

ATTAINING HEART COHERENCE IMPROVES HEALTH  
AND AFFECTS OTHERS' COHERENCE LEVELS

By

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## **Introduction**

In this dissertation, I will prove, through use of technology, that entering into a state of heart coherence changes not only the practitioner's energy field, but this change affects those in local proximity, and also can affect the energy field of a recipient at a distance.

I will define heart coherence, and expand on that definition from a number of resources. I will present various ways that one can enter into a state of coherence, including: grounding to earth, meditation, and slowing the breathing. I will also discuss the health benefits of being in a state of coherence.

I will show, via the results of my research, that a frequency resonance occurs when two people are together, whether in person or by distance, and I'll also present research to support these findings. I will also show that a person in a state of coherence can affect another person's state of coherence via intention, and cause it to increase at an appointed time when the two people are in frequency resonance.

My conclusion will discuss the metaphysical understandings to be gleaned by this research:

- that we are connected by one Divine energy,
- that our focus on gratitude, love, and compassion puts us into a healing state for ourselves and others (which is Divine energy [the most beneficial expression of our true essence] in action),
- that intentional connection to the Earth affects this healing frequency.

I will use the Inner Balance connector, developed by Heart Math, Inc., via experiments with myself and subjects in person and at a distance in Columbus, Ohio, to measure and compare coherence levels.

My interest in this topic developed from wanting to understand the way the brain and Autonomic Nervous System respond to meditation and energy healing practices. I wanted to be able to see the results of what I feel when engaging in these practices. I also wanted to see if I could use technology to see how two people's energy affects each other.

I learned about HeartMath, which is a way to measure changes in the Autonomic Nervous System (ANS) when focusing on heart-centered thoughts, such as gratitude. To learn about this more, I purchased an Inner Balance connector to train myself in establishing the means to affect positive results for myself. In researching this more, I grew to understand the connection between coherence and healing. From here, I became curious to understand more about what coherence looks like beyond the Inner Balance software.

I began experimenting with an EEG headset, which could show, via an app on my iPad, the levels and changes in my brainwaves while I engaged in practices such as grounding, coherence meditation, and Reiki. I went on walks in the woods and in my backyard, and noticed that being in the woods, and touching a tree would easily bring me into a high state of coherence, which also correlated with higher Gamma brainwaves (which indicates a "feel good" state).

I also purchased an AuraCloud 3D Pro aura camera, which takes measurements of skin conductance and translates the data into high-definition graphic results related to the energy levels of chakras and aura colors in real time. Using this technology, I could compare coherence, brainwaves, and the way the skin presents physiological responses to various emotional states. I was able to see, in real time, how giving Reiki to a person using the aura camera changed the state of their body's innate response. I could see what coherence "looks like" using all of this technology.

I started reading research on the human biofield, and the quantum physics science of a single energy source that changes based on human attention. This research supported what I learned in my Metaphysical studies of Dr. Masters' teachings. It also inspired me to create an experiment that would allow me to see graphically, using the HeartMath technology, that two people will share a common frequency when together, and also to find out if, at a certain time, if I intend to increase another person's coherence level, if it would actually show a change.

To conduct my experiments, I purchased two more Inner Balance connectors from HeartMath.com. I sent one to Constance Dohan, a colleague of mine who has a large student base in Columbus, Ohio. She scheduled ten of her students to meet with me online for the experiments. I kept the second connector to use for my local trials. Both the subject and I needed to be wearing these connectors and measuring the output at the same time so I could compare our coherence measurements afterward and analyze the results.

The implications of this project nudge it from the realms of speculation or faith into a measurable science. I believe that my research could be a stepping stone to further studies into the healing implications of raising another person's coherence levels (which affects their Autonomic Nervous System, and thus encourages the body's optimal state for healing). At the conclusion of this dissertation, I will suggest some further experiments for continuing the research.

## Review of Literature

### What is Coherence?

According to the Institute of HeartMath on their website, “Heart rate variability is a measure of the beat-to-beat changes in heart rate. . . The incoherent heart rhythm pattern . . . characterized by its irregular, jagged waveform, is typical of stress and negative emotions such as anger, frustration, and anxiety. . . [T]he coherent heart rhythm pattern . . . is typically observed when an individual is experiencing a sustained positive emotion, such as appreciation, compassion, or love. The coherent pattern is characterized by its regular, sine-wave-like waveform” (HeartMath.com/science, n.p.).

Defined more specifically, “HRV is a product of the dynamic interplay of many of the body’s systems. Short-term (beat-to-beat) changes in heart rate are largely generated and amplified by the interaction between the heart and brain. This interaction is mediated by the flow of neural signals through the efferent and afferent pathways of the sympathetic and parasympathetic branches of the autonomic nervous system (ANS). HRV is thus considered a measure of neurocardiac function that reflects heart–brain interactions and ANS dynamics” (McCraty, Atkinson, Tomasino, Bradley, *The Coherent Heart*, 6).

We can learn from this that the heart rate changes based on our emotions. This is significant because our heartbeats happen without our conscious effort or participation; the heart works automatically. It is part of the Autonomic Nervous System, which includes the functions of the body which work subconsciously. Some other functions included in the Autonomic Nervous System include breathing, blood flow, and digestion. Something interesting about that is that we can consciously alter some of these functions, such as digestion (by choosing whether to



eat, or what to eat), or our breathing patterns, (by making an effort to breathe slower or faster), but otherwise these processes continue without our mindful effort.

With a conscious attempt, we can affect several functions of the Autonomic Nervous System. A simple example is when we experience anxiety, our heart rate increases. We can feel it pounding in our chests. We also begin to breathe more rapidly. Upon noticing this, we may choose to breathe slowly and deeply. Changing our breathing produces a calming effect on our emotions, and we can feel our heart rate slow down. Through making a conscious choice to slow our breathing, we change our body's reaction to anxiety.

It's also commonly understood that stress has a negative effect on overall physical health. According to HeartMath, stress can lead to many conditions including: "headaches, anxiety, dizziness, higher risk of strokes, heart disease, hypertension, diabetes, digestive disorders, Irritable Bowel Syndrome, weight gain, decreased sex drive, and Fibromyalgia" ([HeartMath.com/infographics/how-stress-affects-the-body](http://HeartMath.com/infographics/how-stress-affects-the-body)). Reducing stress, therefore, helps the body not only avoid these conditions, but it's also known to have positive effects on overall health, cognitive function, hormonal balance, sleep, and intuition.

The Institute of HeartMath discovered that the health of the Autonomic Nervous System can be tracked by measuring HRV. The results of measuring and plotting HRV also demonstrate that there are correlations between positive emotions and the heart. This goes beyond reducing stress. There's cooperation between the Autonomic Nervous System and the heart rate. In fact, "Many of the changes in bodily function that occur during the coherence state revolve around changes in the heart's pattern of activity" ([HeartMath.com/science](http://HeartMath.com/science), n.p.). This cooperation between the HRV and ANS, evidenced by the sine-wave pattern produced during monitoring, has been termed "coherence."

The primary way that HeartMath suggests bringing oneself into a state of coherence involves focusing on gratitude, compassion, and sincere positive emotions. In order to get to “sincere” positive emotions, the directions suggest that you think of someone or something that you love very much, or an experience that generated very positive feelings for you. As you think of this, you allow yourself to feel the emotion again, and then practice sustaining it. Therefore, this is different from basic meditation, which doesn’t involve emotions. It is these emotions which trigger the HRV to bring about changes in the ANS (which is controlled by the brain). This exciting finding means that the emotions are controlling the heart, which is then dictating to the brain to change the body! In *The Holographic Universe*, author Michael Talbot explains simply and profoundly, “the deeper and more emotionally charged our beliefs, the greater the changes we can make in both our bodies and reality itself” (138).

Explaining further, a study titled *The Central Role of the Heart in Generating and Sustaining Positive Emotions*, reports, “This shift to coherence, in turn, results in a change in the pattern of afferent cardiac signals sent to the brain, which is significant because at the physiological level, this shift serves to interrupt or even prevent the triggering of the body’s normal stress response. In addition, the increased physiological efficiency associated with the coherent mode appears to facilitate the body’s regulatory and regenerative processes and speed recovery from stress” (McCraty and Rees, 10). Note that this isn’t only about releasing stress, but actually helping the body resist entering into a physical stress response when a stressful situation arises. Therefore, a person can feel calm in a stressful situation, and thus be able to think more clearly (which the “flight or fight” response can actually prevent).

The ANS is made up of two branches, the Sympathetic and the Parasympathetic. These branches balance the heart rate with the activity and stimulus of the person. According to

McCraty in *The Coherent Heart*, “In a healthy individual, the heart rate estimated at any given time represents the net effect of the parasympathetic (vagus) nerves, which slow heart rate, and the sympathetic nerves, which accelerate it.” (12). Basically, when we are alert and awake, the Sympathetic Nervous System is controlling the HRV, which will cause it to fluctuate along with our stress levels, emotional state, and activity level. When we are resting in deep sleep, the Parasympathetic Nervous System is in charge, regulating the heart rate according to the resting state, and responding to the content of our dreams. The balance of these states can occur when we are alert, yet restfully calm, in an emotionally positive state. Plotted on a graph, the HRV looks like a sine wave, rather than a jagged, uneven line (indicating stress or upset). This state of ANS balance demonstrates coherence. In the book, *Earthing*, it’s emphasized, “Whenever there is an improvement in HRV, a reduction in sympathetic intensity and a better balance of the ANS takes place. . . There is definitely a heart brain ‘hotline’” (Ober, Sinatra, Zucker, 167).

### **How Does One Cultivate Coherence?**

HeartMath developed a device that the public can use to track their HRV, and through the accompanying app, see their level of coherence displayed, and chart the length of time in which that level can be maintained. In that respect, it can be thought of as a type of biofeedback device. It’s called the Inner Balance Connector. It clips to the earlobe, and tracks the HRV via the blood flow in the earlobe. The data is analyzed in real time, and the app displays it. Features in the app guide the user to breathe in a slow and measured way, and also to focus on feelings of gratitude and love. The results can be seen immediately. Through regular practice, one’s health and ability to resist stress can improve. I have three of these devices, which I used for the purpose of the experiment I did for this dissertation.

To start to understand my own basic level of coherence and how to change it, I spent much time measuring my own coherence levels using the Inner Balance Connector. I tried various forms of meditation, focused on gratitude, and also stood touching a tree in the woods with it on. Through my practice, I learned how to increase my own coherence, and discovered how long it took for me to regularly and reliably enter into a measurably coherent state.

In Dawson Church's book *Mind to Matter*, he states that "Cultivating coherent local mind starts with aligning our consciousness with the fields of love and creativity found in nonlocal mind" (210). This idea is fascinating because Church says that love and creativity are fields – as in **energy fields**. They are frequencies he is calling "nonlocal" – which means part of something outside of our basic individual-seeming thoughts. I will discuss this further in a little while, but here is a good place to introduce the idea that the emotions of love and gratitude are more than emotions – they are energy fields. Rather, they are part of one energy field that has, through our tapping into it, the ability to change our physical body's health for the better. This idea was a prime motivator for me to explore the role of love and healing as an energy field that can affect another person as well as the person who has learned coherence. I wanted to test this because I practice distance healing through my Reiki practice. I wanted to be able to see coherence in action as it affected a ripple in this energy field and extended to another person. I now had the equipment to allow me to do this.

I mentioned a moment ago that while working with the Inner Balance Connector, I found that my coherence rate escalated effortlessly when I was in the woods. It's fascinating to me that, even without cultivating feelings of gratitude within my emotions, being in the woods affected my coherence levels. That means that there's another way to influence coherence. Something about the trees, and the natural setting of the woods, was having an effect on my HRV. McCraty

explains, “The lowest of Earth’s continuous geomagnetic frequencies, 0.1 Hz, is exactly the same frequency as the rhythm of the human heart when in coherence. . . In that state, our individual human heart is sounding the same note as the slowest of the frequencies of Earth’s magnetic field” (qtd in Church, 228).

There’s more evidence to support this in the book *Earthing*, a text about the health benefits of being physically connected with the Earth. “We believe that the autonomic nervous system is one, and possibly the first, of the major body systems to react to Earthing. . . . The results gave yet more strong evidence indicating its potential for balancing the nervous system and supporting cardiovascular health” (166-167).

I also tried regulating my breathing (indoors), following the guidelines in the Inner Balance app, to see if it would help me achieve coherence. I tried this without mindfully connecting to gratitude, because I wanted to see if it would work by itself, and if so, how well. I found that my coherence would increase through this technique, though not as high as when I was doing both regulating my breath and focusing on gratitude. “Because respiration modulates the heart rhythm, it can be intentionally used as a powerful intervention that can have quick and profound body-wide effects. . . . Our experience with breathing exercises is that they are effective primarily due to the fact that they modulate the heart’s rhythmic patterns” (McCraty et.al, *The Coherent Heart*, 28).

### **What are the Health Benefits of Learning and Practicing Coherence?**

Dr. Masters states, “The conscious and corresponding subconscious mental attitude and thought accumulation become all-important in terms of health, due to the fact that the personal subconscious influences the nervous system. In turn, the nervous system affects the non-

voluntary internal organs, glands, chemistry, and energy factors throughout the body” (*Master’s Degree Course Study Module*, 1:23). Coherence is a measurable example of the mind-body-emotions connection, and also, as I’ll explain in the next section, our very connection to the Oneness of our spiritual essence!

Every system in our bodies works better when performing in a state of coherence.

McCraty, Atkinson, and Tomasino reported,

Heart coherence is a reliable marker of overall physical health, associated with pervasive effects throughout the body. It reduces cortisol secretion and expands the amplitude of alpha waves in the brain. It brings not only the brain but other organ systems such as circulation and digestion into coherence too, while also boosting the immune system (qtd. in Church, 178).

It was also found that repeating the practice of attaining coherence establishes a new norm for the ANS, which has “enduring system-wide benefits that significantly impact overall quality of life” (McCraty, *The Coherent Heart*, 18). We are actually training the mind and body to work together towards a better systemic complete state of health when we engage in a regular practice of coherence. It’s called “restructuring” and it means that, through practice, new brain patterns develop that will become the normal state of handling stress.

Besides physical health benefits, Church enthusiastically reiterates, “You think clearly about problems, you focus on your goals, your imagination is unlocked, and your creativity soars. That’s the power of a coherent mind” (169).

