

The heart equation: The mathematics of emotion and being in sync

"Opening your heart is like putting a wide-angle lens on the camera of your perception. Suddenly, more of the world comes into view. You have more room for new possibilities in the picture. – Doc Childre and Howard Martin, The HeartMath Solution

How do you spend your energy? Do you lead with your head or your heart? And why does it matter?

Researchers have, after decades of work, uncovered a huge connection between mind and spirit that goes directly through the heart. Thousands of heart disease case studies point not only to the individual puzzle pieces of cholesterol, blood pressure, and diet – symptoms of



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heart disease, but also the comprehensive issue that boils down to the mathematics of emotion – and whether the mind and heart are in synch with each other.

In 1991, Doc Childre, author of *The HeartMath Solution* (1999) helped co-found the Institute of HeartMath with Howard Martin, both of Boulder,

Colorado. It is a leading research center aimed at developing "heart intelligence," specific skills to help us manage emotion by setting our heart to be in synch with our mind.

As the extensive HeartMath website documents, studies of 11,500 people have shown improvement in mental and emotional well-being in just six to nine weeks, utilizing basic HeartMath techniques. Results show a 24 percent increase in focus; 30 percent increase in sleep; 38 percent increase in calmness; 46 percent decrease in anxiety; 48 percent decrease in fatigue; and 56 percent decrease in depression.

This synchronization between mind and heart implies that the heart

is not just the physical pump that pushes the blood through the body, but also the metaphysical, emotional command center of the body, responsible for much more than circulation and heart rate.

What exactly is emotion?

Emotion literally means "energy in motion" derived from the Latin word meaning "to move." While a feeling is a closely related concept, an emotion is a strong feeling such as love, anger, joy, sorrow, that generates mental and physiological changes and manifests itself in the nervous system. Though emotional energy is basically neutral, the associated feelings and physiological reaction make a specific emotion posi-

tive or negative and our thoughts about it give us meaning.

Emotion can be translated into mathematics, as evidenced by the frequency measurement of the heart variability rate (HRV). Negative emotional states such as anger and frustration display a HRV that is incoherent, random, jerky, indicating disharmony in the autonomic nervous system which transports information from the brain to the heart throughout the body. Yet, positive emotion such as appreciation or love displays a coherent, ordered HRV, indicating balance in the autonomic nervous system which yields cardiovascular efficiency.