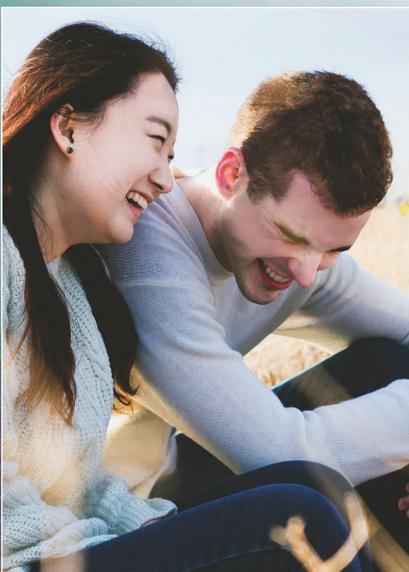
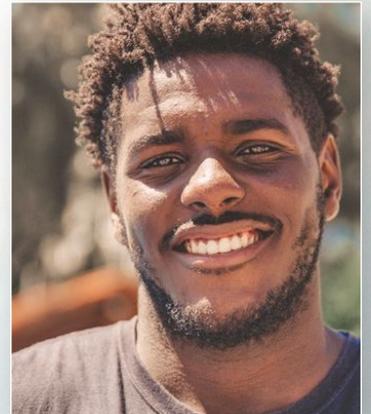
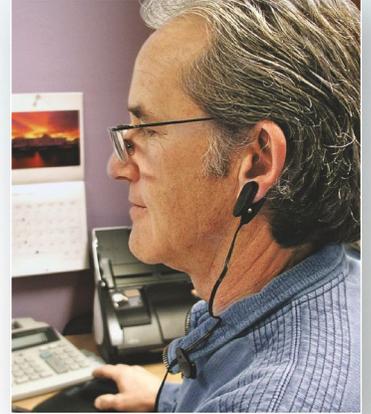


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Letter from the HeartMath Institute President

Dear Supporters and Friends,

In light of the persistent challenges faced by individuals, nations, and the global community in the year 2022, it is our sincere hope that you and your families, remain secure and well-supported amidst these unpredictable transformations. We wish to convey our deep gratitude for your energetic care and generous financial contributions throughout the year. Your continued support has allowed us to pursue innovative research projects, allocate free resources worldwide to reduce stress, and develop emotional self-regulation tools aimed at developing coherence and self-empowerment. Your invaluable assistance has been instrumental in the realization of these endeavors.

Within this Annual Report for 2022, our intention is to highlight the significant accomplishments of the HeartMath Institute, made possible by your support. Our devoted team of scientists, trainers, education specialists, operational staff, board members, program developers, and other stakeholders wholeheartedly dedicate themselves to a singular goal. That goal is to create user-friendly tools and technologies that empower individuals to make discerning choices and discover effective solutions amidst the ongoing paradigm shift. Also, our carefully designed educational programs are aimed at energetically supporting and improving the lives of individuals across the globe.

A few Highlights in the 2022 Annual Report:

- *The 10 newly designed Global Consciousness 2.0 Project (GCP2) Beta Units were completed and passed testing.*
- *Translated Trauma Mini-course for First Responders into Ukrainian, Russian and Polish.*
- *May and Samuel Rudin Family Foundation granted HMI \$10,000 to address student mental health. Twenty schools across the US were recruited to participate in the initial roll-out which was successful.*
- *Completed HeartMath® for Parents, Balancing Stress While Deepening Family Connection and Communication. This is a new course that empowers parents with tools to help raise happy, healthy, and resilient children. Launch scheduled for January 2023.*
- *Completed assembly of 64 more Tree Monitoring Systems for HeartMath Tree Rhythms – A Citizen Scientist Project, for a total of 75.*

Please know that we are honored to be on this journey with you. We are creating together, which is the goal for collective humanity.

With care,



Sara Childre

Sara Childre, President, HeartMath Institute

Statement of Accomplishments



Global Consciousness Project 2.0™

The Global Consciousness Project (GCP) 2.0 made significant progress in 2022, including a hardware redesign and successful testing of ten beta units. The project is preparing to produce Random Number Generator units in 2023. It launched a new website and expanded its reach through presentations at HMI's annual GCI event and a corroborative research project with Dr. Joe Dispenza.

The project aims to investigate the impact of human consciousness on electrons and voltages by collecting data from **4000 Random Number Generators** before, during and after major global events.

Trauma Education for Humanitarian and Emergency Responders

As part of our ongoing commitment to providing free resources that enhance people's lives mentally, emotionally, and physically, we were delighted to offer this free course. In line with this commitment, we have translated the Trauma Education for Humanitarian and Emergency Responders Mini-course into Ukrainian, Russian, and Polish. This online course equips professional and volunteer responders with evidence-based self-regulation techniques, enabling them to cultivate resilience, guard against burnout and secondary traumatization, and effectively assist those affected by man-made or natural disasters.



Statement of Accomplishments

HeartMath® Tree Rhythms – A Citizen Scientist Project

This Global Tree Monitoring project delves into the electrical signals of trees and their connections with other life forms. This is an exciting citizen scientist project. Participants worldwide can install sensors on their trees, contributing to the gathering and analyzing of global tree data. In 2022, 64 Tree Monitoring Systems were manually assembled, reaching a total of 75. By June 2023, all 100 systems will be completed.

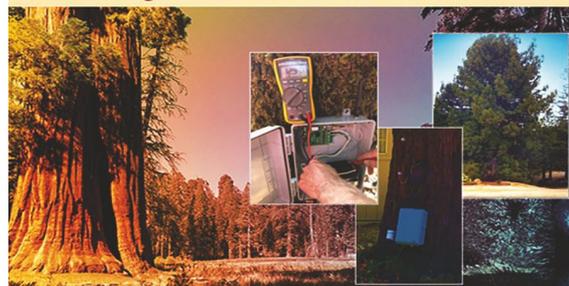
The project's objective is to comprehend how trees may respond to changes in the Earth's magnetic field and collective human emotions. This project also aims to examine the interconnectedness of trees worldwide and investigate questions such as their reaction to human emotions to gain valuable insights into the energetic connection between humans and trees.

Global Coherence™ Virtual Event

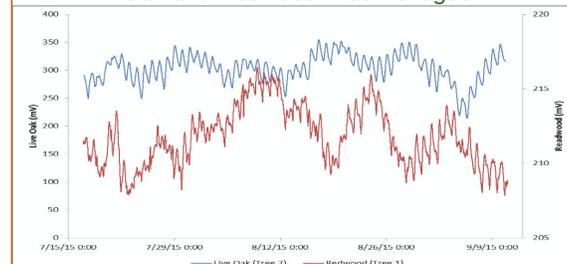
The second annual virtual HeartMath Institute Global Coherence Initiative Event, titled "The Rise of Collective Compassion: A Heart-Centered Approach to Creating a More Coherent World," was presented March 18-22, 2022. The 918 participants were encouraged to explore the transformative power of the heart in fostering personal empowerment and manifesting a more peaceful world. Through heart-focused meditations and proven practices, attendees learned to navigate uncertain times with reduced stress and enhance compassionate latitude, while making heart-centered choices. The event also highlighted the significance of collective compassion and the interconnectedness of hearts worldwide.

Esteemed speakers such as Drs. Joe Dispenza, Scilla Elworthy, Roger Nelson, James Miles, Nachum Plonka, plus three HeartMath Master Trainers, shared insights on the role of the heart in creating coherence and resilience. The general comments from the attendees indicated that they felt empowered, inspired and ready to take action for positive change.

Measuring Trees' Electrical Potentials



Oak and Redwood Tree Voltages



Research Accomplishments

Global Consciousness Project 2.0™

The Global Consciousness Project (GCP), founded by Dr. Roger Nelson at Princeton in 1998, embarked on a journey to explore collective human experiences and reactions, known as global consciousness, in response to significant emotionally engaging global events. In 2022, the project underwent a major transformation with the introduction of GCP 2.0, featuring a complete redesign of the hardware and an enhanced approach to take the project to new heights.

Let's dive into the noteworthy achievements of GCP 2.0 in the past year:



- **Hardware Redesign and Testing:**

GCP 2.0 made significant strides by modifying and thoroughly testing the hardware design. Last year witnessed extensive efforts in refining the hardware components, ensuring optimal performance and reliability.

- **Completion and Testing of 10 GCP 2.0 Beta Units:**

In a significant milestone, the GCP 2.0 team successfully completed the construction and testing of 10 GCP 2.0 Beta Units. These units underwent rigorous examination and met the required standards. With this accomplishment, the project is poised to commence the production of Random Number Generator (RNG) units in 2023.