### **The Coherence-Brainwave Connection**

Brainwaves also change in a measurable way when a person is in coherence. I was very curious about this, and I have an EEG headset which syncs with my iPad via Bluetooth connection. The program that uses it displays and records my brainwaves in real time. Having

this technology means that I was able to measure my brainwaves and chart my coherence at the same time, noting the changes that occurred simultaneously at the same times. Each time my coherence levels went up, my gamma brain waves increased. I even took the equipment to the woods and tried it there, in addition to doing the gratitude-led meditations indoors at other times. The results were consistent.

This correlation was confirmed in *Mind to Matter*, as Church quotes a study by Kim, Rhee & Kang, “Other research shows that heart coherence produces alpha and gamma even while it calms the anxiety bands of beta” (134). Clearly, the brain expresses the changes in the HRV produced by attaining a state of coherence. A wonderful thing about this is that it starts with something we can do mindfully and purposefully, whether we go outdoors, or focus on gratitude and love to get there. But, I believe that this connection between gratitude and the heart, brain and body comes from somewhere bigger.

“During mystical experiences, mind leaves matter. Consciousness ceases to identify exclusively with the local self, and EEG readings show large flares of alpha waves and the alpha bridge is created between conscious and unconscious reality,” (Church, 109). The brain changes during meditation, and it could be argued that it is responding to something that connects to a higher consciousness – indeed, perhaps with our true essence – that of God/Love.

Dr. Masters reminds us in *Mystical Insights*, “Life/creation is eternal love – or God expressed . . . If one dissolves all illusions of separateness from God/Universal Allness, this purpose or meaning to life is what will be found; or in the mystical meaning of the words from the Bible, ‘above all these things, is love’” (143). I believe the more we are experiencing gratitude, which is a love-centered emotion, we become closer to sensing our true God-ness.

Furthermore, the frequency of the Earth has this energy built right in, and it's obvious by the body's reaction to being immersed in nature that this energy is a natural state of healing for us.

I think it's compelling to decide that the more we embody love, the more we are raising our awareness to the divine aspect of ourselves. This divine aspect is wholeness, perfection, and therefore, would be the purest form of healing energy there is. Gregory Flood writes in *God, A User's Manual*, "God is love. God is the substance of love itself. . . . Love is how I do things from now on" (181). The logic that follows is that if connecting with love will change our heartrate, coherence, and body, why wouldn't it also affect another person who is nearby (or even, connected by thought)?

I felt encouraged to pursue this idea further as I read books by Lynne McTaggart. She noted in *The Intention Experiment*, "In a number of studies of healing, the EEG waves of the recipient of the healing synchronize with those of the healer during moments when healing energy is being 'sent.' . . . In many instances, when one person is sending focused intention to another, their brains appear to become entrained" (52). This exciting idea motivated me to create and execute my own experiment with coherence and healing.

### **One Energy – a Healing Force**

Dr. Masters states that "at the center of the human mind, there is Oneness of Presence, or Primal Energy (original universal energy source) in which one discovers that they are ultimately One with all things, as all things are One with them" (*Master's Degree Study Module 1:15*). I believe that there is one energy in the Universe, and that energy is not separate from anything, including all living beings. As one brought up in the Jewish faith, I was taught that God is One, and we are all part of God. I believe that this is the same idea. In fact, I'm thrilled with the idea



that we are all God, for our creative ability is the same. As the Biblical Book of Genesis writings tell us, God spoke and the world came into being. We, therefore, because we are all God, create our reality through our attention and expectations.

In *The Intention Experiment*, Lynne McTaggart writes, “the most essential ingredient in creating our universe is the consciousness that observes it” (xxiv). Indeed, observation is participation. In *Mind to Matter*, Dawson Church relates, “All possibilities exist in the quantum field; the act of observation collapses them into probability” (183).

To continue with this idea from the perspective of quantum physics, Church continues, “The agency that transforms possibility into actuality is consciousness. It is a fact that whenever we observe an object, we see a unique actuality, not the entire spectrum of possibilities. Thus, conscious observation is sufficient condition for the collapse of the possibility wave” (188). Quantum physics experiments have proven that nothing exists until it is observed. The act of observation is an energy that we, as creators, apply to the potential that is the quantum field. When we turn our attention to something, it comes into being in alignment with our expectations. It is thus that we are creators of our reality. This can be applied to our health and our opportunities. “If you expect something to happen, you’re more likely to perceive it happening” (Church, 189).

Dr. Valerie Hunt explains in her book *Infinite Mind: the Science of Human Consciousness*, “Simply we cannot observe the world without participating with it. Observers are part of the nature of physical reality, where matter and mind blend” (44). I own a technological gadget called the Mind Lamp. This is a unique instrument, developed by PEAR (Princeton Engineering Anomalies Research Lab). Inside this lamp is a random event generator (REG). It controls the way this lamp changes colors. The lamp’s behavior is directed by this REG, and thus

it changes colors randomly, and a color will show itself for a random amount of time and intensity. What the researchers realized is that when a person is looking at the Mind Lamp, and thinking of a specific color, the lamp's REG behaves non-randomly. It becomes statistically more likely to show that color than other colors. The act of observation and expectation changes the programmed random behavior into something that is non-random.

Michael Talbot states in *The Holographic Universe*, that there's, "an exchange of information between consciousness and physical reality, an exchange that should be thought of less as a flow between the mental and the material, and more as a *resonance* between the two" (125). He is talking about the interplay between our intention and creating of the reality that we experience. We, as human beings, are not victims of our circumstances, but we are creators of it. Our thoughts flow into the potential energy of the universe, and direct it to manifest from a potential into reality. Richard Bartlett concurs in *The Physics of Miracles*, "Actually what we have done is create a special relativity through the heart that accesses the unified field of consciousness" (79).

Further, researchers who studied changes in DNA when exposed to human intention reported "an energetic connection exists between structures in the quantum vacuum and corresponding structures on the physical plane, and that this connection can be influenced by human intentionality . . . Both intention and coherence were required in order to alter the DNA molecules" (Church, 181-182).

The evidence for this piles up when you look at Lynne McTaggart's work in *The Intention Experiment*. She states, "If the act of *attention* affected physical matter, what was the effect of *intention* – of deliberately attempting to make a change? In our act of participation as an observer in the quantum world, we might be not only creators, but also influencers" (xxv). She

goes on to present actual evidence. “(William) Braud and his colleagues demonstrated that human thoughts can affect the direction in which fish swim, the movement of other animals such as gerbils, and the breakdown of cells in the laboratory. . . 40 remote healers across America were shown to improve the health of terminal AIDS patients, even though the healers had never met or been in contact with their patients. . . our world is highly malleable, open to constant subtle influence . . . *Intention appears to be something akin to a tuning fork, causing the tuning forks of other things in the universe to resonate at the same frequency*”[italics in original] (xxvii, xxix). These quotes from McTaggart’s book show that we are vastly more powerful than we grew up to believe. I deeply admire McTaggart’s work. I own four of her books and subscribe to her website. I appreciate her desire to methodically test her ideas with the most rigorous of scientific methods.

“Carl Jung. . . believed that ‘The collective unconscious contains the whole spiritual heritage of mankind’s evolution, born anew in the brain structure of every individual’” (qtd. in Church, 204). That’s fascinating in itself, though most people today don’t feel aware of this idea. They feel like victims of their circumstances, unaware that a simple mind shift would empower them to have blessings pouring in beyond their wildest imaginings. Church reminds the reader of this power as he writes, “In highly coherent states, our minds are able to create effects in the physical world that are astonishing” (166).

Donna Eden talks about the connection between the body’s intelligence and healing in her widely acclaimed book, *Energy Medicine*. “Perhaps the most startling premise of energy medicine is that the body’s energies are not only intelligent, but that you can engage them in intelligent dialogue that fosters your health. This actually becomes quite apparent when you are working in a healing context and connect with the energies that flow through the human body”

(18). It makes sense that there's an intelligence in the body's biofield, because this is the essence of our existence – the God within.

When trying to identify this energy, one always comes back to love. *The Hidden Power of the Heart* by Sara Paddison, proclaims, “The hidden power of the heart is love. . . to unfold, develop and become. How can we verify this? It is through managing our mental, emotional and physical energies from the heart that we can connect with this higher power and intelligence”

(10). We have the power to manage our thoughts and emotions to then affect our bodies' intelligent abilities to come into a state of balance. Practicing coherence is one way to put our attention on our God-centered ability to tap into this field, affect our ability to heal ourselves, and support one other's ability to heal.

Dr. Masters agrees. He posits, “Unity in its human expression is the manifestation of love. Each and every day I live is an expression of Infinite Unity, which vibrates through me as the energy of love, and through that vibration attracts love back to me” (*Bachelor's Study Module*, 2:62).

*The Infinite Mind* reinforces this idea. “Some persons call on God to heal them; others open themselves to love. I know these to be the same, releasing in or through the person the power to heal” (Hunt, 259). Love, God's power, and healing are all the same. It's up to the individual to tap into this power, this infinite vast oneness, to receive it. All it takes is connecting with love and gratitude for these changes to present themselves to be evident in the physiology through coherence.

## **Coherence and Healing**

Naisha Ahsian is an energy healer who has developed a method based on coherence and grounding. It's called Primus Activation Healing. I interviewed her personally on November 1, 2018. She said, "Helping clients move into a state of being able to recharge their own battery requires people being grounded, heart-centered, conscious and aware, without being in a thinking state." This is important, because she's referring to the way that coherence is a balance between the Parasympathetic and Sympathetic Nervous Systems; being alert, yet not in an analytical state, and relaxed, in a heart-centered presence. Combining grounding with coherence changes the energy of the practitioner. This idea, that one person's energy affects another, is also supported by many science-backed experiments.

Ahsian explained further, "The Law of Resonance states when two bodies are vibrating at nearly the same frequency, there is a common frequency (10 to the negative 30) that all life shares. We can use that channel. When you are in the proper state as a healer, the other person will automatically come into resonance with you" (Ahsian, personal interview). I believe this takes the idea of what happens during a Reiki session a bit further by saying that first, if a practitioner themselves is in a state of coherence, and grounded, and then offers a healing session to another, that person will benefit more fully than if the practitioner was simply offering Reiki without being mindful of those things.

I have been a Reiki practitioner for eleven years. I do self-healing, meditate fairly regularly, and serve clients in person and by distance. However, learning about the effects of coherence on the body fascinated me. Finding Naisha Ahsian, and speaking to her, was captivating to me because she offers healing sessions without Reiki, by just changing her own frequency, and that benefits her clients.

In *The Source Field Investigations*, David Wilcox states, “When people were able to internally entrain their own personal heart and brain waves [through meditation and other related techniques], they caused the heart and brain waves of other individuals to entrain with theirs” (37). Dr. Valerie Hunt reinforces this in *Infinite Mind*, “For the healing transaction, the healer with a strong field, focused through intent, will provide a coherent, powerful energy field” (269).

A study called *The Electricity of Touch: Detection and Measurement of Cardiac Energy Exchange Between People* reports,

Evidence that the cardiac field changes as different emotions are experienced, combined with this study’s finding that this field is registered physiologically by those around us, provides the foundation of one possible mechanism to describe the impact of our emotions on others at a basic physiological level. One implication is that the effects of therapeutic techniques involving contact or proximity between practitioner and patient could be amplified by practitioners consciously adopting a sincere, caring attitude, and thus increasing coherence in their cardiac field.

These resources offer evidence that we affect each other, just by feeling a certain way. It’s generally believed that people can sense each other’s emotions, and often feel affected by them. But, these studies add credibility, which might motivate otherwise skeptical people to consciously change their own emotional state, thus creating a field that will affect others, and naturally protect their own energy from attuning to the lower energy frequencies of others. “When two people touched while focusing loving thoughts on their hearts, the more ‘coherent’ heart rhythms of the two began to entrain the brain of the other” (McTaggart, *The Intention Experiment*, 55). The positive health effects of learning to increase coherence are reason enough to learn to do it. Knowing that it’s possible to make a difference for others could be even more of a win-win situation. What if enough people doing this could change the world? It’s not out of the realm of possibility to consider such a thing.

“When a person is in a heart coherent state, they also radiate a coherent signal all around their body. When such a person comes together with others, that produces a group field effect. This brings people nearby into coherence too . . . Large numbers of people in coherence may be able to nudge the whole psychosphere of the planet toward positive evolutionary shifts” (Church, 201).

The power of utilizing loving thoughts, gratitude, etc. for creating a healing state cannot be underestimated. It is powerful, and can create changes on the quantum level of reality! It is arguably the highest form of spiritual healing possible. “When we elevate our consciousness to the infinite, generating the energy recipe of incandescence in our brains, our cells take form within the inspired energetic template we provide” (Church, 150). We are actually creating a healing reality by controlling our thoughts and emotions. “A gifted faith healer might be considered, in quantum terms, to be an observer who routinely collapses space-time possibilities into the probability of healing” (Church, 207). Church continues by explaining that prayer may be a way of using intention to change the realm of quantum possibilities. Every potential exists until it is observed in some way. Attention, intention, and expectation are tools for directing that potential to become realized, collapsing the infinite possibilities into what we experience as reality. That means that we are able to cause a change on a physical level by connecting with love.

Dr. Masters’ version of spiritual healing is very similar. It starts within the practitioner, which is very similar to establishing a state of coherence. “The practitioner is to do all possible in life to maintain a close connection to the Universal Mind of God within themselves, perhaps through meditation” (*Masters Degree Curriculum*, 2:7). And then, to extend that reality to the person being treated, “The practitioner will usually go into a State of Meditation, visualizing

and/or spiritually affirming that the person is well and whole” (*Masters Degree Curriculum*, 2:3).

### **Coherence and Distance Healing**

Since the quantum world is not limited by physical proximity, this idea also naturally applies to people at a distance, meaning that even thinking of another person while in a state of grounded coherence could instigate a measurable change for that person. Lynne McTaggart in *The Intention Experiment* reports, “Sending a directed thought seems to generate palpable energy; whenever one of Radin’s senders sent a healing intention, many subtle aspects of the receiver’s body became activated, as though her or she had received a minuscule electric shock . . . People appear to receive healing deep in their bodies by being retuned to the more coherent energy of the healer’s intention” (61).

Studies of the effect of HRV synchronization occurring across a distance have generated positive results. “The author stated that ‘a coherent energy field can be generated and/or enhanced by the intentions of small groups of participants... The evidence of heart rhythm synchronization across participants supports the possibility of heart-to-heart bio-communications’” (Morris, qtd. in Church, 98).

