

A Therapist's Guide
Using HeartMath® Tools
with
**Clients with Post-Traumatic Stress,
Addictions, Chronic Pain, Grief and Loss**



Sara G. Gilman, M.F.T.
Marriage and Family Therapist
Fellow, American Academy of Experts in Traumatic Stress
EMDRIA Approved Consultant
Encinitas, CA

A Therapist's Guide: Using HeartMath® Tools with Clients with Post-Traumatic Stress, Addictions, Chronic Pain, Grief and Loss

Introduction: A message to my fellow therapists and caregivers

As you well know, people suffering from the after effects of psychological trauma are often left with high levels of anxiety, hypervigilance, poor sleep, depression and a deteriorating quality of life. Finding effective and worthwhile tools to enhance their stability and relieve stress-induced symptoms in their day-to-day life can help bring their mind, body and spirit back into balance.

As psychotherapists and mental health professionals we are in a unique position to help many people restore their lives. Our heartfelt hope for this guidebook is to support healthcare professionals in using the HeartMath® tools and technology. Over the years we have learned that many therapists would like to know how to integrate the techniques (Quick Coherence® Technique, Inner Ease™ Technique) and the emWave® heart rhythm coherence monitors into their practice.

The purpose of this guide is to share how therapists are using HeartMath tools in their work with clients who suffer from posttraumatic stress disorder, addictions, chronic pain, grief and other trauma related conditions. You will find simple ways to introduce these tools to your clients, along with rich clinical and case illustrations from colleagues around the world who have developed effective protocols for the HeartMath technologies with a variety of clinical populations.

In over 25 years of clinical practice I have studied many treatment modalities and like you, have taught my clients skills that help them to heal and grow. Without exception, the HeartMath tools are the most utilized tools I teach. I have learned to observe and listen to my clients. The immediate and ongoing benefits they obtain through the use of these tools have been wonderful to watch. At first, I thought this was too simple and was curious about why there was such a high level of compliance and positive reports. I then decided to learn more through my own use and the many educational opportunities HeartMath offers. This guide is meant to assist you in streamlining your approach to implementing these tools. In the back of this guide are additional resources to help you navigate the learning curve to greater utilization of the HeartMath technologies.

I want to thank the many therapists and health care professionals who willingly shared their knowledge and experience in this guide. With this Spirit of collaboration, we help each other impact the many lives we all come in contact with. I also want to thank HeartMath for their support, professionalism and vision to bring hope and healing to the world.

From My Heart to Yours,

Sara G. Gilman, M.F.T.
Marriage and Family Therapist
Fellow, American Academy of Experts in Traumatic Stress
EMDRIA Approved Consultant
Encinitas, CA
www.saragilman.com



HeartMath is a registered trademark of the Institute of HeartMath. Quick Coherence is a registered trademark of Doc Childre. Inner-Ease is a trademark of Doc Childre. emWave, emWave2, Personal Stress Reliever and Coherence Coach are registered trademarks of Quantum Intech, Inc.

Treating the Traumatized Client

Following traumatic experiences, clients come to us suffering from symptoms of anxiety, flashbacks, intrusive thoughts and images, hypervigilance, sleep disturbances, nightmares, avoidance behaviors, attention problems, etc. This dysregulation of the Autonomic Nervous System over time can severely impact a person's quality of life and ability to function in daily activities. Often people have lost confidence in their ability to calm themselves down and feel a sense of comfort in their own bodies and mind. How often have we heard clients say, "I just thought I had to live like this."

From a neuroscience perspective we know that the traumatized client may be stuck in a fight or flight mode of response to the world around them. The new field of neurocardiology has discovered that the heart communicates directly with the amygdala and is involved in creating emotional experience. Learning to down regulate the Autonomic Nervous System is an empowering experience for clients. They connect with their own ability to activate the innate healing wisdom of their heart. This becomes a useful new resource that is strengthened over time during their treatment.

Before the processing of traumatic material, it is imperative to assist clients in regulating their current level of functioning. The success in this phase of safety and stabilization is critical to the positive outcomes of processing traumatic material. At this stage, the HeartMath techniques – Quick Coherence® and the Inner Ease™ Techniques – should be viewed as resource tools to assist in grounding and stabilizing in the moment. As treatment progresses, these same tools are used to manage emotional states that become overwhelming.

This guidebook provides you with the knowledge to help your clients:

1. Gain useful tools to manage affect and overstimulation of the Autonomic Nervous System.
2. Provide in session mastery of anxiety and stress response, which builds personal confidence for further processing of traumatic material, in lowered states of arousal.
3. Intervene with themselves in between sessions for affect management skill building.
4. Discharge Autonomic Nervous System freeze response – releasing immobilizing energy.
5. Increase Adaptive Information Processing skills.
6. Increase Heart-Brain synchronization.
7. Increase the body's natural regenerative processes.
8. Maintain mental and emotional stability.

The emWave2® handheld and the emWave® Desktop products, developed by HeartMath, are advanced heart rhythm monitors that allow you to observe the heart's changing rhythms – called Heart Rate Variability (HRV) – in real time. Since emotions are reflected in the heart rhythm pattern the emWaves provide the therapist and the client a window into the emotional state of the client. Research has shown that the incoherence or coherence of the heart rhythm pattern has direct influence on the rest of the body's functions, mental and emotional states, and overall well-being.

HeartMath® techniques easily integrate into any modality of treating the traumatized client. Practicing these techniques with the emWave technology will improve the quality and coherence of the heart rhythms of your clients. Improving heart rhythm coherence can reduce their stress and reset their physiology.

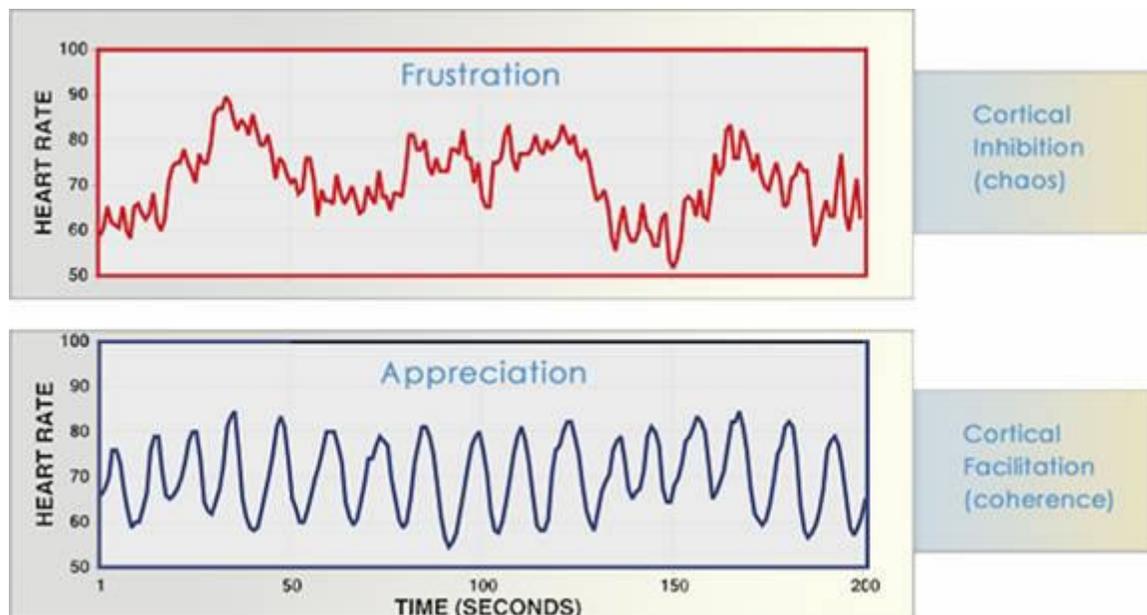
The Heart–Brain Connection and the Role of Emotions

Most of us were taught in school that the heart is constantly responding to “orders” sent by the brain in the form of neural signals. However, it is not as commonly known that *the heart actually sends far more signals to the brain than the brain sends to the heart!* Moreover, these heart signals have a significant effect on brain function – influencing emotional processing as well as higher cognitive faculties such as attention, perception, memory, and problem-solving. In other words, not only does the heart respond to the brain, but the brain continuously responds to the heart.