- **Development of GCP 2.0 Website:**

The groundwork for the first GCP 2.0 website was laid in 2022, with substantial progress made in drafting the majority of its content. The website architecture has been meticulously coded, setting the stage for its official launch in 2023. The GCP 2.0 website will serve as a platform to disseminate information about the project and engage a wider audience.

- **Introduction at HMI's Annual GCI Event:**

GCP 2.0 gained broader exposure through its inaugural presentation at the HeartMath Institute's annual Global Coherence Initiative (GCI) event, focused on Collective Compassion. This introduction provided an opportunity to showcase the project's goals, methodologies, and potential impact to a diverse audience.

- **Expansion of Research Outreach:**

To expand the reach of GCP 2.0, the project facilitated its first analysis outside of HMI by hosting devices at a Dr. Joe Dispenza workshop. By sharing the results, GCP 2.0 ventured into a new realm of collaboration, further advancing the understanding of global consciousness phenomena.

Research Accomplishments

- **Database and Cloud Network Development:**

The team devoted efforts to constructing databases and cloud networks to store the ever-growing volume of data received from the GCP 2.0 devices. Additionally, they implemented automated analysis and storage of Network Coherence, a vital metric often showcased in research presentations.

- **Discovery of New Metrics:**

Through their ongoing investigations, the researchers uncovered the significance of novel metrics that contribute to improved research and presentation methodologies. In addition to the existing Phase Coherence, the introduction of the Amplitude Coherence metric provides a more comprehensive understanding of the research findings.

- **Design Enhancements:**

GCP 2.0 devices underwent substantial improvements in design. The project team meticulously engineered the LED and LCD lighting systems, incorporating network calculations and error states to enhance their functionality. These advancements ensure better visual representation of device status and contribute to a seamless user experience.

- **GCP 2.0 Device Advancements:**

The new GCP 2.0 devices stand as robust, stand-alone technologies, designed to facilitate mass participation in global “Citizen Scientist” projects. With superior capabilities, they gather parallel synchronous data more effectively than their predecessors, heightening the network’s sensitivity to global field changes. The project aims to develop 1000 devices, each equipped with four RNGs, creating a network of 4000 RNGs—an unprecedented scale in this field, over 50 times larger than the previous project. Leveraging advanced technology, these devices enable a deeper investigation into the effects of consciousness on electrons and voltages.

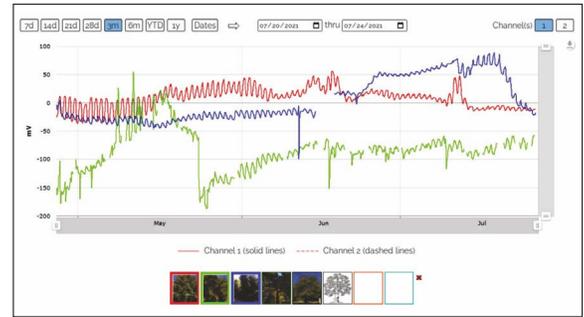
- **Looking ahead to 2023:**

Building upon the achievements of 2022, the GCP 2.0 team aims to conduct beta-testing of devices on a global scale. This global testing initiative will collect valuable data to correlate with global events, facilitating ongoing research and further insights into the relationship between human consciousness and the network behavior.

As we continue our pursuit of understanding collective human experiences, GCP 2.0 strives to make significant contributions to the field of global consciousness research, leveraging cutting-edge technology and fostering collaboration on a global scale.

HeartMath® Institute Tree Rhythms Project

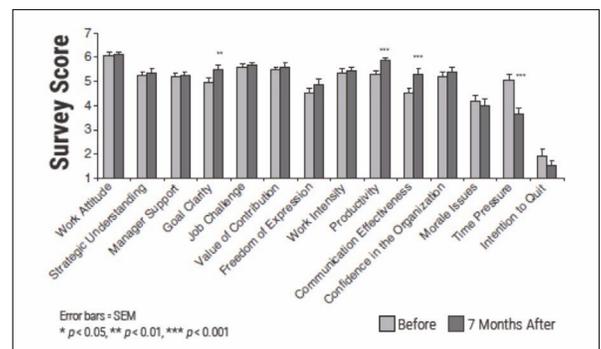
In 2022, significant progress was made in the implementation of the Global Tree Monitoring Network, which aims to investigate the potential energetic interactions between trees and humans, along with other research inquiries. The network has successfully recorded the dynamic electrical activity of various tree species in diverse locations worldwide. Several notable advancements were achieved during this period. Firstly, the assembly of an additional 64 Tree Monitoring Systems was completed, bringing the total count to 75. Furthermore, a technical issue pertaining to Wi-Fi connections was identified and resolved, ensuring a more continuous operation of all tree systems. Additionally, the development of the Base Station Manager software for Mac was finalized, facilitating efficient management of the network. To aid in installation processes, a comprehensive 90-minute video guide was produced. The collection of data during human interactions with trees commenced, with 42 tree systems installed globally in 2022, contributing to a greater understanding of this fascinating field of study.



These sensors are actively collecting real-time data, providing valuable insights into the electrical activity of trees. Additionally, there are 10 pending installations that require power plug-ins, and citizen scientists have expressed their intention to secure these sensors and have them shipped. However, assistance is needed in finding suitable solutions for these installations, particularly in colder regions where solar power is not a viable option.

Team Coherence and Personal Assessments

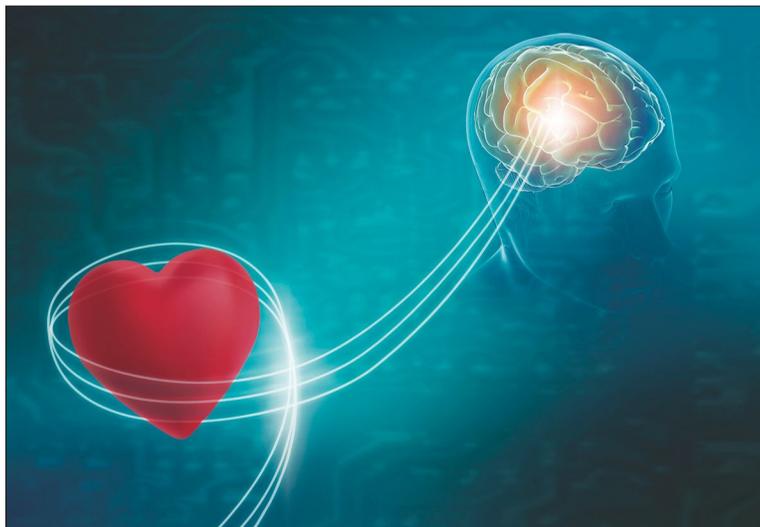
Several years ago, HMI researchers embarked on an endeavor to develop a new assessment for team coherence. The team has worked for five years to establish an automated analysis platform to achieve this goal. In 2021, we were presented with an exciting opportunity when a cutting-edge psychometric company specializing in psychometric assessment development extended an offer to assist us in creating this assessment. This remarkable tool, akin to our existing Personal and Organizational Quality Assessment tool provides a new tool specifically designed for long-term teamwork, utilizes a carefully crafted set of approximately 60 questions. Its primary purpose is to identify areas requiring improvement before involving a trainer. Additionally, it will gauge the impact of interventions by evaluating changes in both team and individual coherence, ultimately influencing the overall team performance. To evaluate the performance of this newly-refined assessment, our first trial is scheduled for 2023.



Research Accomplishments / Publications

The Heart Speaks, The Brain Listens: A Revolutionary Study on Heart-Brain Relationship.

In a groundbreaking research endeavor, a new study has been initiated to investigate the intriguing relationship between the heart and brain. We will use heartbeat-evoked potential analysis of simultaneously recorded EEG and ECG data to examine possible differences in how various methods of shifting into a heart-coherent state affect information processing in the brain. Furthermore, the research will delve into the fascinating realm of self-talk, specifically exploring how negative and positive inner dialogue affect the hearts ascending neural traffic. The findings of this investigation are expected to be published in 2023.



Research Publications

We invite you to browse the HeartMath Institute Research Library's extensive collection of research studies, articles, and other materials. Check out more research papers, Research Library.

Correlation Between ST Elevation Myocardial Infarction, Non ST Elevation Myocardial Infarction and the Local Earth's Magnetic Field Changes.

