Lumbar Instability Jeff Haller, 1998

From the point of view of a *Feldenkrais* practitioner, labeling a condition “lumbar instability” is unnecessary for our work. For example, in a class demonstration for a group of *Feldenkrais* trainees, I worked with a man whose first comment to me was “You’ll be working with a 60-degree scoliosis.” I looked at him and said that I had no intention of working with his scoliosis but that I would work with *him*. After our lesson, I asked him to rephrase his initial statement. This time he said, “I’ve come to see you because I would like to be more comfortable in how I move in the world.” We both agreed that was possible.

Though people sometimes live with great difficulties, I do not treat their difficulties directly. I cannot change conditions such as multiple sclerosis or myasthenia gravis. I cannot alter the fact that a man has lost his prostate and suffers the indignities of incontinence and impotence. I would have little success in treating bones that slip from their moorings because of loose ligaments, whether caused by heredity, accident, or misuse. All I can do to help people is work with the quality of how they live within the conditions specific to their lives. To do this, labels such as “lumbar instability” are unnecessary. The *Feldenkrais Method* can benefit anyone who in interested in making his or her life more comfortable and elegant.

As *Feldenkrais* practitioners, we work with clients—“students” to us—to refine whole and complete functions. Since each human being has only one brain, one nervous system, one set of muscles, and one skeleton, the refined use of self engages the whole person synergistically in volitional activities. We appreciate the extraordinary capacity of the human nervous system to learn from experience. Segmented treatments that focus on specific labeled conditions, with exercises that don’t involve the entire self, often lead to misuse of self in some other way. For instance, strengthening one area may lead to inefficient work—-instead of integrated and effective functioning—in another.

The primary motive of a *Feldenkrais* practitioner is to help people become self—reliant in a changing world. We don’t treat conditions or problems. Students of the *Feldenkrais Method* seek to learn *how* to learn so they can continue to make the necessary modifications in their own behaviors to fit the ever—changing conditions in which they live. As Moshe Feldenkrais said, „If you continue to treat a problem, then you will have a problem for life.”[8] We work with people so they can live in an aesthetic fashion that is comfortable and relevant to them.

BASIC PRINCIPLES

To understand how a *Feldenkrais* practitioner might approach a person who experiences lumbar instability, it is important to comprehend some of the fundamental assumptions and principles of the *Method*. Before I describe several cases, let me explain some of the fundamental ideas that underlie my interactions with students.

Weightlessness in Gravity

One cornerstone of the *Feldenkrais Method* is the way we view the importance of the skeleton to human behavior. In addition to the functions of support, protection, and blood formation, we believe a properly organized skeleton serves an even more elegant function: perceived weightlessness in the field of gravity. For a well-organized human being, it takes a minimal amount of muscular effort to stand erect. This leaves the remaining musculature free to perform work, move about in space, and discover increasing degrees of comfort and pleasure. To maintain balance with a minimal amount of muscular work while maintaining optimal potential for movement, an extraordinary synthesis of sensory information from the eyes, vestibular organs, and proprioceptive nerve receptors in the joints and musculature is required.

The mechanical role of the skeleton is to take weight. In efficient organization the forces of work pass through the length of the bones, rather than across them. Lateral forces require additional muscular contraction to support action. Well-organized action spreads the work

evenly and proportionately so no one area of the body works harder than any other; the larger muscles do the heaviest work and the smaller muscles refine it.

Freedom of Movement

Another cornerstone of the Method is to emphasize the freedom of movement inherent in the erect posture. The benefit of good posture is more than just a feeling of weightlessness and support. To a *Feldenkrais* practitioner, good posture means being organized in such a way that one is able to move in any of the six cardinal directions (up, down, forward, backward, left and right) without hesitation or preparation, from any position (standing, sitting, lying, kneeling, etc.). Thus, well-organized human beings are able to interact with a changing world with sufficient skill and presence to increase their likelihood of survival and success. In other words, they will work for themselves, support themselves, and know how to eliminate errors in their action.

The erect human skeleton has contributed to our survival. Our teleceptors are located at the highest point possible—in our heads. Therefore, ideally—organized movement ensures that the head is free at all times so the teleceptors can respond to changes in the environment. Generally, for ease of movement and survival, a human being is well-organized for standing when the center of body mass is at the highest point possible and the moment of inertia is at its lowest. Consequently, the standing posture is unstable, which promotes ease of movement in all directions. When the moment of inertia is at its lowest, rotation is easier. Thus, in a bullfight, the matador, with his or her high center of mass and low moment of inertia, has extraordinary freedom to move in all directions. The bull, on the other hand, with his low center of mass, moves powerfully and quickly forward, but his high moment of inertia makes turning difficult - hopefully, to the matador's advantage. Similar dynamics are seen in martial arts, dance, and some of the more aesthetically pleasing Olympic events.

