Report

NEUROPHYSIOLOGICAL EFFECTS OF HARMONISATION:

THE EFFECT OF HARMONISATION ON HEART RATE VARIABILITY, RESPIRATORY RATE AND ELECTROENCEPHALOGRAPH

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ABSTRACT

Harmonisation is a practice whereby the harmoniser, who is centered in silent prayer, opens and nourishes the subject's chakras, using touch. This technique has been widely used since 1983, with substantial anecdotal evidence about its benefits, but no published, peer-reviewed data. This preliminary study aimed to discover if standard physiological measuring techniques can detect any significant changes in the central and autonomic nervous systems and the cardiopulmonary system during harmonisation. A simple, comparative design was used, with one experimental group of 20 self-selecting, healthy women, naive to harmonisation. The results were compared with reference data, matched for age and gender, from non-intervention control studies conducted by the same experimenters in the same neurophysiological laboratory. An 80-minute recording session determined baseline, intervention and stabilization measurements of electroencephalographic, electrocardiographic, and respiratory data. A significant lowering of brain activity was found during the opening phase of harmonisation, implying a state of increased mental focus coupled with a sense of calmness and relaxation, while significant changes to heart beat/respiration ratios were observed during the nourishing phase. This suggests that different physiological processes affecting the central and autonomic nervous systems and the cardio-pulmonary system may occur during different phases of harmonisation.

KEYWORDS: Harmonisation, EEG, ECG, respiration, touch therapy, prayer, chakras

INTRODUCTION

With the advent of technology sensitive enough to measure bio-magnetic energy, there has been a sharp increase of scientific interest in human biofields. Hunt describes a continuous, low amplitude, high frequency electromagnetic system emanating from atoms and cells, forming a pool of electromagnetic energy around a person that allows energy exchange.[1] Pert postulates that these energy emanations are created when ligands bind with receptors in the body.[2] Large, pulsating bio-magnetic fields and heat have been discovered emanating from the hands of meditating therapists using qigong and other contemplative practices.[3-5]

Studies exploring the effects of energy and touch practices have shown physiological changes to occur in the brain, heart, muscles, respiration and skin conductance.[6-13] Other studies examining the mechanisms behind these practices have explored the possibility that endocrine glands could convert external energy such as sound, light and electromagnetism into electrical and chemical energy.[14-17] These subtle energies may travel through the body via "alternate nervous systems." Pert proposes a chemical, non-synaptic communication between the cells; while the slow-firing, direct current of the peri-neural system of myelinated nerve fibers has been described by a number of researchers.[2,18,19] Both systems are global and regulate processes throughout the organism, as opposed to the specific activities of the alternating current in the central nervous system.

Oschman says that each molecule, cell, tissue and organ has an ideal resonant frequency that coordinates its activities, and that complementary therapists manipulate and balance these vibratory circuits.[20] This concept is analogous to string theory from physics, which holds that matter consists of minute, vibrating strings, and that sub-atomic "particles" are different notes plucked on the same string.[21]

Touch practitioners typically focus their attention through meditation or prayer.[22] The effects of subtle energy and focused consciousness on the human system have been well documented.[18,23-26] Contemporary research supports the idea that consciousness is the highest form of energy, integrally involved with the life process.[1,2,22,27] Gerber claims that the chakras and the acupunc-

ture meridian system comprise the interface which regulates the flow of these higher energies into the crystalline and bioelectronic networks of the body.[22]

Bernardi et al. found that reciting yoga mantras and the Ave Maria prayer, repetition of which occupies the majority of the Rosary, was associated with powerful, synchronous increases in cardiovascular rhythms and an increase in baroreflex sensitivity.[28] They attributed these physiological changes to the effects of both prayer and mantra. While this study offers possible implications of prayer on health, another study of 748 cardiac care patients found no significant difference in clinical outcome, using interventions of masked intercessory prayer, music, imagery and touch therapy.[29]

Harmonisation is practiced by members of Invitation to Life (commonly known as IVI, an acronym for Invitation a La Vie), an international spiritual organization founded in France in 1983 by Yvonne Trubert.[30,31] It involves a sequence of precise hand gestures on and around the subject's chakras, while the harmoniser enters a higher state of consciousness through silently praying the Rosary. Bruyere describes chakras as whirling vortices of energy.[32] They are said to act as transformers, stepping down subtle energies of a higher vibrational nature and translating them into hormonal, nerve and cellular activity in the physical body.[1,20,22,32] Harmonisation has been used for the past 23 years in over 40 countries. Many anecdotal claims have been made about its effectiveness, particularly reports of feeling relaxed and free of pain for varying lengths of time following the procedure. A recent study in Belgium analyzed data from medical practitioners and 34 case studies of harmonisation.[33] It noted the technique as an effective adjunct to conventional medical treatment, for improving both physical and psychological symptoms.