Giedrė Vanagaitė, Gabrielė Jakuškaitė, Greta Žiubrytė Mantas Landauskas, Alfonsas Vainoras, Rollin McCraty, and Gediminas Jaruševičius. The study looked at how changes in the Earth's magnetic field relate to heart attacks of different types. They examined 1,667 patients who were admitted to a hospital in Lithuania because of a heart condition called acute coronary syndrome. The researchers found that a stronger magnetic field within a specific range of frequencies (32-65 Hz) was linked to more cases of a severe type of heart attack called STEMI, especially during the winter. They also noticed a connection between magnetic field activity and levels of a type of cholesterol called low-density lipoprotein in certain groups of patients. These findings support previous research that has suggested a link between changes in the Earth's magnetic field and heart-related events.

Correlation between ST-elevation myocardial infarction, non-ST-elevation myocardial infarction and the local Earth's magnetic field changes

Giedrė Vanagaitė¹, Gabrielė Jakuškaitė², Greta Žiubrytė³, Mantas Landauskas⁴, Alfonsas Vainoras⁵, Rollin McCraty⁶, Gediminas Jaruševičius⁷
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Abstract. Stronger oscillations in the local Earth magnetic field may have an impact on the course of atherosclerotic heart disease. This effect is individual for every person and depends on the sex, age, living territory, season, capability to adjust to magnetic field fluctuations and health status. Individuals who already have cardiovascular disease are more sensitive to magnetic field fluctuations, therefore further research is needed to make conclusions. Aim: To identify correlations between changes in local Earth magnetic field frequencies and patients with ST segment elevation myocardial infarction (STEMI) and non-ST segment elevation myocardial infarction (NSTEMI) cases per week, cases by sex per week and patients' blood laboratory parameters (low-density lipoprotein cholesterol and Troponin I level). Methods: A retrospective study of 1667 patients, who were admitted to the Hospital of Lithuanian University of Health Sciences Kaunas Clinics between 1st January and 31st December 2019 due to acute coronary syndrome (STEMI and NSTEMI), were included in the study. Local Earth's time-varying magnetic field (TVMF) was measured by a magnetometer located in Basogala, Lithuania. Data from the magnetometer was collected daily, and weekly averaged. We assessed the correlations between average weekly geomagnetic field strength in six different frequency ranges (Hz) and average number of STEMI and NSTEMI cases per week, cases by sex per week and patients' blood laboratory parameters (low-density lipoprotein cholesterol and Troponin I level). Results: The presence of a stronger magnetic field in the frequency range of 32-65 Hz was significantly related to the number of cases in the STEMI group during the winter season ($r = 0.35$, $p = 0.05$). Tendency towards a positive correlation was found during the winter in the men's group with STEMI in the high frequency range of 32-65 Hz. Low-density lipoprotein cholesterol level correlated positively in the winter STEMI group with the magnetic field in the 32-65 Hz range, and in the autumn STEMI group with the magnetic field in the frequency range of 0-7 Hz. Conclusion: Increased geomagnetic field strength in the high frequency range of 32-65 Hz is associated with a higher number of cases in the STEMI group.

Keywords: acute coronary syndrome, ischemic heart disease, STEMI, NSTEMI, cardiology, local Earth magnetic field, geomagnetism.

Following the Rhythm of the Heart: HeartMath Institute's Path to HRV Biofeedback, Rollin McCraty.

Springer Science+Business Media, LLC, part of *Springer Nature*, 2022. The author and their colleagues have conducted extensive research on heart rate variability (HRV) and HRV coherence biofeedback. Their findings indicate that HRV feedback has the potential to enhance self-regulation, decrease stress levels, and improve overall performance. Additionally, they discovered that HRV coherence fosters social coherence and physiological synchronization within groups. The authors emphasize the significance of the cardiovascular afferent system in facilitating self-regulation and maintaining mental well-being. The cardiovascular afferent system comprises a network of nerves that transmit information from the heart to the brain. Understanding and leveraging this system can have profound implications for promoting optimal self-regulation and mental health outcomes.

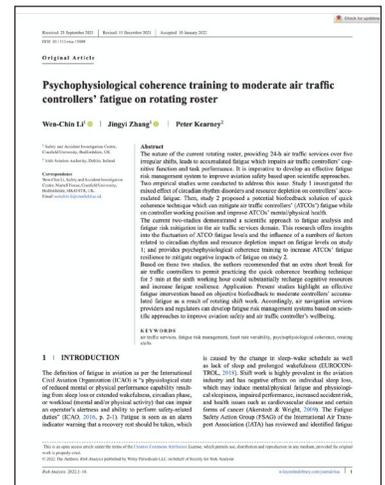
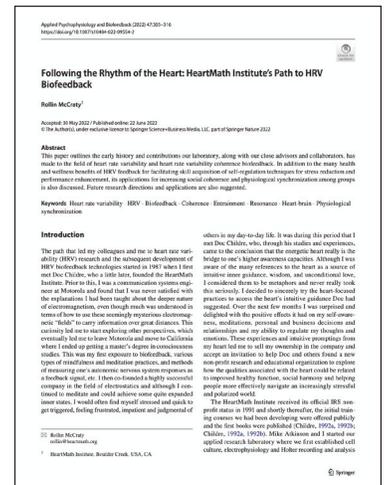
Published Independent Research Studies

Psychophysiological coherence training to moderate air traffic controllers' fatigue on rotating roster.

W. C. Li, J. Zhang and P. Kearney, *Risk Analysis* 2022. Air traffic controllers work long hours and can get tired, which can affect their thinking and increase mistakes. A study looked at a particular type of training called psychophysiological coherence training (PCT) to see if it could help with tiredness. PCT teaches techniques to control heart rate, breathing, and brain activity. The study found that PCT reduced tiredness and improved the mental and physical health of air traffic controllers. This training could be helpful in keeping controllers alert and preventing mistakes caused by tiredness, making air travel safer.

Overview of the Heart's Intelligence: A Dynamic Perspective Into the World of Energetic Wellness.

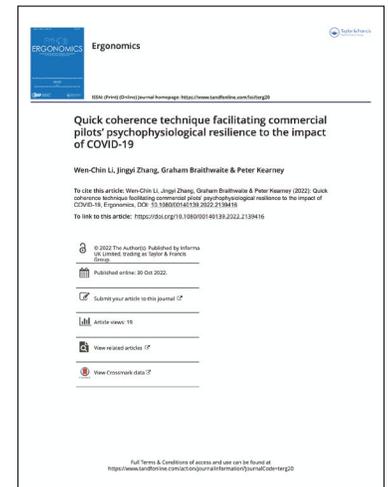
B. E. Sands, *J Am Holist Vet Med Assoc.* 2022;68:22–30. Quantum biology, an emerging field, investigates the intrinsic link between biology and quantum mechanics, revolutionizing our understanding of biophysiology and health. It explores concepts such as the intelligence of the heart, coherence, heart rate variability (HRV), the autonomic nervous system, and the heart-brain communication network. HRV serves as a crucial indicator of overall health



and adaptability. The dynamic role of the autonomic nervous system influences emotional states, cognitive processes, and physiological responses. This interdisciplinary approach, including neurocardiology and psychoneurophysiology, sheds light on the mind-body connection, electromagnetic fields, biofield physiology, and quantum mechanics. It presents a holistic view of human health, offering possibilities for innovative healthcare approaches.

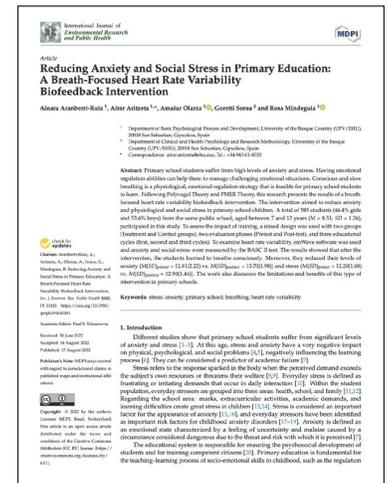
Quick coherence technique facilitating commercial pilots' psychophysiological resilience to the impact of COVID-19.

W. C. Li, J. Zhang, G. Braithwaite and P. Kearney, *Ergonomics* 2022 Pages 1-14. The article discusses the effects of the Quick Coherence® Technique (QCT) on the psychophysiological resilience of commercial pilots. QCT is a simple, two-minute technique that can be used to increase heart rate variability coherence, a measure of heart-brain synchronization. The study found that QCT training significantly increased pilots' psychophysiological resilience, as measured by their mental/physical health, cognitive functions, emotional stability, and wellness. The benefits of QCT were even greater for pilots who continued to practice the technique on their own. The study's findings suggest that QCT could be a valuable tool for helping pilots to maintain their mental and physical health, especially during times of stress.



Emotional Self-Regulation in Primary Education: A Heart Rate-Variability Biofeedback Intervention Programme.

