

## PROFESSIONAL ISSUES

### The Global Coherence Initiative: A global psychological paradigm for health promotion

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This review proposes the value of a global psychology-oriented initiative to promote health and wellbeing. It discusses the concept of collective consciousness, especially heart-based, moral consciousness and related actions as resources for health promotion. The review draws on a collaborative South African Global Coherence Initiative to support communal coherence and interconnectedness in an indigenous community setting.

**Keywords:** HeartMath, Global Coherence Initiative, global psychology, global health promotion, Zulu culture

#### Introduction

A global psychology involving consciousness transformations, changes of heart and related actions may be serviceable for promoting international health. This could be achieved through promoting healing in the original meaning of a transformation to health, integrity and/or wholeness. For instance, a South African Global Coherence Initiative (GCI) site was launched with a general vision of advancing global health and facilitating the shift in global consciousness from instability and discord to balance, cooperation and peace. The general postulate is the existence of dynamic, information processing exchanges between all living systems and the earth's energetic/magnetic field, allowing encoded information to be communicated subconsciously and non-locally (Brizhik, Del Giudice, Jorgensen, Marchettini, & Tiezzi, 2009; McCraty et al., 2012; McCraty & Deyhle, 2015).

This article introduces one such global health initiative based on international research collaboration between the United States of America (USA) HeartMath Institute and South Africa, leading to the establishment of an African Global Coherence Initiative magnetometer—on a private game reserve in rural Zululand. (Relevant information can be found at: [www.Heartmath.org](http://www.Heartmath.org), [www.heartmathsouthafrica.co.za](http://www.heartmathsouthafrica.co.za), [www.glcoherence.org](http://www.glcoherence.org) and [www.live4now.co.za](http://www.live4now.co.za)) The HeartMath Initiative in Boulder Creek, northern California has the central vision and mission of scientific research to facilitate personal, social, global coherence (Institute of HeartMath, 2013). The coherence model is based on research indicating that the heart's rhythm co-varies with positive emotion, respiration, blood pressure and various other physiological systems (McCraty, Atkinson, Tiller, Rein, & Watkins, 1995). In 2008, the Global Coherence Initiative was launched to promote global health and wellbeing through heart-focused care. According to McCraty (2003, p. 17):

*Coherence-building approaches may also help health care practitioners increase their effectiveness in working with patients. In self-generating a*

*state of physiological coherence, the clinician has the potential to facilitate the healing process by establishing a coherent pattern in the subtle electromagnetic environment to which patients are exposed. Since even very weak coherent signals have been found to give rise to significant effects in biological systems, it is possible that such coherent heart fields may provide unsuspected therapeutic benefits. Furthermore, by increasing coherence, clinicians may not only enhance their own mental acuity and emotional stability, but may also develop increased sensitivity to subtle electromagnetic information in their environment. This, in turn, could potentially enable a deeper intuitive connection and communication between practitioner and patient, which can be a crucial component of the healing process.*

HeartMath dynamic systemic theory postulates that, with its independent nervous system, the heart generates a rhythmic electromagnetic field, whose information patterns network with various environmental energy fields. Substantial research has supported this coherent role of the heart in synchronising neurological, biochemical, biophysical and energetic information of nerve impulses, neurotransmitters, hormones, pressure waves and electromagnetic field interactions (McCraty et al., 2009).

To background this proposition, the hallmarks of a global psychology for health programme are considered, followed by illustrative examples (Edwards, 2015). The African Global Coherence Initiative magnetometer is one of about 12 monitoring systems that are planned at strategic locations on planet Earth, five of which are currently operational. In line with the specific vision to establish personal, social and global coherence, the GCI theory of change is based on dynamic, systemic, mutually reinforcing feedback loops between individual, social and global coherence in humanity and the global field environment. In other words, it is hypothesised that as enough individuals increase their personal coherence, this can lead to increased social coherence (families,

teams, organisations) and as increasing numbers of social units (families, schools, communities, etc.) become more coherently aligned, it can in turn lead to increased global coherence, all facilitated through feedback loops between humanity and the global field environment (McCraty & Dehle, 2014, p. 422).