HeartMath research has demonstrated that different patterns of heart rhythm (which accompany different emotional states) have distinct effects on cognitive and emotional function. During stress and negative emotions, when the heart rhythm pattern is erratic and disordered, the corresponding pattern of neural signals traveling from the heart to the brain *inhibits* higher cognitive functions. This limits our ability to think clearly, remember, learn, reason, and make effective decisions. (This helps explain why we may often act impulsively and unwisely when we’re under stress.) The heart’s input to the brain during stressful or negative emotions also has a profound effect on the brain’s emotional processes—actually serving to *reinforce* the emotional experience of stress.

In contrast, the more ordered and stable pattern of the heart’s input to the brain during positive emotional states has the opposite effect—it *facilitates* cognitive function and reinforces positive feelings, emotional stability and perceptual clarity. This means that learning to generate increased heart rhythm coherence by sustaining positive emotions not only benefits the entire body, but also profoundly affects how we perceive, think, feel, and perform.

As the heart rhythms become more coherent (smooth and ordered), it can help release the emotional stress and balance affect, which often results in the reduction of traumatic stress symptoms such as flashbacks, sleep disturbances, hyper arousal and concentration problems.



© Institute of HeartMath 2011

HeartMath’s Quick Coherence and Inner-Ease Techniques presented in this manual are simple and effective ways to bring your body systems into synchronous operation allowing you to move through life in a state of ease.

When you begin teaching these techniques to your patients, keep it simple. Here are some essential steps to follow:

1. **Self Discovery:** Use the two tools yourself in your day-to-day life. Practice yourself so you become comfortable with the steps. Obtain and learn to operate the emWave2 device and emWave Desktop software program. The more comfortable you are with this the easier it is to teach it.
2. **Educate:** Briefly describe what heart rhythms are and what it means to be in *coherence*. Allow some time to educate your client regarding the effects trauma has on the mind and body. Recommend they read *"Transforming Stress"* by Childre and Rozman.
3. **Introduce:** Create your own way of introducing the tools that fits your style and addresses the benefits of practicing in session together. You can write up your own script or introduction. For example: *"Today you're going to learn an easy and effective way to reduce the impact of stress on your body and emotions."* Practice by introducing it to a friend or family member.
4. **Practice:** Give the client an opportunity to use the techniques and/or the emWave products consistently, not just during trauma processing. You can explain, *"The heart is a muscle, muscle has memory and must be exercised regularly to stay in shape. To strengthen this muscle and its' natural ability to be in a state of coherence, (in the flow, in the zone) it must be practiced over and over, during non-stressful times as well as during stressful times."*
5. **emWave Technology:** When using the emWave technology in session, you can learn a lot by observing how the client moves in and out of coherence. An easy way to develop a keen observing eye in this process is to use **your** emWave device daily. You will discover firsthand what helps and hinders the process. By strengthening your own coherence skills you will be able to better facilitate your client's processing.
6. **Complete history of current symptoms and identifying triggers:** Whichever psychotherapy methodology you subscribe to HeartMath tools can play a vital role in resource development, affect regulation and reduction of symptoms. During history taking it will be important to ask about bodily responses to trauma symptoms. As you integrate the emWave technology into your treatment you can go back and check the original reported symptoms for their frequency and intensity. (What we find with clients who use the emWave technology consistently over time is a significant reduction of symptom frequency and intensity.)
7. **HeartMath tools as resource development:** It is particularly important for the highly traumatized client to have a clear and dependable connection to positive inner resources. When someone has been suffering for a long time, connecting to positive resources can seem like a distant memory. As they learn to connect to themselves through the HeartMath tools a sense of relief and hope is often reported.
8. **Set realistic expectations for the traumatized population:** It may seem awkward to ask a highly agitated or traumatized client to generate a positive feeling as in the Quick Coherence Technique. At the beginning you may find responses like, "relief or hopeful" rather than "joyful or confidence". Most people can come up with a small thing they are grateful for such as being in the session, petting their cat or that they are still alive. Start wherever they are. Using guided imagery can help a blocked client gain a sense of calm or peace.
9. **Session closure:** Ending sessions in a state of coherence will not only help the client make the transition to the outside world, it will also help deepen the therapeutic

relationship. Practicing heart focused breathing together creates an environment of safety and trust. When both client and therapist are in a coherent state together a genuine exchange of communication easily occurs.

Two tools: The Quick Coherence® Technique, Inner-Ease™ Technique

These techniques can be done with or without the emWave monitors. For further descriptions refer to HeartMath's *Practitioners Guide, The Coherence Coach® CD, Transforming Stress* book or take the HeartMath Interventions clinical training program for health care professionals. These resources can be found at www.heartmath.com (See Additional Resources at the end of this guidebook)

The Quick Coherence Technique:

- is a friendly way to help people begin to take responsibility for their own emotions.
- helps reduce the impact of stress on your mind and body and reduces the energy drain, so you can feel more renewed.
- allows you to step back from your racing mind and your emotionally charged feelings.
- gives you a chance to pause your emotions and thoughts long enough to consider the consequences and options.

There are three steps to the Quick Coherence Technique. It is often helpful for traumatized patients to practice and learn the first two steps until they become calm and comfortable with the process. This can help them gently neutralize negative states such as fear, anxiety, anger, etc, and help them to find a more neutral state. The steps are below.

Step 1 – Heart Focus: Gently focus your attention in the center of your chest – in the area of your heart. (Most people think that the heart is on the left side of the chest, but it's really closer to the center, behind the breastbone.) If you like you can put your hand over your heart to help. If your mind wanders just gently shift your attention back to the area of your heart.

Step 2 – Heart Focused Breathing: As you focus on the area of your heart imagine your breath is flowing in and out through that area. This helps your mind and energy to stay focused in the heart area and your respiration and heart rhythms to synchronize. Breathe slowly and a little deeper than you're used to, perhaps to a count of 5 in and 5 out. Do this until your breathing feels smooth and balanced, not forced. Continue until your emotions have become calmer and the emotional charge around issues or thoughts has become more neutral.

The simplified steps to a more neutral state are ... *Heart Focus, Heart Focused Breathing.*

This will help:

- Stop the impact of stress on your body.
- Disrupt intrusive thoughts or images.
- Eliminate the energy drain.
- Remove the drama or significance of a situation.

Step 3 – Heart Feeling: Make a sincere attempt to recall a *positive feeling* by remembering a time when you felt a sense of comfort or calm inside and try to re-experience it. You can

remember a beautiful place in nature that you like to visit, or a person you love or care for, a pet or a favorite activity. It can also be a feeling of appreciation or gratefulness for people or experiences. Bring these feelings into your heart area and attempt to re-experience them as you breathe easily and deeply.

Sustain the positive feelings by continuing with the Quick Coherence steps for a few minutes at first, then increasing the length of time as you become more comfortable with the process.

The simplified steps of the Quick Coherence Technique are . . .

Heart Focus . . . Heart Focused Breathing . . . Heart Feeling

Each step is important.

- The Quick Coherence Technique (QCT) can be practiced anytime, anywhere with your eyes open or closed, for any length of time. It empowers you to self-regulate, to shift from one way of feeling to another. QCT goes beyond the relaxed or neutral state by *changing the emotional memories and patterns* that underlie stress. The technique gets your heart rhythm into a smoother, more regulated pattern reflected by the emWave monitors, and helps you to reset yourself from the impact of your inner stress.
- Practicing QCT creates more positive new emotional reference points that can be assessed in stressful situations.
- The power of QCT comes from self-activated, positive feelings. With a little practice positive feelings become easier to generate and begin to feel natural.

The Quick Coherence Technique is very effective in the stabilization phase of treatment and resource development. It can also be beneficial in helping patients arrive at their own insights and solutions to their problems.

Helping Patients to Realize Their Own Solutions

When patients become more coherent they often see their stressful issues from a broader, more balanced perspective. I've often found it beneficial to suggest they ask themselves *what might be an efficient, effective attitude or action that might resolve the issue*. I suggest they quietly sense any change in perception or feeling and share it with me. I ask them to sustain the new perception or feeling as long as they can.