A. Arizeta, A. Aranberri-Ruiz, G. Soroa, R. Mindeguia and A. Olarza, *International Journal of Environmental Research and Public Health* 2022 Vol. 19 Issue 9 Pages 5475. This 2022 study examined the effectiveness of a breath-focused heart rate variability (HRV) biofeedback intervention in reducing anxiety and social stress among primary school children. The research involved 585 students from a Spanish public school who were randomly assigned to either a treatment or control group. The treatment group received a 10-week intervention involving breath-focused HRV biofeedback training, relaxation techniques, and social skills training, while the control group did not receive any intervention. The results indicated that the treatment group experienced significantly lower levels of anxiety and social stress compared to the control group. Additionally, the treatment group showed improvements in heart rate variability, which reflects enhanced emotional regulation. The authors suggest implementing the breath-focused HRV biofeedback intervention in schools to promote students' mental health and well-being.



Heart rate variability (HRV) changes and cortical volume changes in a randomized trial of five weeks of daily HRV biofeedback in younger and older adults.

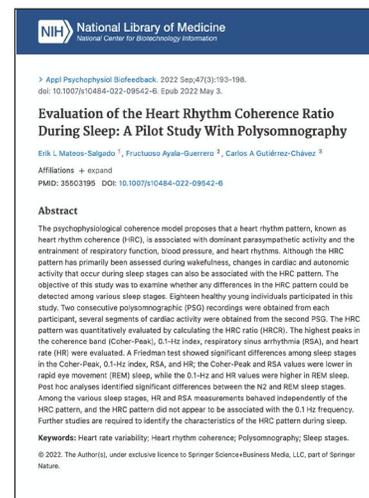
H. J. Yoo, K. Nashiro, J. Min, C. Cho, S. L. Bachman, P. Nasser, et al., *International Journal of Psychophysiology* 2022 Vol. 181 Pages 50-63.

Recent studies have found connections between brain areas like the prefrontal cortex and orbitofrontal cortex and heart rate variability (HRV). Researchers explored if daily biofeedback sessions could affect the size of these brain areas linked to HRV. They discovered that sessions increasing heart rate oscillations increased the size of the left orbitofrontal cortex, which improved mood. Resting HRV also improved more in the group receiving biofeedback to increase heart rate oscillations. These findings show that biofeedback targeting heart rate oscillations can impact HRV and brain circuits involved in HRV control and emotion regulation.



Evaluation of the Heart Rhythm Coherence Ratio During Sleep: A Pilot Study With Polysomnography.

E. L. Mateos-Salgado, F. Ayala-Guerrero and C. A. Gutiérrez-Chávez, *Applied Psychophysiology and Biofeedback* 2022 Pages 1-6. The psychophysiological coherence model suggests that a specific heart rhythm pattern called heart rhythm coherence (HRC) is linked to the body's relaxation response and affects functions like breathing, blood pressure, and heart rhythms. This study aimed to find out if there are any differences in the HRC pattern during different stages of sleep. They studied eighteen healthy young individuals and analyzed their heart activity during sleep. They found that the HRC pattern varied across sleep stages. The highest peaks in the coherence band, the 0.1-Hz index, respiratory sinus arrhythmia (RSA), and heart rate (HR) showed significant differences. REM sleep had lower Coher-Peak and RSA values but higher 0.1-Hz and HR values. These findings suggest that the HRC pattern behaves differently during sleep stages, and further research is needed to understand it better.



Reducing Anxiety and Social Stress in Primary Education: A Breath-Focused Heart Rate Variability Biofeedback Intervention.

Aranberri-Ruiz, A. Aritzeta, A. Olarza, G. Soroa and R. Mindeguia, *International Journal of Environmental Research and Public Health* 2022 Vol. 19 Issue 16 Pages 1-4. This study was done to see if teaching primary school students how to breathe consciously could help to reduce their anxiety and stress. This

study taught students conscious and slow breathing using a technique called heart rate variability biofeedback. They found that after the training, students in the Treatment group learned to breathe consciously and experienced reduced anxiety and stress levels. This strategy could be helpful for other primary school students and is feasible to implement in schools.

HeartMath as an Integrative, Personal, Social, and Global Healthcare System.

S. D. Edwards, D. J. Edwards and R. Honeycutt, *Healthcare* 2022, Publisher: MDPI Pages: 376. The research suggests that the HeartMath system has benefits on personal, social, and global levels. Personally, it reduces stress, improves mood, and increases resilience. Socially, it promotes cooperation and harmony. Globally, it aims to enhance the collective heart rhythm, known as global coherence. The study concludes by emphasizing the potential of the HeartMath system to revolutionize healthcare, benefiting individuals, communities, and the planet's well-being.

Effects of a randomised trial of 5-week heart rate variability biofeedback intervention on mind wandering and associated brain function.

K. Nashiro, H. J. Yoo, J. Min, C. Cho, P. Nasser, Y. Zhang, et al. *Cognitive, Affective, & Behavioral Neuroscience* 2022 Vol. 22 Issue 6 Pages 1349-1357. This study suggests that mind wandering is when your thoughts drift away from the present moment. It can be caused by the default mode network (DMN), a network of brain regions that are active when you're not focused on anything in particular. Heart rate variability (HRV) is a measure of how much your heart rate varies from beat to beat. It's a good indicator of your overall health and well-being. Heart rate variability biofeedback is a technique that uses real-time feedback on your HRV to help you learn how to control it. The study found that daily sessions involving high amplitude heart rate oscillations may help reduce negative mind wandering and associated brain function. This means that people who practiced slow paced breathing, which increased their heart rate oscillations, were better able to focus on the present moment and had less negative thoughts.

International Journal of Environmental Research and Public Health (MDPI)

Reducing Anxiety and Social Stress in Primary Education: A Breath-Focused Heart Rate Variability Biofeedback Intervention

by Almira Anarbuti-Ruiz¹, Altor Arteta^{1,2}, Amair Olaza¹, David Sorro² and Rosa Mirogallu¹

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(This article belongs to the Section Children's Health)

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Abstract

Primary school students suffer from high levels of anxiety and stress. Having emotional regulation abilities can help them to manage challenging emotional situations. Conscious and slow breathing is a physiological, emotional regulation strategy that is feasible for primary school students to learn. Following Polyvagal Theory and PNER Theory, this research presents the results of a breath-focused heart rate variability biofeedback intervention. The intervention aimed to reduce anxiety and physiological and social stress in primary school children. A total of 585 students (46.4% girls and 53.6% boys) from the same public school, aged between 7 and 12 years ($M = 8.51$, $SD = 1.28$), participated in this study. To assess the impact of training, a pretest, a posttest, and two follow-up tests (Treatment and Control groups), two evaluation phases (Pretest and Posttest), and three educational cycles (Pre, second, and third cycles). To examine heart rate variability, ambulatory watches were used and anxiety and social stress were measured by the BASC II test. The results showed that after the intervention, the students learned to breathe consciously. Moreover, they reduced their levels of anxiety ($MCSQ_{\text{anxiety}} = 12.10(2.22)$ vs. $MCSQ_{\text{anxiety}} = 12.70(2.88)$) and stress ($MCSQ_{\text{stress}} = 12.20(2.66)$ vs. $MCSQ_{\text{stress}} = 12.50(3.41)$). The work also discusses the limitations and benefits of this type of intervention in primary schools.

Keywords: stress; anxiety; primary school; breathing; heart rate variability

Healthcare (MDPI)

HeartMath as an Integrative, Personal, Social, and Global Healthcare System

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[†] Department of Psychology, University of Jeddah, P.O. Box 5021, King Abdulaziz University, Jeddah, Saudi Arabia

Abstract: COVID-19 is a recent major event, adding to planet Earth's systems of chaos, stress, imbalance, and dysfunction. The HeartMath research team has conducted various research, demonstrating that the brain can be trained to regulate the heart's electrical activity, which in turn regulates the autonomic nervous system, leading to improved health, emotional stability, and social harmony. All of this occurs within a planet in desperate need of healing. The proposed work will explore the potential of HeartMath as a global healthcare system, addressing the needs of individuals, communities, and the planet's well-being. The research suggests that the HeartMath system has benefits on personal, social, and global levels. Personally, it reduces stress, improves mood, and increases resilience. Socially, it promotes cooperation and harmony. Globally, it aims to enhance the collective heart rhythm, known as global coherence. The study concludes by emphasizing the potential of the HeartMath system to revolutionize healthcare, benefiting individuals, communities, and the planet's well-being.