As well, Lynne McTaggart advocates for the powerful changes amassed by small groups working together in her book *The Power of Eight*. “When people are involved in a passionate activity like a healing circle, they transmute from a solitary voice into a thunderous symphony” (61). McTaggart, through her website, coordinates healing groups as well as Intentions of the Week, for those on her mailing list to send healing intentions to at specifically planned times. She has a subscriber base in the millions. She sends feedback from the healing subjects, and



quite often, seemingly miraculous results occur. Her book is filled with anecdotes and studies that support the theory that together, a group of people with focused healing intentions can bring about a shift in a recipient's state of imbalance.

Richard Bartlett emphasizes that it's not necessary to make an effort to "do" anything, because that effort actually interferes with the healing process. "*The less you do, the more power you can gain access to* [italics in original]. When you are trying to do something or make something happen, you are 'doing' with your limited awareness of what can be done. When you are in the tide and flow of events, you are no longer resisting their quantum potential benefits. Now anything is possible and many miraculous things become more likely" (*The Physics of Miracles*, 29). McTaggart agrees, "And the strangest part of all was that my participants had entered into this space effortlessly, simply by holding on to the power of a collective thought" (*The Power of Eight*, 84). I think that adding effort into a healing session gets in the way, and I speculate that this happens because the person offering the healing activates too much activity in their own Sympathetic Nervous System, which lowers their coherence.

I appreciate the idea of small groups creating a healing field together, but what about one person? Can one person, I wondered, generate enough of a coherent field to affect another's at a distance? Can I? I have years of experience with distance healing using Reiki, but have never tried to measure the effects of it, other than by asking my subject how they are feeling afterward, and what was experienced. Now I wanted to know if my being in coherence, not using Reiki, would be able to generate a physical, measurable change in coherence levels for another person.

## Methods

I devised an experiment intended to answer the following questions:

- What practices bring about a measurable, consistent change in my own coherence levels?
- If I am in a measurable state of coherence, and intend once to include another person in my energy field, will that bring about a measurable change in coherence for a person in the same room as I am?
- If I am in a measurable state of coherence, and intend once to include another person in my energy field, will that bring about a measurable change in coherence for a person at a distance?

For this experiment, I used two HeartMath Inner Balance Connectors, and two Bluetooth devices running the Inner Balance app. The app gave me the ability to measure coherence for myself and another person, and compare the results to each other by taking screenshots and lining them up above each other.

I recruited twenty volunteers, ten local, and ten who would do the experiment with me from Columbus, Ohio, while I was in Gaithersburg, Maryland. (For the distance experiments, a third Inner Balance Connector was purchased and sent to Ohio, since one would be needed out there.) My colleague, Constance Dohan, recruited ten people to participate in the Ohio experiments, including herself. We arranged times to meet live online, and the local participants met with me in person, mostly in my office.

The format of the experiment was as follows:

- 1) The subject and I put our Inner Balance Connectors on and started the app.

- 2) We chatted lightly for three minutes, to establish a control, intended to get just a baseline read of our levels of coherence without doing anything in particular. The app was stopped at the end of three minutes.
- 3) I instructed the subject to just sit there for the next ten minutes, not intending to help me, not intending to resist anything either. Just basically sit and think their thoughts as usual. I told the subject that I was going to meditate into a state of coherence (which I knew from experience would take about five minutes). Then, a brief alarm would alert me to focus my intention on including the subject in my field. For the next five minutes, I would do my best to maintain my state of coherence, intending for the other person's frequency to resonate with me.
- 4) The subject and I started the apps again. I set two alarms, one for 5 minutes, and another for 10 minutes. Then, I began meditating into coherence, using measured breathing and focusing on gratitude. At the 5 minute alarm, I intended to include my subject, as described above. At the 10 minute alarm, we both stopped our apps.
- 5) We started the apps again and lightly chatted for another three minutes, to have a comparison of the levels from the first one.

### **Challenges I Faced in the Experiment Process**

This experiment required making appointments with all of the potential subjects, whether in person or by distance, within a month. I wanted to limit the experiment time to a month so I'd have more time to analyze and write up the results. The process of scheduling presented a slight logistical challenge.

For the distance experiments, a couple times I had three subjects in a row, as Connie was getting her students to come to her house and running the experiment with me via Zoom (a video-conferencing website) on specific days of the week. I had to meditate and get into coherence three times in a row, reliably, with no real breaks in between. That was personally challenging for me.

Also, it's one type of experience to meditate into coherence alone. It's far different to have the combined pressures of a time limit expectation (five minutes) and someone watching you. I had to combine my trust in my ability to "go within" and put aside any thoughts about what this might be like for the other person as, in person or on webcam, they were waiting for the ten minutes to be up. I'm happy to say that I was able to do this fairly well for almost every experiment.

The biggest challenge was the limits of technology. We had to get our individual Inner Balance Connectors started at the same time, and it was very difficult to be entirely simultaneous. Usually I'd wait until the subject said theirs had started, and I'd quickly hit my start button. That was because sometimes the device needed to restart its Bluetooth connection, or connect between the app and the device, and there would be a slight lag. That process made the results possibly out of sync by 1-5 seconds. This was even truer when working with subjects in Columbus, Ohio, because they weren't physically there with me. Connie had to get their devices started with her iPad, and stopped at the time I said, "Stop." It often took several tries to get started.

The timer I used was on my Amazon Echo device. I would set two timers: one for five minutes, and one for ten minutes. When the five minute timer went off, I had to say, "Alexa, stop timer" without losing my coherence. It was slightly distracting.

Connie also had to send the data to one of her students who had a phone app, so that student could screenshot every result (often needing 3-4 separate shots to get all of the ten minutes), and then email them to me. It had to be done this way because screenshots on an iPad app look different from screenshots on a phone, and I was using a phone app. I needed consistency to compare results. Sometimes it was a challenge to line up screenshots with my own, or else I had to redo my own screenshots to match up with the times that had been captured by Connie's student when she screenshotted the results for me. I also had to do the same for myself with my two devices used in the local trials; I had to screenshot the same sections so they'd match up for comparison's sake.

Another challenge arose when, once I went to analyze the data from both devices, I found that one of my devices had simply not saved some of the results. That glitch caused me to lose results from three people's tests, and so I ended up with a final count of 17 subjects, rather than 20.

Finally, sometimes the app would stop showing results before the ten minutes were up for one of the tests, leaving me only able to see results up to the last fifteen seconds of the ten minute test. I could only analyze data that I had for both subjects, so I had to work with what I had.

## **Findings**

I learned many things, some expected, and some unexpected, from performing these experiments. I'll describe my findings here, and you can see the actual screenshot data comparisons in the Appendix A and Appendix B sections at the end of this dissertation.

### **Finding My Own Coherence**

First, I wanted to learn for myself what would reliably bring me into a measurable state of coherence. It had to be reliable in the sense that the results were consistent throughout my practice. I had to know with confidence that doing whatever I did would work. This was important not only for the constraints of the experiment, but for me to even decide that I'd be able to do an experiment in the first place. If I couldn't rely on my ability to attain a significantly coherent state within a predictable time, it wouldn't be possible to stage an experiment in which I had a prompt to then try to initiate a change in my test subject's coherence level.

I spent about a month experimenting with the Inner Balance Connector, as I tried different things. I tried deep, slow, measured breathing. That would work, somewhat. I tried thinking loving thoughts. Sometimes that worked alone, and sometimes, it felt "forced." During the times that I was really "trying" to connect with love and gratitude, it wasn't reflected in the app as having any effect. I'm a generally positive and grateful person. I think of gratitude as my "baseline" normal state of emotion through the day. So, trying to "add gratitude" sometimes felt strange to me. The mental effort required to try to visualize gratitude streaming from my heart was getting in my way. I believe that it was actually stimulating my Sympathetic Nervous System (the left-brain analysis process) and thus throwing me out of coherence! I realized that I

do better with less trying, and more just being and feeling in a natural way. My conversations with Naisha Ahsian helped to reinforce my understanding about this.

I also found that just being outside in the woods naturally generated a “feel good” effect for me which naturally increased my coherence. I would feel peace, calm, serenity, by just being in that setting. While I didn’t go into the woods for my tests (because it would probably affect my subjects’ results as well if they were in the woods with me), I realized the power of grounding had on the ANS, resulting in an easy way to enter into coherence. In short: being in the woods has measurable healing effects on a person. I was happy to see this in my own experimenting with the Inner Balance Connector.

Through repeated work on my own, indoors, using the Inner Balance Connector, I was able to reliably get to a coherence level of between seven and ten on the app in five minutes. It would usually take five minutes for my levels to get there. A level of two or higher is considered coherent, so I was giving myself time to be in as high a level of coherence as possible. The Inner Balance app rates the level of coherence based on the HRV sine wave being even, rather than inconsistent or jagged in any way. Only ANS balance can produce such results. For perspective, a level of 11 is considered “Monk level,” and 16 is considered “humanly impossible.”

### **The Experiment Results: 3 Minute Chat Times**

For 80% of the subjects, there was neither a notable resonance nor coherence level for either of us during the first three minute chat time. For 20%, there was some coherence, and/or some resonance either in the three minutes before, afterward, or both. Interesting to note was that those who I knew well were most in sync with me before and after the experiment. That included two of my students, Connie, and my friend Paul.

### **The Experiment Results: 5 Minute Spikes**

In my actual experiments, I was looking for a change in coherence levels for my subject at the five minute mark, at which time I was mentally intending to include the subject in my energy field. In eight of the seventeen subjects tested, or 47%, there was a definite spike in the subject's coherence at that time, *independent of whether there was a spike in my own*. All I was seeking for this part of the study was a change in coherence level for my subject in sync with my intention to include them at that specific time. In most cases, I had a significant coherence level at five minutes, but in at least one, I had a low coherence level. Again, this part of the experiment was to determine if my intention (hopefully from a coherent state) would help another person increase his or her own coherence level. What I noticed is that the intention proved to work, even if I was not yet in a strong state of coherence. There is one example of that among the results posted in Appendix A.

Here's some perspective about the significance of a result of 47%: Considering what result in an experiment makes something scientifically significant, we can reasonably assume that throughout the entire ten minute test, a subject has an equally possible chance to have an increase or decrease in coherence levels without outside influence or personal effort. Taken minute by minute, that means there might be a 10% chance of any given minute showing a marked increase in coherence. Therefore, at the 5 minute mark, there was a 10% chance that a subject would randomly have an increase in coherence. 47% of the subjects had not only an increase, but a significant "spike" increase of several "points" all at once. This result could be considered quite significant. This result was equally distributed between my local and distance subjects; four people in each category had these notable spikes in coherence levels within five



seconds of the five minute mark during the ten minute test. These results are posted in Appendix A.

### **The Experiment Results: Correlation in Coherence Levels**

Something that I didn't expect, but which was very intriguing, was that in every single experiment I did, there were comparable peaks and valleys in coherence levels between my subject and me. Although my results consistently displayed that I was at a higher coherence level than my subject (which would be expected since I had spent so much time practicing and preparing for these experiments), there were several striking parallel ups and downs at the same time between my subject and me throughout the test. I believe that we were in resonance at these times. These results can be seen in Appendix B.

In considering these findings, they are supported by the research I did. The Law of Resonance states that two people's energy will entrain to a shared frequency when they place attention on each other. This idea is corroborated throughout each of the sources I consulted. Seeing these ups and downs at the same time (or within a 5 second variation to allow for the variations in the limits of the ability to coordinate exact start times), showed me that the Autonomic Nervous Systems of my subjects were synching up with mine during our experiment. This may have begun during our initial three minute control chat time. But, within every experiment, it could be argued that there is some correlation that defies the expected. 100% is quite surprising to me.

At first, looking at the data, I didn't see much going on. But, by putting the screenshots above each other, the patterns were much more visible. There is a connection between us – and it's measurable on a physical level. These patterns showed up in every subject, as I mentioned, whether in person or by distance. It became clear that it's not only the spike at five minutes for

47% of my subjects that's significant, but the similar peaks and valleys of our levels during the same period of time that show quite strongly an entrainment in our Autonomic Nervous Systems. My subjects, not practiced in coherence-inducing exercises, were having increased coherence levels, rising and falling along with mine for significant amounts of our experiment time. This is a physiological effect, affecting the heart rate variability, ANS, and one which has been proven in research to have significant benefits for wellness. In Appendix B, I've displayed the results of these experiments and added arrows and notes to indicate the correlations.

I started this project because, as a Reiki practitioner, I want my work to have the most benefit for my clients. I know that it starts with me, and nurturing my connection to my spiritual source so that I can allow the Oneness of Spirit to do the healing through me. It's very validating to be able to actually be able to measure the effects of connecting with love on not only myself, but on others. We are truly all connected on a quantum level.

## Discussion

My studies of the elements of quantum physics which change based on our simple attention have supported the idea that attention is, and functions as, an energy. We can choose to place our attention on gratitude, thus amplifying the emotion of love inside ourselves. By choosing to focus on gratitude, we start to affect changes in our hearts, which is reflected in the minute shifts in heartrate variation. A coherent HRV then signals our brainwaves, and starts to regulate our ANS into a state of coherence. A regular practice of this trains the brain to easily revert to this overall coherent state throughout the day. Regularly becoming coherent starts to adjust our baseline to one of coherence. This shift brings about not only vibrant health for ourselves, but actually reaches beyond us to increase the coherence levels of other people. The people affected by an individual's coherent state might be in the same room, or only in the thoughts of the coherent person. A coherent person who thinks about someone with compassion will help that person's energy sync with their coherent state, and induce improvements in that person's HRV. It is, indeed, heart-to-heart communication in the quantum field.

My experiments showed that not only did my intentions at a specific time make an immediate change in some of my test subjects, but each of my subjects and I entered into a state of heart entrainment during the experiments. Our HRVs were in sync, including increases in coherence levels. Whether we were in the same room, or online together, we affected each other on a physiological level.

In my Reiki practice, before my clients arrive, I now spend a little time grounding, breathing in a slow, measured way, and focusing on gratitude. I know now that my being in a coherent state will help my client receive an additional benefit during our Reiki session.

Teaching my students how to attain coherence, and discussing the benefits of it can also influence them to be mindful of their own focus, and help them be healthier, as well as affect those around them. My students will become stronger sources of coherent energy for those whom they serve. Might we together have a positive impact on the world? I truly believe the research and experiments support a “yes” answer to this question.

In considering what I learned from Dr. Masters’ curriculum, it all comes back to understanding that we are all Source inside, and the highest expression of that Source is Love. We are all Love. It is our truest essence. If we allow Love/Source to live as us, we are embodying the Divine in all of our interactions. Living as Source will bring about the highest and best for our lives, because we are easily living our purpose. We can train our minds and bodies to resonate with this Love by practicing getting into coherence. This sort of meditation is, as Dr. Masters teaches, for the purpose of helping us understand that we are more than “connected” with Source, that we *are* Source. Embodying this practice will also then affect others who are simply near us, and allow us to mindfully help others entrain with a higher coherence.

