



HeartMath

<http://www.heartmath.org/>

In researching for my book *The Law of Love* a friend of mine told me about the Institute of HeartMath and the research that they have been doing on heart intelligence, research that I will include in my book particularly how it relates to *The Law of Love*. However I am guided also to share with TEV readers now some data from their website and then add a little synopsis from their *HeartMath Solution* book.

Since 1991 the Institute of HeartMath (IHM) has been dedicated to helping people find balance between their mind and heart in life's activities. Our work is focused in two main areas, research and education. IHM research includes basic research on emotional physiology and heart-brain interactions, clinical studies, and research on the physiology of learning and performance. An additional line of inquiry aims to further the scientific understanding of the human biofield, intuition, and emotional energetic system. The Institute of HeartMath's research forms the foundation for the development of practical, scientifically-validated tools and technologies that enable people to improve their health, performance, and quality of life.

Frequently Asked Questions

<http://www.heartmath.org/ihm-faqs.html>

Question: Why the word HeartMath?

Answer: Although the words "Heart" and "Math" are rarely used together, Doc Childre, who founded IHM, felt that this combination reflected the two most essential aspects of our work.

Heart — The word heart, of course, has meaning to almost everyone. When we think of heart, we think of the physical heart as well as qualities such as wisdom, love, compassion, courage and strength, the higher aspects of all human beings.

Math — In the context of HeartMath, the word math refers to the stepping stones or the nuts and bolts of unfolding the qualities of the heart in a systematic way. It also refers to physiological and psychological equations for accessing and developing the incredible potential of the heart.

The term HeartMath represents the importance of both aspects in our exploration of the heart.

Question: What is the difference between "coherence" and "entrainment"?

Answer: We introduced the term physiological coherence to describe a physiological mode that encompasses entrainment, resonance, and synchronization, which are all distinct but related physiological phenomena that are frequently associated with more ordered and harmonious interactions among the body's systems.

The coherence mode is associated with a sine wave-like pattern in the heart rhythms (reflecting increased synchronization between the two branches of the autonomic nervous system), a shift in autonomic balance toward increased parasympathetic activity, increased heart-brain synchronization, increased vascular resonance, and entrainment between diverse physiological oscillatory systems.

In physics "coherence" is used in two different ways, both of which apply to our use of the term. It is used to describe the ordered or constructive distribution of power within a single waveform. The more stable the frequency and shape of the waveform, the higher

the coherence. The term autocoherece is used to denote this kind of coherence. An example of a coherent wave is the sine wave. In physiological systems, this type of coherence describes the degree of order and stability in the rhythmic activity generated by a single oscillatory system. For example, in the physiological coherence mode, the heart rhythms become more coherent, shifting toward a sine wave-like pattern.

Coherence is also used to describe two or more waves (or systems) that are either phase- or frequency-locked. This is also called entrainment. In the coherent mode, respiration, heart rhythms, and blood pressure rhythms become entrained and oscillate at the same frequency. The term cross-coherence is used to specify this type of coherence.

In terms of physiological functioning, coherence confers a number of benefits to the system. For example, there is increased cardiac output in conjunction with increased efficiency in fluid exchange, filtration, and absorption between the capillaries and tissues; increased ability of the cardiovascular system to adapt to circulatory requirements; and increased temporal synchronization of cells throughout the body. This results in increased system-wide energy efficiency and metabolic energy savings.

Question: Have HeartMath techniques been shown to help people with atrial fibrillation?
Answer: Yes, many people with atrial fibrillation have benefited substantially from the HeartMath techniques.

A large hospital in Orange County, California, conducted an internal study with a random sampling of 75 patients with atrial fibrillation. Many of these patients had severe conditions and were on aggressive antiarrhythmic and antihypertensive medication regimens; a large number were on "last resort" medications with extremely toxic side effects.

The patients learned HeartMath's Freeze-Frame and Heart Lock-In techniques through coaching and home learning materials and were asked to practice the tools over a period of three months. At the end of the three-month period, 71 of the 75 patients reported substantial improvements in their physical and emotional health. Fifty-six patients had significantly fewer symptomatic episodes of atrial fibrillation and were able to reduce their antiarrhythmic and antihypertensive medications under their physician's guidance. Fourteen were able to discontinue their antiarrhythmic medications altogether. The reduction in pharmacy costs to the HMO as a result of these improvements in patients' health was in thousands of dollars per month. The hospital study coordinator concluded: "The overall benefits to the patients were significant, life-changing, and priceless."