Keywords: healthcare; HeartMath; Global Coherence Initiative; coherence; stress; anxiety; emotional regulation

1. Introduction

COVID-19 is a recent major event, adding to planet Earth's systems of chaos, stress, imbalance, and dysfunction. The HeartMath research team has conducted various research, demonstrating that the brain can be trained to regulate the heart's electrical activity, which in turn regulates the autonomic nervous system, leading to improved health, emotional stability, and social harmony. All of this occurs within a planet in desperate need of healing. The proposed work will explore the potential of HeartMath as a global healthcare system, addressing the needs of individuals, communities, and the planet's well-being. The research suggests that the HeartMath system has benefits on personal, social, and global levels. Personally, it reduces stress, improves mood, and increases resilience. Socially, it promotes cooperation and harmony. Globally, it aims to enhance the collective heart rhythm, known as global coherence. The study concludes by emphasizing the potential of the HeartMath system to revolutionize healthcare, benefiting individuals, communities, and the planet's well-being.

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Randomized Controlled Trial | Cogn Affect Behav Neurosci. 2022 Dec;22(6):1349-1357. doi: 10.3758/s13415-022-01019-7. Epub 2022 Jun 27.

Effects of a randomised trial of 5-week heart rate variability biofeedback intervention on mind wandering and associated brain function

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Affiliations → expand
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Abstract

Previous research suggests that excessive negative self-related thought during mind wandering involves the default mode network (DMN) core subsystem and the orbitofrontal cortex (OFC). Heart rate variability (HRV) biofeedback, which involves slow paced breathing to increase HRV, is known to promote emotional well-being. However, it remains unclear whether it has positive effects on mind wandering and associated brain function. We conducted a study where young adults were randomly assigned to one of two 5-week interventions involving daily biofeedback that either increased heart rate oscillations via slow paced breathing (Osc-conditional) or had little effect on heart rate oscillations (active control or Osc-conditional). The two intervention conditions did not differentially affect mind wandering and DMN core-CFC functional connectivity. However, the magnitude of participants' heart rate oscillations during daily biofeedback practice was associated with pre- to post decreases in mind wandering and in DMN core-CFC functional connectivity. Furthermore, the reduction in the DMN core-CFC connectivity was associated with a decrease in mind wandering. Our results suggested that daily sessions involving high amplitude heart rate oscillations may help reduce negative mind wandering and associated brain function.

Keywords: Default mode network; Functional connectivity; Heart rate variability biofeedback; Mind wandering; Orbitofrontal cortex.

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Education Achievements



► Meet the People in the HeartMath® for Parents Program

In a world where raising emotionally aware children is a profound challenge, the HeartMath for Parents program brings together a diverse group of individuals who have personal and professional experience using HeartMath tools and technology with children. In this program, they share their heartwarming stories of love, dedication, and transformation.

Michele Coleman, PhD, guides families through attachment trauma using HeartMath.

Jorina Elbers, MD, a pediatric neurologist and author, integrates HeartMath into her daily life with her husband, Owen, and two sons, empowering both her patients and her own family.

A NEW PROGRAM 

HeartMath® for Parents

Nurturing Emotional Wellness in Families



Education Achievements

Sophia Kim, MD, an Internist and Medical Director, addresses stress-related health issues. She has introduced HeartMath to a Girl Scout troop and their parents, equipping them with a tool for social-emotional regulation. Kata Kiszely-Tóth, an educator and coach, promotes connection and heart-based living through HeartMath teachings for parents, children, and teachers. Xabier Moro, PhD, a physicist and devoted father, practices HeartMath with his children every morning, embracing Heart-Focused Breathing™, Quick Coherence® Technique, and appreciation.

Together, Wanda Muhammad, MEd., Kathy Norwood, EdD, MCC, Diedra Perry, Tecreshia Rana, Constanza Rosenzweig, Mohammed Sheikh, and Owen Ward embody a shared interest in using HeartMath to enhance personal well-being, relationships, and emotional regulation in their personal lives and with their children. With their diverse backgrounds and experiences, these individuals inspire hope, resilience, and heart-centered living as they nurture the hearts and minds of their children and families.

► WiseHeart™ Program – A Blended-Learning Initiative

The WiseHeart program is an innovative blended-learning initiative designed to boost the well-being of learners aged 7-10 years. It offers five comprehensive units focusing on vital life competencies such as self-regulation, social skills, mindfulness, and the growth mindset. Rooted in extensive educational research and neuroscience insights, the program explores the intricate links between the heart, brain, and emotions, enhancing students' academic engagement.

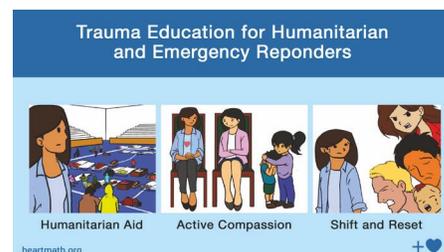
Encompassing a variety of engaging resources, WiseHeart employs 3D animation videos, narrated infographics, and online activities to enrich learning. Unique features like drumming sessions and rap songs add an interactive dimension to the program. Interviews with students sharing their experiences provide personal perspectives and inspire learners. The program includes pre- and post-progress trackers, enabling students to measure their growth in healthy habits and skills. Backed by HeartMath research, WiseHeart offers a comprehensive approach to increasing students' well-being, resilience, and academic success. Instructional videos introduce the program's content and enrollment process, making WiseHeart an accessible, research-driven educational initiative. *Scheduled for release in the Summer of 2023.*



Education Achievements / Accomplishments

▶ Trauma Mini-Course Successfully Translated Into Ukrainian, Russian and Polish

The Trauma Mini-course for First Responders was successfully translated into Ukrainian, Russian, and Polish languages. This educational program instructs first responders, both professional and volunteer, in utilizing evidence-based self-regulation techniques. The aim is to cultivate resilience, mitigate burnout, address secondary traumatization, and provide assistance to individuals affected by human-caused or natural calamities.

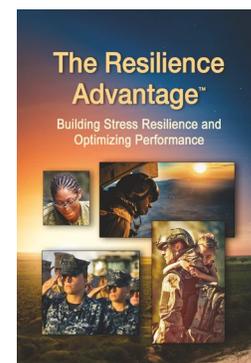


▶ A Guide Was Created for the Trauma Mini-Course for First Responders

This guide is designed for HeartMath® Certified Professionals, particularly those offering humanitarian aid or psychological support to survivors of environmental disasters, mass shootings, displacement, conflict, and emergency responders. Given the rise in global humanitarian crises, this HeartMath for Humanitarian Aid program equips individuals with skills to help their communities. The program teaches participants how to maintain composure in chaos, assist those in emotional distress, and help those debilitated by stress. It explores the psychological and physiological effects of trauma, provides instruction for four HeartMath techniques for aid workers, and offers interactive activities for better understanding. It aims to help participants recognize different stress responses, increase their resilience, and equip them with heart-focused tools for self-help and aiding affected individuals.

▶ Four New Resilience Advantage™ Pocket Guides

The education division translated and created four versions of the Resilience Advantage Pocket Guide: Three for Law Enforcement (Spanish, Nepalese and North Macedonian) and one English version for the military. These guides were designed to fortify military members, law enforcement personnel, families, and units. This guide aims to strengthen resilience and promote a culture of seeking help for stress-related injuries. Through comprehensive education, immersive training, and effective communication, it ignites constructive change and transformation in these communities.



▶ New Coherence Advantage™ Program

The Resilience Advantage Trainer Certification program is undergoing a major revision and introducing the Coherence Advantage program as its updated version. The new program, tested during the autumn of 2022 and set to launch in the spring of 2023, incorporates several enhancements. It emphasizes the scientific understanding of heart coherence and its influence on emotional well-being, performance,



Education Achievements / Accomplishments

and health. Additionally, it introduces newly revised tools and techniques for self-regulation and energy management to facilitate the transition into heart coherence, offers a more interactive and captivating curriculum, and provides trainers with a new online platform for streamlined program delivery. These updates aim to enhance the overall effectiveness and accessibility of the Coherence Advantage program.

► CDC Grant Recipients' Comprehensive Training

We successfully completed the implementation of the CDC grant. As part of this process, Jenna Moniz conducted two days of comprehensive training, equipping over 20 Social and Emotional Learning Specialists, Social Workers, and Psychologists from Aldine ISD (located adjacent to Houston, Texas) with the necessary knowledge and skills. These professionals were trained in the use of Inner Balance™ Bluetooth, Smart Brain Wise Heart™, and HeartMath Interventions. In addition to this, two educators from Aldine ISD obtained certification as HeartMath Trainers, enabling them to provide resilience training to their fellow staff members.