Case Illustration:

Dave MacDonald, LCSW, EMDRIA Certified Therapist, Atlanta, Georgia

The Practitioners Guide, p.16. Emotional/Behavioral Disorders Case Study 1, Clinical Psychology.

"I have a private psychotherapy practice in the Martin Luther King, Jr. National Historic Site in downtown Atlanta, Georgia. I also spend a day each week in an urban low cost clinic. I work with adults ranging in age from their early 20's into their 70's. In both practice settings most of my patients are city dwellers. They present with a spectrum of diagnoses ranging from Generalized Anxiety Disorder to Complex Post Traumatic Stress Disorder. Some seek to resolve creative blocks limiting their art and others are seeking freedom from lives interrupted by intrusive recollections of a painful childhood. I introduce each of them to the emWave heart rhythm monitors regardless of their presenting problem.

I usually present the emWave monitors in this manner: I tell my patients that change, while sometimes desirable (and always inevitable) is nonetheless often contrary to the habitual nature of humans.

I explain that psychotherapy will often stir up memories and emotions and that part of their therapy will involve my teaching them some basic skills. These skills, in emotional self-regulating as practiced with the emWave monitors, will help them to understand and manage these “periods” so they might make the best therapeutic use of them.

I want to teach my patients how to “soothe” and “ground” themselves. I help them learn that they can change their minds about a problem by using the emWave monitors to shift the emotional state. They discover new ways to manage their emotions rather than feeling controlled by them. The emWave monitors quickly and easily show them the power of their own thoughts and feelings and the immediate effect they can have on their body. One goal of therapy, stated or not, is always to heal the past *in the present* and thereby free the future for new possibilities. The emWave monitors are valuable tools that help my patients learn that they can change their minds.

I use the emWave technology in conjunction with these psychotherapeutic techniques:

1. Psychodynamic/Insight Oriented (talk) Therapy
2. Eye Movement Desensitization and Reprocessing (EMDR) I believe the emWave Stress Relief System – now called the emWave Desktop – has many elements similar to EMDR. One primary similarity being the attention paid to multiple stimuli. Similarly, I think of the emWave Stress Relief System as helping the user to “reprocess or rethink” ideas that may have gotten “stuck” due to strong emotion or dysfunctionally stored information. I suspect the emWave Stress Relief System might have a similar effect on sub-clinical problems that professionally administered EMDR has on more florid clinical issues.
3. Peak Performance Enhancement.

Case Illustration:

**Jeffrey W. Smith, MFT,
EMDRIA Approved Consultant
Vista, CA**

“I use HeartMath’s emWave Desktop with a large screen monitor for my clients to observe real-time feedback of their Heart Rate Variability (HRV) during their clinical treatment. This unique tool is significantly beneficial to both the patient and clinician/coach by being able to evaluate and track their progress in self-regulation while processing traumatic events/memories. The emWave Desktop monitors the patients pulse and plots the data in an interactive presentation that depicts low, medium and high states of coherence using a dynamic chart, colors and sound tones to entrain the mind/body/field. Being able to move from low to medium and on to high coherence is powerfully rewarding to the patient. They experience increased attunement with their thoughts, emotions, body sensations and environmental awareness. I encourage my clients to also use the emWave hand held unit at home and outside the clinical setting to reinforce the trauma recovery process. As clients learn to shift from low to high states of coherence in a variety of settings and circumstances, they feel empowered and confident to move through their past traumas and really begin living their life dreams.”

Frequently Asked Questions from Therapists – “What if...?”

What if the client cannot identify a positive feeling or find anything to appreciate?

When a client is unable to clearly identify and recapture a positive feeling, usually it is because they are trying to identify a big feeling. Remember that feelings such as love often have a bitter and a sweet side to them. The client suffering from trauma and loss may be emotionally disengaged due to the pain. Start small with a quiet or calm place in their body or a recent moment of relief. Look for subtle shifts such as a spontaneous deep breath, change in posture or muscle tone, increased swallowing, then use your own intuition to help the client see this as positive. Acknowledge this may be difficult at first and with practice their ability will improve in time. The heart focused breathing can be helpful here until they develop a greater comfort level with a calmer state.

What if the client has great difficulty identifying feelings and distinguishing between feelings and bodily sensations of emotional arousal?

In some cases, the client may be suffering from Alexithymia, where they have difficulty identifying and describing feeling to others. Primary Alexithymia is more of an enduring psychological trait where Secondary Alexithymia is a state that is dependent upon and disappears after a stressful situation has changed. This may be seen in cases of PTSD and physical trauma. Using HeartMath tools in these cases requires patience and encouragement. They may find working with emotions produces symptoms of anxiety or depression and often will be unable to tell that the change in the autonomic arousal system is separate from their feelings of stress, even if there are improvements in coherence ratios. Clients with secondary alexithymia may limit their use of emotions in a self-protective way to avoid recalling overwhelming emotions. Start slow with heart focus and heart breathing and let them describe what they are experiencing. You can assist them by asking questions like; “If the feeling were a color, what color would it be? If it had a texture or shape?” Helping them feel safe while encouraging this process will help them move forward. (Special clinical considerations should be emphasized when working with clients with significant attachment disorders or dissociative disorders.)

What if the person is uncomfortable breathing slowly?

When asked to breathe slowly, a client did not want to do it. When the therapist asked why, she said “My grandfather who abused me would tell me to breathe slowly while he was hurting me, I can’t do it.” The therapist simply said, “Ok, for now can you simply refocus your attention to your heart.” She started with that and as trust developed and information about the impact of traumatic stress was introduced, the client was able to begin to breath along with the exercises, while orienting to the current time and without being consistently triggered from the past events. Remember these tools are about emotional refocusing and restructuring thoughts and feelings while breathing.

The following technique can also help.

Inner-Ease™ Technique* – Basic Steps

- (1) If you are stressed, acknowledge your feelings as soon as you sense that you are out of sync or engaged in common stressors— feelings such as frustration, impatience, anxiety, overload, anger, being judgmental, mentally gridlocked, etc.
- (2) Take a short time out and do heart-focused breathing: breathe a little slower than usual; pretend you are breathing through your heart or chest area.

- (3) During the heart-focused breathing, imagine with each breath that you are drawing in a feeling of *inner-ease* and infusing your mental and emotional nature with balance and self-care from your heart. *It's scientifically proven that radiating love and self-care through your system activates beneficial hormones and boosts your immunity.*
- (4) When the stressful feelings have calmed, affirm with a heartfelt commitment that you want to anchor and maintain the *state of ease* as you re-engage in your projects, challenges or daily interactions.

It's ok if a disruption takes you out of the ease-state throughout the day; just reset your intention with a genuine heartfelt commitment and start again. You'll have to reset your commitment periodically, yet soon you can remain longer in the ease-state and with lower maintenance. In a short time, with practice, you won't need to labor through all the steps. You will be able to skillfully and consciously just "breathe" yourself into the ease-state.



* Reprinted by permission of Doc Childre. Download and share with others as long as you attribute the work to Doc Childre without changing it in any way or using it commercially.

A therapist describes his experience with HeartMath tools after Hurricane Katrina:

Natural disasters, critical incidents, medical traumas and military combat all require immediate response to manage life threatening stress and trauma. HeartMath has developed a Short-term crisis/Trauma Protocol (Heal the Moment). This protocol helps to neutralize stressful emotions and increases the ability to think clearly in times of extreme stress. This protocol is taught in the HeartMath Interventions Certification training for health professionals.

Butch Robicheaux, LCSW Clinical Director, Family Services of Greater Baton Rouge

Butch and other therapists used HeartMath tools in the first six weeks following Hurricane Katrina. In his YouTube presentation (<http://www.youtube.com/watch?v=E61WHQD2OvU>) he discusses how the hurricane survivors had lost everything, were displaced and grieving. They were suffering from severe anxiety. He talked with them about our inability to control our outside environment but we can control how we will perceive things and how we will respond. Teaching the Quick Coherence Technique produced immediate relief for many adults and children.

PTSD and Military Personnel

Troops returning from Afghanistan and Iraq are experiencing the highest rates of PTSD in the history of the military. It is reported that an average of 18 returning service members commit suicide each day. It is clear the stress of military service affects those enlisted and their families.

Research joins with practical applications in addressing the after-effects of Military Combat.