Contemporary, natural scientifically orientated biomedical as well as alternative and complementary medical (ACM) approaches may be understood as metaphorical branches of an ancient tree of healing, which was rooted in a field inhabited by human healers whose holistic, therapeutic knowledge and intuitions were recognised and sanctioned by their indigenous communities. A global psychology for health programme is premised on the fact that holistic, integral healing inevitably implies more than any sum of, or interaction among, healing variables in diverse contexts. Core healing variables typically included diverse forms of spirituality, energy, coherence, consciousness, care and/or compassion (Rogers, 1980; Sheldrake, 1994; Nidich et al., 2000; Mansfield, 2015). The excellence of this example of a global psychology paradigm for facilitating collective consciousness and behaviour, which hinges around the core concept of coherence, will become apparent in the ensuing discussion. In addition to substantial HeartMath Institute research, numerous studies conducted independently of the HeartMath Institute and its employers can be found in the HeartMath research library, as well as elsewhere. This research has considerably extended knowledge about the intrinsic nervous system of the heart, as well as supporting the positive psychology and global psychology paradigms, with regard to the neuropsychological, electromagnetic, energetic, metaphorical and other multifaceted roles of the heart. For example, in psychological science this research constitutes balancing and harmonising additions to the contemporary overemphasis on cognitive, behavioural orientations.

### **Features of global psychology for health-care programming**

A global psychology which transcends continental, national, cultural and other boundaries has yet to fully develop structure and function (Berry, 2013; Edwards, 2009, 2013, 2015). It includes the study of the structures, states, modes, developmental, behavioural and relational aspects of consciousness, their manifestations in behaviour, as well as their application for improving humanity in particular and the universe in general (Wilber, 2000; Edwards, 2015). In a scientific context, global psychology functions as a relationship science that connects all the other sciences. In an applied context, a truly global psychology should represent all inhabited regions of the global village. As a worldview or body of theory, global psychology may direct the general quest for knowledge, inquiry and/or research in its concern with the study and improvement of global consciousness and behaviour. As an injunction, global psychology specifies the practice of this quest, as, for example, in health promotion.

A global psychological perspective constructed around the human heart metaphor offers much promise. Heart focused healing occurs in ancestral reverence, Hinduism,

Judaism, Buddhism, Taoism, Christianity and Islam (Murphy, 1992; Benson, 1996; Wilber, 2000, 2007). Yoga postulates that life-energy flows up and down the spine, with the heart chakra, *anahata*, as the balancing and harmonising centre of unconditional love (Graham, 1990; Judith, 2004). The Buddhist heart sutra regards ultimate enlightenment as the union of emptiness and form, realised through loving kindness, meditation and action. Traditional Chinese medicine, especially Taoist chi-gung, emphasises subtle consciousness/breath/energy work and/or exercises in relation to the lower, middle and upper *tan tien* (Reid, 1998). Judaic energy centres (*sefirot*) include the beauty, balance and harmony of the heart (*tiffer et*). In the Kabbalah, the heart is the central sphere that touches all others (Childre & Martin, 1999). In Christian Hermetic traditions, the Prayer of the Heart involves a differentiated focus on the human heart and the continuous repetition of a phrase, or the name of a Deity, with a breath-paced focus on the sense of self in the chest (Louchakova, 2007a, 2007b; Louchakova-Schwartz, 2013). A more recent version called Centring prayer has been popularised by Keating (1997). A similar practice is found in Islamic Sufi traditions.

The conscious use of energy in healing possesses theoretical potential to integrate common components of health care (Katz, 1982; Graham, 1990; Reid, 1998; DiNucci, 2005). This includes a variety of ancient and modern healing practices, using freely accessible universal energy, which is given various names in traditional contexts, e.g. *num* (San), *prana* (Hindu) and *tao* (China). For example, the yogic, subtle energetic, chakra system recognises various energetic levels and dimensions, organised into particular patterns and/or vibrations (Pert, 1998; Chopra & Simon, 2004). Contemporary integral scientific views resonate with the phenomenological insights of the ancient sages. Wilber's (1995) integral theory includes a dynamic systemic approach, embracing concepts of holism (Smuts, 1926). Holons refer to relatively autonomous whole/parts or wholes that are part of other wholes (Koestler, 1976). They are defined by the logic of coherence in the patterns displayed (Varela, Thompson, & Rosch, 1991). For example, relatively autonomous capacities of holons, such as agency, communion, transcendence and dissolution, can be instructively pictured as a cross, with agency and communication providing constant tensile pulls along the horizontal axis, and transcendence and dissolution along the vertical axis (Wilber, 1995). Such interconnecting capacities form a coherent context for a creatively evolving universe (Wilber, 1995).