An unpublished German study by David using EEG reported changes in the occipital region of the brain in harmonised subjects, suggesting that subjects were in a relaxed state of active, receptive consciousness.[34]

AIM

The purpose of this preliminary study is to discover whether harmonisation is associated with measurable changes in the central and autonomic nervous

systems and the cardio-pulmonary system, using standard physiological measuring techniques.

METHOD

The study was undertaken at the University of Technology Sydney Acupuncture Research Laboratory (UTS-ARL). Approval for the study was granted by the UTS Human Ethics Research Committee, and it was conducted in accordance to the ethical standards set forth in the Helsinki Declaration (revised 2000).

SUBJECTS

Twenty healthy, women aged 19 to 50 years, recruited from the local community. Subjects taking pharmaceutical medication or with hypertension, cardiovascular or respiratory disease, were excluded from the self-selecting volunteers. All were naïve to harmonisation.

RESEARCH MODEL

A simple, comparative study using reference control data. All 20 participants were allocated to the intervention group. A continuous 80-minute recording of electrocardiogram (ECG), electroencephalogram (EEG), electrooculogram (EOG), and respiration was conducted. For the purpose of analysis using a repeated measures model, recording sessions were divided into four 20-minute intervals. This model has been developed and validated in the UTS-ARL. It allows for inter-subject analysis, and provides baseline values for intra-subject comparisons. It permits adequate time to collect sufficient data for meaningful analysis of the physiological measures, avoiding a common shortcoming in many physiology studies.

A "reference control" data base was used for comparisons, consisting of measurements of 30 healthy women aged between 20 and 50 years, from non-intervention control groups in previous acupuncture studies in this laboratory. They

were measured on the same physiological, psychological and time parameters, by the same experimenters using the same instruments as in the present study. This allowed evaluation of the essential statistical trends in the experimental variables.

Equipment and Materials

The UTS-ARL is equipped with custom designed software/virtual instrumentation integrated with high gain *Isolation Bio2* and *EEG8* amplifiers (Contact Precision Instruments, UK). All electrophysiological signals are amplified and digitized using plug-in A/D converters *E6023* (National Instrument, US). Chest and abdominal respiration was measured by custom designed, electronic/mechanical sensors attached to a body harness. The recording equipment allows for simultaneous, real-time, multi-channel acquisition of ECG, EEG, EOG and respiration signals.

The Speilberger State-Trait Anxiety Inventory form Y (STAI-Y) was used to measure participant anxiety.[35] This well validated and reliable instrument has separate, self-reporting scales for state and trait anxiety.

The custom designed computer software used to record the physiological measures also processed these data. Data were then analyzed for statistical significance using Statistica (StatSoft, US) statistical analysis software.

Procedure

To ensure comparable measures of heart rate, no food, coffee or alcohol were taken in the two hours before the intervention. Participants read a brief description of the procedure and completed both STAI-Y State and Trait questionnaires. An EEG cap was fitted for taking unipolar recordings from bilateral frontal, central and temporal locations F3, F4, C3, C4, T7 and T8, according to the 10-20 system of the International EEG Nomenclature. Electrodes for EOG were placed above and below the right eye (vertical movement) and posterior to the outer canthus of both eyes (horizontal movement). ECG was measured via three electrodes on the torso, using a Lead II configuration with two electrodes placed below the clavicles and a third over the left, tenth rib.

The participants, lying supine, were asked to close their eyes and relax, but to avoid using any meditation techniques. Each session consisted of 20 minutes rest for baseline measures, 40 minutes of harmonisation, then 20 minutes of rest for stabilization measures. The phase of harmonisation which opens the chakras was conducted during the second interval and the phase which nourishes them during the third interval. At the end of the procedure, participants completed a STAI-Y State questionnaire and wrote a brief description of their experience. For the reference controls, the same procedure was followed, but with no intervention.

The same person conducted all 20 harmonisations, silently praying the three prayers of the Rosary throughout the procedure. The intervention involved gentle, circular movements to open and then nourish the chakras. The movements were made on the face, under each clavicle, over the solar plexus, on each side of the abdomen and over the feet and legs. At one stage, the harmoniser blew over the solar plexus.

