

# A Change of Heart

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Institute of HeartMath Research Lab  
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## New Meaning to "Horse Sense"

**H**ow perceptive and sensitive are horses? "Horse sense" means "plain common sense," which, for researchers at HeartMath, means "the sense to respond to heart coherence."

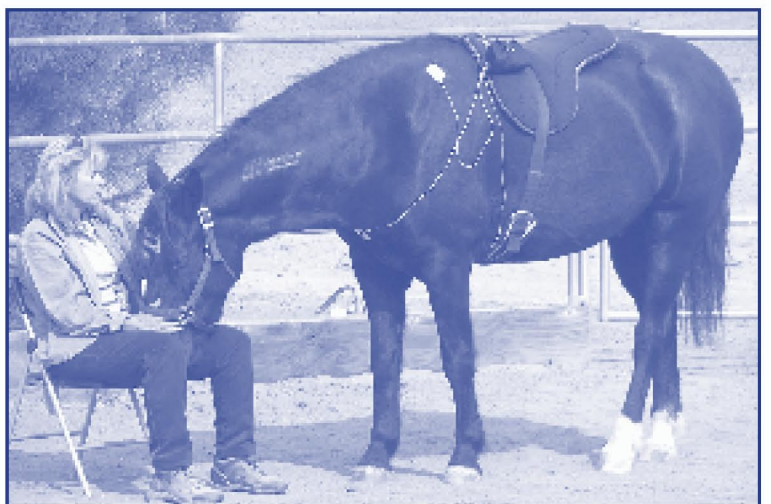
The HeartMath research team recently partnered with Dr. Ellen Gehrke, a Qualified HeartMath Instructor and Professor of International Business and Management at Alliant International University in San Diego, to do a preliminary research project with horses. Dr. Gehrke, who has combined her twenty years of teaching leadership and management experience with her passion for training wild horses, teaches a course called Developing Coherent Leaders in Partnership with Horses.

**It is well known that horses are very sensitive to and aware of their surroundings.** They sense a storm coming long before it arrives and sense a predator long before we can see or hear one. Many people feel that certain horses mirror the emotions of the peo-

ple with whom they interact. These horses are often used in programs with alcoholics and children to help them with their personal growth. We have all heard the saying "horses can smell fear," but it may be more accurate to say that they can *feel* fear. We have found that our nervous systems are tuned to the electromagnetic fields produced by the hearts of other people and that a person's brainwaves can synchronize to another person's heart up to five feet away (see "The Energetic Heart" at [www.heartmath.org/energeticheart](http://www.heartmath.org/energeticheart)).

**It may be possible that horses are also energetically sensitive to the fields produced by the human heart—and that humans are sensitive to the fields produced by a horse's heart.**

*Continued on page 4*



Shiloh placed his nose in Ellen's lap and hung out with her for the majority of the Heart Lock-In period.

A Newsletter from the Institute of HeartMath®

*Continued from page 1—New Meaning to "Horse Sense"*

**In this pilot study with four horses, we hoped to see if there was evidence that a horse's inner state was reflected in its heart rhythm patterns, similar to what we have found in humans and other animals. Additionally, we wanted to determine if there were any indications that the horses were responding to a change in human emotional states.**

In the study, we placed 24-hour ambulatory ECG recorders on Ellen and on each of the four horses so we could measure their heart rate variability during a series of different conditions and interactions. There were periods when each horse was alone, eating, in the corral during a Heart Lock-In® by Ellen, being groomed, and being ridden. This protocol was followed separately with each of the four horses.

### The results were very encouraging.

It appears that heart rate variability patterns do indeed reflect a change in a horse's inner state, although further research will have to be done to confirm this in a more scientifically rigorous manner. There were also clear indications that the horses responded differently to Ellen's changing states. The most interesting example of this was during the Heart Lock-In periods. Three of the four horses spontaneously walked over to Ellen and nudged or licked her after she started the Lock-In. One of the horses, Shiloh, even placed his nose in Ellen's lap and stayed beside her

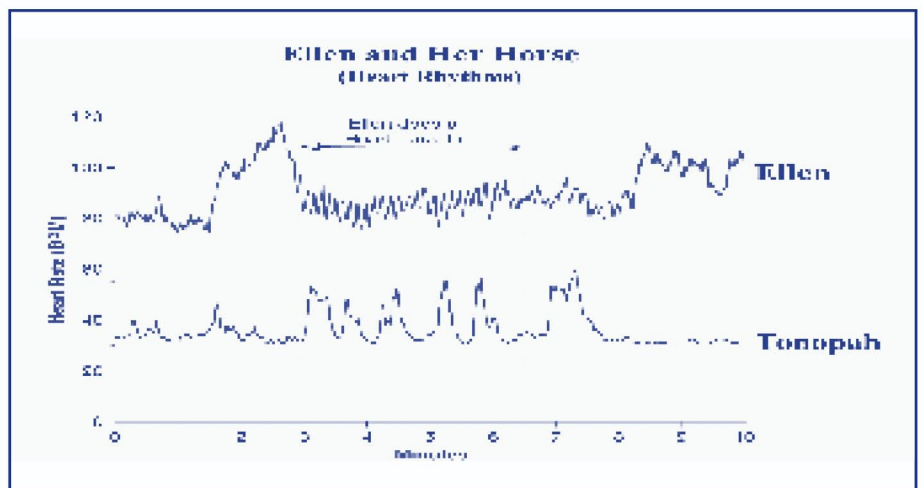


Figure 1 shows Ellen's and Tonopah's HRV patterns during the Heart Lock-In period.

for the majority of the Heart Lock-In period (see picture on page 1). More importantly, these three horses' HRV patterns became more ordered.

**We may have just recorded the first example of horse heart coherence!** Figure 1 shows Ellen's and Tonopah's HRV patterns during the Heart Lock-In period. Figure 2 shows an example of the state shift Rusty made while Ellen was riding him. In this example, after she pets and hugs him, his HRV pattern shifts to a more coherent pattern.

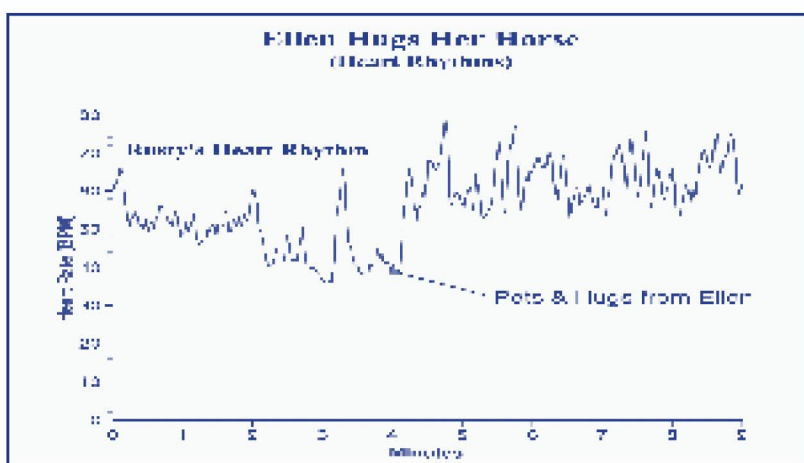


Figure 2 shows an example of the state shift Rusty made while Ellen was riding him.

We cannot make any definitive conclusions without first doing more rigorous research, but this initial pilot study does indicate that a horse's HRV pattern reflects its inner state and that horses are sensitive to changes in human emotions, reflected as a change in the horse's HRV patterns. It is likely that this emotional connection is mediated by an energetic form of communication. We hope to address this question and several others in future studies with Dr. Gehrke and her horses. ■