Dr. Masters said specifically in the *Bachelor’s Study Module*, “The primal, or God-energy, that is contacted in meditation, also improves or maintains the good health of the body. The body is, in truth, an energy field that is affected in a healing, rejuvenating, renewing way by the contact with primal or God-energy, which is the natural healing energy of the body” (2:21).

From the experiments of Lynne McTaggart, I learned that every person’s intention is important. When groups of eight people get together and at the same time, combine their intentions towards an altruistic goal, things happen. Over and over again, powerful results occurred. Personally, for the past nine years, two energy healer friends and I have offered people

what we call “Team Distance Healings.” In real time, we meet up online (we live in three different US states), and focus our intentions on sending healing to a person who has requested our services. We also share observations about this person’s energy, and share any intuitive information that we receive during the session with the person afterward in the form of a report. The response to our work has been nothing short of astounding. Reading *The Power of Eight* and *The Intention Experiment* by Lynne McTaggart have been personally affirming and validating, as well as sound, scientifically-backed resources for this dissertation.

## **Conclusion**

The experiment I conducted for this dissertation has been instrumental in giving me first-hand experience in confirming the significant effect that we have on each other. It helped me become more mindful in my daily self-care, as well as my interactions with others personally and professionally. It rooted my spiritual beliefs even more deeply in experience. It gave me the confidence to speak about the body's physiological response to mindful focus on gratitude and love.

The research I did helped me gain solid knowledge in principles of quantum physics that show how our intentions affect matter, and that combined intentions of a group of people can intensify the changes. It helped me understand the body's physiology and its response to our emotions on a more profound level. The sources I studied, together confirmed the potential for making my own work on myself, and professional energy therapy work, even more effective.

The process of preparing myself for running the experiment gave me a deeper spiritual connection through the meditations I did, helping me know that I'm part of an unlimited Source of Being, and feel it. I was excited that I could attain high coherence levels, and reliably get into coherence within five minutes. I know this preparation had a positive effect on my health.

Dr. Masters points out in the Master's Study Module, "Translated into daily living, this Consciousness of Universal Oneness breaks down the neurotic walls of mental isolation between oneself, conditions in one's environment, and communications with others. One deals with outer life from an identity founded on an Absolute, or Universal frame of reference" (1:16). Being part of this program of study over the past three years has been exactly what I'd hoped it would be: enriching, expanding, and profoundly meaningful. It has prepared me to go even further in my

professional life as an educator, energy therapist, wedding officiant, and author. For all of that, I am extremely grateful.

Dr. Lawrence LeShan describes in *The Medium, the Mystic, and the Physicist*, “Through mental action one attempts to bring the immense energies of the total universe to bear on another part of it in order to increase the harmony of that part. Feelings mobilized by that state include awe, humility, deep religious feelings, serenity, and calm” (157). It is, I believe, the experience of a sense of oneness with everyone and everything that brings about these feelings, and furthermore, it is these feelings that bring about the physical changes that are initiated from this work.

An important thing to note is it’s not about the effort. Lynne McTaggart frequently discusses the altruistic intention, combined with moving mental effort aside, that are important elements in her “Powering Up” meditation which is the basis of the group intentions she wrote about in *The Power of Eight* and *The Intention Experiment*. (*The Intention Experiment*, 202-212).

Indeed, Dr. Leshan also states, “It means a complete surrender of your own will except for your desire for the best for the healee. Here you identify with the All totally, and reach toward the state where you wear the universe like a glove and it wears you” (151).

Finally, for further study, in reflecting back on my experiment, I would try it again but not tell the participant at what time into the ten minutes I was going to intentionally include them, to rule out the idea that they heard the alarm and thus responded as they had perceived I wanted. (Even typing this makes me wonder if it would have been possible anyway, but just to rule it out, it would be a good control.) I would also separate the participant from me by placing them in another room, and making some different “control” experiments that would not involve

me meditating, just to show how much that process impacted the energetic entrainment that we entered into during the experiments I did.

Dr. Hunt wrote, “. . . the tenets of the quantum era show that the experimenter, as a part of every research he performs, influences the results by what he chooses to study, the collection of data, and how he analyzes it – but even more importantly, by his actual presence in an experimental situation” (44). As I mentioned before, just observing something collapses the wave of quantum possibility into reality. The world is as it is because people have brought it into being that way. We can also use our minds and connection to love as a tremendous and impactful process toward healing ourselves and others, and ultimately, the world.

Lynne McTaggart, along with huge numbers of people at once, used intention to increase peace in war-torn areas, to improve Middle East relations, and to reduce crime in Washington, DC. In the Washington, DC experiment, “Capitol Hill and its environs – the real focus of our intention – experienced an immediate drop in violent crime after our June intention, with a massive 33 per cent long-term decrease in violent crime after our September intention, which carried on for months. Combining the two, we saw a flattening of violence, compared to high spikes of the year before” (*The Heal America Intention Experiment*, 1).

Working on this dissertation showed me something much bigger than my initial experiment to test the effect of my own coherence on another person. It gave me hope that sharing what I learned personally and professionally can inspire others to harness the power of their own emotions, intentions, and connection to Source to impact the world – through their personal healing, their relationships, interactions, and combined efforts, along with mine.



## Works Cited

Ahsian, Naisha. Personal interview. November 1, 2018.

Bartlett, Richard. *The Physics of Miracles: Tapping into the Field of Consciousness Potential*. New York, NY: Atria Books, 2009. Print.

Church, Dawson. *Mind to Matter: The Astonishing Science of How Your Brain Creates Material Reality*. New York, NY: Hay House, Inc, 2018. Ebook.

Eden, Donna. *Energy Medicine: Balancing Your Body's Energies for Optimal Health, Joy, and Vitality*. New York, NY: The Penguin Group, 1998. Print.

Flood, Gregory Edward. *God: A User's Manual*. TX: Koios Books, 2017. Print.

"How Stress Affects the Body." HeartMath.com/infographics/how-stress-affects-the-body, 2015. Web. Dec. 30, 2018.

Hunt, Valerie V. *Infinite Mind: The Science of Human Vibrations*. Malibu, CA: Malibu Publishing Company, 1995. Print.

LeShan, Lawrence. *The Medium, the Mystic, and the Physicist: Toward a General Theory of the Paranormal*. New York, NY: Ballantine Books, 1974. Print.

Masters, Paul Leon. *Ministers/Bachelor's Degree Curriculum*. 4 vols. Burbank, CA: Burbank Printing, 2012. Microsoft Word File.

---. *Master's Degree Curriculum*. 2 vols. Burbank, CA: Burbank Printing, 2012. Microsoft Word File.

---. *Mystical Insights: Knowing the Unknown*. Sedona, AZ: University of Sedona Publishing, 2016. Print.

McCraty, Rollin, Ph.D., Atkinson, Mike, Tomasino, Dana, and Bradley, Ramond Trevor, Ph.D.. *The Central Role of the Heart in Generating and Sustaining Positive Emotions*. Boulder Creek, CA: Institute of HeartMath, 1999. Ebook.

---. *The Coherent Heart: Heart-Brain Interactions, Psychophysiological Coherence, and the Emergence of System-Wide Order*. Boulder Creek, CA: Institute of HeartMath, 2006. Ebook.

McCraty, Rollin, Ph.D. [www.heartmath.com/science/](http://www.heartmath.com/science/). n.d. Institute of HeartMath. December 12, 2018. Web.

McTaggart, Lynne. *The Intention Experiment*. New York: NY: Atria Paperback, 2007. Print.

---. "The Heal America Intention Experiment." [www.lynnemctaggart.com/wp-content/uploads/2016/08/The-Heal-America-Intention-Experiment.doc](http://www.lynnemctaggart.com/wp-content/uploads/2016/08/The-Heal-America-Intention-Experiment.doc). 2016. Web. January 5, 2019.

---. *The Power of Eight: Harnessing the Miraculous Energies of a Small Group to Heal Others, Your Life, and the World*. New York: NY: Atria Books, 2017. Print.

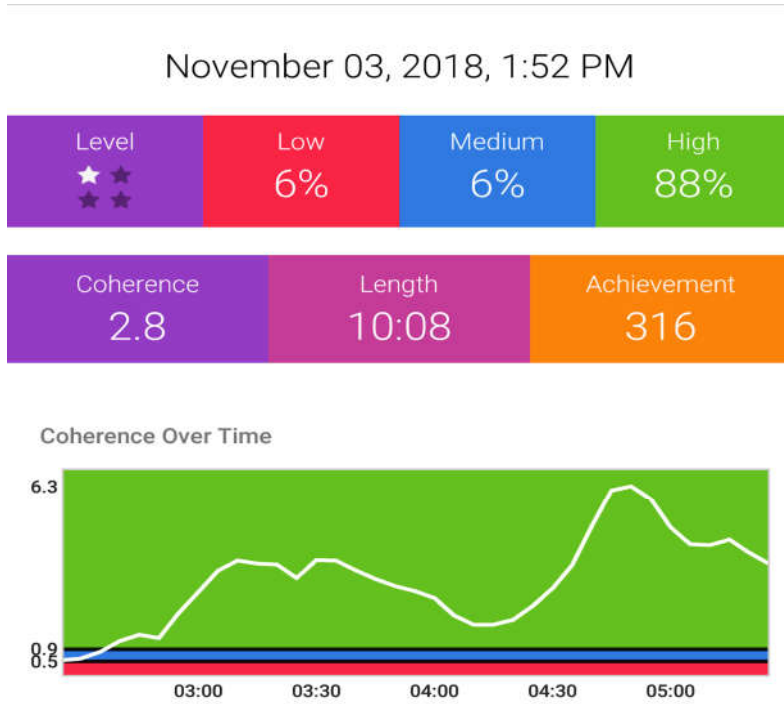
Ober, Clinton, Sinatra, Stephen T, MD, and Zucker, Martin. *Earthing: The most important health discovery ever?* Laguna Beach, CA: Basic Health Publications, Inc., 2010. Print.

Paddison, Sara. *The Hidden Power of the Heart: Discovering an Unlimited Source of Intelligence*. Boulder Creek, CA: Planetary Publishers, 1998. Ebook.

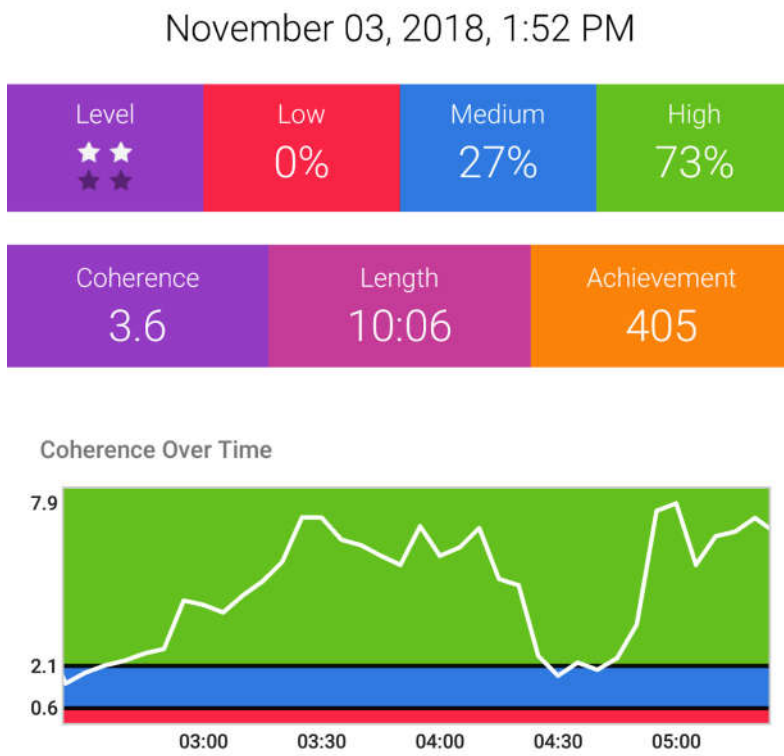
Talbot, Michael. *The Holographic Universe*. New York, NY: Harper Perennial, 1991. Print.

Wilcock, David. *The Source Field Investigations*. New York, NY: The Penguin Group, 2012. Print.

## Appendix A – Coherence Spikes in Subject at 5 Minutes

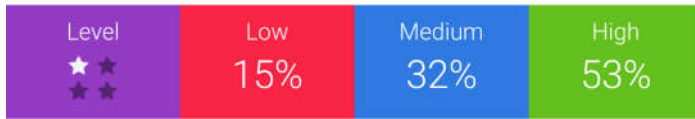


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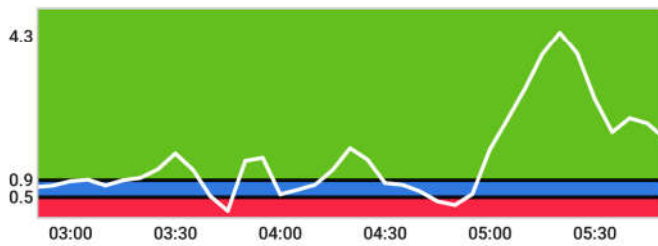


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Coherence Over Time

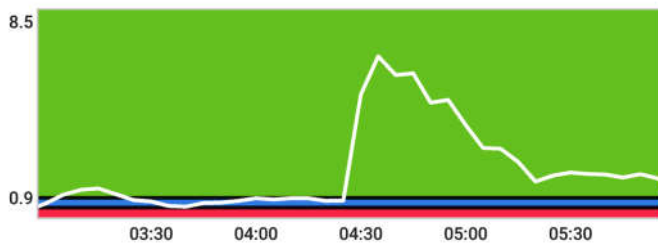


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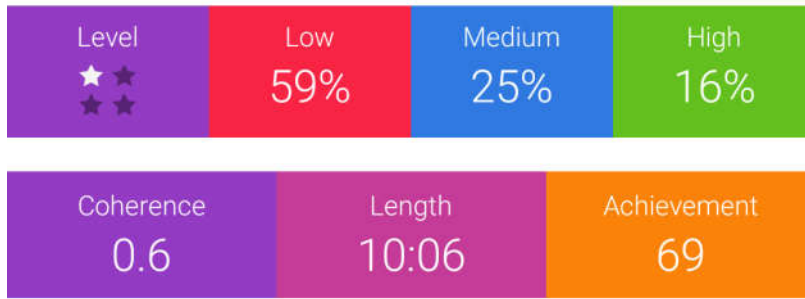