In July of 2010, the journal, *Alternative Therapies in Health and Medicine* published an article entitled; *Cardiac Coherence and Posttraumatic Stress Disorder in Combat Veterans*, by Jay P. Ginsberg, PhD; Melanie E. Berry, MS; Donald A. Powell, PhD

It reads:

"All 10 of the pilot study participants expressed enthusiasm about their experience in the HRV pilot study and their perception of its benefit to everyday living. The PTSD+ veterans were

particularly enthusiastic about the benefits of HRV, as shown by this statement that one of the PTSD+ veterans made to study personnel during the final debriefing:

"I am an OIF and Gulf War veteran. I recently returned from Iraq, where I experienced 5 IEDs and 1 RPG explosions. To deal with all the pain I felt after I got back I self-medicated for several months with alcohol and marijuana, but after weaning off of both I was determined not to use narcotics of any kind to cope with the pain. Being part of this experimental HRV training program has changed my life and given me a practical, non-medicated way to reduce the pain and handle the stress. One time in particular, stress from the relationship with my wife was robbing me of sleep and causing me to lose control. I remembered the emWave tool and after about 30 minutes of practice I was calm and able to go back to sleep. The benefits of HRV training are so much better than medication because I am learning a way to self-regulate anywhere, anytime without risk of dependency or that drugged feeling. I'm so grateful for being part of this pilot study. My last BP reading was 115/76, compared to previously when it was 120/95. My heart rate has dropped from the 90s to the 70s."

A veteran therapist has a passion for working with Military Veterans who suffer from PTSD.

***Dr. Jonathan Douglas, Ph.D., Clinical Psychologist
Barrie, Ontario.***

"I've been using HeartMath software products in my clinical practice since the late 90s, and have always found them to be highly beneficial in my treatment of anxiety disorders in general. The emWave device added significantly to the utility of HRV training, providing my patients with the opportunity to practice at home or on the street.

My current practice is based largely on the treatment of Veterans and active Members of the Canadian Forces. Most of my patients have PTSD. In this population, the emWave device is particularly and uniquely beneficial. I compare the motion of the LED lights to sitting at a campfire: the stimulus naturally draws the attention, and it's easy to remain focused on it. This means that flashbacks, dissociation, irritability and anxiety can be handled with a device that can be carried in a pocket or purse, and which provides nearly instantaneous grounding. With practice, the [heart focused] breathing exercises have the potential to reduce the frequency of such events—and the "coolness" factor [of the emWave monitors] encourages my patients to get that practice regularly.

When treating trauma, a phase-oriented approach is best. Phase One involves stabilization. This includes the assessment phase; psychoeducation about the disorder; and the introduction of cognitive behavioral techniques aimed at symptom reduction, including relaxation strategies and grounding techniques. It's in this phase that I introduce the emWave program and device. Phase Two includes confronting triggers and memories through exposure techniques such as EMDR. This more challenging phase is made more tolerable by the patient's familiarity with the Phase One interventions, and the emWave device often helps to deal with the sequelae to a tough session. Phase Three focuses on rehabilitation, and again, the emWave device can be beneficial in increasing stress tolerance, improving sleep, and reducing fatigue, all of which will be helpful as we return the patient to his or her productive life.

I continue to use the emWave PC – now called the emWave Desktop – program as well, which allows me to provide detailed coaching on the process of learning the technique. I generally begin teaching about HRV with training on my computer in my office. Introducing the device is then quite simple: I explain that the [emWave2 portable] device contains essentially the same software, allowing them to transfer their training to the use of the device. I lend them the device for use at home, and if they choose to keep it, they can reimburse me for the purchase price later on. (The devices are not covered by Veterans Affairs Canada at this time. However, I have often had success getting other insurance providers to cover their cost).

Once I have trained the patient in the use of the device, I often don't use it again within the sessions; however, I frequently use the breathing techniques which they have learned. Deep breathing is a component of exposure therapies such as EMDR, and I suspect that their prior learning of HRV and practicing with the device helps my patients use the deep breathing more effectively. Indeed, once the patient is well trained with the device, taking just a few a deep breaths likely becomes a stimulus which leads to the conditioned response of feeling calmer, more relaxed, and more centered.

What's more, HRV device training teaches people to be aware of the feeling of their beating heart. This sensation may have formerly been a signal of an impending panic attack—and may have been something of a self-fulfilling prophesy, leading to anxiety whenever they felt their heart beating. Through training, anxious patients can learn to not only tolerate the sensation of their beating heart, but to use that sensation for their own benefit.”

Complex posttraumatic stress = complicated symptoms and complicated treatment.

Complex trauma can result from sexual abuse, physical abuse, emotional abuse, domestic violence, childhood neglect, torture, military combat and experiences where someone is exposed to multiple life threatening events. Treatment for C-PTSD requires a multi-modal approach. Problems associated with this disorder include emotional dysregulation, dissociation, psychosocial fragmentation, interpersonal problems, loss of a sense of safety, trust and self-worth. There is a tendency for these clients to be re-victimized. One of the most important features in C-PTSD is the person's loss of a coherent sense of self.

Therapists who work with this population have effectively used HeartMath tools as part of their integrative treatment.

***Jeri Lynn Schroeder M.S., M.A., LCPC
Portland, ME***

“One of my clients in his early 60's with complex PTSD, learned to manage his flashbacks through utilizing HeartMath tools. He has never wanted to work directly with his trauma.”

Eye Movement Desensitization and Reprocessing (EMDR) Therapy

EMDR is a comprehensive psychotherapy treatment approach developed by Dr. Francine Shapiro in 1986. There are over 20 controlled research studies to date and it is the most researched treatment for PTSD. EMDR is a top rated therapy for the treatment of PTSD. Many EMDR trained therapists have integrated HeartMath tools into their trauma treatment either in the early phases of resourcing and stabilization or later in the 'future template' phase.

***Andrew M. Leeds, Ph.D.
EMDRIA Approved Consultant
Director of Training
Sonoma Psychotherapy Training Institute***

<http://www.heartmath.com/health-professionals/health-professionals-speaker-series.html>

“I use the emWave computer based technology in my practice in two distinct and different ways. First, I use it to help selected patients develop self-capacities for emotional and physiological self-regulation. These patients find the visual feedback from the emWave Mac program helpful to validate their perceptions and skills for self-soothing. Some of these patients go on to purchase the technology for use in their homes or workplace settings. I also have used the emWave Mac

to monitor certain patients during standard and modified EMDR procedures to detect changes in their physiological states that may be difficult to directly observe. These patients tend to be survivors of severe early neglect and abuse with avoidant or disorganized insecure attachment who developed rigid dissociative defenses (in Cluster C related personality disorders) or structural dissociation of the personality (in DDNOS or DID). Sudden increases and decreases in heart rate and heart rate variability appear to be associated with spikes in arousal and subsequent dissociative changes in discrete state when these patients exceed their "window of tolerance" or encounter external or internal threat cues. The emWave Mac has helped me to recognize these moments more easily and to help me to clarify whether my interventions are resolving (or triggering) these patients' clinical issues."

Carol Maker, LCSW
Inner Courage LLC, Portland Oregon

"In working with highly traumatized clients it is important to see the results of Heart Rate Coherence in the context of the full clinical picture.

For instance, a DID (or suicidal) client may have one part of the self able to obtain coherence and one part that may not, making coherence achieved with HeartMath one of several important indicators in the assessment of safety issues.

And although some trauma victims may find HeartMath immediately helpful, others may not find it soothing at first. For these patients, letting go of hyper-vigilance can be irritating or even terrifying, as they have relied on this state to survive and may not have access to other states.

Therefore, in my experience, we should refrain from making a clinical judgment about not being able to achieve coherence as "bad" or as "resistance." Ideally, the successful use of HeartMath tools with trauma processing (as in EMDR) allows a client to understand they have an available relief from the symptoms whenever they want, and that they are strong enough to face the emotions with proper clinical support."