To replicate harmonisation, it is necessary first to receive at least six months of spiritual preparation with the international organization Invitation to Life. This preparation culminates in attending a two-day seminar, after which the harmonisation's gestures are taught by demonstration and word of mouth. It is regularly reviewed to make sure that the procedure is followed accurately.[30,31]

Data Analysis

The measurement point for each of the physiological parameters was the average value for each 20-minute interval. Data were analyzed using analysis of variance with repeated measures (ANOVA).

Changes in heart activity were assessed using ECG heart rate variability data and changes in heart rhythms, by a power spectrum analysis of heart tachogram readings, using standard computational techniques. Respiration frequency and amplitude were calculated for each of the four intervals. The ratio between heart beat and respiration frequencies indicated synchronization between the heart and lungs. EEG data were analyzed using power spectrum analysis.

Table I
Groups split according to state anxiety raw scores after harmonisation

	Group 1 Scores Below 30	Group 2 Scores Above 30
Harmonization condition: $N = 20$		
Raw Scores Range:	20-25	32-49
T-Scores Range:	35-40	47-62
	n = 15	$n = 5$
Reference control condition: $N = 30$		
Raw Scores Range:	20-30	31-49
T-Scores Range:	35-45	45-62
	$n = 19$	$n = 11$

Previous studies from the UTS-ARL found a median STAI-Y State anxiety raw score of 30 for healthy female participants with no anxiety disorders. The post-harmonisation scores in the present study fell into two clear groups above and below this point, with no overlap of scores. Therefore, for the purposes of analysis, a raw score of 30 was used to define relatively "higher" and "lower" post-State anxiety scores within the experimental group (Table I). Raw State and Trait anxiety scores were converted to T-scores, adjusted for age and gender. T-scores have a mean of 50 with an average range of 40 to 60. The low average range was set at 35 to 39 and high average range at 61 to 65, following guidelines in Spreen and Strauss.[36]

RESULTS

Brain Activity

No significant differences were found in measurements between the left and right sides of the brain.

A number of statistically significant reductions in brain activity were found, with the main effects occurring during the "opening" phase of harmonisation.

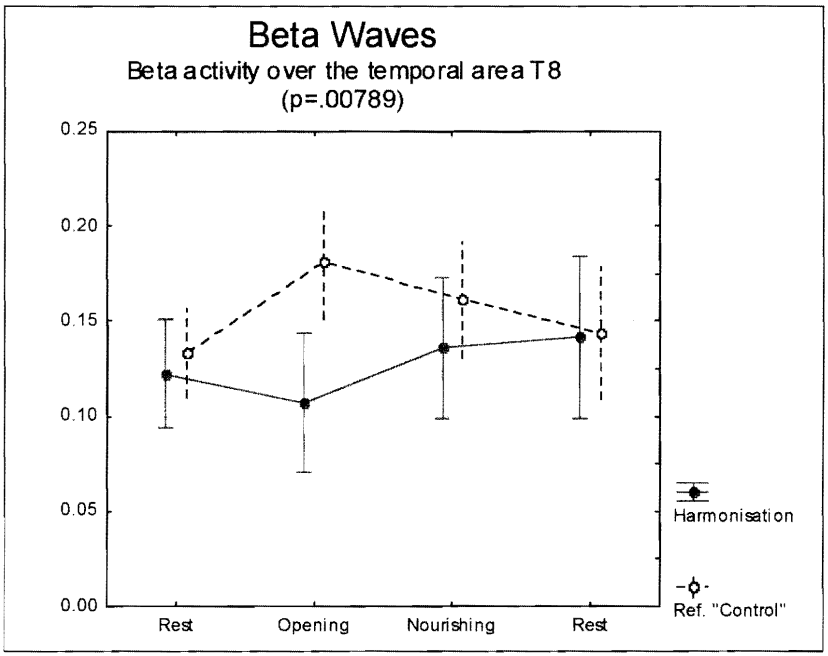

Figure 1. *Beta wave activity at T8—significant change occurring during the opening phase of hamonisation (second interval).*

Over the temporal area, there were significant reductions in beta activity (p = 0.008, Figure 1) and in theta activity (p = 0.02, Figure 2). There was also a highly significant reduction in beta activity over the central area (p = 0.0003, Figure 3). Alpha activity was significantly lower over the frontal area (p = 0.033, Figure 4). These findings are summarized in Table II. No significant differences were found in delta wave activity that could be attributed to harmonisation.