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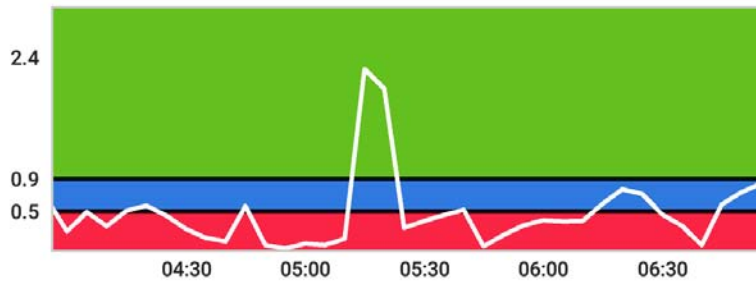


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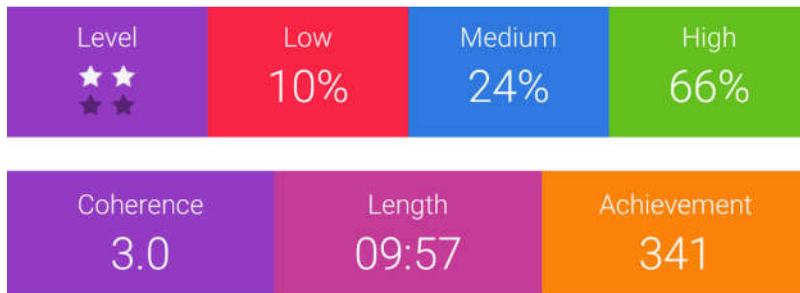


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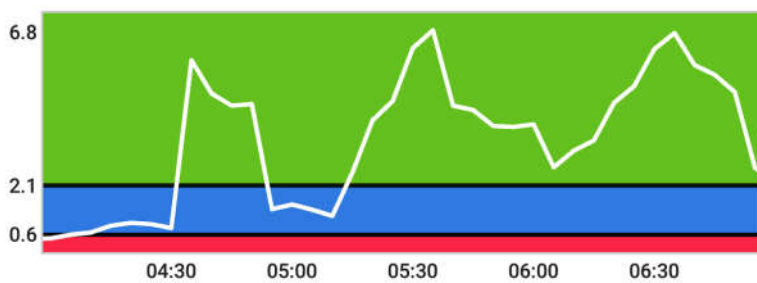


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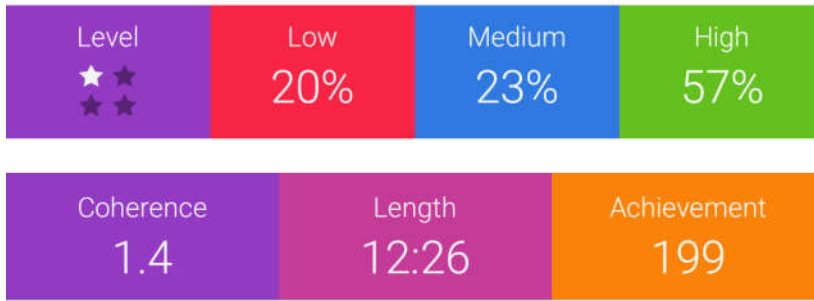


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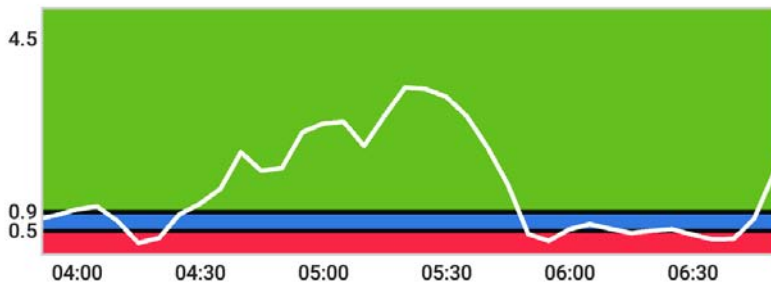


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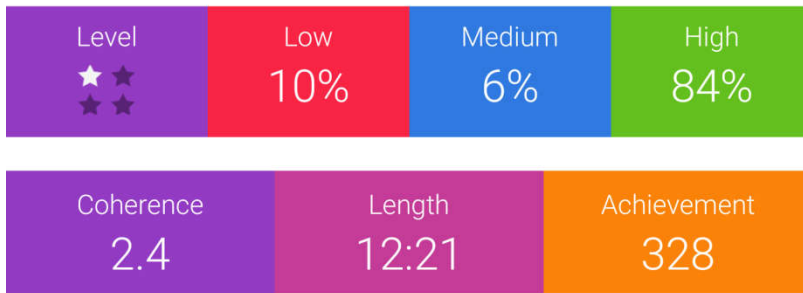


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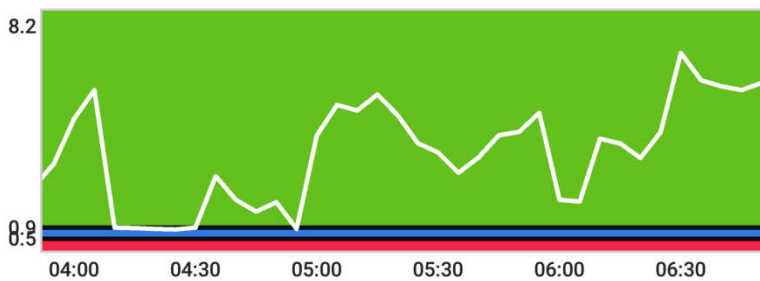


Paul (local)

November 23, 2018, 6:18 PM



Coherence Over Time

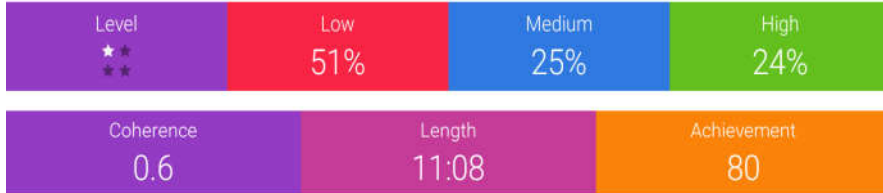


me

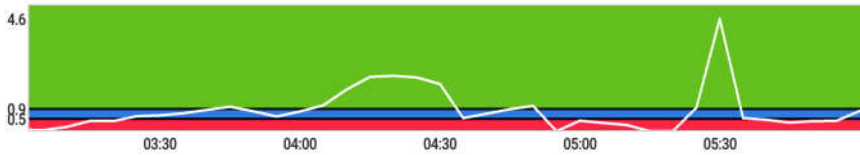
# Subject Coherence Spikes at 5 min – by Distance

← Session Results

Terrific!

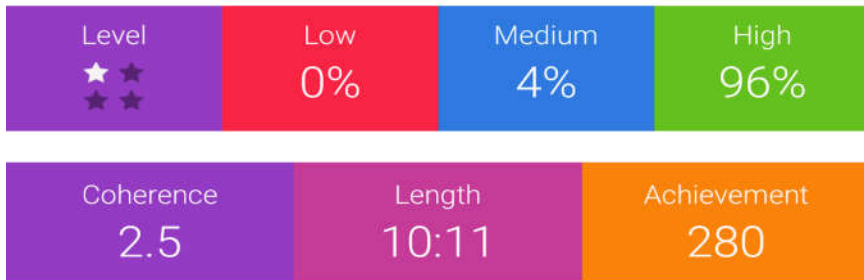


Coherence Over Time

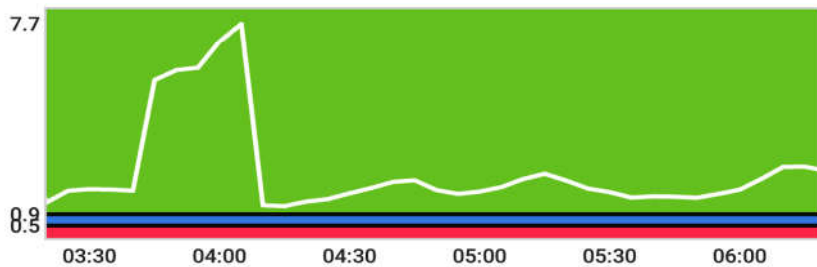


MT (distance)

December 05, 2018, 12:27 PM

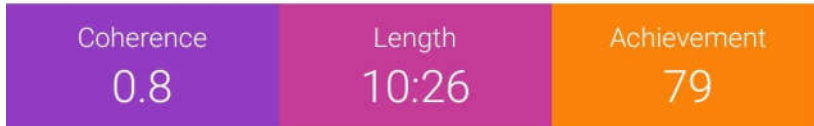
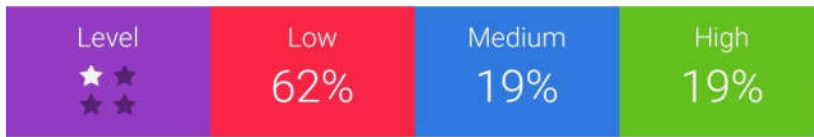


Coherence Over Time

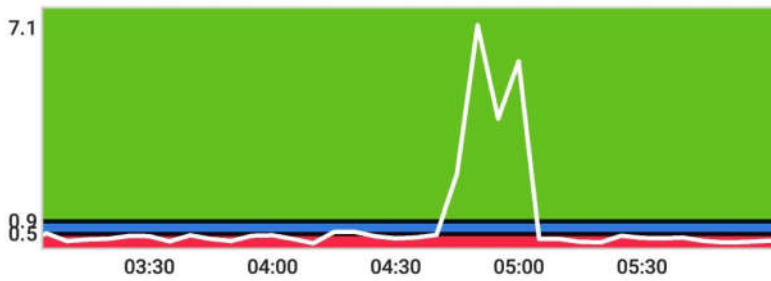


me

December 05, 2018, 12:27 PM



Coherence Over Time

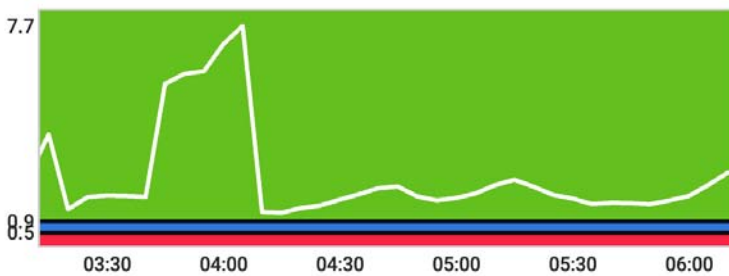


Amanda (distance)

December 05, 2018, 12:27 PM



Coherence Over Time

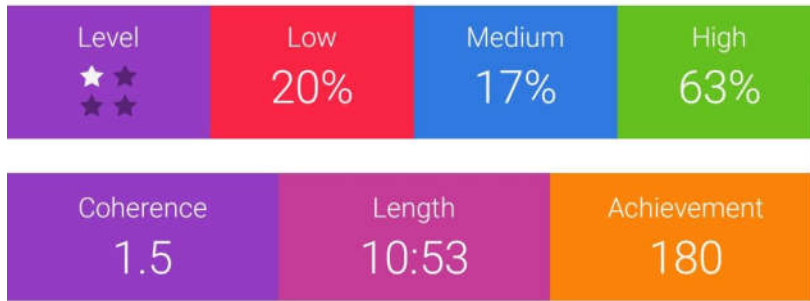


me

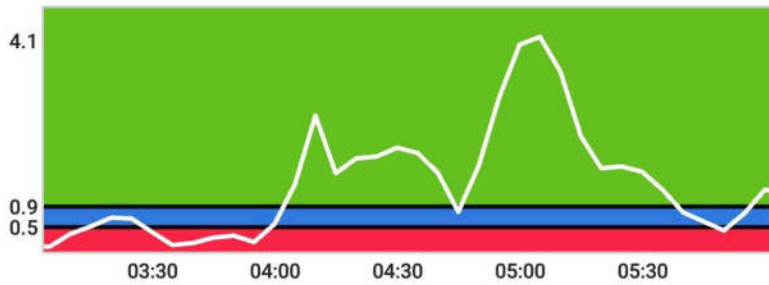
Note that this result helps demonstrate that the subject's spike in coherence level at 5 minutes is unrelated to my own level of coherence at the same time, or any possible correlation in the rest of our coherence levels during this period.



December 05, 2018, 11:59 AM

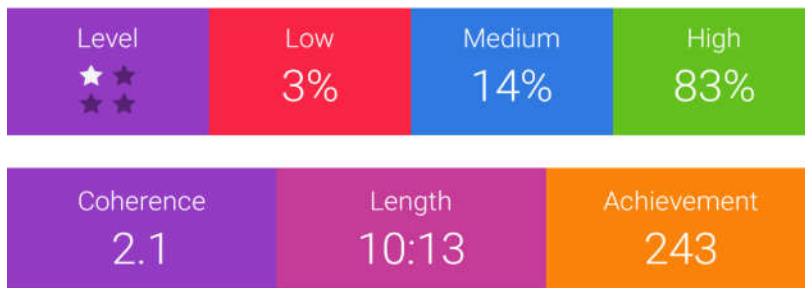


Coherence Over Time

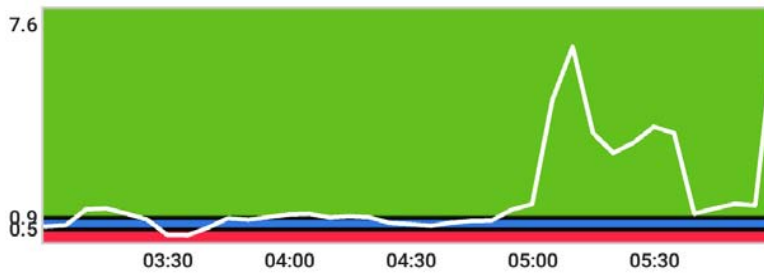


Diane (distance)