Global travel, telecommunications and the internet have facilitated the scientific study as well as theoretical and practical integration of such traditions. Contemporary scientific theories of the interconnectedness of everything typically extrapolate what the perennial philosophy traditionally called the Great Chain of Being to include some form of integral, dynamic and systemic holism (Lovejoy, 1936; Huxley, 1958; Bohm, 1993; Wilber, 1995; Gidley, 2007; László, 2007). An established intuition for the advanced meditator – for others the apprehension of the interconnected whole – typically emerges as an eternal,

infinite moment breaking into everyday awareness. Such an event may be associated with contexts such as sleep, dreams, birth, death, sex and/or communal ceremonies, and typically associated with heightened consciousness, insights, morality and ethical behaviour (Wilber, 2000, 2007; Edwards, 2009). Similar consciousness has facilitated Rumi's poetry, Credo Mutwa's mission to document and preserve African indigenous knowledge, Sri Aurobindo's integral yoga, the founding of the Institute of Noetic Sciences by Apollo 14 astronaut Edgar Mitchell in 1973, the Global Consciousness Project (Nelson, 2011) and HeartMath Global Coherence Initiative (GCI).

**Consciousness** is a key mechanism for health and wellbeing in these ancient traditions. For instance, famous figures such as Buddha, Christ and Mohammed proposed that the great value of meditation, prayer and/or contemplation lies in its evidence-based propensity to facilitate consciousness, particularly moral consciousness and behaviour, creativity and health promotion (Ivanoski & Malthi, 2000; Nidich, Nidich, & Alexander, 2000; Hohn, 2003; Alexander, 2005; Horan, 2007; Hussai & Bhushan, 2010). For example, well-controlled, collective consciousness studies, using time series methodology, have indicated significant correlations between size of meditation group, reductions in war deaths and/or intensity, as well as improvement in broad quality of life indices (Orme-Johnson, 2000). Various meditative practices, especially centred on the heart, in all its psychophysiological associations and other-centred positive emotions such as love, care, compassion and appreciation, led Doc Childre, to create the HeartMath system in 1991.

Indigenous peoples across the planet have traditionally lived in a way that honours life as a deeply interconnected whole. Spiritual traditions typically recognise a non-duality or oneness, which underlies material existence and interlinks the manifest diversity of forms. Various descriptions have been advanced under such explanatory terms as Spirit, God, Brahman and Tao. For millennia many wisdom, knowledge and spiritual traditions, such as ancestor reverence, Judaism, Hinduism, Buddhism, Taoism, Christianity, Islam and perennial philosophy, have recognised this interconnected non-duality, which is typically layered in various levels of consciousness and evolves from matter to body to mind to soul to spirit (Lovejoy, 1936; Huxley, 1958; Schuon, 1984; Smith, 1992; Steiner, 1999). The traditions also recognise the reverse process that miraculous evolutionary happenings occur through some prior process of involution or emanation (Gidley, 2007; László, 2007; Wilber, 2007). Global psychology honours such indigenous knowledge on the profound interconnectedness of everything, where plants, animals, humans, ancestors and all creation interdependently coexist through Spirit as source of self, community and the all.