In addition to this study, numerous patient case histories have documented dramatic improvements in people suffering from atrial fibrillation and other cardiac arrhythmias after learning HeartMath tools and techniques.

Question: Is there any research related to congestive heart failure?

Answer: Yes, a study was conducted by Stanford University investigating the effects of the HeartMath program in patients with congestive heart failure. Patients demonstrated significant improvements in functional capacity and significant reductions in stress and depression, among other improvements. You can read a summary of the study in our research section on the following web page:

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www.heartmath.org/research/science-of-the-heart/soh_58.html

(Study summary begins halfway down this page and is 3 web pages long.)

Read on for a HeartMath synopsis with Jasmuheen

HeartMath Synopsis

with Jasmuheen

We know that our DOW anchors Itself in our heart chakra and then spreads Its rays out from the inner planes into our physical world, weaving Itself through our organs, light-body, meridians, bloodlines, skeleton and whole bio-system to support it into a continuous stream of life. We know that when our DOW withdraws Its rays our physical system can no longer exist.

We also know that the more powerfully our DOW can radiate Itself through our heart and our physical system and into our world, the more Grace we will experience and the more miracles.

We know that one way to increase our DOW's radiation through us and into our world is the Love Breath Meditation. What I would like to share here is the science and some facts to support another aspect to all this which is what the Institute for HeartMath calls the intuitive intelligence resource of the heart." and to also share some perhaps relatively unknown data re our physical heart and its electromagnetic pulses.

In the book *The HeartMath Solution*, authors Doc Childe and Howard Martin explain how the electromagnetic fields radiating from the heart affect the fields around us, they also show us how to move into sensing with the intuitive nature of our heart's brain rather than operating only from cranium's brain of limited linear thinking.

The HeartMath system – HMS - offers a model for efficient living in our world. Beyond what they have been able to prove by researching the fields of neuroscience, cardiology, psychology, physiology, biochemistry, bioelectricity and physics; the Institute for HeartMath – IHM – holds the theory that "the heart links us to a higher intelligence through an intuitive domain where spirit and humanness merge."

They say that "Heart intelligence is the intelligent flow of awareness and insight that we experience once the mind and the emotions are brought into balance and coherence through a self initiated process. This form of intelligence is experienced as direct intuitive knowing that manifests in thoughts and emotions that are beneficial for our selves and for others." (page 6 of HMS.)

What has this got to do with the Law of Love? Simply this – our DOW is the purest expression of the Law of Love in existence and our DOW uses Its heart intelligence to communicate with us. Consequently I am guided to offer in this chapter some tried and true tools that work that have been scientifically tested after being developed by the IHM, so that we can improve how our DOW communicates with us and so that we can understand and work more powerfully with the law of Love. Hopefully from this we will all be able to make the sort of decisions that will allow for a greater expression of the Law of Love in our world.

So let's look at some facts and then a beneficial HeartMath tool.

Institute of HeartMath Research on the physical heart:

- ♥ The physical heart beats one hundred thousand times a day or approx. 40 million times per year or 3 billion pulsations over a seventy year period.
- ♥ It pumps two gallons of blood per minute or 100 gallons per hour through a vascular system that is two times the circumference of the earth.
- ♥ The heart starts beating in an unborn foetus before the brain is formed.
- ♥ The heart has its own independent nervous system that is called "the brain in the heart".
- ♥ There are at least forty thousand neurons – nerve cells in the heart and these relay information back and forth to the brain in the cranium to allow for a two

way communication between our heart and brain, although the heart beats independently of its connection with the cranium brain.