Self Responsibility

Essential to the *Feldenkrais* perspective is that "good" posture is unique for each individual. It can only be discovered by that person through his or her own explorations in living and moving. Therefore, students of the Method become responsible for their own learning, development, and refinement. In other words, there is no "correct" posture for people to attain. No picture is given for what is right. No outside force or agency determines what another individual should look like.

A *Feldenkrais* practitioner will work with students to create an environment in which they are able to learn how to refine the organization of their erect postures relative to their individual circumstances. For example, the most efficient postures for those with severe scoliosis, Parkinson's disease, or neuropathy of the lower extremities would certainly differ from one another, as well as from that of a ballet dancer. Functionally erect posture creates a feeling of elegance and comfort, with respect to the unique circumstances of each individual.

Learning in Action

The keystone of the *Feldenkrais Method* is learning. As defined here, learning is the acquisition of new behavior; either an old way of acting is refined in a new way, or entirely new behavior is acquired. In either case, learning only takes place when students are able to find new, more useful ways of acting to replace the old ones.

For learning to take place, students must be involved in an environment that supports learning. While we speak of *Feldenkrais* practitioners as being "teachers," one important characteristic of such an environment is that no teaching takes place—only learning, for both student *and* teacher. Once, when describing a remarkable recovery that a student of his had made from a debilitating nerve disorder that affected the musculature of his hands, Feldenkrais himself questioned what took place. He made the following observation: "How did I 'cure' that man? I don't know. All I can tell you is this: That man and I worked together in such a way that we both agreed that it was a better way of acting."[6] Clearly, to attain such a result, both participants in the interaction had to be capable of listening to and learning from each other.

Awareness of Process

Human beings must also be able make differentiations in their actions for learning to occur. Before they are able to alter or refine their actions effectively, they must be able to discover haw they move—that is, they must discern which components of the neuromuscular self are involved (and in what sequence the montage of movements takes place) and assess the quality of their movement. Unfortunately, most people lack a clear picture of how their body parts work together. For example, very few people have a clearly differentiated sense of where their hip joints are and of how to move their pelvises relative to their legs in the action of sitting. Instead, people often think their hip joints are located at their waists and therefore bend by flexing or extending their spines. In a *Feldenkrais* lesson designed to study how one moves from sitting to lying or from sitting to standing, students have the opportunity to explore, discover, and refine the use of their pelvises in completing the function. ("Differentiation" is a term commonly used by *Feldenkrais* practitioners. It denotes the process by which people refine their self images internally, thus discovering how their body parts work together and how they can be mobilized in different activities.)

Discrimination of Difference

In order for people to make clear, concise distinctions about their use of self, they must be able to discern differences in sensation. If they cannot notice such differences, students are unable to alter their actions or tell if one action is easier than another.

In a *Feldenkrais* lesson, movement explorations are performed sitting or lying on the ground, or on a table. This is to help the students to discern how they initiate actions and how much effort they expend to complete those actions. In this way, the habitual use of anti—gravity musculature is reduced so students can slowly learn how to distinguish between moving with effort and moving efficiently. For example, students who make unnecessary muscular effort to roll from lying to sitting will have a hard time feeling how they initiated the movement. Did they begin by rolling their pelvises or their eyes in the intended direction? Did they involve more of themselves than necessary for performing the action? What sequences of movements did they use to complete the action'?

A *Feldenkrais* teacher's touch is directed toward enabling students to feel easier ways to move in whatever function is being explored. With proper exploration it takes a student only a short time to learn how to eliminate unnecessary muscular effort.

Function vs. Action

In a *Feldenkrais* sense, function is not equivalent to "action," for many different actions can complete a given function. For instance, one function of a basketball player is to put the ball in the basket. When we watch the brilliance of many of today's top players, we are awed by the amazing array of actions they utilize to complete that function. Clearly, the human brain is capable of making an extraordinary number of connections and associations necessary to perform the volitional actions of life. This study of function, combined with learning multiple ways of acting to complete functions, is the "skeleton" of *Feldenkrais* lessons. As Feldenkrais put it, „Having only one way of acting is a compulsion; two ways of acting is nothing other than primitive choice. Only when a person has at least three ways of completing a function does he or she have real choice."[7]

Education vs. Therapy

Most people who have only a brief acquaintance with the *Feldenkrais Method* think of it as "movement work" and consider it to be "alternative." This is illustrated by the following story I heard from a woman who is currently in a professional *Feldenkrais* training program: As a firefighter working in emergency services, she suffered a severe low-back injury, which resulted in debilitating lumbar instability. Surgery was deemed necessary, but the first attempt at L5·S1 fusion failed. After enrolling in the training, she required a second operation, which to this point has proven to be quite successful. The day following surgery, her hospital physical therapist was assisting her to get out of bed. Using the skills she had learned in her training, the trainee easily rolled herself to sit and stand and quickly adapted to walking.

