

The HeartMath Experience

Chapter Summary



Chapter Three – The Science of the Heart

Key Learning from this Chapter

In recent years, neuroscientists have made an exciting discovery. They've found that the heart has its own independent nervous system. The heart sends signals to the brain that go to the amygdala, the emotional processing center, and to the thalamus, which synchronizes our cortical functions and affects our higher brain centers. Brain function is critically dependent on this information.

The heart is an electrical organ producing by far the strongest source of rhythmic bioelectricity. This energy goes to every cell in your body. Your heart produces enough electrical energy that it creates an electromagnetic field surrounding your body 360 degrees, extending beyond the skin out into space, measurable up to about 3 feet outside your body.

Coherence refers to the cooperative alignment between heart, mind and emotions that allows more spirit to infuse our system. Higher coherence is good for us. It is a healthy state that regenerates us. It is associated with increased emotional balance, stability, access to intuition and improved

mental functions, such as the ability to focus, mental clarity, bigger picture thinking, memory, improved reaction times, coordination and so on.

Coherence can be measured using technology that measures the beat-to-beat changes in the rhythmic beating patterns of the heart. This is called heart rate variability analysis. It is a measure of the naturally occurring beat-to-beat changes in heart rhythm.

Stressful emotions create a chaotic heart rate variability pattern—lower coherence. Sustained regenerative emotions create a smooth and ordered pattern that indicates higher coherence.

Coherent heart rhythms send signals to the brain that open up our higher brain functions. We become smarter.

Practicing heart coherence for even a few minutes lifts your vibration, making it possible for your heart's intuition to inform your attitudes, discernment and choices.

“We can measure that we are radiating this heart magnetic field and that our nervous system is tuned to this field and receiving information from others. What this means is that there’s a real energetic communication that is happening between people all the time.”

*–Rollin McCraty,
HeartMath Institute
Director of Research*

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“Learning to activate uplifting heart qualities sends a different signal from the heart to the brain. It can change how we perceive and respond to situations.”

*-Deborah Rozman,
HeartMath CEO and
Author*

Additional Resources for Learning More About These Subjects

- **HeartMath Institute Research Video**
<https://www.heartmath.org/resources/videos/scientific-foundation-of-the-heartmath-system/>
- **Mysteries of the Heart Video**
<https://www.heartmath.org/resources/videos/mysteries-of-the-heart/>
- **Science of the Heart eBook**
<https://www.heartmath.org/research/science-of-the-heart/>
- **All HeartMath Institute Science Monographs**
<https://store.heartmath.org/store2/Scientific-Monographs/>