December 05, 2018, 11:59 AM



Coherence Over Time

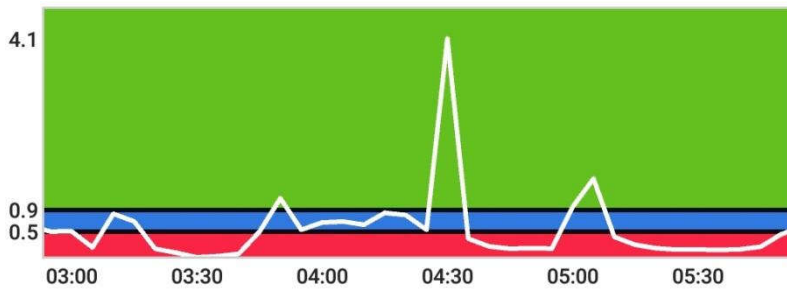


me

November 28, 2018, 10:41 AM



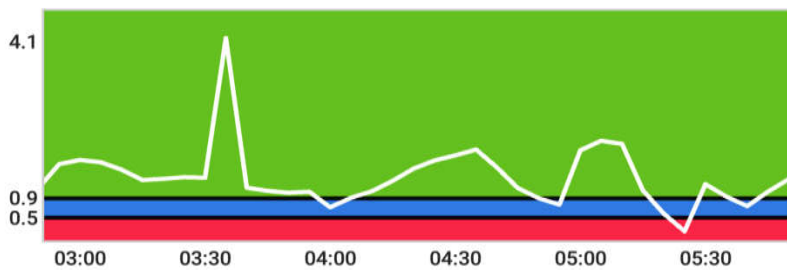
Coherence Over Time



November 28, 2018, 10:41 AM

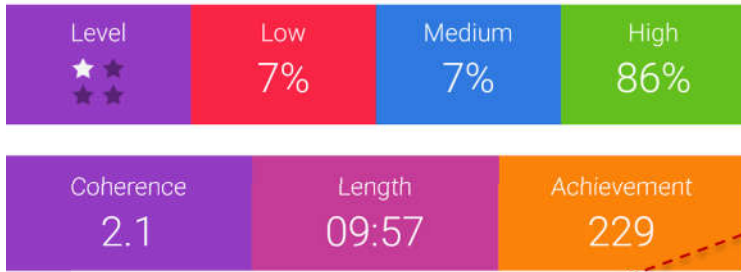


Coherence Over Time

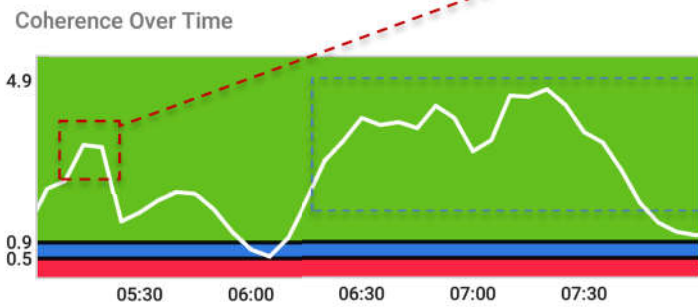


## Appendix B – Coherence and Entrainment Correlation Comparisons

November 12, 2018, 11:25 AM

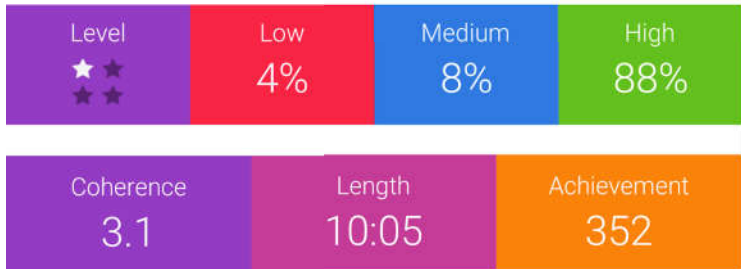


5 minute spike in coherence

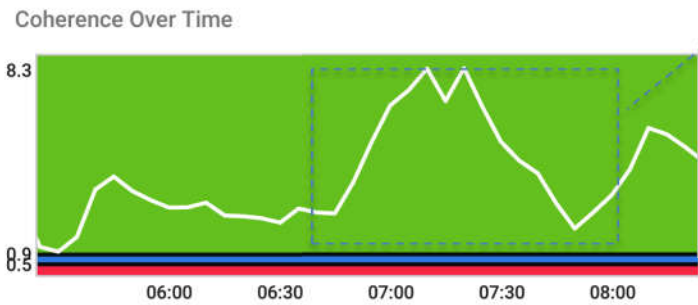


Garine (local)

November 12, 2018, 11:24 AM

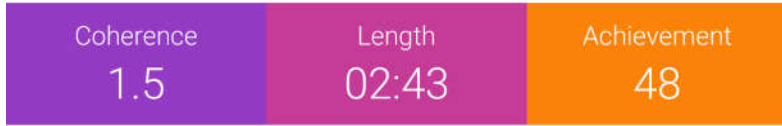


Entrainment in peaks and valleys

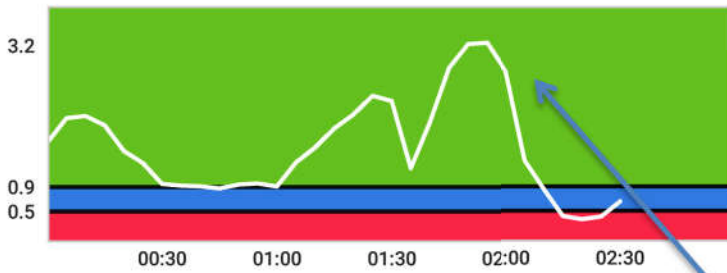


Me

November 12, 2018, 11:18 AM

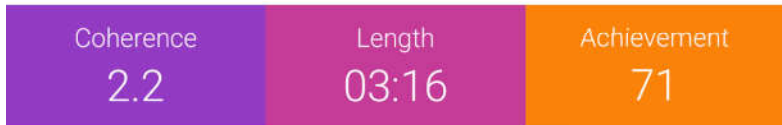


Coherence Over Time

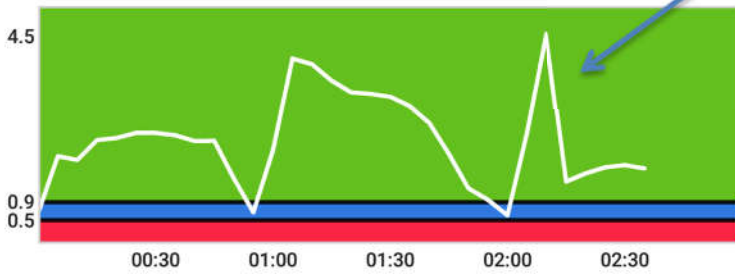


Garine (local) (2<sup>nd</sup> control)

November 12, 2018, 11:45 AM



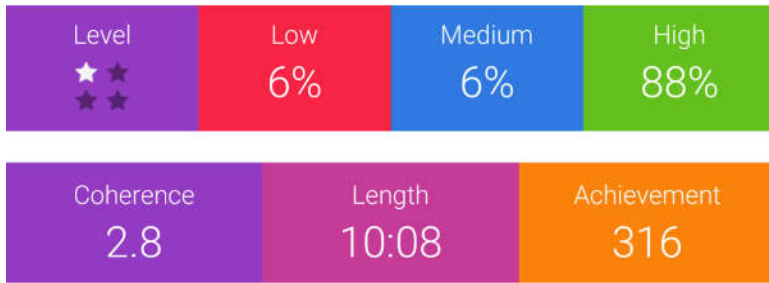
Coherence Over Time



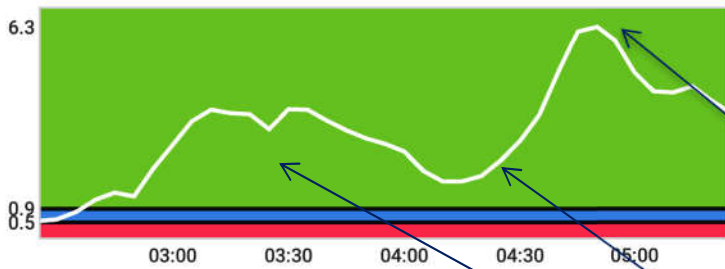
Similar peaks and valleys throughout indicating continued entrainment after the experiment.

Me

November 03, 2018, 1:52 PM

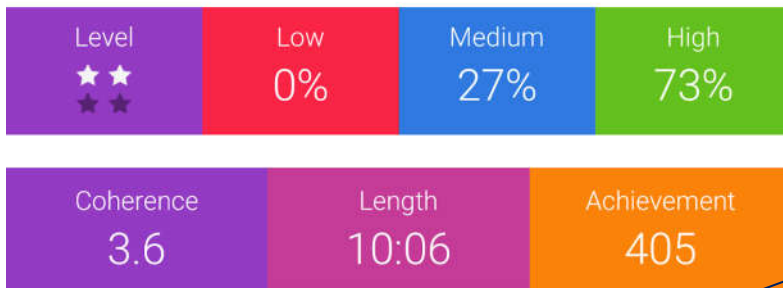


Coherence Over Time

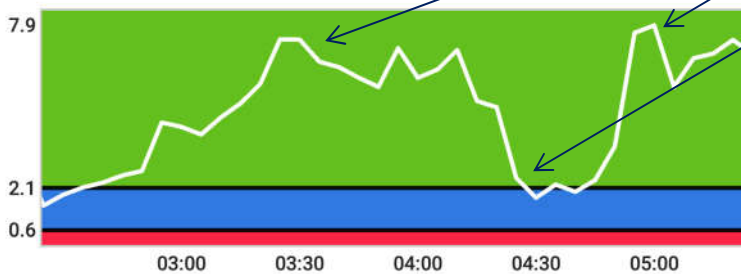


Katherine (local)

November 03, 2018, 1:52 PM



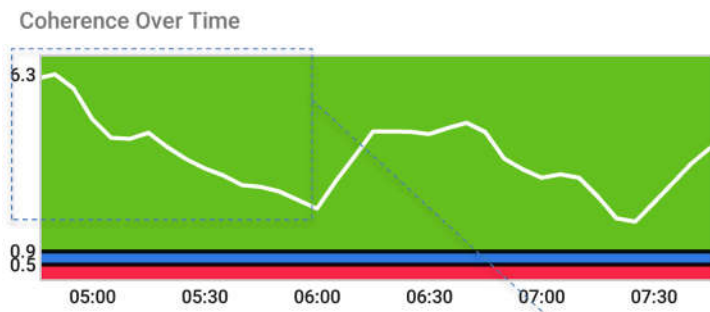
Coherence Over Time



Me

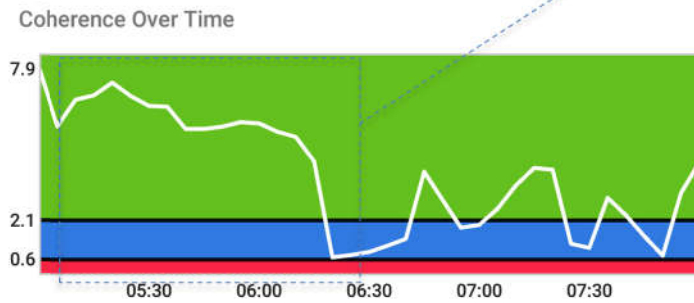
Correlation in wave peaks and valleys as well as 5 minute spike for both of us.

November 03, 2018, 1:52 PM



Katherine (local) example 2

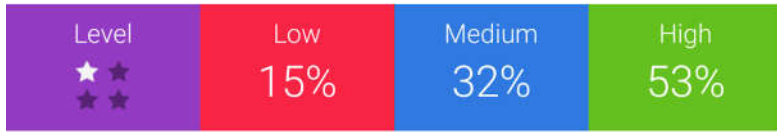
November 03, 2018, 1:52 PM



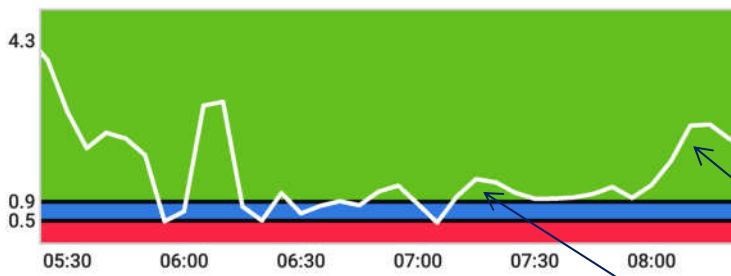
Correlation in a big decrease in coherence at the same time.

Me

November 18, 2018, 1:34 PM



Coherence Over Time

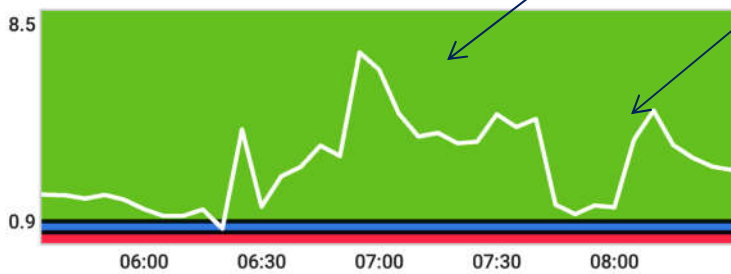


Janine (local)

November 18, 2018, 1:34 PM



Coherence Over Time



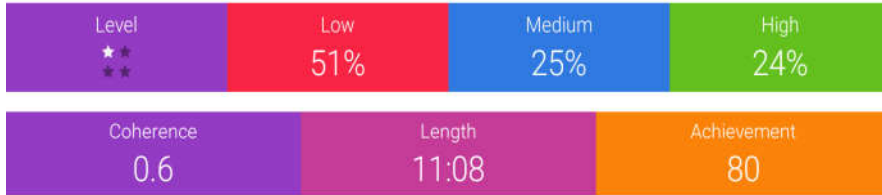
Me

Janine stayed in coherence between 7 and 8 minutes, and had a spike at 8 minutes along with me.

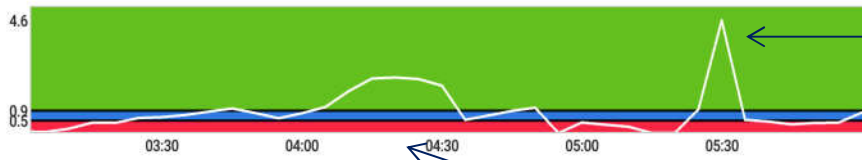
Session

Results

Terrific!



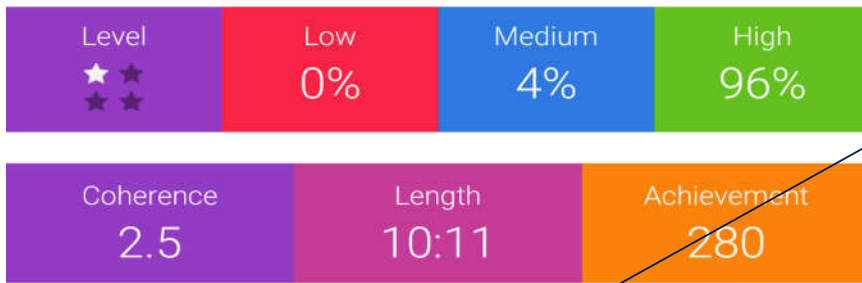
Coherence Over Time



Spike (considering this within the variability in time due to the app synchronization challenges).

