

Suggestions for a research program

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Those of us in the Feldenkrais community know the value of Feldenkrais lessons. Yet many know nothing about the Feldenkrais Method, and many of those familiar with the work are not convinced that it can be effective in meeting their needs. A successful research effort on our part could help inform and alter perceptions of the work. It could be used to demonstrate the value of Feldenkrais to those who have not yet experienced it and it would enable many people to understand and accept that the Feldenkrais Method may have value for their lives and the lives of others. It would enable decision-makers, those who could, would, and may even want to, to support us in our work.

We need to consider how we, as a community, can do research so that it meets acceptable standards. This represents a challenge to our community as well as an opportunity. Ryan Nagy articulated the areas of focus in a discussion of the FGNA Research Committee: “We need to demonstrate that the Feldenkrais Method is safe, that it is effective, and how it is effective.” This provides an initial framework for organizing our research effort. We need to describe what the *Feldenkrais Method* is and to demonstrate not only what the potential results may be, but also how they come about. The following paragraphs represent some of my thoughts about each of these areas of potential research.

Demonstrating Safety

Is it safe for people to use Feldenkrais lessons to improve their health, enhance their performance, and support their personal development? This should be possible to demonstrate. Thousands of people have experienced Feldenkrais lessons as a safe path to improving themselves. We need to document this.

Demonstrating Effectiveness

We can do research to demonstrate that Feldenkrais lessons are effective. We can set up studies with special populations — for example, people who play basketball, individuals living with multiple sclerosis, children in a school setting, and those with attention problems. The possibilities seem unlimited. In addition, we can do studies across groups and look at how health, performance, and development are enhanced in individually meaningful ways. Many of these kinds of studies have been done, some of which are to be found in both the IFF Research Journal and the Feldenkrais Guild of North America research bibliography. (www.feldenkrais-method.org/en/node/860, www.feldenkrais.com/content/resources/research) In setting up these studies, we need to find agreement on what we mean by improvement. We also need to find research methods that can capture exactly and completely what it is that Feldenkrais lessons improve. Capturing the effects of Feldenkrais lessons, in my experience, is a huge challenge. Feldenkrais lessons change movement patterns, reorganize the body image, and give us an

opportunity to develop our sense of self. These are highly complex behaviors. They are difficult to capture, measure, and quantify, all of which are necessary for research.

Explaining the Results

The last question is: How do the lessons work so that they are effective? For me this is both the most interesting question and the most challenging one. Simply quoting Moshe Feldenkrais as the authority, which we often do internally in the Feldenkrais world, has no impact in the world of science. Rather than stopping at describing and evaluating the results, we need to explain how the results came about. This, too, is part of a successful research effort.

The difficulty in explaining how Feldenkrais lessons work is related to the challenge of capturing the effects of Feldenkrais lessons: the highly complex behaviors involved are not easy to capture, measure, and quantify. Furthermore, we have the problem of explaining why movement is constituent for the self-image and the sense of self. This entails crossing the disciplines of movement science with psychology and a host of other fields of knowledge. Demonstrating that the body experience is the foundation of psychological experience appears to be widely accepted in developmental psychology. However, how that operates is not widely understood, or at least not well documented. For example, Damasio (1999, 2003) or Edelman and Tononi (2000) describe how the “proto-self” forms the foundation of consciousness, and that this proto-self is the brain’s sense of the body, they do not describe how this sense of the body develops in infancy and evolves over the lifetime of the individual. This sense of the body and how it changes is central to our work.

To explain how Feldenkrais is effective, we need to build a theoretical foundation that draws on what is known about human movement, learning, and development in describing with clear, logical reasoning how Feldenkrais lessons come to the results that we document. We also need to demonstrate, with original research or with reference to the research of others, that each step along this path of explanation is testable.

