do, can you do what you want'.

Today there are over 4000 Feldenkrais 'Awareness Through Movement' lessons covering topics from improving the organisation of the eyes, jaw and tongue, to maximising the healthy functioning of the feet and ankles. These lessons can improve every aspect of human functioning and provide a profoundly effective approach to understanding and optimising our design for effortless, graceful motion.

WHAT HAPPENS IN A FELDENKRAIS LESSON?

The goal of a lesson is not to ask what is wrong but what is possible and to explore how the student could function at his/her most optimal. Students are guided, either through direct manual contact (Figure 1) or through verbal instructions (Figure 2), to explore specific aspects of movement.

These explorations are designed to develop the students' awareness of where they are limiting their movement more than the design of the skeleton requires. Ingrained habits of muscular holding always go hand in hand with perceptual distortions and lack of accurate sensory feedback. The role of the teacher is to find



CASE STUDY: FEMALE TENNIS PLAYER COMPLAINING OF LOWER BACK PAIN EXACERBATED BY SERVING

Movement observation

The student replicates her serve as slowly as possible. At the apex of the toss she extends powerfully at the top of the lumbar spine (where she feels most discomfort), yet the upper thoracic, lower lumbar and hip joints remain relatively unchanged.. She holds her breath.

In sitting, when asked to look up to the ceiling by arching her back, the same pattern emerges: she extends powerfully in her mid back; the vertebrae of her thoracic spine stay uninvolved; her pelvis remains slightly rolled back; her abdominals are a little contracted throughout.

Asked to notice where she can sense the movement of arching, she reports that she feels her mid back pushing forward but has no sensation of movement in her upper spine and no sense of how the hip joints and pelvis could be more involved..There is a gap in her perception.



Figure 1: Guidance through manual contact



Figure 2: Guidance through verbal instruction



Figure 3: Constraints

strategies that help the students refine their kinesthetic perception and improve their motor control.

HOW DOES IT DIFFER FROM EXERCISE OR APPROACHES SUCH AS MASSAGE OR CHIROPRACTIC TREATMENTS?

In the exercise model it is assumed that if you are weak you should strengthen your muscles, if you are inflexible you should stretch, or if you think bad posture causes your problem, you should correct it and stand up straight. These approaches assume that the body is something that must be moulded, reshaped and put in its proper place. None of these look at how you move, and how that could relate to the problem you are experiencing. Massage, chiropractic and many other treatment modalities are structural approaches that seek to effect change through changes in your structure. The Feldenkrais Method, on the other hand, is a functional approach that works with your ability to regulate and coordinate your movement. In a Feldenkrais lesson the practitioner is working with the nervous system and the whole person.

Developing new options for effective action

In the case study, the student experiences back pain as a consequence of her inefficient pattern of extension. The source of her problem is not, however, in her muscles but in her inability to perceive accurately how she is moving. Without the sensory acuity to regulate and coordinate her movement more efficiently, she compulsively and unconsciously reproduces her habitual pattern, whether or not it is appropriate for the particular activity.

Strategies for replacing habits

Figure 2: Unusual movements in unlikely positions

In this image the students are exploring kinematic linkage – the chain of movement through the skeleton - by pushing the standing foot into the floor and finding a pathway through the skeleton to the reaching arm. Emphasis is not on strengthening the extensors or stretching the flexors, but on exploring slowly and attentively how forces are able to travel joint by joint so that every part of the body can organise the action of reaching. Notice how closely related this exercise is to serving in tennis.

Figure 3: Constraints

Constraints simplify the motor control task, inhibit habitual action, and highlight specific aspects of dynamic action. In this photo, the constraint of holding onto a foot with one hand whilst gently moving the bent knee forward and backward is a device to invite the spine and pelvis into the movement of flexing and extending the hip and leg. Imagine a goal keeper kicking as far down field as possible.: in order to find the power for the kick, his whole spine extends as he takes his leg behind him; as he completes the arc of his kick, his whole spine flexes to the extent that his head almost touches his knee.

LEARNING AND EXPLORATION

In both individual and group lessons, emphasis is placed on exploration not performance and on awareness rather than mindless repetition. The student is asked to move slowly and gently so that he or she can tune-in to the qualitative aspects of the movement. At no point is the 'right' way demonstrated or suggested. The Feldenkrais teacher's job is to guide the students' exploration so that they discover for themselves new ways of moving in varied and often challenging situations. Learning has taken place when the students can take away these discoveries and make them useful not only in their sport but in every activity in daily life.

THE AUTHOR

Catherine McCrum is an accredited Feldenkrais practitioner who has been teaching sport, fitness and movement since 1986. She is an internationally qualified ski instructor and ski instructor coach and has taught in Europe, New Zealand and USA. On her return to London she worked as a personal trainer and was one of the first to incorporate Pilates into her training methods. Catherine is one of the presenters at the sportEX 2007 Conference where she will be presenting and offering workshops introducing the Feldenkrais Method.

FURTHER READING

1. Feldenkrais, Moshe. Awareness Through Movement. Harper and Row 1972. ISBN 0060623454
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5. Heggie, Jack. Running With The Whole Body. North Atlantic Books 1996. ISBN 1556432267.

WEBSITES

- www.catherinemccrum.com The website of the author
- www.feldenkraislondon.com The website of Scott Clark
- www.feldenkraisuk.com The UK Feldenkrais Guild website
- www.feldenkraisresources.com Great source of books, DVDs etc on every aspect of human learning including latest research on neuroscience, biomechanics, psychology
- www.mindinmotion-online.com The website of Feldenkrais trainer, cyberneticist and movement scientist Larry Goldfarb. Excellent articles on the method and courses for manual, occupational and physical therapists.