HEART RHYTHM

There was no significant change in heart rate across the four intervals, with a baseline mean value of 59.0 beats per minutes (SD 6.2). Both sympathetic and parasympathetic components of heart rate variability also remained unchanged.

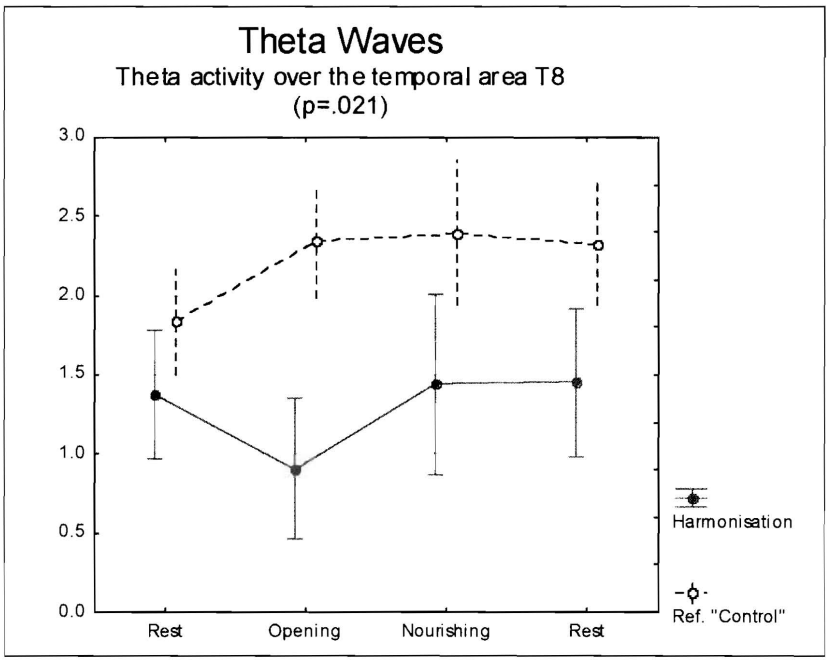

Figure 2. *Theta wave activity at T8—significant change occurring during the opening phase of harmonisation (second interval).*

ANXIETY LEVEL

Two subjects had Trait T-scores of 61 and 65 respectively, indicating proneness to the higher range of average anxiety, while the remaining participants had personality Trait scores that fell within the normal range for their cohort (T-scores 40 to 60). State anxiety T-scores all fell in the normal range except for one participant, who had a post-harmonisation T-score of 62. However, her Trait T-score was 61, indicating she was no more anxious than usual. Analysis of variance revealed no significant difference between State anxiety ratings prior to and after the procedure that could be attributed to harmonisation. The STAI State scores were then used as a factor in analyzing other experimental variables (Table I).

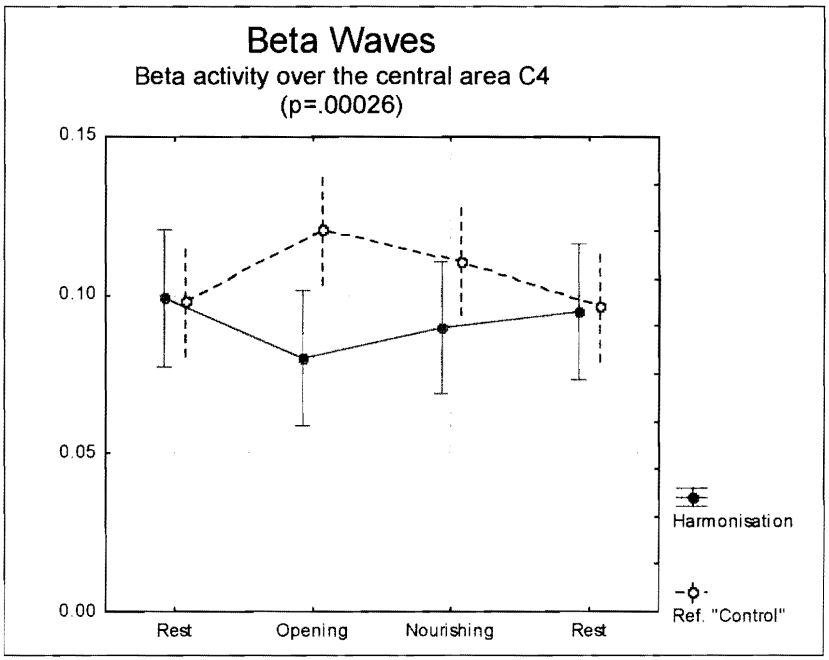

Figure 3. *Beta wave activity at C4—significant change occurring during the opening phase of hamonisation (second interval).*