When her PT commented on how well she was moving, the trainee told the therapist she was taking a *Feldenkrais* training. The therapist replied, “Well, you know, my dear, that’s alternative stuff, and you need to make sure you are following your doctor’s advice.”

The *Feldenkrais Method* is in fact not alternative health care but rather an exacting educational process, and most *Feldenkrais* teachers consider themselves to be educators rather than health care providers. In general, we do not work with specific problems. We don’t tend to focus on pain or relief from pain. We don’t diagnose. And we don’t address the medical nature of the problem. That is up to health care professionals.

Our domain is educational, and our goal is to provide the necessary environment in which students can learn to pay attention to how they act habitually and, in turn, discover more skillful ways of acting on their own behalf to make their lives easier.

CASE HISTORIES

So how does all this relate to lumbar instability? All human beings are affected by gravity, the biological environment they have grown in, their genetic endowment, and their life experiences. Lumbar instability is certainly one of the conditions people can develop. It has been well—defined by the therapeutic and medical communities. From a *Feldenkrais* perspective, however, to become identified as “a person living with a condition” is to lose sight of our objective: the improvement of human functioning. People who have “lumbar instability” and relate to themselves that way will tend to identify with that label and develop their personality around it. In addition, a practitioner who accepts that label will work with the person’s “problem” and try to correct it.

In either case, regardless of motive, the student or teacher fails to address the most simple question: What can a person with lower back difficulties *learn* to function with greater skill and ease?

Discovering Choice

I once worked with a man in Australia who had been diagnosed with lumbar instability and was referred to me by a physiotherapist. This man had broken his lower back when he was young. After the initial healing process, he never suffered any pain, and the condition went undiagnosed for 40 years. He lived a full and hearty life-until his wife passed away. Shortly after this crushing blow, he began to experience severe pain in his back, which radiated down his right leg. In our lessons together, he began to understand his choices. He could stand and bear weight in such a way that the loss of his wife crushed him and the weight of his torso fell into his pelvis when he moved; or he could literally support himself and differentiate his current experience from his loss. Through careful attention to his actions, he learned to move from position to position and orientation to orientation without pain.

Regaining Balance

A second brief case history relates to the work I did with a man in Europe. As a French ballet dancer, this man had danced for years with varying degrees of low back pain and had been diagnosed with lumbar instability and mild scoliosis. In addition to his dance training, he had been given a series of lumbar stability exercises, which he performed diligently.

At the beginning of the lesson, I asked him what he would like to improve. He said he would like to be able to do an arabesque equally well on both sides. (Due to the pain he experienced in his right hip and leg, he was unable to hold the position on the right, and he had adapted his dance technique to this inability. On his left leg, however, he was completely stable, and he could easily jump and land on his left foot and move into the position.)

I had him stand with both feet on the floor and asked him to move his head to look from side to side. It was noticeably easier for him to turn his head to the left. I then had him stand on his left leg with his right foot back, toes touching the ground behind for minimal support. Again I asked him to move his head right and left. He was very smooth in this movement and further demonstrated the ability to turn his head and look in all quadrants. He could look up and down- even turn his head in one direction and his eyes in the opposite - without losing

his balance or the quality of his movement. From my point of view, he could easily interact with his surroundings. His senses were intact. His proprioception was acute, and his ease of movement a pleasure to behold. (If you were to stand on one foot and make the movements I describe, you would find them a challenge to do with elegance.)

But when I had him stand on his right foot, it was a different story. First, it took him several moments to find his initial standing balance. When asked to move his head from side to side, his movement was jerky and through a much smaller range. Several times he fell out of the position. When moving his eyes in the opposite direction from which he was turning his head, he moved too quickly and became uncoordinated. From my perspective, he was not as responsive to the environment on his right foot. His balancing senses and his eyes were not well integrated, and despite many years of technique classes, he had been unable to improve his movement sequences to the right.