### **Heart and consciousness in indigenous Zulu communities**

In rural Zululand, for example, spirituality in healing is traditionally associated with divine healers, *izangoma* (Edwards, 2011, 2013). Practices include ancestral

consciousness, intuition, meditation, contemplation, ritual purification, indigenous medicines, sexual abstinence, and appropriate observance of other cultural and moral requirements, dream messages, ancestral dancing, bone throwing and a host of other divining practices. Divine healing typically involves a transcendent consciousness and atmosphere where the presence of the divine is profoundly apprehended. Transcendent messages must be clearly felt, experienced and understood so that any sacred ancestral communications transferred can be clearly communicated to clients, their families and/or other relevant community stakeholders. The genuine divine healer is required to very clearly communicate the truth (*iqiniso*), beauty and/or excellence (*ubuhle*) of the message to optimise the effect, quality and value of healing. The genuinely gifted healer intuitively discerns the sacred communication as authentic to the extent to which it is transpersonal in origin and conveys clear, holistic and/or integrated healing messages from the spiritual realm. This is an essential yardstick used to assess progress along the path of a calling to be a healer, which implies continual spiritual growth and moral discernment so as not to abuse divine gifts received (Mlisa, 2009; Edwards, 2013). Other yardsticks are the quality and effectiveness of divine healing interventions as evaluated by both the communities of diviners, clients and families.

### **Authentic healing**

The effectiveness of authentic healers' intuitions is supported by empirical research in South Africa (Edwards, 2013) as well as the HeartMath Institute in the USA, which has provided significant electrophysiological evidence of intuition as a holographic, system-wide, energetic process involving a non-local realm outside the space-time world, which is mediated by the heart, before the brain (McCraty, Atkinson, Tomasino, & Bradley, 2009). Traditional Nguni culture provides a process for auditing ancestral claim calls for their authenticity (Bojuwoye & Edwards, 2011; Mpofu, 2011). Intuition can be incubated and matured with the help of a professional *isangoma* (*ithwasa liyathwasiswa*), through an initiation/apprenticeship towards becoming a divine healer. This spiritual calling (*ubizo*) into apprenticeship knows neither heredity nor genealogy. In the experiential process, spiritual-intuitive energy is mediated. The resultant healing energy reflects the power and spiritual nature of ancestral work. The energy takes different forms as ancestors breathe through the diviner (*ukububula/nokubhonga kwedlozi*).

While Zulu-speaking cultural groupings are not necessarily representative of African or southern African cultures in particular, the available evidence points to such similar patterns in other indigenous cultural groupings that some transferability of findings can be assumed (Edwards, 2011). This is not surprising in view of obvious evidence that such traditional, indigenous knowledge, and culturally embedded, local systems provided foundations for all contemporary science (Wilber, 1995; Gidley, 2007). The circular orientation of indigenous African communities is exhibited in their material culture and behaviour, roundness of huts, cattle byres, homesteads, diurnal rhythms of day and night and related colour symbolism

in healing. Linguistically the isiZulu terms *indingiliza* and *isidindingilizi*, denoting circularity and/or roundness of spherical objects, accentuate the emphasis on wholeness, wholesomeness and the whole, health and healing, as conveyed by such terms as *philisayo*, *philile* and *phelele* (Doke & Vilakazi, 1972; Ngubane, 1977; Mutwa, 2003; Edwards, 2011). Profound interconnectedness becomes especially evident in such themes as *ubuntu* (humanity in all communal and spiritual interrelationships), *ubudlelwana*, (interconnectedness), *ukuhlangana* (coherence), *indaba* (coherent communication), *ubunhlobohlobo* (diversity in all its relatedness), emphasis on order (*uhlelo*), balance, harmony (*ukulungiso*), dignified movement and rhythm (*isigqi*), balanced ecological relationships and, ultimately, non-dual unity (*ubunye*) (Doke & Vilakazi, 1972).

### Conclusion

From a global psychological perspective any individual, group, community or nation motivated to promote planetary health and welfare can become global coherence ambassadors at no financial cost. Many more integral healing approaches are needed, as is collaboration between all caring planetary stakeholder individuals, communities and countries.