A RESEARCH CHALLENGE

A major consideration in doing research is that we need to catch the changing movement pattern in its entirety *as the change is unfolding*. This is indeed challenging and scientists in movement science disciplines are working on this issue themselves, for example: Berthoz(2000) or Button, Davids and Schoellhorn (2006) Our efforts could be frustrating if we maintain the attitude: “We cannot capture our results.” Alternatively, it can be inspiring if we think: “Wow, a research field that is open for exploration!” If we choose the second approach, which is my personal point of view, then we need to ask ourselves what we can take from our own Feldenkrais experience and observations as a basis for developing our questions for research.

Although this leads us into some daunting epistemological problems, for example, Maxine Sheets-Johnstone, [The Primacy of Movement](#) (1999). Mark Johnson, [The Body in the Mind](#). (1987), Francisco Varela and Jonathan Shear [First-person Methodologies: What, Why, and How?](#) (1999) or recently, Shaun Gallagher, [How the Body Shapes the Mind](#), (2005), tackling these issues could be a lot of fun. We have experienced philosophers in our community who can contribute to this discussion. We then can look at several different processes in our Feldenkrais experience, processes that unfold over different time frames. These time frames range from the very fast, often minutes or less, to a period of years. I suggest that we consider looking at each of these time-frame processes as a separate field of research. This would allow us to demonstrate how Feldenkrais lessons are effective within four time frames: (1)

within a single lesson, (2) within a series of lessons over a short time period, (3) within a series of lessons over several months, and (4) within a period of time long enough to capture life-span developmental issues.

Time-Frame Process 1

All of us have had the experience during an Awareness through Movement lesson of taking a short break from moving and suddenly sensing something completely new in our sense of our body. In a seemingly mysterious way, our body image has shifted significantly, often suddenly. When we begin the movements again, they are not only easier but also fundamentally different in how we do the action. When we end the lesson, these changes in body image and movement pattern often persist in other activities.

Time-Frame Process 2

As we continue to do a series of six or eight lessons, we discover the same phenomena. However, something more substantial changes. We find that a new experience of how we sense our bodies in daily life has emerged out of lessons that seems to have nothing to do with those particular daily activities. After all, it is not obvious to most people why lying on our side and making circles with the shoulder and hip would help enhance our ability to swim, walk, or play the piano.

Time-Frame Process 3

Those who find this experience fascinating, aesthetically pleasing, or a relief from pain, usually continue to “do Feldenkrais” over a period of several months. During that time, they experience another phenomenon. They discover that their sense of themselves as independent, skillful, self-confident individuals has gradually unfolded in ways that are both unexpected and pleasing. They experience personal growth in a fashion that they did not anticipate would happen by “just doing movement lessons.”

Time-Frame Process 4

Finally, people on several continents have been engaged in a personal developmental process based on their Feldenkrais experience, some for up to 40 years. What exactly has changed for them when they describe their personal growth?

CONSIDERATIONS FOR RESEARCH

As I understand research methodology, each of these time-frame processes will require that we utilize different research approaches and methods. Ideally we will be able to embed these different methods into a coherent theoretical model which ties them together.

Time-Frame Process 1 Research

The most fundamental research effort, without a doubt, is to show how movement patterns change within a single Feldenkrais lesson. This means that we need to capture the change in movement pattern during the lesson and directly afterwards. This presents a challenge, yet the equipment and methods can be found within the laboratory of a movement science researcher. I believe that we need to do more than capture a single parameter of a movement, we need to capture *the entire pattern as it changes*. Further, we need to describe how the person experiences the change. This involves subjective experience and introduces methodological complexities that need to be addressed. One possibility would be to take a close look at Daniel Stern’s (2004) methods which he outlines in his book “The Present Moment”. In addition, we need to demonstrate how the subjective shift in body image is

coupled with an observable change in movement patterns. This will require that smart and adventurous movement scientists and psychologists work together.

Time-Frame Process 2 Research

Once we have accomplished this, we need to apply the same methods over a series of lessons. This is the usual time of an effectiveness study, for example, a group does ten Feldenkrais lessons over six weeks while the control group sits and reads the newspaper over the same time. Afterwards we discover that those who participated in the Feldenkrais group can move significantly more smoothly than those in the control group when they pick up a newspaper. (However, the control group knows more about what is going on in the world!) A real example here is the study done by Jim Stephens and his co-workers (2006) recently published in *Physical Therapy* entitled: Lengthening the Hamstring Muscles without Stretching Using „Awareness through Movement“.