► Summary of the CDC Grant Implementation

Jenna Moniz was asked to write a brief summary of the CDC grant implementation and start posting inspirational student quotes from Aldine, Texas schools, approved by the grant coordinator. She indicated that HMI's program was tested with 450 ninth-graders in Aldine. Utilizing HMI's curriculum and tools, they learned emotional self-management and tracked progress with heart rate biofeedback. Fourteen teachers received training and support. Feedback highlighted improved focus, relational skills, and athletic performance. The intervention's effectiveness will be examined by the University of Chicago's NORC and reported in 2023. The program's success points to its potential to boost students' emotional and academic well-being.

► Earth Day Activities for Children

The Marketing and Education Teams collaborated to create an Earth Day Activities landing page featuring one activity for children aged 3-10 and another for those aged 11-18+. Additionally, they launched the Special Earth Day Care Focus on the GC app and blog. As part of the Earth Day promotions, Laura Lopez-Arenas and Jenna Moniz organized the recreation of several activities from the Teaching Children to Love program. Their efforts resulted in a successful Earth Day campaign that engaged participants of different age groups and raised awareness for environmental care.



Education Accomplishments / Highlights

► Understanding Educators and Parents Needs

The education team conducted a survey using SurveyMonkey, which gathered responses from nearly 200 educators and parents, which provided us with valuable data. Additionally, they conducted interviews with educators to gain a deeper understanding of their needs and expectations and the potential contributions the HeartMath Institute can make in the realm of education. With this information, they can now develop innovative strategies and resources aimed at expanding the range of services offered by the education department to both schools and parents.

► Education Training Videos

In collaboration with our education team, Tara West, a skilled video editor who produced an Inner Balance™ video while at the University of Hawaii at Hilo, contributed to the development of five instructional videos for emWave®. This collection comprises three instructional videos for emWave® Pro and two videos demonstrating the accurate recording of data using the emWave® Pro Plus. For further details, visit their website: <https://hilo.hawaii.edu/studentaffairs/counseling/heartmath.php#tutorialsandlinks>.

► Client Implementations Highlights

- Hope Lives, our longstanding client in Phoenix and now Flagstaff, who offer mental health services to urban at-risk adults, continues to add resilience mentors to their staff.
- Grant submitted and approved to the May and Samuel Rudin Family Foundation for funding 20 schools throughout the US around student mental health. Each school will use HeartMath classroom programs and technology to help students gain greater resilience and lessen stress. A program report on results and stories will be sent to the May and Samuel Rudin Family Foundation in August 2023.
- The Florida Gulf Coast University education department helped fund HeartMath training for their undergraduate teaching candidates trained by HeartMath trainer Andrea Trank. The POQA was used to measure the results. Results will be available in Spring 2023. If successful, this training could become an important ingredient in teacher training.
- A research study was proposed and accepted by the Drake Planetarium in Cincinnati to measure two groups of urban underserved children, ages 6-8 and 9-12, during Summer 2023. Each of the 40 participating children will have pre-and post-data using the emWave Pro Plus and then use the emWave pro daily for six weeks as a way to prepare them to best learn before doing 3-hour blocks of training in science and math. We are hoping for a published study.
- We began making 10 Education videos from short interviews with users of the emWave Pro and the application of HeartMath tools in their daily lives. The goal is to complete the 10+ videos created by the Summer of 2023. These videos are based on the success each educator had at their respective schools.
- Dr. Imad Mays, professor of Neuroscience at Connecticut College, has successfully used a combination of Inner Balance and emWave® Pro Plus with some of her undergraduate college students that

Education Accomplishments / Highlights

show significant gains in resilience and HRV coherence. Results will be published in 2023-2024.

- A successful intervention at Lakeview Jr. High in Pickerington, OH, with over 400 middle school students using the Smart Brain Wise Heart™ and the emWave® Pro will lead to a research article to be published in 2023-2024.
- Two notable education research studies published based upon successful interventions: A meta-analysis on heart rate variability biofeedback and depressive symptoms published in Scientific Reports in the Nature portfolio: The International Journal of Environmental Research in Public Health used the emWave Pro to measure students between the ages of 7-11 years old. HRV grew significantly in most populations as a result.
- The Neuva Luz Foundation, a nonprofit organization situated in the Rio Grande Valley, TX, is dedicated to aiding individuals impacted by Trauma and Post-Traumatic Stress Disorder (PTSD), encompassing children, Veterans, and families. To increase their capacity to support their beneficiaries, several of their personnel, including the Clinical Director and Program Managers, have actively participated in diverse clinical programs, notably The Resilient Heart™ Trauma-Sensitive program. Additionally, the foundation has utilized HeartMath's skillsets and resources, such as Inner Balance™ Sensors, Wild Ride to the Heart™ Game, and Smart Brain Wise Heart™ licenses, to advance the goals of their Family program.
- Marshall University School of Nursing had seven faculty trained in the Resilience Advantage™ program to integrate the HeartMath content within their curriculum for bachelor, master's and, doctoral nursing students. They also acquired emWave Pros and 26 Inner Balance sensors to use within their school and have outreached to various community medical facilities within their area and in Thailand. They are pursuing becoming an affiliate school with Jean Watson's Caring Science curriculum.
- The Education Staff collaborated extensively with a diverse array of individuals and organizations to facilitate the seamless integration and use of HeartMath tools and techniques within their programs. This extensive list of collaborations reflects the broad reach and impact of our educational initiatives.
- In October and November 2022, Patricia Lim, a HeartMath® Certified Trainer and former World Health Organization member in Brazil, conducted Resilience Advantage self-empowerment sessions over a period of 4-5 weeks. The program included HeartMath Institute sponsored Inner Balance sensors and targeted selected participants. Zip Zap, a dynamic circus and school in Cape Town, South Africa, offered complimentary empowerment and outreach programs to children. Patricia, representing the Inspira Heart Institute, trained 16 staff members and marginalized youth in Cape Town. Following the four-week training, participants reported an average increase in resilience, happiness, calmness, energy levels, work performance, personal relationships, and 16.6% increase in overall quality of life. Additionally, the program incorporated a visioning exercise where participants released biodegradable balloons carrying their intentions for 2023.
- Blue Courage, a HeartMath Institute alliance partner, trained more than 4,000 police officers and National Guard members in core HeartMath resilience modules, enhancing emotional strength and resilience within their ranks.

Impacting Lives: A Look at Our Training Accomplishments

In 2022, the Resilience Advantage™ Certification Program conducted virtual events on February 24, May 19, August 19, and November 3, training a total of 65 participants. Additionally, the Columbia National Police certified two new officers in RA, with training delivered in Spanish. Also, the Building Personal Resilience™ Certification Program (BPR) successfully trained 145 individuals. The program hosted sessions on January 10, March 8, May 4, June 30, and August 31, equipping participants with valuable HeartMath skills and tools for personal resilience. The Ministry of Solgen in Ontario also demonstrated commitment to resilience by providing additional training to eight staff members who became resilience mentors.

Furthermore, the BPR expanded its reach by offering mentor programs in Spanish, training six individuals, and piloting a Portuguese mentor program, training 33 individuals. Additionally, the AHT Certification Program focused on activating the heart of teams, training 22 individuals virtually in 2021 and 2022. Additionally, The Resilient Heart™ Trauma Sensitive HeartMath® Course and Certification witnessed significant success, with over 1,600 practitioners enrolling in the program. Lastly, the Stress and Well-Being Assessment Course enrolled 120 individuals, highlighting the growing interest in stress management and well-being.

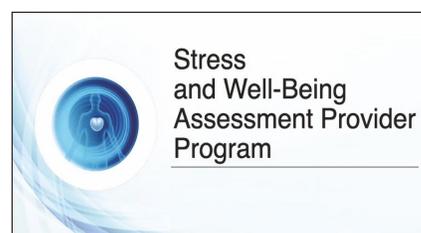
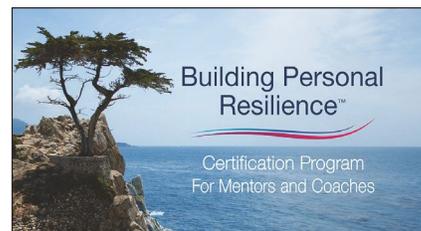
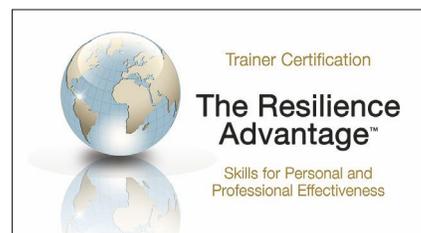
Education Events

- Beyond Identification Conference, March 12, 2022
- Heartfulness Conference, “An Approach to Integrative Health and Well-Being,” Dec. 16-18, 2022.

