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Opinion Paper

HeartMath coherence technology and innovation in community psychosocial well-being: A way to promote healing

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Abstract

HeartMath coherence technology promotes both physical and psychological well-being by examining physiological responses, specifically heart rate variability. The HeartMath system focuses on promoting psychophysiological, psychosocial, and global coherence and interconnectedness. These coherent states are associated with increased social facilitation and interpersonal, family, and group functioning. This is beneficial in the African context, where the communal interconnectedness of ubuntu is addressed. This is central to improving communities and rectifying the remnants of apartheid by promoting the well-being of individuals in South Africa by providing a tool towards better mental health.

Keywords: community, HeartMath, psychology, psychosocial well-being, South Africa, technology.

Introduction

The media often portrays Africa as a continent plagued by chaos and marked by endemic violence (Larsen & Jensen, 2019). The harsh reality is that many Africans are involved in a daily struggle for survival, a relentless pursuit that depletes human energy, distorts consciousness and exacerbates inhumanity and disorder (Edwards, 2017). These issues unfold within a broader global context of international warfare, terrorism, climate change, and natural disasters, underscoring the urgent need for healing—not just for Africa, but for the entire planet. This healing must encompass all inhabitants, transcending individual, familial, communal, and national boundaries. Achieving this vision requires, amongst others, a coherent consciousness, care, and collaboration among the diverse populations that make up contemporary humanity (Edwards et al., 2022). This was the general intention that drove the local South African community psychology and HeartMath initiatives described below.

Critical Discussion

Zululand University (South Africa) community psychology programmes were developed during the 1980s with the specific intention of becoming health-promoting transformative initiatives to address Apartheid-related social injustice, as well as structural, reactive, and repressive violence (Edwards, 2014a). Apartheid meant that predominantly white psychologists were working in urban areas, who constituted about 95 per cent of the total South African psychology workforce at the time. This meant that the very few black psychologists at the time also worked mainly in urban areas. Furthermore, housing, shelter, sanitation, basic health, and educational resources either did not exist or were seriously lacking in most poor, politically segregated communities during that period (Sobantu et al., 2019). This sparked collaboration with local health, education, industry, and traditional healing resources as community psychology programmes started operating across segregated communities in rural contexts during this time (Seedat & Lazarus, 2014). However, politically segregated communities, especially those living in rural areas, were seriously disadvantaged as a result of the Apartheid regime (Mahosi, 2025). Over time, professional clinical, counselling, educational, and research psychological programmes nevertheless began producing more African black psychologists who were committed and competent and who provided effective multicultural community services. International collaboration further facilitated the provision of quality research, health, and education programmes as well as skilled resources to these psychologists (Edwards, 2014b). The California-based HeartMath Institute was an example of one such excellent collaboration resource and remains so to this day.

The HeartMath Institute, which was originally developed by stress researcher Doc Childre, continues to provide a promising framework for community psychosocial well-being (Edwards et al., 2022). Since 1992, the Institute has developed and promoted, evidence-based methods to alleviate stress, enhance creativity, and optimise performance, along with biofeedback technology for ongoing assessment and evaluation of personal, psychosocial, and global well-being. This writing is informed by such an integral heart-based approach developed by the HeartMath Institute, to which the present author has been affiliated as a mentor and coach since 2015. This was the same year in which community psychology collaboration between the Psychology Department of the University of Zululand (South Africa) and HeartMath Research. Director, Rollin McCraty, led to the establishment of the Global Coherence Magnetometer at Bonamanzi Game Reserve near Hluhluwe in Zululand, KwaZulu-Natal, South Africa. This is one of six state-of-the-art magnetometers located across the planet (Edwards,

2016b). It offers a freely available global coherence application (app) that transmits coherent personal, social, and global consciousness data, which can be downloaded at: <https://www.heartmath.org/resources/videos/global-coherence-app/>