RESPIRATION

The average respiration frequency for intervals two, three and four were unaffected compared to the baseline interval (14.0 per minute, SD 3.2). Nor was the amplitude of respiration movement significantly altered. However, the measure of synchronization between heart rhythm and respiration revealed an unexpected trend. While none of the State anxiety scores exceeded the high-average range, those subjects who had relatively higher post-treatment scores (n = 5), had a lower ratio between heartbeat and respiration during the nourishing and final resting phases of the experiment ($p < 0.014$; Figure 5).

SUBJECTIVE REPORTS OF THE EXPERIENCE OF HARMONISATION

Of the twenty participants who were harmonised, one did not write a subjective report. Each of the nineteen subjects reported feeling either calm or relaxed

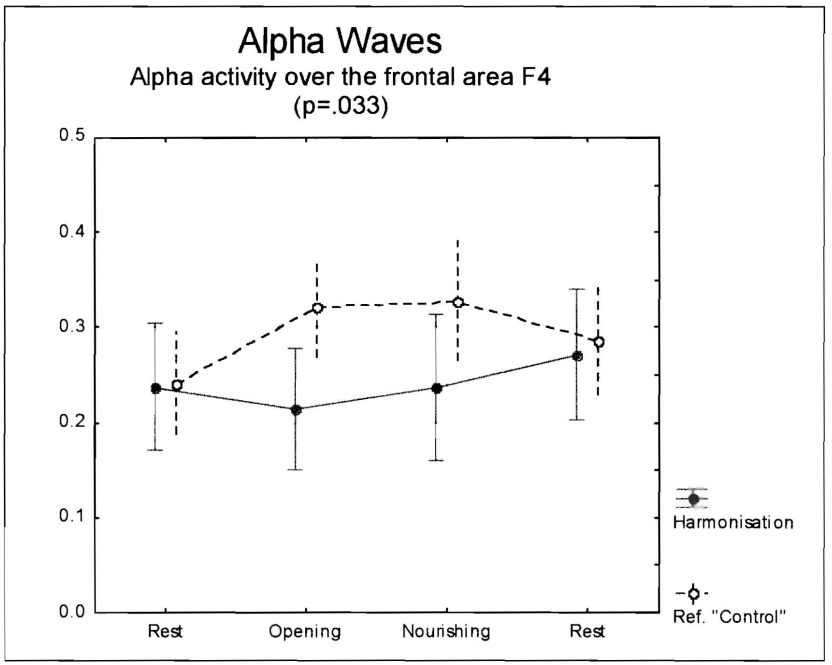

Figure 4. *Alpha wave activity at F4—Significant change occurring during the opening phase of harmonisation (second interval).*

or both; one women reported that she sensed "a presence who was supporting me." Other testimonies included visual imagery, and sensations of floating and heat.

Ten subjects commented on sleep, although these experiences were not evident in the EOG readings.

Nine participants differentiated the harmonisation experience from the pre and post baseline measurement periods and reported focussed awareness such as mild discomfort or awareness of the electrodes or the hand movements of the harmoniser.

DISCUSSION

Despite clear limitations due to the relatively small number of subjects, this preliminary study presents some interesting findings.

Table II

Reductions in Brain Activity: p-values from the ANOVA analysis of EEG in the second experimental interval—opening phase of harmonisation.

Brain waves	EEG electrodes		
	Frontal F4	**Temporal T8**	**Central C4**
Beta	$p = 0.607$	$^{*}p = 0.007$	$^{*}p = 0.0002$
Alpha	$^{*}p = 0.033$	$p = 0.512$	$p = 0.396$
Theta	$p = 0.272$	$^{*}p = 0.021$	$p = 0.058$
Delta	$p = 0.371$	$p = 0.059$	$p = 0.105$

* p values < 0.05 deemed significant

Although no significant changes were found in heart rhythm or respiratory frequency, the heart rate to respiration ratio among those who reported "higher" post-harmonisation STAI-Y scores was significantly lower during the nourishing phase of harmonisation and the stabilization period. Relatively higher STAI-Y State scores that still fall in the average range (i.e. not significantly anxious) could be interpreted as a relatively higher state of alertness. This is consistent with these participants' descriptions of the experience, such as: "my mind was very active for a lot of the session."