Investing in Education: Grant Funding Progress

The education division received a generous \$10,000 grant from the May and Samuel Rudin Family Foundation for Student Mental Health. We collaborated with 20 schools nationwide and implemented HeartMath tools and programs in selected classrooms. The outcomes of this initiative will be made public in 2023. In 2022, a total of \$7,491.35 was spent on this endeavor.

The Education Division also received funds from HeartMath Institute’s Development Division Funds for Trainer Sponsorships in various areas: 22 sponsorships were awarded from the Education Sponsorship Fund, totaling \$12,958.



2022 Summits and Presentations



Summit: February 2022

Breathwork Summit

Presentation: February 7-11, 2022, Rollin McCraty, Ph.D.

“Getting in Sync: Using your Breath to Align the Heart, Mind, and Emotions”



Summit: February 2022

The Science of Healing Summit

Presentation: February 28 - March 4, 2022, Rollin McCraty, Ph.D.

“Coherence: How to Get in Sync With Your Higher Self, Others, and the Earth”



Summit: March 2022

The Rise of Collective Compassion: A Heart-Centered Approach to Creating a More Coherent World

Presentation: March 18 - March 20, 2022, Rollin McCraty, Ph.D., Deborah

Rozman, Ph.D., Howard Martin, Dr. Joe Dispenza, Scilla Elworthy, Ph.D., James Myles, Sr., Ph.D. and Roger Nelson, Ph.D. *“Discover how the transformational power of the heart is key to becoming empowered, self-secure individuals for manifesting a more coherent, peaceful world.”*



Summit: April 2022

Healing with Vibration Summit (2.0)

Presentation: April 4-10, 2022, Rollin

McCraty, Ph.D. *“Coherence: How to Get in Sync with Your Higher Self, Others, and the Earth”*



Summit: April 2022

Protecting Gaia's Oasis – Free Global Summit

Presentation: April 18-22, 2022, Rollin McCraty, Ph.D., *“Consciousness, the Human Heart and the Global Energetic Field Environment”*



Summit: April 2022

Global Coherence Pulse – Giving a Voice to Nature: A Global

Network for Monitoring Tree Potentials

Presentation: April 16, 2022, Rollin McCraty, Ph.D. *Celebrating Earth Day – “A Citizen Scientist Project: The Global Tree Monitoring Project”*



Summit: April 2022

Trauma, Attachment & Resilience Summit.

Presentation:

April 18-24, 2022, Rollin McCraty, Ph.D., *“Heart-Brain Synchrony: A Key to Emotional Balance and Resilience”*

Connecting with Others

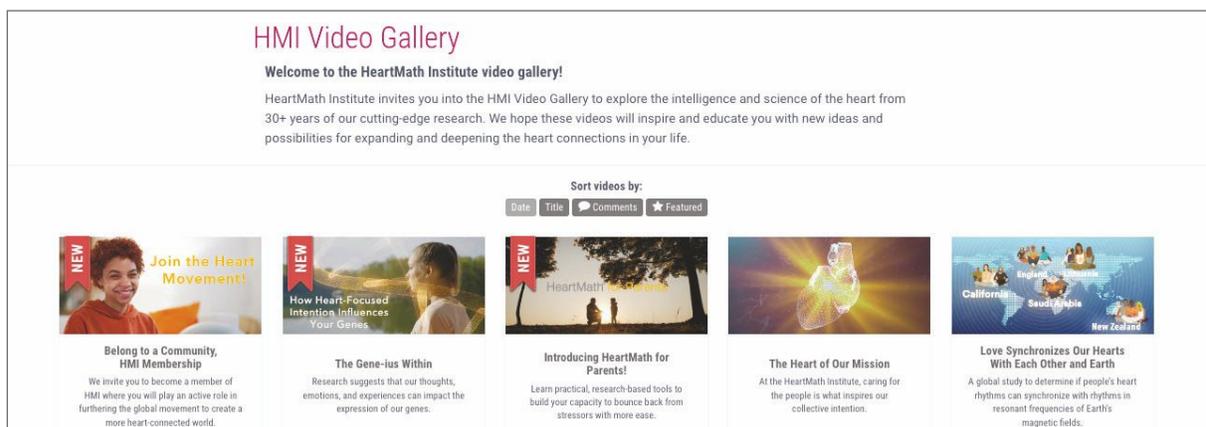
- ▶ **Summit: April 2022**
NeuroHeart Education Conference.
Presentation: April 28-30, 2022, Jeffrey Goelitz
“Activating the Transformative Heart: Practices and Strategies for the Classroom.”
- ▶ **Summit: May 2022**
The Metaphysically Fit Summit. **Presentation:** May 5-8, 2022, Rollin McCraty, Ph.D., *“Moving From Feeling That You’re On Autopilot To Being Human.”*
- ▶ **Summit: June 2022**
The Meaningful World Annual Festival at the United Nations, Nurturing Peace Within: Uplifting One Another. **Presentation:** June 5-8, 2022, Rollin McCraty, Ph.D., *“Getting the Heart and Mind in Sync”*
- ▶ **Summit: July 2022,**
Becoming Pain-Free: Healing the Root Causes of Chronic Pain. **Presentation:** July 18-24, 2022, Rollin McCraty, Ph.D., *“Lower Pain with Heart Coherence”*
- ▶ **Summit: August 2022**
The Ultimate Holistic Health Summit: Latest Breakthroughs You Haven’t Heard Of.
Presentation: August 3-10, 2022, Rollin McCraty, Ph.D., *“Heart Coherence Is the Key to Emotional Regulation”*
- ▶ **Summit: August 2022**
The Biology of Trauma 2.0: Beyond the Diagnosis.
Presentation: August 8-14, 2022, Dr. Jorina Elbers *“A Physician’s Guide to Diagnosing Trauma”*
- ▶ **Summit: September 2022,** *The Science and Practice of Heart Coherence.*
Presentation: September 14-October 26, 2022, Rollin McCraty, Ph.D., *“The Science and Practice of Heart Coherence”*
- ▶ **Summit: September 2022,** *Inner Evolution Summit: The Science of Mind, Consciousness, and Healing* **Presentation:** September 15-25, 2022, Rollin McCraty, Ph.D., *“How Heart Rate, Trauma, Emotions, or Intuition Can Be Measured”*
- ▶ **Summit: September 2022,** *HeartWeek Brazil 2022.* **Presentation:** September 29-October 1, 2022, Rollin McCraty, Ph.D., *“Research of the HeartMath® Institute”*
- ▶ **Summit: October 2022,** *Reverse Autoimmune Disease Summit 2.0.* **Presentation:** October 4-11, 2022, Rollin McCraty, Ph.D., *“The Science and Practice of Heart-Brain Coherence”*
- ▶ **Summit: October 2022,** *The Second International Cranio Research Conference: Cranio at Heart.* **Presentation:** October 7-8, 2022, Rollin McCraty, Ph.D., *“The Energetic Heart: Deepening the Therapeutic Relationship Between Heart and Brain”*
- ▶ **Summit: October 2022,** *The Second International Cranio Research Conference: Cranio at Heart.* **Presentation:** October 15-24, 2022, Rollin McCraty, Ph.D., *“How Global Consciousness Starts at the Heart of Every Human Being”*
- ▶ **Summit: November 2022,** *The Energy Medicine Summit.* **Presentation:** November 14-18, 2022, Rollin McCraty, Ph.D., *“Energetic Interconnectivity”*

Connecting with Others

In 2022 we released 14 new videos.

- ▶ Two videos to support our fundraising efforts – one for our Spring Appeal titled, *Window Into the Energetic Lives of Trees: New Discoveries on the Connection Between People & Nature*, and another for our Year-End Appeal titled *The Heart Of Our Mission: Co-Creating A Kinder, More Compassionate World*.
- ▶ Three videos highlighting interesting HeartMath Institute research studies:
 - *Study Finds that Love Synchronizes Our Hearts with Each Other and the Earth*
 - *Exploring The Beneficial Bond Between People And Dogs*
 - *Connecting Hearts: Understanding the Research on the Symbiotic Bond Between Horses and Humans*
- ▶ We also created three brand new videos on the benefits of applying coherence:
 - *What Is Personal Heart Coherence & How Can It Help Us Manage Stress?*
 - *Social Coherence Explained: How Getting In-Sync with Each Other’s Hearts Uplifts the Energetic Field*
 - *The Advantages of Activating Heart Feelings in the Morning*
- ▶ In addition, we created two videos to help promote the 2022 GCI virtual event, including a Zoom chat with HeartMath presenters and event guest speaker Dr. Joe Dispenza, plus a welcome video for the attendees.
- ▶ We also created a video to support the membership drive featuring the new Heart Intelligence book titled *Become a HeartMath Institute Member and Experience the Transformative Power of Heart Intelligence*.
- ▶ Plus, a promotional video about the Building Personal Resilience certification program, *Get Certified to Help Build Resilience & Transform Stress with Validated, Heart-Based Program*.
- ▶ And a video describing some of our work in education called, *Building a Heart-Coherent Classroom*.