The HeartMath system embraces a model of interconnectedness and coherence, reflecting perspectives from contemporary science, perennial philosophy, and wisdom traditions (Edwards, 2016a). This approach resonates with several ancient phenomenological insights, meditative, and contemplative. The vision and mission are to promote personal, social and global well-being, health, education, coherence and interconnectedness. The inverse emphasis is on prevention of all forms of violence, stress, chaos, separation and disconnectedness. In this regard, HeartMath may be viewed as a positive psychology paradigm for promoting psychophysiological, psychosocial and global coherence and interconnectedness. To this end, many practical tools and techniques have been developed to promote positive and renewing feelings and emotions associated with optimal heart rate variability and psychophysiological coherence (Edwards, 2015). From a psychosocial perspective, such coherent states are associated with increased social facilitation, interpersonal, family and group functioning (Edwards, 2015, 2018).

This interconnectedness, coherence and well-being approach forms an essential foundation for an integral personal, social and global paradigm that encompasses energy sciences and the ever-evolving universe (Edwards et al., 2022). HeartMath Heart Rate Variability (HRV) research has shown that the integral heart communicates the most significant and meaningful information patterns. Optimal transmission occurs during states of psychophysiological coherence, characterized by stable, rhythmic heart rate activity. Independent research has consistently validated the effectiveness of the HeartMath system, which is widely used by individuals, health professionals, companies, healthcare systems, educational institutions, and government agencies worldwide (HeartMath Institute Annual Report for 2023 at: www.heartmath.org/assets/uploads/2024/08/hmi-annual-report-2023.pdf). Assets included the Global Consciousness Project (GCP), which was transferred from Princeton University to the HeartMath Institute in 2020 (<https://gcp2.net/about>).

HeartMath developed GCP into GCP2, which plans for 4000 random number generators (RNGs). RNGs detect consciousness fields in binary codes of either zero or one. Ordinarily, RNGs produce completely unpredictable sequences of zeroes and ones. However, when a great event synchronises the feelings of millions of people, the GCP network of RNGs may become subtly structured. The GCP hypothesis register contains a description of events predicted to have an effect on the network of RNGs. This project is an international collaboration between committed citizen scientists who work with a global network of RNGs located around the planet, and any person can enter an event in the registry. For example, the GCP Hypothesis Register No. 472 refers to the effect Nelson Mandela's death had on people. A Stouffer Z statistic indicated a probability of 0.013 when measured with only 45 devices, indicating the great significance of the planetary emotion that was associated with his passing (Nelson, 2015). The composite GCP data statistic from over 500 events shows a 7-sigma departure from expectation, indicating a probability of 1 in a trillion that the correlation of data with meaningful global events is merely due to chance. Furthermore, global harmony events have registered more significance than sensational disaster-type scenarios, which are routinely featured on international news media (Plonka et al., 2024).

Conclusion

Many South African citizens have long recognised the fundamental importance of living a socially coherent, integrated life, where all dimensions of existence are harmoniously aligned. This is closely related to the concept of Ubuntu, which refers to

human social relationships, as idiomatically portrayed in the isiZulu saying *umuntu umuntu ngabantu*, which means a person is a person through others in a fundamentally social world. Ubuntu HeartMath workshops have provided empirical evidence of their effectiveness in promoting social coherence and work spirit (Edwards, 2018; Hlongwane et. al., 2018) for raising awareness of the great need for contemporary humanity to develop greater social consciousness, moral actions, and ethical behaviour. The technological interconnectedness of the planet is self-evident to anyone who remains updated on international news. The total interconnectedness of all reality, what we may term: non-duality, one interconnectedness and/or interconnected one-ness; has long been recognised by sages and adepts from various wisdom, prayer, meditation, and contemplative traditions (Plonka et al., 2024). The vision of HeartMath is to provide research, education, and resources that will promote personal, social, and global coherence and health. Hopefully, this will continue to inspire humanity by reminding each one of us that individual contributions, however small, can ultimately become meaningful as part of a greater whole, contributing to planetary health, harmony, and healing (Plonka et al., 2023). However, the freedom walk for all remains long.

Conflict of Interest

The author has no conflict of interest to declare.

Author Contributions

N/A

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