Steve Sawyer, LCSW, CSAC
Clinical Director/ Co-Owner
Dynamic Interventions & New Vision Wilderness Program, Germantown WI

"Throughout my last 10 years of intensive trauma and attachment focused clinical interventions the science of HeartMath has proven to be one of my most effective tools when used in combination with other advanced clinical interventions. This is based in the evidence from hundreds of interventions that I have both supervised and performed. The state of high coherence makes all forms of clinical intervention easier to implement and helps produce a long lasting effect. For instance, in EMDR therapy I have noticed a state of high coherence allows for the client to more effectively identify targets, and perpetuates bi-lateral stimulation to work more effectively by preventing dissociation.

Another key variable in trauma treatment is the perception of real or imagined powerlessness. HeartMath's protocols are a self-empowering approach to calming the nervous system. The techniques allow traumatized clients to take charge in their own therapeutic process eliminating the helplessness response. In my work with wilderness therapy the sense of powerlessness is imminent and HeartMath's techniques are a crucial buffer keeping our clients from becoming over stressed. Coherence focused interventions ensure that the therapeutic process can continue without the rise of defenses, shame, and fear responses that accompany trauma allowing for continuous therapeutic gain. The neurological effects of HeartMath practice are truly a therapeutic catalyst in trauma treatment. HeartMath tool practice is empowering in the healing process through the clients own efforts and allows for advanced interventions like EMDR, Traumatic Reprocessing models, or Narrative work to occur without the strong internal resistance."

Jeri Lynn Schroeder, M.S.,M.A., LCPC
Portland, ME

"I introduce HeartMath tools to every one of my clients on the second session. I think about the heart breathing as part of resourcing. When actually doing EMDR, I emphasize the connection with the heart as a grounding support for staying in the process. I ask my clients to practice extending the Quick Coherence Technique (QCT) once or twice a day starting with five minutes and then ask them how the practice is going as a follow up. I also teach them to use QCT during conflict with another person by noticing the energy arising from the conflict, ask them to connect with their heart and find something they appreciate about the other and extend that towards the other or just send compassion towards the other. I feel like the science and research behind the HeartMath system and the simplicity and empowerment of these skills provides us with solid, profound, applicable tools to offer to our clients."

Emergency Service Personnel and First Responders

911 Call Center Operators experience near daily exposure to callers in the midst of life-and-death traumas. They have frequent and direct contact with traumatizing events including "Officer Down" calls, the suicide of callers, calls involving death or injury of a child and more. Repeated exposure to this kind of acute stress can have a serious personal impact on operators including life-changing problems in mental and physical health, job performance, and their relationships. The case study results below presents how HeartMath tools have helped operators reduce their stress both in-the-moment and over the long term.

Jim W. Marshall III, M.A.
Director, MasterCare Institute, PC, Founder 911 Training Institute
Petoskey, Michigan

"Following my discussions with HeartMath staff and reading the peer reviewed journal articles on Coherence, and subsequently purchasing my own emWave device, I have felt compelled to educate my clients and the 911 professionals I train about HeartMath. There is simply too much value to be gained in personal health and peak performance to overlook this science and technology. When offering psycho-education, I hear myself sounding like a spokesperson for a treatment, service, and technology that I don't profit personally from espousing. I know that comes from personal conviction that it is simply best for my clients and students. That has been the case with HeartMath tools. Self-medication and ignorance must give way to self regulation of stress among those who struggle with anxiety, depression, trauma; and any process folks can learn that empowers such skill building should be on the top of our list as helpers!"

Sarasota County 911 Call Center: HeartMath Training Results **Sarasota County, FL**

Comparative Results Highlights: All numbers are average paid per quarter over a one-year period. The control group did not receive HeartMath training or any other stress management training. These individuals were chosen due to similar job, stress, and working conditions, and were used as a comparative basis for results.

Significant improvements in the HeartMath trained group include

- **Medical Expenditures** – The control group average Medical Paid per quarter increased by 19%. The HeartMath trained group average per quarter decreased by 11%.

- **Total Medical and Pharmacy Expenditures** – The control group average per quarter increased by 30%. The HeartMath trained group average Total Paid per quarter increased by 8%.
- **Utilization**
 - **ER Visits / Admissions**
 - Control group decreased by 17% per quarter.
 - The HeartMath trained group decreased by 50% per quarter.
 - **Scripts**
 - The control group number per quarter increased by 30%.
 - The HeartMath trained group increased by 9%.
- **Risk Index (RI)**
 - The control group average RI increased by 20%.
 - The HeartMath trained group average increased by 10%.
- **Care Gaps (CG)**
 - The non-intervention group average number of CG's decreased by 11%.
 - The HeartMath group average decreased by 22%.
 - While surprising that the non-intervention group showed a reduction in CG's without some form of intervention, **the HeartMath group showed twice the improvement of the non-intervention group.**

Risk Index (RI) – Indicator of health status based on unhealthy habits and activities
(lower is best)

Care Gaps (CG) – Gaps in an individual's medical care that could lead to a medical incident
(lower is best)

Addiction Recovery: When Trauma and Addiction Collide

Many people who are recovering from substance abuse and other addictions experience high levels of daily anxiety and mood changes. It is common knowledge that a high incidence (30-50%) of people who suffer from substance use disorder also have PTSD. PTSD is known to negatively affect outcomes in SUD treatment. What addiction therapists see is once a client is clean and sober symptoms of PTSD resurface (anxiety, hypervigilance, arousal, flashbacks, insomnia). Living with these symptoms over time can increase the urge to return to substances to medicate the discomfort. Current research supports a self-medication model and recommends using integrated interventions for overall improved treatment outcomes.

Therapists and clients have discovered how HeartMath tools easily integrate into addiction treatment. Educating substance abusers about hyperarousal in the limbic centers of the brain helps them understand the inner brain-driven decisions that previously were inexplicable to them. Educating them about the relationship between trauma and substance abuse helps them see how one impacts the other. Heart focused breathing and the Quick Coherence Technique are effective tools to integrate early in treatment. Helping clients understand their trauma symptoms and giving them tools to intervene sooner than later may help to prevent relapses. The tools can be utilized for urge reduction as well.

Case Illustration:

For Robert, emotional relapses of explosive anger always preceded his relapse into drinking. After years of this rollercoaster he joined Alcoholic Anonymous to address his alcohol addiction. His sobriety was going well. He attended weekly AA meetings and worked closely with his sponsor going through the 12 steps of the program. His anger resurfaced which created fear and anxiety of the explosiveness returning. While working through the steps with his sponsor, Robert was triggered by a traumatic memory when he was 5 years old, which connected him to the origins of his explosive anger. Robert entered therapy to address the underlying traumas. I explained the vicious cycle of trauma and substance abuse and how they negatively affect each other when left untreated. I then explained the HeartMath concepts regarding hyper-arousal of the limbic system and the impact on heart rate variability. I taught him heart focused breathing and the Quick Coherence Technique along with emWave technology for daily emotional management and as a precursor to trauma processing with EMDR therapy. Robert reported an increased ability to manage his anxiety and irritability at home and at work. His inner confidence grew. The trauma processing through EMDR resulted in a positive reconnection to his younger self. The sting of the trauma was transformed into a positive sense of self. He remarked that using the HeartMath tools helped him know he could soothe himself as well as shift his current emotional state. He also reports his current irritability is related to present day life stressors and he now knows what to do to manage it.

Amy Hudson, Ph.D., CADC
Supervisor, Chemical Dependency Unit, Mississippi State Hospital
Jackson, MS

"We have treated more than 250 people at this point, the vast majority of them from the chemical dependence treatment program I supervise, and virtually all of them receiving HRV training with the emWave Desktop. I continue to be thrilled and moved by the results they achieve. Early sobriety is difficult, partly because the nervous system has become so unbalanced by drug and/or alcohol abuse. HRV training addresses that problem at its root. I know with complete confidence that many of these trainees have increased their chances of staying sober immensely by learning how to get into the "zone". It's also amazing how well HeartMath training fits with 12-Step concepts. Meditation and conscious contact with a Higher Power are very, very hard concepts for a lot of folks to grasp, and they are ESSENTIAL to recovery (in the 12-Step model). Once patients have experienced the "zone" through Quick Coherence and use of the emWave Desktop, they get it. For many of them, that becomes their way of meditating and connecting with their Higher Power. Suddenly two of the most elusive but most important 12-Step tools are completely available to them at any moment. It is very exciting to see. We continue to be absolutely thrilled with the emWave technology. Just wanted you to know how much we are appreciating the HeartMath system down in Mississippi!"