You can view the videos at HeartMath Institute website video gallery, HeartMath Institute YouTube channel or HeartMath Institute Facebook page.



Lives We Touched Through Sponsorship

HeartMath Institute donors are making a significant difference.

In 2022, HMI was able to provide valuable support to numerous individuals thanks to the kindness of our donors. Through donor-funded sponsorships, over 6,000 people in education, military, and community service settings were able to benefit from HeartMath technology, tools, and educational programs.



The Education Projects Fund

HMI's education programs and tools for social and emotional awareness were offered to more than 5,000 students. These resources assist students in effectively managing stress, reducing anxiety, and developing essential self-regulation skills.

"Receiving this scholarship will make my dream of sharing HeartMath with my students a reality. I hope to help my students learn how to deal with the stress we all encounter in life."

– Middle School Teacher



The Military Service Appreciation Fund

Over 200 military personnel and veterans were able to recuperate their well-being and overcome PTSD, thanks to the Military Service Appreciation Fund's efforts.

"I appreciate your generosity. HeartMath is such an awesome program and I relish in this opportunity to continue using it."

– Navy Veteran



The HeartMath for Communities Fund

Support was provided to over 800 community members, including firefighters, police officers, victims of human trafficking, and communities coping with stress and trauma.

"I was looking for something to do that was simple for my balance. The research was compelling, comprehensive and clear. Now I use the tools and techniques every day. Anyone that wants easy access to more ease in their life needs this."

– HMI Donor

The caring and hopeful spirit of contributors like you is present every time HeartMath touches someone's life. We truly appreciate your generosity.

All of us at HeartMath Institute thank you, our donors and supporters, for a successful 2022. Your care and generosity make all that we do possible. Our pledge to you is to educate people about HeartMath and provide them with research-based tools, programs and services that can empower them to manage their mental, emotional and physical well-being as they strive to reach their full potential.

Donations to the institute come from individuals, corporations, other nonprofits and a wide variety of public and private institutions and organizations.

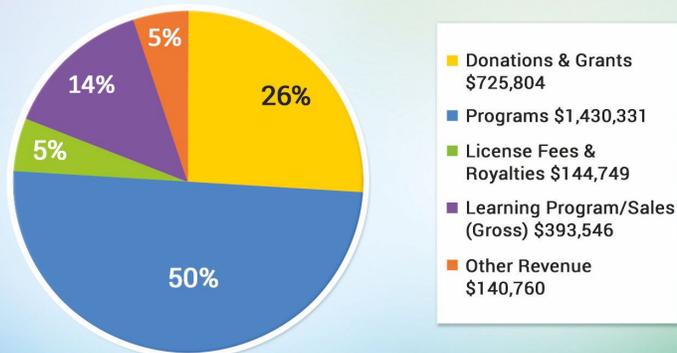
100% Donation Model

HMI is a nonprofit that uses 100% of the donations it receives to fund initiatives, public programs and research projects. We use product sales and licensing fees to cover administrative and fundraising expenses, so each contributor's donations can be used solely for projects that help people.

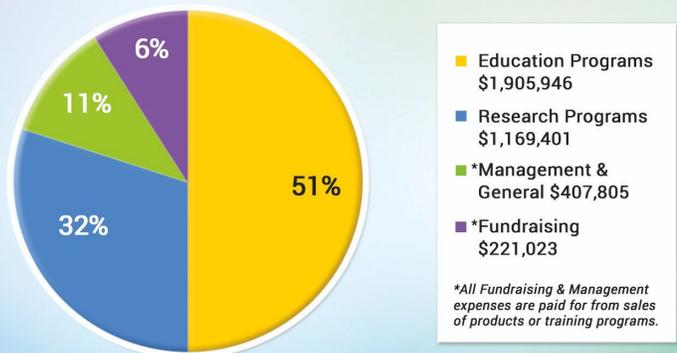
Every child, woman and man HeartMath is able to empower to improve their lives has contributors like you to thank. For them and all of us at HeartMath, thank you. We truly appreciate your generous spirit.



2022 HMI Revenue \$2,835,190



2022 HMI Expenses \$3,704,175



HeartMath Institute's Vision

There is a global shift underway in people's attitudes and how we treat one another and the planet. This shift involves forming a deeper connection with our own and each other's hearts. As these connections are established, we believe the world we live in can be transformed. Coherent, heart-centered interactions will generate a higher vibrational consciousness field globally, increasing individual, social and global coherence and resonance. HeartMath Institute provides practical, heart-based tools and technologies that people of all ages and walks of life can use to enhance health, performance and well-being.

Ways to Support HMI and GCI With Donations

HeartMath's work and outreach continues with the generosity of supporters like you. Here are some ways you can contribute:

- ▶ Become a sustaining/monthly supporter and get free HMI Membership.
- ▶ Make a personal donation through cash, stocks, bonds, real estate or dividends.
- ▶ Participate in employers' corporate matching-gift programs.
- ▶ Make an in-memory contribution on behalf of a loved one.
- ▶ Make a donation to acknowledge special people who are doing good work, or designating a gift for birthdays, holidays or other occasions.
- ▶ Help to fulfill the HMI wish list with in-kind donations.
- ▶ Participate in HMI's Planned Giving Program, which benefits HeartMath for generations to come and donors during their lifetime.
- ▶ Include HMI in your will as part of your legacy.

Stay Connected ...

There are lots of ways to stay connected with HeartMath and keep on top of all we have to offer.

Subscribe to News and Tools on HMI's website: www.heartmath.org.

Become an HMI Member on HMI's website: <https://www.heartmath.org/membership>

Become a GCI Emmissary on HMI's website, <https://www.heartmath.org/gci>, or join others on the Global Coherence App. <https://www.heartmath.org/gci/global-coherence-app/>

Like us on Facebook: <https://www.facebook.com/HeartMathInstitute>

Don't forget our other Facebook pages at <https://www.facebook.com/GlobalCoherenceInitiative>, <https://www.facebook.com/HeartMathMyKids> and <https://www.facebook.com/HeartMathTroopsVeteransFamilies>

Watch our numerous videos on YouTube at <https://www.youtube.com/HeartMathInstitute> and <https://www.youtube.com/GlobalCoherenceInit>

Follow us on Instagram: <https://www.instagram.com/HeartMathInstitute>

Follow us on LinkedIn: <https://www.linkedin.com/company/HeartMathInstitute>

Have a question? Give us a call at (831) 338-8500 or toll free (800) 711-6221. Support HeartMath with your contributions by visiting <https://www.heartmath.org/donate> or calling us toll free at (866) 221-6339 or emailing us at info@heartmath.org

Our Volunteers and Boards



With gratitude and heartfelt thanks, we salute our many volunteers for the time and energy they donated in 2022.

We are grateful to the many individuals, with diverse backgrounds, knowledge and expertise who oversaw the operations, organization and missions of HeartMath Institute and the Global Coherence Initiative.

Your dedicated service is integral in our ability to offer programs, services and outreach.

HMI Leadership Team:

Doc Childre, founder; Sara Childre, president and CEO; Rollin McCraty, executive vice president, director of research; Brian Kabaker, chief financial officer, director of sales; Katherine Floriano, executive vice president, office of philanthropy.



HMI Board of Directors:

Chair: Katherine Floriano. Directors: Brian Kabaker, Diana Govern, Donna Koontz, and Dan Bishop.



HMI Scientific Advisory Board:

Doc Childre, Dr. Abdullah Abdulrahman Alabdulgader, Dr. John Andrew Armour, Linda Caviness, William C. Gough, David Joffe, Rollin McCraty, Ph.D., Minvydas Ragulskis, Ph.D., Dr. Richard Rahe, Dr. Deborah Rozman, Ph.D., Abdul Qahar Sarwari, Ph.D., Alfonsas Vainoras, M.D., Ph.D. and Carlo Ventura, M.D.



Our Volunteers and Boards

GCI Steering Committee:

Chairman: Doc Childre. Members: Gregg Braden, Jeddah Mali, Howard Martin, Rollin McCraty, Ph.D., Deborah Rozman, Ph.D. and Claudia Welss.



GCI Advisory Board:

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