A decrease in the number of heartbeats per one respiration is indicative of parasympathetic regulation by the autonomic nervous system. Synchronization of respiratory and cardiovascular central rhythms has been shown to have favorable effects on cardiovascular and respiratory function.[28] Therefore, the nourishing phase of harmonisation may positively influence heart beat/respiration ratios, particularly when coupled with relative alertness. These results are consistent with David's comments that harmonisation induced a relaxed state of active, receptive consciousness; and with the reports of beneficial physiological changes through harmonisation and other touch and energy practices.[6-13,33,34]

In the reference control group there was an increase in frontal alpha activity during the initial period, which habituated for the rest of the session. This was consistent with expectations, given that subjects lay still with closed eyes

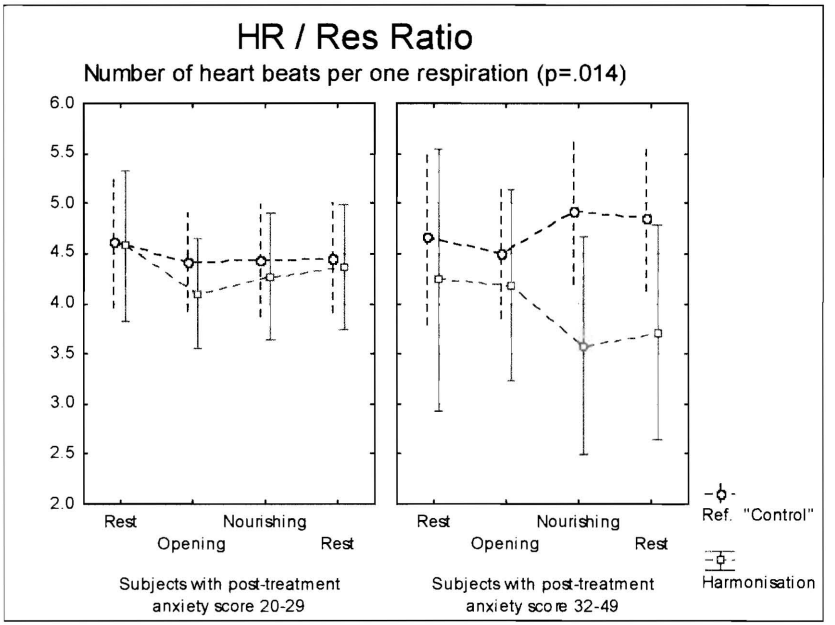

Figure 5. *Heart rate to respiration ratio for "high" anxiety participants.*

throughout the session.[37] Patterns in the harmonisation group however, were contrary to expectation, with a significant *decrease* of frontal alpha activity during the opening phase, which attenuated over the nourishing and stabilization phases. This initial decrease of alpha activity is difficult to interpret, given the participants' reports of feeling calm and relaxed, and that research on the influences of touch therapies on brain activity typically describe increases in alpha.[20,22]

It seems that this result may imply some kind of focussed alertness, also evident in the pattern of significantly reduced temporal theta activity during the opening phase of harmonisation. Increased theta activity is associated with drowsiness or deep meditation.[37] The findings of reduced alpha and theta activity are certainly not consistent with either sleep or deep relaxation.

The quality of the apparent focussed attention associated with opening the chakras in harmonisation appears different from cognitive processing or anxiety,

where a preponderance of beta activity is to be expected. The reductions in beta activity in both central and temporal areas of the brain were consistent with mental relaxation. Training to increase beta activity has been shown to result in states of relaxed focus, but the opening of the chakras in this study appeared to produce a similar state, while suppressing beta activity.[37]

As a whole, the EEG results suggest a state of increased mental focus, coupled with a sense of calmness and relaxation.

Limitations of this Study

We acknowledge clear limitations in this preliminary study due to size constraints. Firstly, all twenty subjects were allocated to the treatment group, with no true randomized control group. Therefore, strict statistical comparisons can only be made between recorded physiological parameters within the four 20-minute intervals, with comparisons between corresponding intervals in harmonisation versus reference "control" being used as a description of trends. Secondly, the calculated effect sizes for different variables indicate that larger groups are required. In order to achieve the power of experiment in the range of 0.8 the treatment group will require at least 60 subjects (these calculations are based on the data from heart rate variability).