- ♥ Research by Joel and Beatrice Lacey at the Fels Research Institute in the 1970's found that when the cranium brain sent signals to the heart through the nervous system, our heart didn't automatically obey. The hearts response depended on the nature of the task and the type of mental processing it required. However the brain obeys all messages and instructions sent to it by the heart, messages that could influence a person's behaviour.
- ♥ The Fels Institute found that the heart beat is not just a mechanical throb but a system of intelligent language that influences our perception and reactions. Other researchers have found that the hearts rhythmic beating triggers neural impulses that influence the higher brain centres that govern emotional processing.
- ♥ Research at the IHM has also found that negative emotions disrupt the hearts rhythms so that they become jagged and disordered and positive emotions produce smooth harmonious heart rhythms which in turn increase a person's mental clarity, intuition and ability to perceive the world more clearly as well as enhanced their communication with others.
- ♥ Being able to sustain balanced and harmonious heart rhythms allows a person to sustain a positive life perspective and intuitive flow and to access positive emotions at will.
- ♥ When our heart rhythm becomes balanced and coherent, every organ of the body is flooded with neural and biochemical events that improve their functioning and health e.g. experiencing compassion boosts our levels of IgA, a secretory antibody that improves our immune systems resistant to disease.
- ♥ The electromagnetic field of the heart is approximately 5000 times greater in strength than the electromagnetic field produced by the brain. It not only permeates every cell of our body but is powerful enough to radiate out into the field around us a radiation that can be measured by magnetometers.
- ♥ Gary Schwartz and his colleagues at the University of Arizona found that there is a direct interaction of energy flow between the heart and the brain via their electromagnetic fields.
- ♥ "Because the heart is the strongest biological oscillator in the human system, the rest of the body's systems are pulled into entrainment with the hearts rhythms." (page 46 HMS.)
- ♥ The quickest way to harmonize human heart rhythms is to focus on what the IHM call core heart feelings such as love and compassion.
- ♥ Increasing head/heart coherence requires reducing emotional and mental stress by monitoring and mastering our thoughts and feelings. The more we do this the more powerfully our DOW can radiate itself through the higher heart and magnetize more Grace to our field.
- ♥ The difference between heart and head intelligence is that the heart is open to intuitive solutions and the head is open to linear and logical solutions. When they work together we again have more choices in life and a clearer vision of how to fulfill our dreams. Coherence between the head and heart also allows us to operate more effectively through all fields of life - a fact that the IHM has tested repeatedly.

While we can be the master of our mind and learn to work in a positive way with both our perceptions and our emotions, we cannot be the master of our heart, only its partner, yet accessing our hearts intelligence or its codes allows us to live life in full mastery.

According to research at the IHM "our feelings affect the information contained in the hearts electromagnetic signals"(page 59 HMS) and spectral analysis has revealed that when the hearts rhythms become more coherent and ordered then so does its electromagnetic field emanations, emanations that they have also found can influence other peoples' brain wave patterns. Spectral analysis can determine the mix of frequencies present in a field i.e. an electromagnetic fields ingredients.

Emotions such as appreciation and compassion create heart coherence just as anger and frustration create incoherence, consequently as we alter our perceptions in life, we alter our emotional flow which in turn alters our physical heart rhythms and allows us to alter our internal and external radiation levels.

Choosing to see the perfection of each situation, choosing to see the Divine spark in all, choosing to enjoy the fullness and simplicity of each moment, all of this alters our heart rhythm and our rhythm in our world and the type of rhythms that return to surround us.

Research at the IHM has found that “when a system is coherent, virtually no energy is wasted, because its component parts are operating in sync.”(page 63 HMS.)

I do not wish to digress here into the benefits of applying EQ – emotional intelligence which is the type of intelligence that the marriage of head/heart brings in our lives as there are already many books on this. I recommend that if you wish to learn to listen more to the voice of your heart in a way that also honours the voice of your mind, that you read and apply the tools in the HeartMath Solution. <http://www.heartmath.org/>

My point in this chapter is firstly that in metaphysical circles we focus a lot on our heart chakra whose rhythm affects our physical heart, yet our physical heart also has very particular rhythms that can be measured and altered to our advantage, as per the IHM research. The idea that the electromagnetic field of our heart is 5000 times stronger than that of our head is a great fact to support the work that many are now doing regarding the “Love/Wisdom Radiation” game as discussed in detail in The Food of Gods.

The IHM has also found that our breathing patterns can regulate our heart rhythms so the love breath tool is again another powerful way to bring our being into coherence and balance as according to IHM research when people breathe through the heart entrained rhythms occur naturally and can thus be sustained for long periods of time. Using the physical heart rhythms to entrain – or synchronize – our biological, emotional and mental fields is a wonderful way to eliminate stress on all levels and to naturally increase longevity and free us from dis-ease.

Not only can we consciously alter our brain wave patterns as we discussed in detail in The Food of Gods but we can consciously alter our heart wave patterns. When we do both consciously the fields within and around us alter again via the game of entrainment or sympathetic resonance. The Law of Love cannot function successfully in our lives without the synchronization of both our head and our heart rhythms.