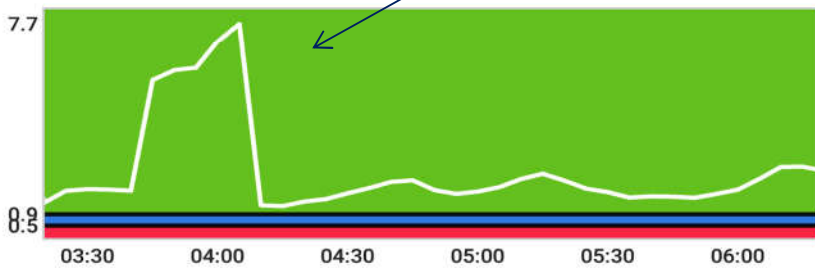
MT (distance)

December 05, 2018, 12:27 PM



Increase in coherence between 4 and 4:30 (assuming that MT is ~30 seconds ahead of me due to app sync issues by distance).

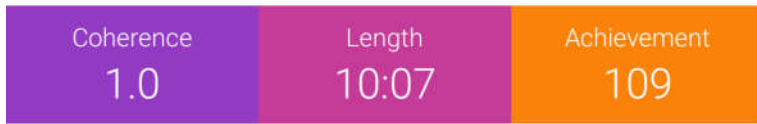
Coherence Over Time



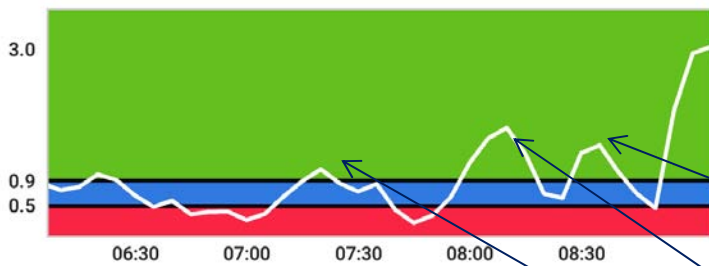
Me



November 25, 2018, 11:26 AM



Coherence Over Time



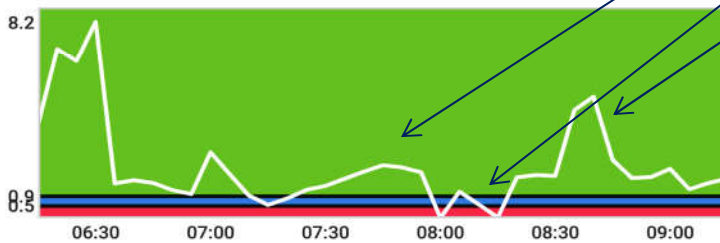
Wendy had peaks in her coherence levels at the same times as mine.

Wendy (local)

November 25, 2018, 11:26 AM



Coherence Over Time

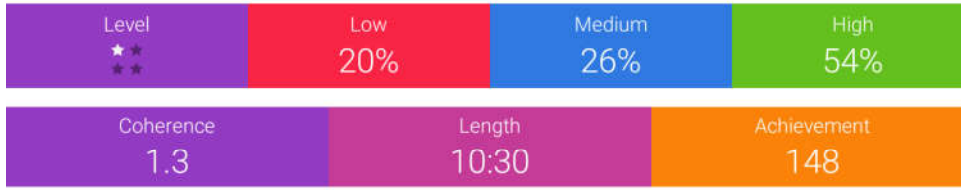


Me

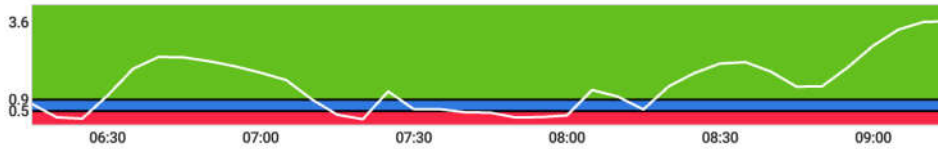
Session

Results

Terrific!

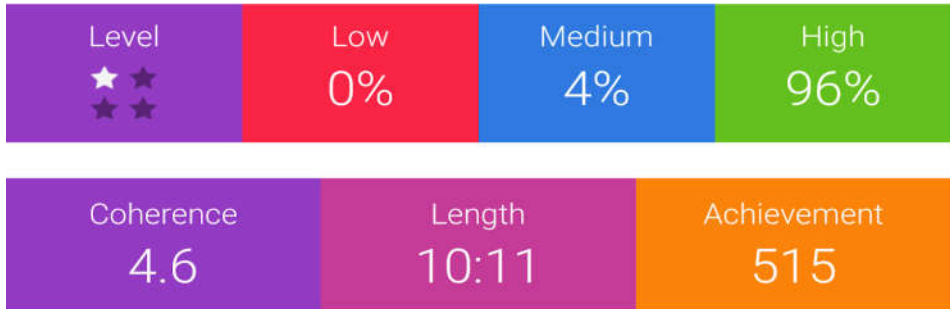


Coherence Over Time

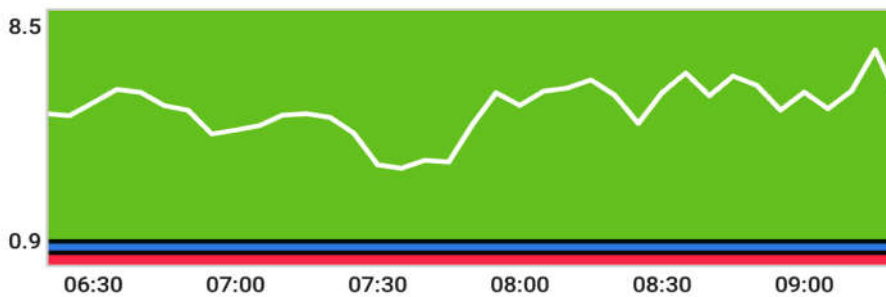


HRV

November 27, 2018, 2:37 PM



Coherence Over Time

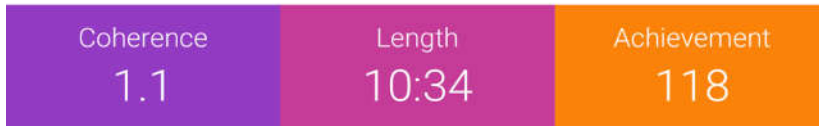
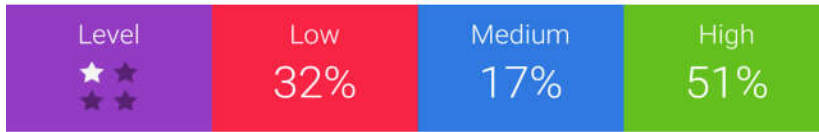


Maryann (distance)

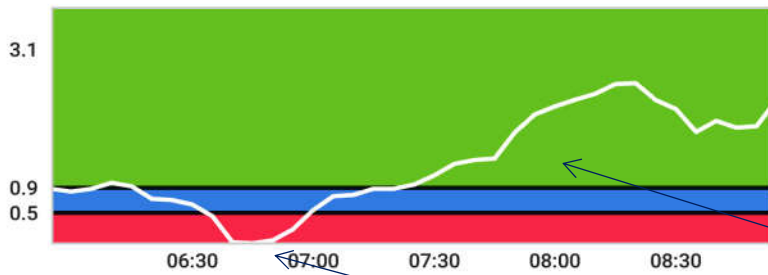
Note correlation in peaks and valleys overall, and especially 08:00, 08:30, and beyond.

Me

November 17, 2018, 5:08 PM



Coherence Over Time

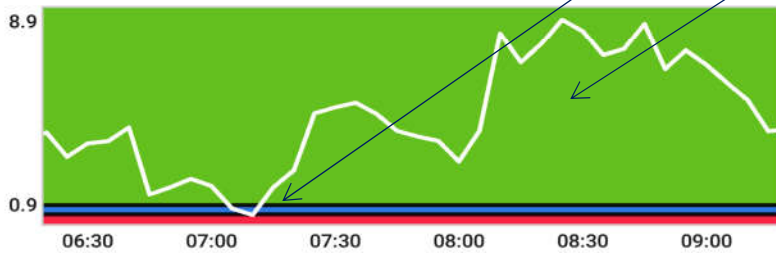


Trish (local)

November 17, 2018, 5:08 PM



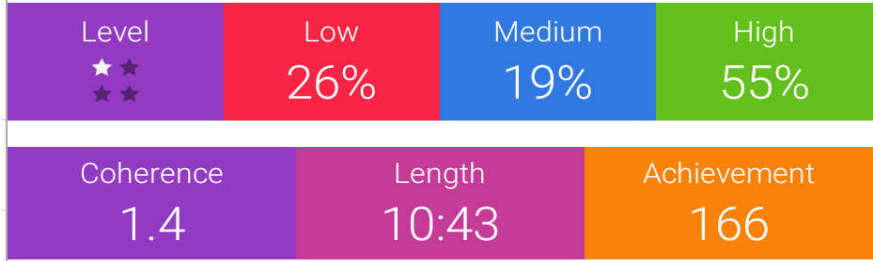
Coherence Over Time



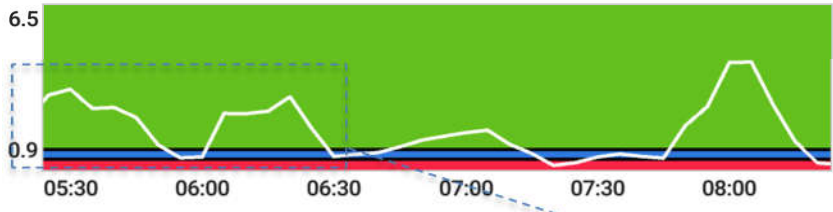
Me

Note similar decrease in coherence levels for both of us at 07:00, and the overall arch shape indicating coherence for us both from 07:00 on.

November 26, 2018, 1:43 PM

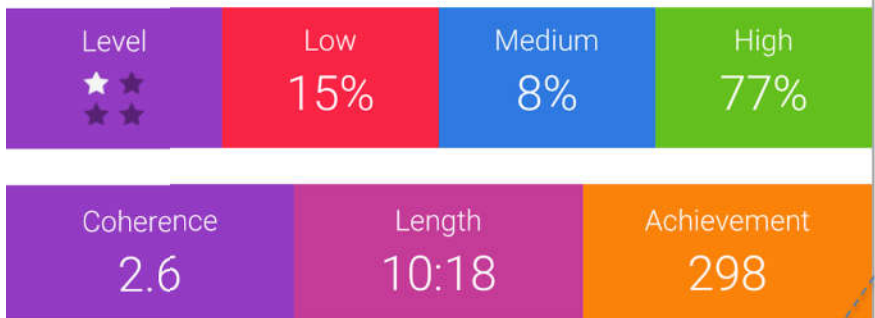


Coherence Over Time

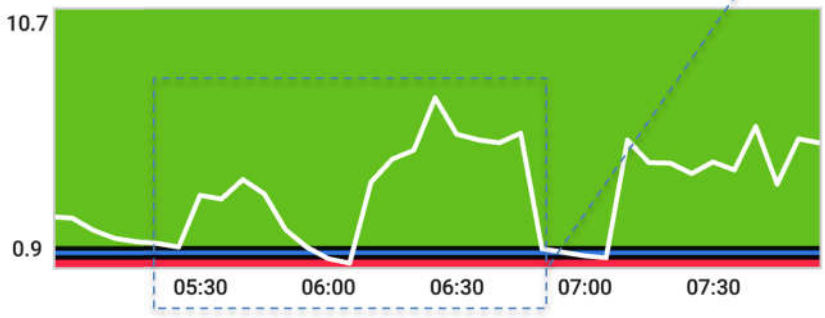


Christine (distance)

November 26, 2018, 1:44 PM



Coherence Over Time



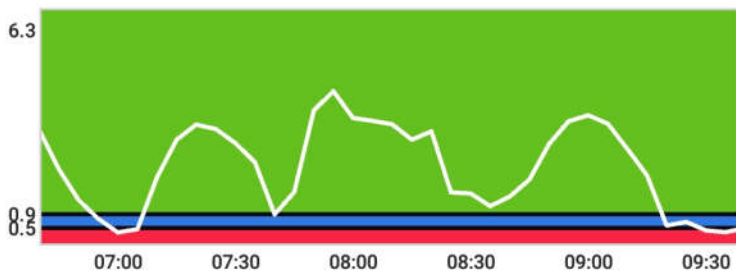
Note similarity in peaks and drops in coherence levels at the same time.

Me

November 28, 2018, 10:12 AM



Coherence Over Time

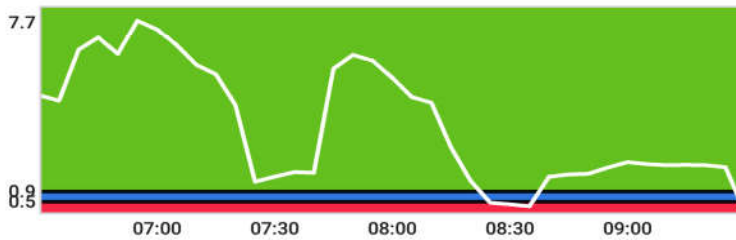


Amy (distance)

November 28, 2018, 10:12 AM



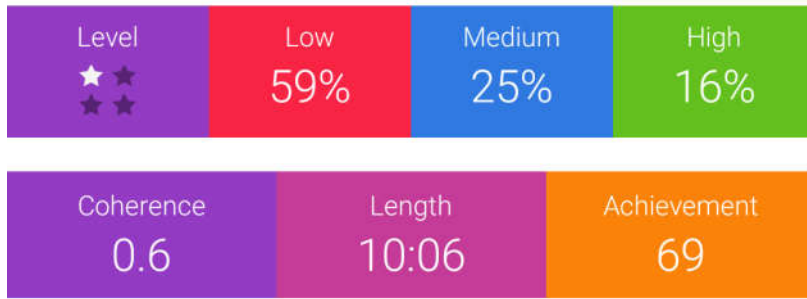
Coherence Over Time



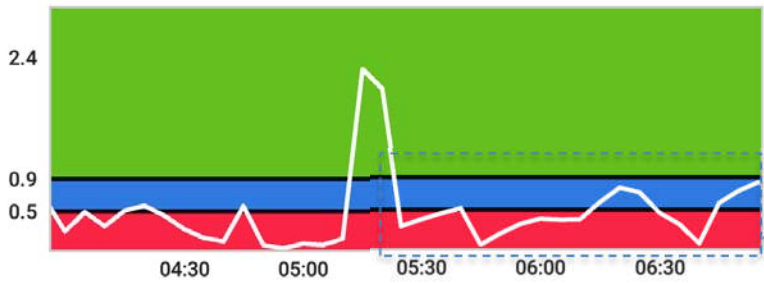
Me

Note parallel peaks and valleys overall.

