

COHERENCE

What is it?

Most simply put it is **order and harmony between the brain, heart and body.**

The image of a laser beam best illustrates the increased efficiency and power of a person in coherence. Imagine a 100 watt light bulb. It's energy is spread in many directions. When the same amount of light is focused into a beam and it's waves and phases aligned, it is capable of piercing a piece of sheet metal....the same energy but much more powerful. The same is true when our brain, heart and breathing are aligned and synchronized: we perform much more optimally.

In more technical terms coherence is a **synchronization of the body's sub-systems:**

- the heart and brain synchronize;
- the sympathetic (fight or flight) and parasympathetic aspects of the nervous system are in balance;
- the oscillatory systems of the body are entrained and resonating together. This includes:
 - heart rhythms
 - respiratory rhythms
 - cranio-sacral rhythms
 - blood pressure rhythms

What are the benefits?

Research studies have shown that consistent and frequent coherence results in many physiological, mental, emotional and performance benefits.

Physiologically:

- decrease in systolic and diastolic blood pressure
- increase in % of DHEA (often described as the anti-aging hormone)
- decrease in % of cortisol (the stress hormone)
- enhanced functioning of the immune system (IgA)
- reduction in total cholesterol
- better sleep
- reduced fatigue
- decrease in fasting glucose levels

Mentally:

- enhanced capacity for concentration
- enhanced capacity for performance
- more clear-headedness
- increased creativity
- brain able to work faster
- more mental accuracy

Emotionally:

- less anxiety
- less depression
- more self-mastery of emotions
- less hostility
- increase in positive outlook

Functionally:

- more coherent communications
- more frequent "flow" experiences
- more organized meetings
- less home/work conflict
- better listening skills
- more perceived manager support
- significant increase in productivity

In sum, it is a highly efficient and effective state.

How is it measured?

One of the ways to measure coherence is **Heart Rate Variability (HRV)**. HRV is the naturally occurring beat to beat changes in heart rate. In other words, although your heart rate might measure 65 beats a minute, if you measure the actual length of each beat you would find that there is quite a bit of variance of speed in each single one. For instance the first beat might actually equal a 75 beat per minute rate, while the next one is slower and, if extended to a whole minute would equal a 62 beat per minute rate. When all of the beats

are averaged out we get a reading of 65 beats per minute and call this our heart rate. HRV can be measured by either an ElectroCardioGram or pulse wave recordings from a fingertip.

The variance in speed is due to many physiological factors one of which is the balance of the sympathetic (speeding up) and parasympathetic (slowing down) aspects of the nervous systems and is both expected and healthy....in fact, the more variability, the healthier the person. You could say that HRV shows the responsiveness and resilience of the body. Low HRV is associated with depression and anxiety.

How do you become coherent?

There are many ways to train yourself to become coherent: through deep and even breathing (respiratory interventions), through a clear and focused mind (cognitive interventions) or through an open, compassionate heart (emotion based interventions). Many researchers believe that because the heart is literally the most powerful force in the body (1000-5000x more powerful than the brain in terms of electro-magnetic force), that heart centered/emotion based techniques are the quickest and most easily sustained way to train yourself to become coherent.

Visit our website for more information on tools and techniques for entering coherence. (www.timeoutforliving.com)

What does coherence feel like?

Coherence is a natural state that most people have experienced at one time or another. There are many common phrases which capture the essence of coherence..."firing on all cylinders", "centered" "resonating", "all together", "energized", "humming", "all systems on go", "in the zone", etc. The following are some of the most often reported descriptions:

- Deep sense of peace
- In harmony with yourself and others
- Buoyant
- Senses enlivened
- Invigorated
- Regenerated

- Clear-headed
- Decisions become obvious
- Intuitive insight provides solutions
- Creativity flows
- Greater connectedness to other people, a larger whole, higher aspect of yourself

What are the implications of coherence and the power of the heart?

In the end, all of the world's spiritual and philosophical traditions have pointed to the importance of operating with a generous and compassionate spirit...with love and gratitude. Now science is giving us the rationale for doing so. With the convergence of so much evidence isn't it time we focus our attention on consciously maintaining an open heart?

The basic sources of happiness are a good heart, compassion, and love. If we have these mental attitudes, even if we are surrounded by hostility, we feel little disturbance. On the other hand, if we lack compassion and our mental state is filled with anger or hatred we will not have peace.

HH the Dalai Lama

For more research on coherence visit www.heartmath.org or www.heartmath.com