We will probably also establish as a result of these kinds of studies that the lesson series changes the way the movement pattern in the very first lesson of the series is done — if we were to return to it and try it again. We know this from our own Feldenkrais experience. Doing one lesson, such as a twisting movement on the back, influences how a subsequent, seemingly unrelated lesson, such as lifting the foot in standing, is done. One explanation of this phenomenon is that the one lesson changes the body image in a way that results in the movements in another lesson being coordinated differently. This interaction demands that we think about how we organize and change our body image.

Time-Frame Process 3 Research

Interesting questions concerning neurological plasticity and the psychology and philosophy of body image come up when we ask about organizing and changing body image. We need to address these questions. I believe that this can best be done over a relatively long time period.

When we continue Feldenkrais lessons over a period of weeks or months, we discover that something more than the coordination of their movements changes. We discover that our internal image of the body has changed in all of our activities. This may include how long, wide, round, deep, or voluminous we sense our selves and various parts of our bodies. It includes changes in the quality, ease, comfort, effectiveness, efficiency, and satisfaction with moving. Actions that were either impossible or unimaginable become part of our daily life.

Beyond all of this, we discover that something astounding has grown within us. This involves a new sense of aesthetics of living, a sense of trusting our bodies and ourselves in a way that gives us joy and satisfaction. Finally, we begin to experience a deep trust in ourselves and in our ability to learn. We discover that we can take care of ourselves and of our health, and we can improve our performance. We recognize that we can do this by exploring and experimenting with our moving, sensing, feeling, and thinking in ways that do not conform to the widely accepted paradigm of *effort, repetition and strain*. We begin to challenge assumptions, our own and those of others. We become intrigued with these processes of change that seem to contradict most of what is thought to be true about how we learn.

Obviously these kinds of changes in an individual's sense of personhood will not be captured in a movement laboratory. We need to link the results of the movement laboratory with those of a completely different research methodology. This research requires qualitative, case study methods that are familiar to psychologists, anthropologists, and sociologists. The question remains: how can we do this?

Time-Frame Process 4 Research

Once the process of awareness emerges in the course of our Feldenkrais experience, it becomes part of our lives over years and decades. What kind of person develops out of this process? To answer this question, we need to expand upon the use of qualitative methods without sacrificing discipline or clarity. For example, we might ask experienced psychologists to conduct a series of careful interviews with people in our community who have been doing Feldenkrais lessons for periods of 5 – 30 years. We need to attend to overall trends, as well as get clear and precise information about certain decisive experiences that changed the person's approach to themselves. This should include how they learned to use the awareness process as a tool for learning to learn over their life span.

CONCLUSION

Anyone familiar with research involving human subjects will see that we face a host of methodological complexities in bringing quantitative and qualitative methods together. We need to define and demonstrate what we mean by improvement within each of these approaches and time frames and how these improvements are interrelated, for example. Research resources and financing will be a challenge to say the least. And all of this takes time, lots of time!

As far as I can see, we need to cooperate to get the job done. Within our community we have many people familiar with at least one of the required research methods. We also have people who are familiar with fundraising and research management. Furthermore, we have contacts with a wide range of institutions with research resources that could be made available for projects. What we most need is a vision of how to do it and a lot of patience to get the job done. We can begin by bringing people into contact with one another. We are now laying the groundwork to make this happen soon.

In July 2008, the Feldenkrais Educational Foundation of North America and the Feldenkrais Guild of North America are cooperating on a new interdisciplinary symposium and conference. The symposium's provisional title is: "Exploring Human Development – the evolutionary and developmental foundations of the Feldenkrais Method". During the FGNA conference which follows plans are being made to create a program for researchers from around the world to meet and exchange ideas and results. In tandem with these plans a new website is being created to enable Feldenkrais teachers and scientists in all fields of human development to share ideas and coordinate research projects for the future. (more information about these events and the website will be available in the next months.)

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