From a *Feldenkrais* perspective, my work with him was really quite simple. Since ballet training is usually done with a lot of rigor, he had been using his power and will to override his difficulties. Therefore, he had been unable to find and feel the faults in his balance.

I began with him standing an arm's length away from the wall, and I placed his right foot across a sturdy cardboard roller, four inches in diameter. Then I began to roll his foot from toe to heel on the roller through different paths, laterally to medially. This was to make him more conscious of the sensations coming from the unstable surface beneath his feet. After this, I turned the roller parallel to (and still under) his foot and began to roll it into inversion and eversion, slowly narrowing the range of motion until his foot stood solidly on the roller. With his hands on the wall for support—so he would have a minimal amount of balancing to do—he learned a new way of standing on his foot. I then had him raise himself to standing (while on the roller) and lift his left foot from the ground. Since the roller was unstable, we worked slowly until he could lift himself without hesitation or any detectable measure of instability.

At this point, the dancer was standing with his right foot on the roller, his left foot lifted into the air, and his hands supporting him on the wall. Very slowly, I had him reduce his contact with the wall until he was only touching it with the tip of one finger on each hand. Despite this minimal support, he was able to maintain a stable, comfortable position, and his breathing was slow and regular. Then I asked him to experiment with moving his head right and left. (In such a movement, eyes can follow passively or be engaged actively in leading the movement.) We went through each of these alternatives until he was able to coordinate the movement of his head with his eyes while maintaining the quality of his breathing. With increased head, eye, and body coordination, his ankle and foot became more and more stable on the roller, and he gradually learned to turn his head freely through a greater range of motion.

After a brief rest and a short walk—to give him a chance to sense changes in the support through his right leg—I had him make more difficult differentiations between the movement of his head, eyes, and breathing. For example, I had him turn his head right and left. Then keeping the same tempo right and left, I had him move his head up and down. Now it was going right and left and up and down at the same time. To this we added various combinations of eye movements until these were all performed smoothly. In addition, I asked him to continue moving his head and eyes while alternating his support on the wall from one linger to the other.

By the end of the session, he could move his head freely over his foot while standing on the roller. His head-turning range had increased dramatically. And, to his great surprise, so had his rotation around his right hip. When he lowered himself from the roller, he was immediately able to step into an arabesque and hold it at will—with his head free to move. He also felt a solid line of support through the bones of his leg, into his pelvis, and through his spine to his head. Furthermore, since his learning was so complete and refined in such detail, he was able to maintain this new sense of freedom and support after the lesson. When I saw him two

years later, he said he felt he had been able to work with himself to maintain the inner feeling of support he had achieved that day.

Exploring Learning

To illustrate further how a *Feldenkrais* practitioner might work with conditions such as lumbar instability, I offer the case of a 23 year—old woman in New Zealand who at 18 was struck by a falling high-voltage wire. The shock broke her lumbar spine 90 degrees backward. Her treatment included extensive surgery to stabilize her spine and five years of traditional lumbar- strengthening exercises, as well as exercise training in a swimming pool.

This unfortunate woman was a heart-breaking sight. Her features were gray and prematurely aged from years of agony. It was apparent to me that she suffered not only from her injury, but also from her very real need to protect herself from the traumatic memories of her accident. Her pattern of protection was, in fact, as serious an assault on her day-to-day existence as her original injury, which was slowly healing.

She had been referred by a friend and had no idea of how I would work with her. I invited her to sit on my *Feldenkrais* table, which is low and wide and about the height of a coffee table. She was extremely reluctant to do so since most of her previous experience of therapy had been painful. I explained that I hoped to work with her in a gentle way to help her find movement she wasn't aware of being able to make. I also told her we would explore how she might breathe more easily.

With her consent I invited her to lie on her side. She chose her right side, with her legs extended. I supported her head with a foam pillow to keep her cervical vertebrae in line with the rest of her spine. I asked her to focus briefly on her breath as it came and went. I then invited her to bend her knees to about 45 degrees to feel if she could identify a change in her breathing. She reported that her breath was a little deeper and easier with her knees bent. The bent knees provided her with greater stability, allowing her to stop using her anti—gravity musculature for support and balance. Now she could use it to breathe.

Noticing this change, I began very lightly to support her ribs moving with her breath. My hands did the work that would normally be done by her musculature. Soon I could feel her softening beneath my hands, her breath deepening. She could feel the support I was providing, which facilitated a decreasing tonus in her musculature. Gently, I continued to support her. I took the weight off each spinal vertebra and lifted her scapulae so she wouldn't have to hold them up against gravity. Gradually, I began to roll her forward and back and found her holding her pelvis, ribs, shoulders, and head rigidly—they all rolled as a unit. Perhaps she was afraid of what was going to take place in the lesson; perhaps she was maintaining her pattern of protection against further pain.