Chronic Pain: Patients Find Relief While in Heart Rate Coherence.

Client's coping with chronic pain can suffer from depression, anxiety, grief and loss due to the impact their pain has on the quality of their lives. Coping with ongoing pain can be exhausting to the mind and body. Using HeartMath tools has been shown to have a positive effect on those dealing with physical and emotional pain.

Rollin McCraty, Ph.D., Director of Research Institute of HeartMath, explains why this relief occurs in an article titled; "[Afferent Vagal Information and Pain Perception](#)".

"Numerous reports from individuals who have learned HeartMath techniques indicate that they are able to modulate pain levels by utilizing the tools. This is true of both visceral pain, such as angina and joint pain, and coetaneous pain, such as a stubbed toe or scrape. Increased afferent

activity associated with coherent heart rhythms evoked by the application of these techniques affect the neural mechanisms involved in pain reduction. A number of studies have shown that an increase in afferent vagal activity inhibits the flow of pain signals traveling to the brain. Several mechanisms have been identified which explain how increased vagal afferent activity decreases pain sensitivity and increases the pain threshold.”

Case Illustration:

Carol Linnell, Pain and Rehab Clinic, Centinela Freeman Health Systems, Inglewood, CA

Sally’s problem with chronic pain began about 8 years ago. She developed back and right leg pain from a work-related injury and had surgery to correct a disc problem. The surgery was “successful” but her pain never improved. Sally’s emotional state began to worsen. Overcoming her fears, she decided to go ahead with a second surgery on her back. That surgery was also “successful”, but she developed an infection in the surgical site and was bedridden for 4 months, feeling like a total failure. Her back pain continued and she also developed right knee degenerative arthritis.

“After my second surgery I couldn’t walk; I could barely stand up. I was given 24 visits with physical therapy, but that was not enough. By then I needed a walker because I couldn’t stand on my own, and used one for several years. Then I tried NOT to use the walker, but I had balance problems and I thought using 2 canes was the solution. But that ended up not being a good thing, but I didn’t know it – I would have been better off with the walker, because using 2 canes ended up really hurt my arms. I never really improved over the years, even though I had occasional physical therapy, acupuncture, and psychotherapy. Besides that, all I was offered for such a long time was a bunch of pills or an epidural shot. I still couldn’t stand for long and went back to the walker, but couldn’t go very far. I couldn’t sit up in bed or stand up from a chair without a pulley or assistance. I felt so lonesome, useless, and worthless by then. I had gained weight because I was feeling “What’s the point – life’s not worth living if this is the way it’s going to be”. I was feeling worse and worse. I was totally drained, like I was just taking up space. After waiting for a long time, I finally heard that I was eligible for the Pain Management Program and I cried the whole day. . I was really looking forward to the program. I wanted to do whatever it took to get out of my mental and physical funk. I was scared. I hoped my body wouldn’t let me down. I wanted to come out as a human being again. And I kept going. The best thing that could have happened to me was that program. I was introduced to HeartMath and it was wonderful. HeartMath taught me that I could handle my pain and depression. It takes practice, and a willingness to keep trying, but it can be managed. There are real good lessons that I learned, like that Neutral Place. I’ve really needed to use that when situations around me or my pain gets challenging. Sometimes my knee gets so bad that I almost fall and I get angry. Then I tell myself, “before you get all upset, just get in that Neutral Place”. Then I can shift focus to the positive. I can deal with it then. I’m going to have a total knee replacement real soon and will have a brand new knee. My depression level is almost non-existent now. I just don’t feed into it; I act before it takes a hold on me, when I feel it coming on. I use HeartMath tools to find a positive outlook, and without it I probably wouldn’t have been able to deal with all the stress and pain I have. I’m not taking any pills anymore (except for blood pressure and thyroid). I’m off Soma, Vicodin, Neurontin, Kepra, Topamax, and Cymbalta. I’d be taking something if not for HeartMath. I found my attitude changed after I started using HeartMath. I really began to feel like I could actually live with my pain. It gave me a focus. Yes, life sent me some curves, and my pain probably won’t go away. But you have to take control of you- your feelings, your pain – and not let it control you. I talk to my pain: “I’m not focusing on you today”. It works. I’ve expanded on feeling heart feelings to doing things that I enjoy. I think everyone needs to find something that they always have enjoyed or can enjoy if they can still do it. I love music. I always have, even before I could walk. I’ve been so depressed that I didn’t feel like listening to music. I’d be lying around and just didn’t want to get up and go all the way across the room and turn on the music. Now I’ll be singing, dancing, and moving every body part that I can. I find it takes my

mind off of what's going on. My leg will still be hurting, but I move every part that I can move. It helps to really feel better. That's just one little thing. It's different for others. I just know that I have to find a different way of doing things, just as long as I can find enjoyment in my life. I saw the psychologist I've been seeing for several years and he said "You've got your cane, but you're swinging it!" I don't have back pain every day now, but my knee is the major problem. I'm going to the YMCA 3x/week and doing what I can: getting in the pool, using a recumbent exercise machine, and doing group exercises in a chair. I'm optimistic about my knee replacement surgery and looking forward to an improved quality of life – volunteering, working, driving, having fun. I'm just staying focused and not letting depression get ahold of me."

Grief & Loss: Healing the Broken Heart

Traumatic grief or complicated mourning are conditions where both trauma and grief coincide. Treating traumatic grief requires a high level of sensitivity and a focus on the individuality of each case. Whether it be a sudden death or prolonged illness, a personal medical crisis where there is a loss of functioning or one's own impending death, each situation has stages of intense emotional states. It is important to note that HeartMath interventions are not meant to suppress or prevent any stages in the grief process, but should be viewed as tools to manage emotional states that become overwhelming.

Sara G. Gilman, M.F.T.

**Fellow, American Academy of Experts in Traumatic Stress
EMDRIA Approved Consultant
Encinitas, CA**

"I consistently teach my clients Heart-focused breathing, Quick Coherence Technique and extending the Quick Coherence Technique for longer periods of time within the first few sessions. This way we can practice in each subsequent session and follow up on how they are utilizing these tools in their day-to-day life. I reinforce this work by using the emWave2 handheld and emWave Desktop version to help clients get direct feedback. As an EMDR therapist, I have found these tools to be excellent in stabilization. When focusing on new behaviors (future template) for their future, I have the client get into heart rate coherence while visualizing the future experiences and how they want to respond."

The following Case Illustrations are from my own experience working with individuals and underserved populations.

Case Illustration:

In her early 30's Jen was a dynamic young women who had completed her graduate degree, happily starting her career and engaged to be married. One day she received a phone call that her mother was in the emergency room following a terrible car accident. Thousands of miles away, Jen headed home to be with her. Tragically her mother died days later. 8 months had gone by and Jen was barely functioning. Unable to get out of bed some days, difficulty sleeping, profoundly depressed, losing weight and cried daily. She entered therapy at her family's insistence. She did not think anything would help saying, "nothing will bring my mom back, she was my best friend, what is the point." At the first session Jen was visibly shaking, had dark circles under her eyes and had difficulty maintaining eye contact. As she began to explain what happened to her mother she slumped down and began to quietly cry. The therapist said what happened is important, however she would like to wait on hearing the details. She asked Jen to shift her focus to her chest in the area of her heart and simply breathe, letting other thoughts just go by for now. Jen replied, "I can't, my whole heart aches, I am afraid I can't go on." The therapist asked her to place her hand on her heart for now. As Jen did this, she slowly began to take short breaths. After a few minutes she spontaneously took a deep breath and following a long exhale,

looked up and said, "Wow, I don't think I have been able to breath in 8 months. What happened to me?" At this point the therapist educated her about the impact of traumatic stress on the mind, body and spirit and how grief is a process with stages to move through. Jen kept her hand on her heart during the entire session. As she was leaving she said, "maybe I can heal from this, I just don't know yet." The therapist said, "For now, just keep breathing through your heart."

The End of Life – A Matter of the Heart.

