## **Final Report:**

## Low-frequency magnetic field oscillations during Healing Touch interventions Margaret Moga, PhD

Number of Healing Touch practitioners involved: 20

Number of Healing Touch recipients involved: 62

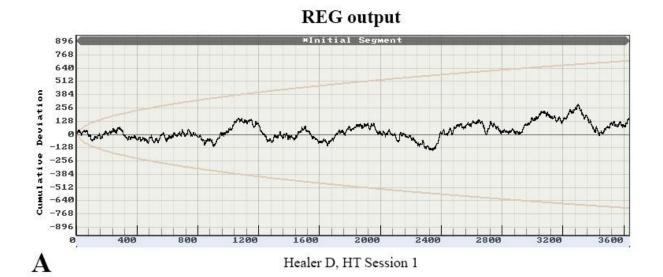
From 2008 to 2014, I recorded magnetic field (MF) activity (low frequency, 0 – 40Hz) during HT sessions. In these sessions, I observed significant increases in MF activity during HT, particularly when, 1) the HT practitioner detected heaviness or congestion in the biofield of the client, 2) the client presented with an emotional symptom (e.g., grief, anxiety), and/or 3) the client was receiving HT for the first time. These experiments demonstrated that low-frequency MF activity, as detected with a Hall-type magnetometer, is a reliable measure of energetic changes during Healing Touch sessions and classes (Moga, 2014a,b).

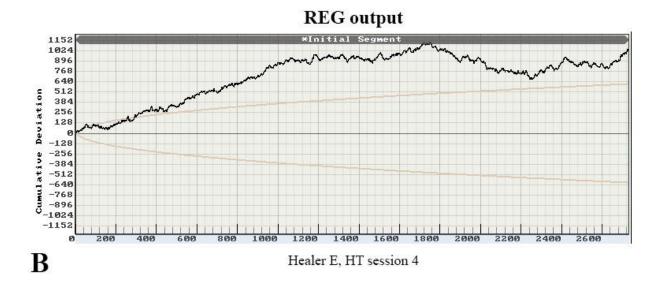


In 2014 and 2015, in addition to recording magnetic field activity (magnetometer, arrows in photo) during Healing Touch, I added other measurements during the HT sessions, including ultrasound detection, random event generator (REG)-output, and heart rate variability (HRV) of both practitioner and client.

Thus far, I have observed that certified HT practitioners and advanced HT students/apprentices, as a whole, can readily modify magnetic field (MF) activity in the healing space, with more advanced practitioners requiring less time to change the MF activity. For example, in a HT session with an experienced HT instructor, the MF activity began increasing as soon as she closed the door to the room, as she was still talking with the client and doing an assessment. Less experienced practitioners require 20-30 minutes to "warm-up" during the HT session before changes in the MF activity appear.

REG-output is monitored worldwide as part of <u>The Global Consciousness Project</u>. The REG device is thought to measure the effects of focused, coherent human consciousness in the immediate environment. So far, I have observed REG-output vary significantly (p<0.05) in 7 out of 18 HT sessions. Only two HT practitioners were able to modify REG-output for an entire HT session. Here are two examples of REG output during HT sessions. In A, the REG-output was 'random', and did not achieve significance. In B, the REG-output was highly significant with deviation from the expected 50-50 output. Note that the output greatly surpassed the light brown significance line throughout most of the session (p<0.05).



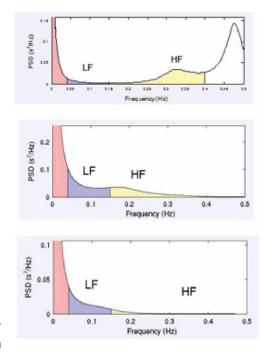


The REG device is currently located 6 feet away from the client-practitioner pair, which may be too far to accurately measure an effect in all sessions. In future experiments, I will place a second REG device closer to practitioner and client, which may increase the number of HT sessions with significant REG-output.

In 18 experiments (5 healers, 18 clients), I measured heart rate variability (HRV) of both the healers and the clients. HRV reflects the autonomic nerve activity to the heart, which arises from both sympathetic ("flight or fight") and parasympathetic ("feed and nurture") nerves. In HRV recordings, the sympathetic nerve activity is reflected in low-frequency (LF) levels (blue in diagrams below), and the parasympathetic nerve activity, in high-frequency (HF) levels (yellow in diagrams). Practitioners of meditation and other mind-body practices typically show high HF levels. In the current experiments, the HT practitioners

showed three different patterns of HF HRV activity. One HT practitioner/instructor showed very high levels of HF (right, top): she practices heart-based meditations on a daily basis, and her HRV showed a strong oscillatory rhythm which is described by researchers at the Institute of HeartMath as reflecting the emotion "gratitude". Two HT practitioners showed modest levels of HF (right, middle): both of these practitioners have done inner work for a long time. The last two HT practitioners showed negligible levels of HF (right, bottom): these two practitioners were younger in age and recently certified.

Interestingly, high HF HRV levels were associated with a practitioner's ability to alter REG-output. The three HT practitioners with moderate-to-high HF levels were able to significantly change REG-output during the HT sessions. REG-output during the HT sessions with the two practitioners with



negligible HF HRV activity was random and non-significant. In other words, the HT practitioners with strong parasympathetic components in their HRV were able to alter the healing space during an HT session. This finding, which is preliminary, suggests that the effectiveness of HT practitioners may be measurable with HRV and REG.

Recently with HT instructor Tim McConville, I conducted an online survey of HT practitioners regarding their experiences of Healing Touch. The most common experiences involved touch sensations, such sensations of heat/cold, prickly, vibration, etc., while working in the biofield of the client. The touch sensations suggest that the practitioners are sensing real physical fields, some of which I am measuring and other fields which will require additional equipment to detect. Overall, my work suggests that there is a need to emphasize the physicality of Healing Touch and energy healing – not just the quantum aspects of healing. Physical measurements support the existence of energies felt and experienced during Healing Touch. Dr. William Tiller has generated a theoretical model of energy healing which involves the interaction of everyday "real" energies (D-space) and quantum energies (R-space). His model, congruent with my findings, predicts changes in everyday space when nonlocal, quantum energies are in play. The perceptions and sensations felt by Healing Touch practitioners and clients are changes in everyday D-space which are coupled to changes in quantum R-space, reflecting the nonlocal interactions between practitioner and client.

**Time involved to date:** I began these studies in 2008, and will continue in the near future.

## **Publications:**

- Moga MM (2014a) Magnetic field activity during psychic healing: A preliminary study with Healing Touch practitioners. <u>Journal of Nonlocality 3(1).</u>
- Moga M (2014b) Healing Waves. Energy Magazine, Sept/Oct.

- Caswell JM, Carniello TN, Tessaro LWE, Sidorov S, Dotta BT, Vares DAE, Moga MM, Pitkanen M, Millar B et al. (2014) Conditioning of Space-Time: The Relationship between Experimental Entanglement, Space-Memory and Consciousness: Round Table Series, Colloquium #4.
  Journal of Nonlocality 3(2).
- Moga MM, McConville T (in preparation) Sensory and extra-ordinary experiences of Healing Touch practitioners.
- Moga MM (2013-ongoing) Healing with Intent blog, <a href="http://www.indiana.edu/~brain/">http://www.indiana.edu/~brain/</a>