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### References

- Alexander, V. K. (2005). Applications of Maharishi Vedic science to developmental psychology. *Journal of Social Behavior and Personality*, 17(1), 9–20.
- Becker, R. O., & Seldon, G. (1985). *The body electric*. New York: William Morrow.
- Berry, J. W. (2013). Global psychology. *South African Journal of Psychology. Suid-Afrikaanse Tydskrif vir Sielkunde*, 43(4), 391–401. <http://dx.doi.org/10.1177/0081246313504517>
- Bohm, D. (1993). *The undivided universe: An ontological interpretation of quantum theory*. London: Routledge.
- Brizhik, L., Del Giudice, E., Jorgensen, S. E., Marchettini, N., & Tiezzi, E. (2009). The role of electromagnetic potentials in the evolutionary dynamics of ecosystems. *Ecological Modelling*, 220(16), 1865–1869. <http://dx.doi.org/10.1016/j.ecolmodel.2009.04.017>
- Chopra, D., & Simon, D. (2004). *The seven spiritual laws of yoga*. Hoboken: Wiley and Sons, Inc.
- Childre, D. L., & Martin, H. (1999). *The HeartMath solution*. New York: Harper Collins.
- Deyhle, A., & Waterman, J. (2013). *Heart coherence increases order of crystallization patterns in dried saliva study*. HeartMath Research Center. Boulder Creek: Institute of HeartMath.
- Doke, C. M., & Vilakazi, B. M. (1972). *Zulu-English dictionary*. Johannesburg: Witwatersrand University Press.
- Edwards, S. D. (2009). The description and evaluation of an African breath psychotherapeutic workshop. *Journal of Psychology in Africa*, 19(2), 253–260.
- Edwards, S. D. (2011). A psychology of indigenous healing in Southern Africa. *Journal of Psychology in Africa*, 21(3), 335–347.
- Edwards, S. D. (2013). Holistic psychology: An extrapolation. *Journal of Psychology in Africa*, 23(3), 531–538.
- Edwards, S. D. (2015). HeartMath: A positive psychology paradigm for promoting psychophysiological and global coherence. *Journal of Psychology in Africa*, 25(6), 367–374.
- Gidley, J. (2007). The evolution of consciousness as a planetary imperative: An integration of integral views. *Integral Review*, 5, 4–226.
- Graham, H. (1990). *Time, energy and the psychology of healing*. London: Jessica Kingsley.
- Huxley, A. (1958). *The perennial philosophy*. London: Fontana.
- Institute of HeartMath. (2014). *Building personal resilience. A handbook for HeartMath certified coaches and mentors*. Boulder Creek: Institute of HeartMath.
- László, E. (2007). *Science and the Akashic field: An integral theory of everything*. Rochester: Inner Traditions.
- Lovejoy, A. O. (1936). *The great chain of being: A study of the history of an idea*. Boston: Harvard University Press.
- Lynch, J. J. (2014). Hidden therapeutic dialogue: Decoding the language of the human heart. *Neuropsychologist*, July, 49–70.
- McCraty, R. (2003). *The energetic heart. Bioelectric interactions within and between people*. HeartMath Research Centre. Boulder Creek: Institute of HeartMath.
- McCraty, R., Atkinson, M., Tomasino, D., & Bradley, R. J. (2009). The coherent heart. Heart-brain interaction, psychophysiological coherence and the emergence of a system wide order. *Integral Review*, 2, 10–115.
- McCraty, R., Barrios-Choplin, B., Rozman, D., Atkinson, M., & Watkins, A. D. (1998). The impact of a new emotional self-management program on stress, emotions, heart rate variability, DHEA and cortisol. *Integrative Psychological & Behavioral Science*, 33(2), 151–170. <http://dx.doi.org/10.1007/BF02688660>
- McCraty, R., & Childre, D. L. (2010). Coherence: Bridging personal, social, and global health. *Alternative Therapies in Health and Medicine*, 16(4), 10–24.
- McCraty, R., & Deyhle, A. (2015). The Global Coherence Initiative: Investigating the dynamic relationship between people and the earth's energetic systems. In P. J. Rosch (ed.), *Bioelectromagnetic and Subtle Energy Medicine* (2nd edn, pp. 411–425). Boca Raton: CRC Press.
- McCraty, R., Deyhle, A., & Childre, D. L. (2012). The Global Coherence Initiative: Creating a coherent planetary standing wave. *Global Advances in Health and Medicine : Improving Healthcare Outcomes Worldwide*, 1(1), 64–77. <http://dx.doi.org/10.7453/gahmj.2012.1.1.013>
- McCraty, R., & Shaffer, F. (2015). Heart rate variability: New perspectives on physiological mechanisms, assessment of self-regulatory capacity, and health risk. *Global Advances in Health and Medicine : Improving Healthcare Outcomes Worldwide*, 4(1), 46–61. <http://dx.doi.org/10.7453/gahmj.2014.073>
- McCraty, R., & Zayas, M. A. (2014). Cardiac coherence, self-regulation, autonomic stability and psychosocial well-being. *Frontiers in Psychology*, 5. <http://dx.doi.org/10.3389/fpsyg.2014.01090>
- Mpofu, E. (ed.) (2011). *Counselling people of African ancestry*. New York: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511977350>
- Murphy, M. (1992). *The future of the body. Explorations into the further evolution of human nature*. New York: Penguin Putnam.
- Mutwa, V. C. (2003). *Zulu shaman. Dreams, prophecies and mysteries*. Rochester: Destiny Books.
- Nelson, R. (2011). Detecting mass consciousness: Effects of globally shared attention and emotion. *Journal of Cosmology*, 14, 1-15.