Randy was dying of brain cancer. He was an active and vibrant 60-year-old when he faced the news of his diagnosis. Towards the end of his life I made house calls to be by his side and support the family. His speech deteriorated so our communication was done through hand signaling and me responding with words of comfort. One day when the struggle to talk looked so painful for Randy, I took my hand and placed it on his heart saying, "Let's just heart breathe together. Let go of whatever you were thinking for now and just focus on your heart." Keeping my hand on his heart, gentle tears rolled down his face as his body relaxed. While we continued to breathe together for several minutes, Randy reached up and placed his hand on my heart. We continued to breathe together as gentle tears flowed down our faces. Randy smiled and so did I. As the days went by I noticed something - Randy could no longer talk, however he had many visitors and with each one who sat by his side he would place their hand on his heart and his on theirs and they would breathe, smile and sometimes cry together.

Women's Shelter for the chronically homeless. The residents have lived in highly stressful environments while previously homeless. Many suffer from depression, substance abuse and panic disorder. I asked the staff what is the number one problem they see in the women. They unanimously said, "Anxiety." Then I asked what the number one challenge for the staff was. The staff described feeling overwhelmed with work and the multiple needs of the women.

I first held a staff meeting where I educated them on the effects of stress on the nervous system and heart rate variability. I then introduced them to the emWave technology as well as heart focused breathing and the Quick Coherence Technique. The staff began to use the tools in their weekly meetings and teach them to the residents. Everyone joined together learning to reduce anxiety. There have been reports of greater staff productivity; decrease feelings of burnout and outbursts among the residents are more easily managed.

Demona Program/Case Manager Wise Place, Inc. Residential Home for Women

"Thank you for the follow up, we are using the emWave monitors and they are great. We are currently using them prior to staff meetings, I will use it prior to my busier days, they are also used tremendously in case management to assist the ladies in staying on subject. This tool has also assisted the ladies in breathing techniques and they really love to see themselves go from RED to GREEN."

Women's Sober Living House

I met with the Director of a sober living house. The director described her residents as suffering from PTSD, multiple relapses, anxiety and insomnia. I spent 90 minutes educating the residents about the effects of stress and taught them heart focused breathing and the Quick Coherence Technique. The emWave device was passed around to help them see the levels of coherence and get a felt sense of the experience. Guided Imagery was added, focusing on a Safe and Calm place in nature that was uniquely theirs. They were instructed to use the tools throughout the day and to use the Safe place imagery along with the heart focused breathing at night before they went to sleep. Within 2 weeks the women were reporting better sleep and more confidence in handling situations throughout the day. A follow up session was scheduled to reinforce the

process and address any questions. One resident in her 50's said, "I can't believe at my age, I'm finally learning to breathe and how it is helping me to think more clearly." Another resident was surprised at how easily she was falling asleep after years of tossing and turning.

San Diego's Survivors of Suicide Loss Foundation uses HeartMath tools to begin and end their support group meetings.

People who have lost a loved one to suicide struggle to come to terms with this traumatic experience. The pain, grief and loss along with facing the stigma suicide still has, can be a long difficult process. Support groups for these survivors, provide a unique place to go where others relate to the experience and the pain associated with it. Facilitators of these groups are generally survivors themselves. I met with a small group of these facilitators and asked what was the most challenging part of their leadership in the groups. They described wanting to do something to help in the moment when someone is crying or when someone is emotionally triggered while hearing another's story. I spent an hour educating them about stress and heart rate variability. I then taught them heart focused breathing and the Quick Coherence Technique. They decided it would be helpful to begin and end each group with "heart focus, heart breathing." Accessing a positive feeling was added to the end of the group by asking everyone to think of a positive quality they appreciated about their loved one. The facilitators found this to be empowering as they felt they could offer something that would make a difference in the moment. Attendees began reporting the use of heart focused breathing throughout the week to help them move through the pain and grief.

Students who suffer from Attention Deficit Disorder and test anxiety use HeartMath tools for improved performance.

Students with ADD often suffer from low self-esteem and inconsistent performance in school. Parents observe their students' high levels of anxiety and emotional fatigue while struggling over homework. Test anxiety often occurs when students feel the pressure to perform in a specific time frame. Therapists who introduce the HeartMath tools to parents and students find efficient improvements in patience, concentration, retention and test performance.

Case illustration:

Seth, a 24-year-old young man was diagnosed with moderate Attention Deficit Disorder in junior high school. He intermittently used prescription medications and under performed through most of high school. In college he developed certain study habits to minimize distractions. While beginning his intensive study schedule (6 + hours per day) for the Medical School entrance exam (MCATS) he found his concentration inconsistent, his fatigue increasing and he became more irritable and anxious. His mother noticed increasing dark circles under his eyes and mentioned to him that he seemed particularly irritable. He said he wasn't sleeping well and was beginning to worry about the amount of time it was taking him to get through the practice tests. He began to feel anxious about his ability to perform on the exams. She recommended he make a session with a counselor who specialized in peak performance enhancement. He was willing and hoped he would gain some insight into a more efficient way to move through the exams. I spent one session introducing the emWave technology and educated him on heart rate coherence. I recommended he spend 10 -15 minutes prior to each study period getting into heart rate coherence with the emWave. I also told him to use it at the end of each study period and before bed each night. After the first day of using the emWave Seth called me and left a very excited, yet skeptical message, "I can't believe this, but I shaved an hour off my practice test and feel energized rather than exhausted. I'll see if this continues." We had a follow up phone call to review his results and answer any questions. His gains in time and energy remained consistent, his sleep improved and his irritability was dramatically reduced. On test day he took the emWave

with him and spent time in the car getting into heart rate coherence. He finished the exam in the same improved time frame and had a lot of positive feelings following the exam. His score was well above average. It was even higher than his goal score.

Athletes suffer from traumatic stress that blocks their peak performance.

Many athletes experience traumatic events during their training or competitions. Whether it be injuries, unexpected conditions, lost competitions or conflicts with a coach, these experiences are stored in the mind and body and can affect the way they perform. Previous traumatic experiences can act as a trigger to the nervous system to launch into fight or flight mode when the athlete is performing a similar movement. Most often EMDR therapy can resolve this old material and help to remove it as a roadblock. Adding HeartMath technology enables them to easily restore their focus in stressful training or performance situations and to push through to the next level. Athletes understand the importance of finding their “zone” where they access a high level of focused attention. The “zone” is the place of optimal performance. Heart rate coherence is the “zone” and can be achieved easily through the Quick Coherence Technique and practicing extending the technique for longer periods of time.

Case Illustration:

A competitive cyclist came in to see me because he wanted to improve his high-speed turns. He said he believed this is the one area he can improve his time and performance but felt something was holding him back. He was finding himself dropping back when approaching turns in a group then trying to play catch up after the turns. This was costing him a lot of precious time. When I asked him to describe his experience as he takes the turns, I noticed he began to breath shallowly and at times held his breath. He identified the negative thoughts that came up and his constricted body sensations. In the first session I taught him the heart focused breathing and Quick Coherence Technique with the use of the emWave technology. I suggested he use it before and after his training rides and to simply notice what happens during his turns. The next session he reported more focused attention during his rides and spontaneous deep breaths during his turns. During an initial EMDR session we targeted his current angst while cornering. He was able to recall a bicycle accident when he was eight years old. He was coming around a corner, slid on some sand, fell, nearly hitting an oncoming car and had the wind knocked out of him. The woman in the car got out and was visibly shaken, his mother was running up from behind screaming in panic. It all happened quickly, no one was hurt, after getting his breath back he rode home. The positive resolution in the EMDR session helped free him to be in the present moment and work on his turns. He found that by getting into his coherent zone before a ride, he was able to take turns with greater ease, clear thinking and focused breathing. He stopped dropping back in the group and described taking turns now with a more aggressive approach without becoming distracted.

Trauma Therapists can suffer from Compassion Fatigue & Vicarious Traumatization

Helping others walk through the healing journey of early childhood trauma, medical emergencies, combat, abuse, death and dying, etc. can impact even the most experienced therapist. Over time this can take its' toll. *Managing your own stress is crucial to staying healthy.*

Trauma therapy in particular has a major impact on the therapist. Some authors have written about secondary traumatic stress disorder also known as ‘compassion fatigue’, which refers to the effects of trauma upon psychotherapists. The nature of our work as therapists puts us at a particular emotional risk. The daily exposure to horrific accounts of client’s traumatic experiences can culminate in an empathic strain. This strain may result in feelings of helplessness, grief, anger, irritability and horror, which are all classic symptoms of PTSD. Although most therapists

are well aware of the need for self-care, some do not recognize when they are overworked and approaching burnout.