SUMMARY

Despite the study's limitations, the results indicate that neurophysiological methods can be used successfully to monitor the physiological effects of harmonisation. The recorded measurements were stable and sensitive enough to detect small changes in physiological status.

Changes in brain activity occurred primarily with the opening of the chakras, when significant reductions in alpha activity occurred over the frontal areas of the brain, while theta activity was reduced in the temporal areas, and beta activity reduced in the temporal and central brain areas. During the nourishing of the chakras, a significant lowering of the ratios and synchronization of the

heart rate/breathing patterns occurred among those subjects who were possibly more alert when the 80 minute procedure had been completed. The results suggest that different physiological processes affecting the central and autonomic nervous systems and the cardio-pulmonary system may occur during different phases of harmonisation. They provide some basis to reports of therapeutic benefits of harmonisation and invite further exploration of the still poorly acknowledged or understood, but increasingly documented possibility of connections between prayer, human biofields and health.[33]

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REFERENCES & NOTES

1. V. Hunt, *Infinite Mind: The Science of Human Vibrations of Consciousness* (Malibu Publishing Company, Malibu, CA, 1996), pp. 18-22.
2. C. Pert, *Molecules of Emotion* (Simon and Schuster, New York, NY, 1997), pp. 138, 224-311.
3. J. Zimmerman, New Technologies Detect Effects of Healing Hands, *Brain/Mind Bulletin* **10**,3 (1985), pp. 136-143.
4. A. Seto, C. Kusaka & S. Nakazato, Detection of Extraordinary Large Biomagnetic Field Strength from Human Hand, *Acupunture and Electrotherapeutics Research International Journal* **17** (1992), pp. 75-94.
5. D. J. Muesham, M. S. Markov, P. A. Muesham, A. A. Pilla, R. Shen & Y. Wu, Effects of Qigong on Cell-Free Myosin Phosphorylation: Preliminary Experiments, *Subtle Energies and Energy Medicine* **5**,1 (1994), pp. 93-108.
6. D. P. Wirth & J. R. Cram, Multi-site Electromyographic Analysis of Noncontact Touch, *International Journal of Psychosomatics* **40**,1-4 (1993), pp. 47-55.
7. L. Z. Song, G. E. Schwartz & L. G. Russek, Heart-focused Attention and Heart-brain Synchronization: Energetic and Physiological Mechanisms, *Alternate Therapies in Health and Medicine* **4**,5 (1998), pp. 44-62.
8. N. V. Sneed, M. Olson, B. Bubolz & N. Finch, Influences of a Relaxation Intervention on Perceived Stress and Power Spectral Analysis of Heart Rate Variability, *Progress in Cardiovascular Nursing* **16**,2 (2001), pp. 57-79.
9. A. J. Stancak, M. Kuna, Srinivasan, C. Dostalek & S. Vishnudevananda, Kapalabhati—Yogic Cleansing Exercise, II. EEG Topography Analysis, *Homeostasis in Health and Disease* **33**,4 (1991), pp. 182-189.
10. W. Pan, L. Zhang & Y. Xia, The Difference in EEG Theta Waves between Concentrative and Non-concentrative Qigong States: A Power Spectrum and