- Nidich, S. I., Nidich, R. J., & Alexander, C. N. (2000). Moral development and higher states of consciousness. *Journal of Adult Development, 7*(4), 217–225. <http://dx.doi.org/10.1023/A:1009559327351>
- Ngubane, H. (1977). *Body and mind in Zulu medicine*. London: Academy Press.
- Orme-Johnson, D. W. (2000). An overview of Charles Alexander's contribution to society: Developing higher states of consciousness in the individual and society. *Journal of Adult Development, 7*(4), 199–215. <http://dx.doi.org/10.1023/A:1009507310513>
- Pribram, K. H., & Melges, F. T. (1969). Psychophysiological basis of emotion. In P. J. Vinken & G. W. Bruhn (eds), *Handbook of Clinical Neurology* (pp. 316–341). Amsterdam: North-Holland Publishing Company.
- Reid, D. (1998). *Chi-Gung. Harnessing the power of the universe*. London: Simon and Schuster.
- Rosch, P. J. (2014). Why the heart is more than a pump. *Neuropsychotherapist*, July, 1–13.
- Schwartz, G. E., & Russek, L. G. (1997). Dynamical energy systems and modern physics: Fostering the science and spirit of complementary and alternative medicine. *Alternative Therapies in Health and Medicine, 3*(3), 46–56.
- Schuon, F. (1984). *The transcendent unity of religions*. Wheaton: Quest.
- Smith, H. (1992). *Forgotten truth*. New York: HarperCollins.
- Steiner, R. (1999). *A psychology of body, mind and spirit*. New York: Rudolf Steiner Press.
- Thayer, J. F., Ahs, F., Fredrikson, M., Sollers, J. J., & Wager, T. D. (2012). A meta-analysis of heart rate variability and neuroimaging studies: Implications for heart rate variability as a marker of stress and health. *Neuroscience and Biobehavioral Reviews, 36*(2), 747–756. <http://dx.doi.org/10.1016/j.neubiorev.2011.11.009>
- Thayer, J. F., & Lane, R. D. (2000). A model of neurovisceral integration in emotion regulation and dysregulation. *Journal of Affective Disorders, 61*(3), 201–216. [http://dx.doi.org/10.1016/S0165-0327\(00\)00338-4](http://dx.doi.org/10.1016/S0165-0327(00)00338-4)
- Varela, F. J., Thompson, E. T., & Rosch, E. (1991). *The embodied mind: Cognitive science and human experience*. Cambridge, Massachusetts: MIT Press.
- World Health Organization. (2013). *World health report: Research for universal health coverage*. Geneva: WHO.
- Wilber, K. (1995). *Sex, ecology, spirituality. The spirit of evolution*. Boston: Shambhala.
- Wilber, K. (2000). *Integral psychology*. Boston: Shambhala.
- Wilber, K. (2007). *Integral spirituality*. Boston: Integral Books.