Using the HeartMath system will help you achieve greater balance and resilience. Your continual use of these tools will also enhance your ability to teach others. You can use the time your clients are learning their skills in session as an opportunity to “get coherent” as well. Therapists report feeling more energized throughout the day when they have done this. Develop a routine that fits into your workweek.

Here are a few strategies that many therapists, including myself, have come to rely on.

1. Daily use of the emWave technology - before and after your clinical day. Before you head home make a healthy transition by getting into Coherence and ‘letting go’ of the office stress. It only takes a few minutes and can benefit you and your family!
2. Breathe along with your clients. Coherence in the moment! Many therapists have reported they have more energy at the end of their workday when they have done this.
3. Take a moment in between each client to reset yourself by heart-focused breathing.
4. Use your emWave device before bed for a more restful sleep.
5. Check in on your coherence level following a particularly challenging session. You can get into coherence quickly in between client sessions.

Jeri Lynn Schroeder M.S., M.A., LCPC
Portland, ME

“I believe very strongly from my own experience that the HeartMath skills are a source for expanding Self Energy. When I am sitting with a client regardless of the method I am working with, I will place my fingertips on my heart if I find myself challenged to stay centered or in Self and it always work. I practice the HeartMath skills and a meditation practice called Heart Rhythm Meditation, which are very similar, on a daily basis so my heart energy is very receptive and available to me. I use the emWave tools at least once a week to check my own coherence pattern.”

Barbara DaSilva
Certified Holistic Health Practitioner
Celebrate Wellness
St. Catharines, Ontario

“I am a Holistic Health Practitioner in St. Catharines, Ontario Canada. I do EAV Testing, and Energy Healing. I love my career and am very passionate about helping people to achieve their very best health – body, mind and spirit.

I always felt like something was missing in my practice. I was helping my clients, but stress was an on-going concern and my encouragement to them to find time to do something they enjoy, breath, meditate, exercise, etc, was easier said than done.

When I heard about the HeartMath system I was so excited because it sounded like the missing link for helping my clients. Reading the *HeartMath Solution* book brought me to tears. It made so much sense and I couldn’t wait to purchase the program and begin offering it to my clients.

The biggest surprise came when I started using the program for *myself*. I wanted to learn it inside out before I presented it to anyone else. I was shocked to see how incoherent I was. I was stressed out!! I was in denial at first because I always saw myself as “all together”, calm, nurturing etc. However, I never did take time for myself to just breathe. I was too busy telling others to do it.

I feel blessed that HeartMath's tools and technology came into my life when it did. I'm 48 years old and want to live a long healthy life. The stress that was going through me, that I was unaware of, could have had very negative effects on my health.

Since I have been practicing with the HeartMath tools and understanding what being coherent feels like, I am happier, more confident and able to listen to my intuition and trust it. I now make sure I am in coherence before I see a client. Being in the space of "grace" that coherency puts me into, allows me to be at the top of my game for my clients. When I'm doing energy healing, I have had the emWave2 monitor attached to me to make sure I am coherent when bringing in healing frequencies.

I strongly recommend and encourage anyone in the caregiving profession to utilize this program yourself. You will be so much more effective at helping the people in your lives if you are coherent. You will be no good to others if you become ill yourself, so make yourself matter!!

I believe it has helped me in numerous ways already and I have only been using it for month. I approach people in a much more positive state and I'm recognizing more positive energy returning to me from clients, friends, and family.

I am so grateful for the HeartMath tools!! I know anyone who learns them and makes them a part of their lives can feel genuine peace at last!"

Conclusion

All of the case illustrations were drawn from actual clinical cases. Identifying information was slightly altered for the purposes of confidentiality. All of the stories shared remind us of the innate wisdom in the heart and mind to heal and grow. As therapists we learn to help others activate their natural healing mechanisms for an improved quality of life. I hope this guidebook assists you in expanding your work and improving your life. This guidebook is the just the tip of the iceberg of information offered by HeartMath to help enhance your clinical work. There are many supportive materials available. I've found the following resources helpful.

Additional Resources

[HeartMath Interventions Certification Program](http://www.heartmath.com/health-professionals/heartmath-interventions-certification-program.html). An in-depth clinical program delivered as five weekly 1 hour live webinars and 2.5 hours of recorded webinars with extensive support materials. Designed for licensed health professionals who want advanced training on adding HeartMath tools and technologies into their clinical practice.

<http://www.heartmath.com/health-professionals/heartmath-interventions-certification-program.html>

[A Practitioner's Guide](http://www.heartmath.com/downloads/hp/practioner-guide.pdf). A guide for using the emWave Desktop program with clients. Includes instructions and case studies. **Free**

<http://www.heartmath.com/downloads/hp/practioner-guide.pdf>

[Health Professional Webinar Series](http://www.heartmath.com/health-professionals/health-professionals-speaker-series.html). A series of recorded webinars by experts from the fields of psychotherapy, cardiology, pain management, medical practice, pediatrics and more share how they are using the emWave technologies with patients and the results they are seeing. Available **Free** on the HeartMath web site at

<http://www.heartmath.com/health-professionals/health-professionals-speaker-series.html>

Orientation Sessions. Free one-hour tele-class on how to use the emWave Desktop program and the emWave handheld unit. Schedule of tele-classes and recorded versions of the calls are available at the link. <http://www.heartmath.com/personal-use/emwave-free-training.html>

Video based training on how to use the emWave2 handheld. Use the link below. Free <http://www.heartmath.com/personal-use/emwave-free-training.html>

The State of Ease This booklet discusses a "state of ease" that each of us can access to help release emotional turbulence and help maintain coherent alignment between our heart, mind and emotions. **Free.**

Books and other products

Transforming Stress, Transforming Anger, Transforming Anxiety, Transforming Depression, The HeartMath Approach to Transforming Hypertension, Stopping Emotional Eating, the emWave Solution for Better Sleep Guide, emWave Meditation, Prayer & Self-Help Assistant. For more details please visit <http://www.heartmathstore.com/category/book/stress-relief-books>

HeartMath Clinical and Published Research - Free
<http://www.heartmath.org/research/research-library/research-library.html?submenuheader=1#basic-research>

If you have questions or need help please feel free to contact the following people at HeartMath's Health Professional Division:

John White
Phone: 831-338-8711
Email: jwhite@heartmath.com

Carol Thompson
Phone: 831-338-8781
Email: carol@heartmath.com

Tom Beckman
Phone: 831-338-8745
Email: tom@heartmath.com

Sara Gilman: Brief Bio

Ms. Gilman, is a licensed Marriage & Family Therapist, specializing in the areas of Trauma, Addictions and Performance Enhancement with athletes and other performers. Graduating in 1983 from California State University, Fullerton with a Masters of Science Degree in Clinical Psychology, she began her work specializing in Addictions. In 1995 she completed her EMDR training. She is a Diplomat in Forensic Traumatology, holds Fellowship status with the American Academy of Experts in Traumatic Stress, is an EMDR Approved Consultant and Past-President of the EMDR International Association Board of Directors. She was a principal investigator in a research study piloting an Integrated Trauma Treatment Program (ITTP) combining EMDR and Seeking Safety for co-occurring trauma and substance abuse in an adult Drug Court Program. She has a private practice and consulting business in Encinitas, CA. Ms. Gilman lectures nationally and has appeared on national TV regarding Traumatic Stress and PTSD. She has used the HeartMath tools and emWave products for over five years with her patients and is a certified HeartMath Interventions practitioner.

-Sara G. Gilman, M.F.T., Encinitas, CA, www.saragilman.com

HeartMath is a registered trademark of the Institute of HeartMath. Quick Coherence is a registered trademark of Doc Childre. Inner-Ease is a trademark of Doc Childre. emWave, emWave2, Personal Stress Reliever and Coherence Coach are registered trademarks of Quantum Intech, Inc. HeartMath techniques are reprinted by written permission from HeartMath LLC.