At this point, I worked with her scapulae, and we explored the cardinal movements they could make, differentiating her shoulders from her ribs. Slowly, I began to move her pelvis and ribs and invited her to oppose the movement with her shoulder, which she was able to do. I then rolled her head together with her pelvis and ribs. Finally, after a long while, she felt she could also move her head in opposition to the rest of her body. She was beginning to discover what was available for movement—that is, for movement without pain. We worked and learned together what was possible for her (she listening silently to the suggestions offered by my touch; me listening silently to the answers in her movement). We were learning from each other I could refine my touch to fit her needs, and she could refine her actions to suit her own comfort.

We worked this way for about an hour. I felt a deep sense of compassion and caring for this gravely injured person. Eventually, she found some softness and freedom in movement. Now she could move her shoulders independently, her ribs obliquely, and her pelvis in the cardinal planes in relation to her ribs. She could also roll her head nicely, with, or in opposition, to any of these movements.

With great care I finally supported her in sitting up, so as not to elicit any fear of falling and to avoid mobilizing any old pattern of working hard to get up. Her eyes filled with tears. It was

the first time she had worked with someone without experiencing pain. For the moment, she was comfortable, and her eyes and face looked years younger—refreshed, as if she had just awakened from a nap. The contractions she had used to protect herself were relaxed, and her musculature was freer to do its natural work of supporting her and enabling movement. She sat tall, felt light, and was able to walk with an improved sense of grace and balance.

I believe that this one session helped her to feel her own potential and showed her a way she could improve further.

Of course, not all sessions are as successful as these. My colleagues and I note that many people diagnosed with lumbar instability will engage in strenuous activities too early—that is, before their skill levels are high enough to maintain the feelings they experience in their lessons. In short, they take their new-found comfort and freedom and overdo it.

Being a student in a *Feldenkrais* process often requires a deep look into how we identify ourselves with our activities—at work and at play. Students need to learn how to make healthy decisions about which activities work well for them. They need to determine which are harmful, and which are safe to engage in. In other words, they need to learn how to truly take care of themselves.

SUMMARY

It is my fervent wish that I have provided some clarity concerning the educational model and philosophy inherent to the *Feldenkrais Method*. Moshe *Feldenkrais* began to record his functional explorations in Israel in the early 1950s. He later called these explorations Awareness Through Movement lessons. Of the 600·plus lessons he developed from the early 1950s until the late l960s, over two-thirds have been translated into English. These are now taught by trained and certified Feldenkrais teachers.

From 1968 through 1982, Feldenkrais personally trained three groups of practitioners. He also taught many courses for the public and for professional theater groups in Israel, Europe, and the United States. There are literally thousands of variations of the lessons he presented. Feldenkrais' works have been service·marked and ongoing trainings for practitioners are accredited through The *FELDENKRAIS* GUlLD® of North America and the *International Feldenkrais Federation*.

As a way of expanding their personal and professional understanding of human potential and function, many physical and occupational therapists have joined *Feldenkrais* training programs in recent years. They have brought great benefit to the evolution of the *Feldenkrais Method*, and trainings continue to draw a high percentage of professional people. The growth of the Method is also furthered by teachers and students learning from one another. I have taught many professionals who sensed intuitively that they needed additional training to help their patients become more self-reliant.

Without a doubt, many therapeutic modalities in recent years have been looking at the entire use of self, at whole functioning. Functional outcomes are required more often in treatment plans. Perhaps the educational approach of the *Feldenkrais Method* can serve as a useful and distinct adjunct to the world of therapy. We need see no conflict among our approaches when we seek the greater good of all.

l remember well one afternoon when my wife, who is both a physical therapist and a *Feldenkrais* practitioner, came home from a course on lumbar instability and stabilization exercises. She had noted a significant change in her own experience of lumbar—stabilization exercises after her *Feldenkrais* Training. She was now more sensitive to the tonification of her abdominal and back muscles, as well as to the differentiation of her hips and pelvis. She could also feel an effect on her neck and ribs, as well as a tendency to hold her breath and use 15 excessive effort in doing the exercises. Noticing this in herself, she was able to observe more closely how her patients worked against themselves. She became more able to guide them clearly and effectively. She felt she had a better sense of which exercises to give and when to give them. I believe the practice of the *Feldenkrais Method* is good and useful work and provides us with a view of a greater potential for us all.

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