Topographic Mapping Study, *Journal of Traditional Chinese Medicine* **14**,3 (1994), pp. 212-218.
11. M. Xu, M. Tomotake, T. Ikuta, Y. Ishimoto & M. Okura, The Effects of Qigong and Acupuncture on Human Cerebral Evoked Potentials and Electroencephalogram, *Journal of Medical Investigations* **44**,3-4 (1998), pp.163-171.
12. C. K. Peng, J. E. Mietus, Y. Liu, G. Khalsa, P. S. Douglas, H. Benson & A. L. Goldberger, Exaggerated Heart Rate Oscillations During Two Meditation Techniques, *International Journal of Cardiology* **70**,2 (1999), pp. 101-107.
13. G. Litscher, G. Wenzel, G. Niederwieser, G. Schwartz, Effects of Qigong on Brain Function, *Neurological Research* **23**,5 (2001), pp. 501-505.
14. L. A. Wisneski, A Unified Energy Field Theory of Physiology and Healing, *Stress Medicine* **13**,4 (1998), pp. 259-265.
15. T. M. Rechlin & E. A. Weiss, Does Bright-light Therapy Influence Autonomic Heart-rate Parameters?, *Journal of Affective Disorders* **34**,2 (1995), pp. 131-137.
16. S. A. Schwartz, R. J. DeMattei, K. G. Brame & S. J. Spottiswoode, Infrared Spectra Alteration in Water Proximate to the Palms of Therapeutic Practitioners, *Subtle Energies and Energy Medicine* **1**,1 (1990), pp. 43-72.
17. C. H. Chien, J. J. Tsuei, S. C. Lee, Y. C, Huang, Y. H. Wie, Effect of Emitted Bio-energy on Biochemical Functions of Cells, *American Journal of Chinese Medicine* **19** (1991), pp. 285-292.
18. G. Braden, *The Isiah Effect: Decoding the Lost Science of Prayer and Prophecy* (Random House Inc., New York, NY, 2000), pp. 96-99.
19. R. Melzack & P. Wall, *The Challenge of Pain* (2nd Edition, Penguin Books, Great Britain, 1982), pp. 222-239.
20. J. L. Oschman, *Energy Medicine: The Scientific Basis* (Churchill Livingstone/Elsevier Science Ltd. UK, 2000), pp. 76-84, 100.
21. M. Kaku, *Parallel Worlds: A Journey Through Creation, Higher Dimensions, and The Future of the Cosmos* (Anchor Books, Random House Inc., New York, NY, 2005), pp. 197-203.
22. R. Gerber, *Vibrational Medicine: The #1 Handbook of Subtle-Energy Therapies* (3rd Edition, Bear and Company, Vermont, 2001), pp. 104, 383-465
23. L. Dossey, *Healing Words: The Power of Prayer and the Practice of Medicine* (Harper Collins, New York, NY, 1993).
24. L. Dossey, *Reinventing Medicine* (Harper Collins, New York, NY, 1999).
25. L. Dossey, Spirituality, Science and the Medical Arts, *Subtle Energies and Energy Medicine* **12**,1 (2001), pp. 1-15.
26. M. Agnes & B. Nunley, Toward an Integral Energy Medicine Model for Understanding the Vascular Autonomic Signal, *Subtle Energies and Energy Medicine* **16**,2 (2005), pp. 1-4.
27. P. Russell, The Mystery of Consciousness, *Subtle Energies and Energy Medicine* **16**,1 (2005), pp. 43–57.
28. L. Bernardi, P. Sleight, G. Bandinelli, S. Cencetti, L. Fattorini, J. Wdowczyc-Szulc & A. Lagi, Effect of Rosary Prayer and Yoga Mantras on Autonomic Cardiovascular Rhythms: Comparative Study, *British Medical Journal* **323** (2001), pp. 1446-1449.
29. M. W. Krucoff, S. W. Crater, D. Gallup, J. C. Blankenship, M. Cuffe, M. Guarneri, R. A. Krieger, V. R. Kshettry, K. Morris, M. Oz, A Pichard & M. H. Sketch, Jr., Music, Imagery, Touch and Prayer as Adjuncts to Interventional Cardiac Care: The Monitoring and Actualisation of Noetic Trainings (MANTRA), 11 Randomized Study, *Lancet* **366**,9481 (2005), pp. 211-217.

30. www.invitationtolife.org.au
31. www.invitation-a-la-vie.org/english/invitation-to-life.html
32. R. L. Bruyere, *Wheels of Light: Chakras, Auras and the Healing Energy of the Body* (3rd Edition, Simon and Schuster Inc.—Fireside, New York, NY, 1994), pp. 20-42
33. C. Laurant & S. Scheffer, *Benefits of Harmonisation for Patients: 34 Case Studies Presented at the Le Vivant AISBL Colloquium* (Limal, Belgium, January 18-20, 2004).
34. E. A. David, *A Comparison of EEG Readings in the Healing State of Harmonisation and the Hypnotic State, presented at the Invitation to Life Colloquium* (Paris, June 21-23, 1996).
35. C. D. Speilberger, R. L. Gorsuch, R. Lushene, P. R. Vagg & G. A. Jacobs, *Manual for the State-Trait Anxiety Inventory (Form Y)* (Consulting Psychologists Press Inc, Palo Alto, California, 1982), pp. 16-28.
36. O. Spreen & E. Strauss, *A Compendium of Neuropsychological Tests: Administration, Norms and Commentary* (Second Edition, Oxford University Press, New York, NY, 1998), pp. 16-27.
37. J. L. Andreassi, *Psychophysiology: Human Behavior and Physiological Response* (3rd Edition, Lawrence Erlbaum Associates Inc., New Jersey, 1995), pp. 21-25, 53-54.

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