November 04, 2018, 10:12 AM

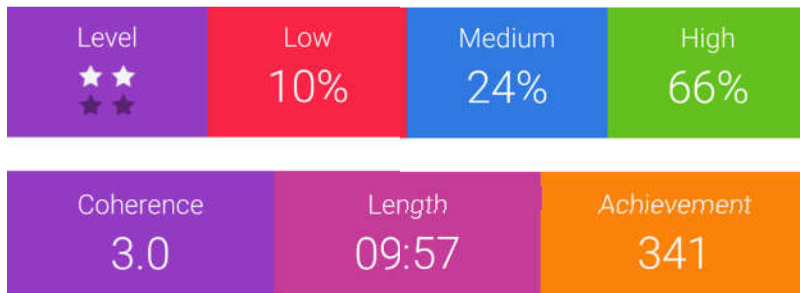


Coherence Over Time

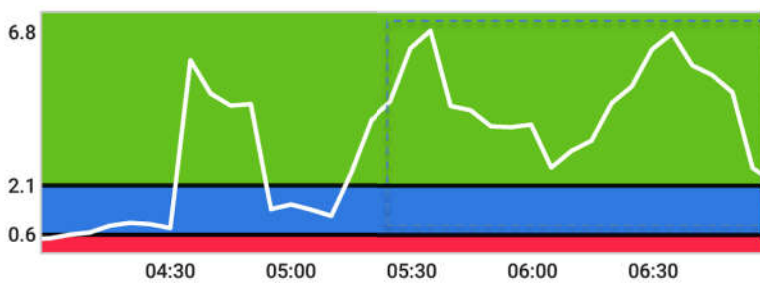


Sari (local)

November 04, 2018, 10:11 AM



Coherence Over Time



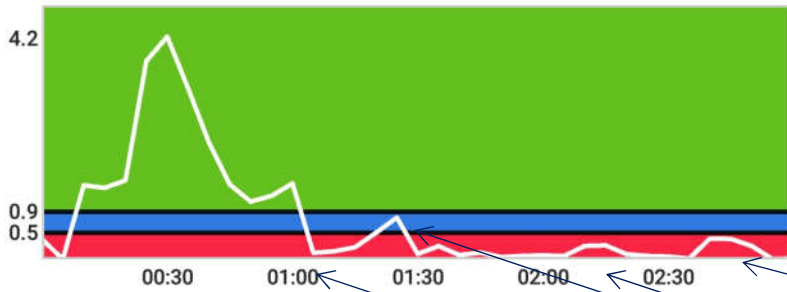
Me

Similar pattern of ups and downs in sync from 05:30 on. Even though my levels are higher (to be expected since I practiced this and my subjects didn't), the rises and dips match up in resonance.

November 26, 2018, 11:35 AM

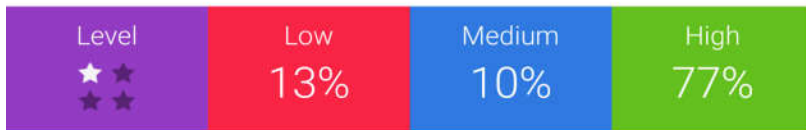


Coherence Over Time

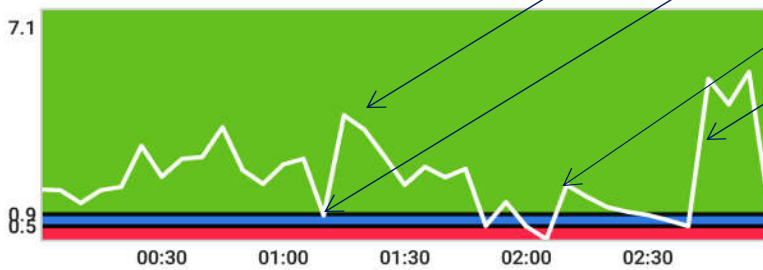


Connie (distance)

November 26, 2018, 11:37 AM



Coherence Over Time



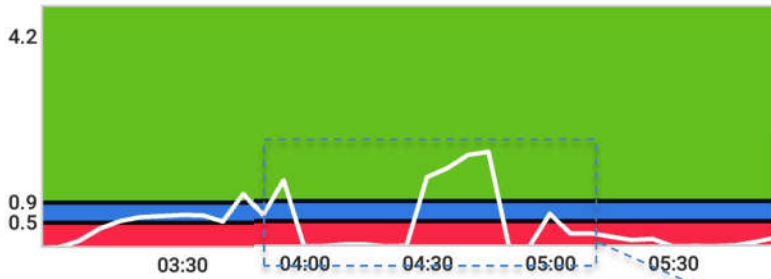
Me

Even before 5 minutes, Connie and I had similar drop at ~01:05, and peaks at 01:30, 02:10, and 02:35.

November 26, 2018, 11:35 AM



Coherence Over Time

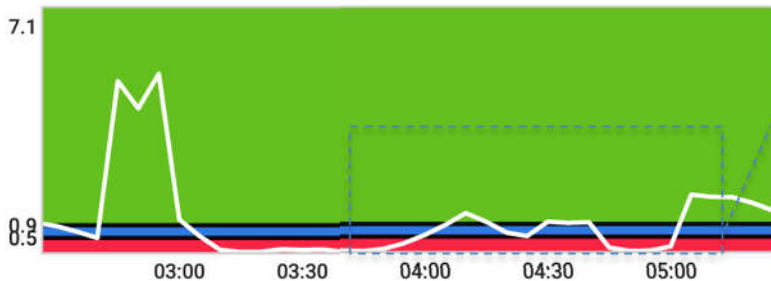


Connie (distance)

November 26, 2018, 11:37 AM



Coherence Over Time

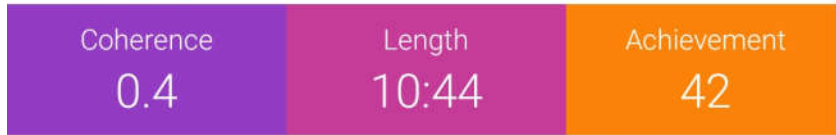
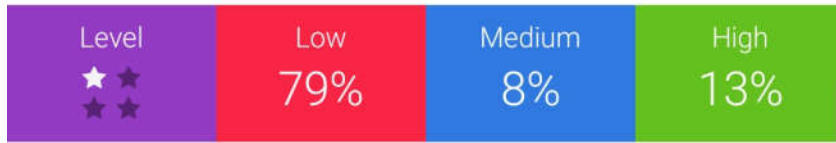


Me

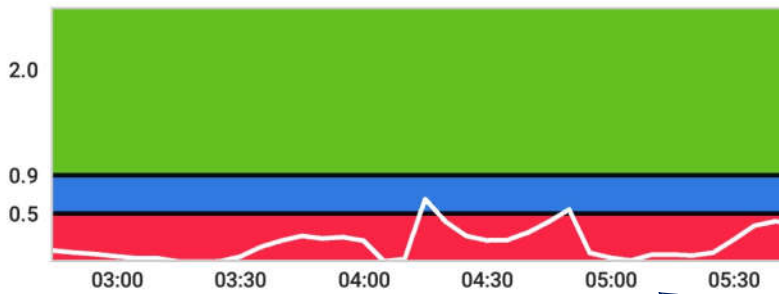
Even though I was barely in coherence (before 5 minutes), Connie and I had peaks in sync at 4:00, 4:30, and 05:00.



December 01, 2018, 4:17 PM

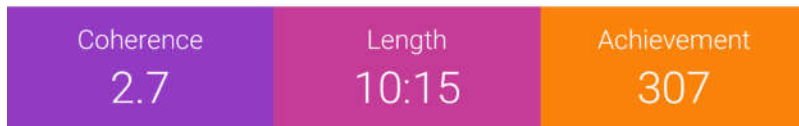


Coherence Over Time

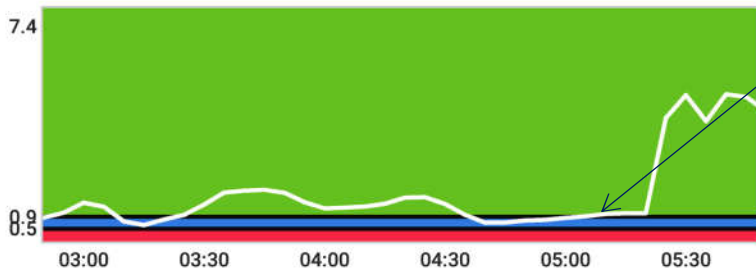


Bill (distance)

December 01, 2018, 4:17 PM



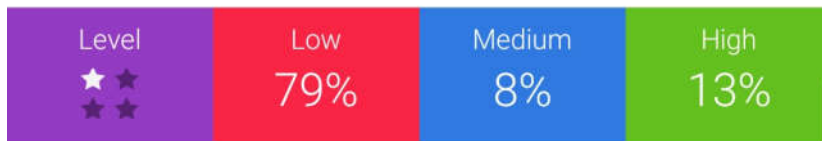
Coherence Over Time



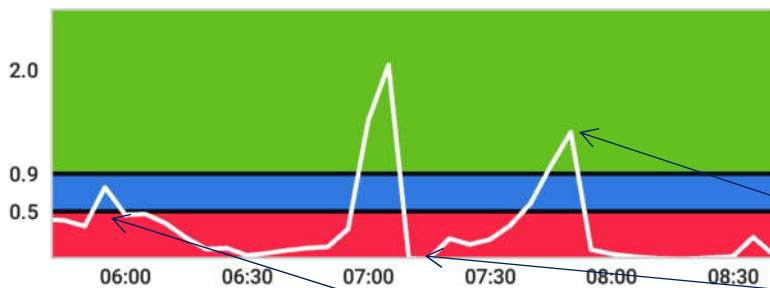
Me

Even before 5 minutes, Bill and I had similar levels from 03:30 to 05:00 and a low flatline from 05:00-05:30 when we both bumped up again at the same time as entered coherence.

December 01, 2018, 4:17 PM



Coherence Over Time



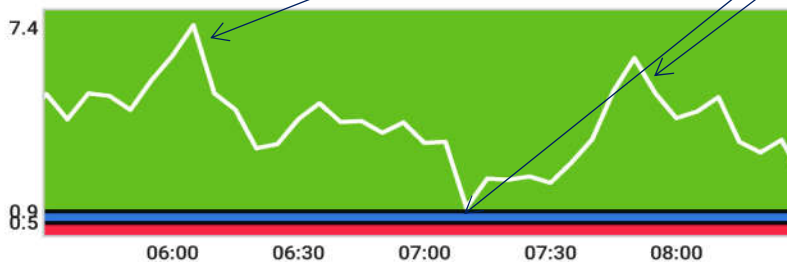
Note: similar peak at 06:00, dip just after 07:00, and peak again just before 08:00.

Bill (distance)

December 01, 2018, 4:17 PM

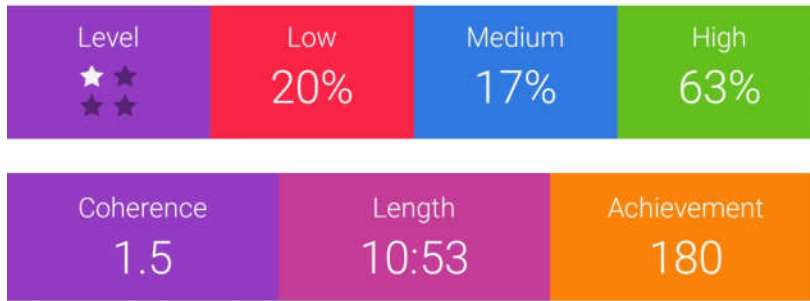


Coherence Over Time

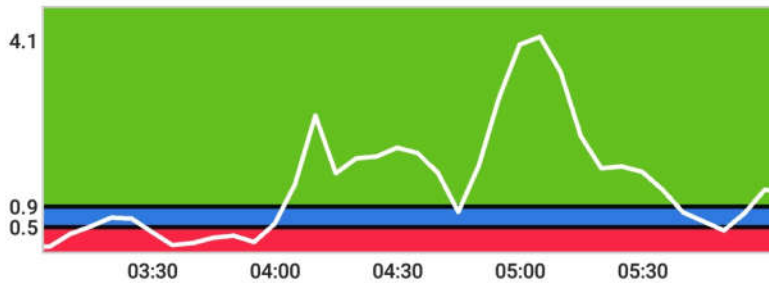


Me

December 05, 2018, 11:59 AM

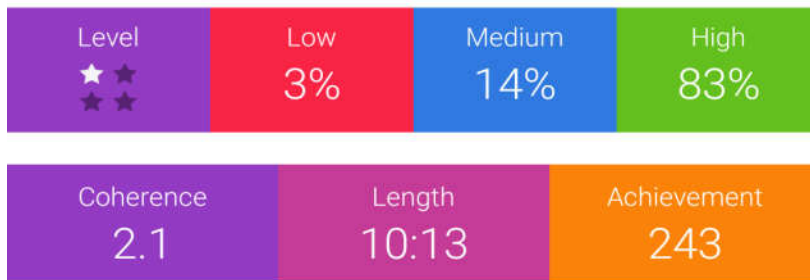


Coherence Over Time

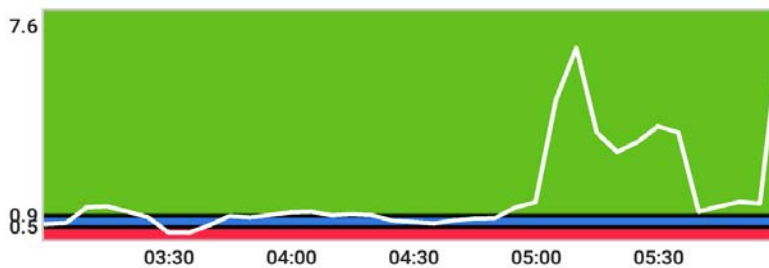


Diane (distance)

December 05, 2018, 11:59 AM



Coherence Over Time



Me

From 5 minutes (when I attained coherence) forward, Diane and I had a similar spike and then a dip right after 05:30.

Note her spike at 05:00 in line with my intention at that point in the experiment.