

Immediate Effect of Nada Yoga Meditation on Energy Levels and Alignment of Seven Chakras as Assessed by Electro-photonic Imaging: A Randomized, Controlled Crossover Pilot Study

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ABSTRACT

Context • *Nada Yoga* is a branch of yoga philosophy that means “union through sound.” The practice involves the resonance of energy centers in the body through specific sound frequencies. These subtle effects of yogic sound resonance on the subtle energy systems of the body have not been assessed before.

Objective • To investigate the immediate effect of *Nada Yoga* meditation on the energy levels and alignment of the seven *chakras* in healthy volunteers.

Design • Randomized, controlled crossover design.

Setting • Department of Integrative Medicine, National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru, India.

Participants • 15 healthy volunteers (5 males and 10 females) with a mean age of 28.40 ± 5.63 were randomized to one of the two groups: group A ($n = 8$) and group B ($n = 7$).

Intervention • On day 1, group A performed 45 minutes of *Nada Yoga* meditation (NYM) and group B performed 45 minutes of supine rest (SR). On day 2, the interventions were interchanged for the group.

Outcome Measures • The assessment was done using the electro-photonic imaging (EPI) technique just before and immediately after each session on both days.

Results • There was a significant increase in *muladhara chakra* energy ($P = .012$), *manipura chakra* energy ($P = .008$), *anahata chakra* energy ($P = .011$), *vishuddha chakra* energy ($P = .001$), and index energy (average *chakra* energy) ($P = .001$) after a 45-minute *Nada Yoga* meditation session as compared to the supine rest session. (*Adv Mind Body Med.* 2022;37(1):11-16)

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INTRODUCTION

Nada Yoga is a branch of yoga philosophy; the terms *nada yoga* mean “union through sound.” It is the science of ancient yogic systems used for inner transformation through the use

of frequencies of sounds or tones.¹ *Nada Yoga* meditation is based on the concept of ancient science, which assumes the entire universe is created through the vibration of sound (*nada*). Different external tones and frequencies are used in the *Nada Yoga* technique.² The sounds in the *Nada Yoga* system are divided into two primary categories: external sound (*ahata nada*) and internal sound (*anahata nada*). *Ahata nada* comes from an external source through a physical channel and is perceived via sensory organs in the form of ears, whereas *anahata nada* is considered to be a silent vibration of the self that does not have any external source or channel. *Anahata nada* is believed to be the universal sound of “*om*” that can be felt only in deep meditation.¹ Regular practice of *ahata nada* is recommended to be able to perceive *anahata nada*. *Anahata nada* carries far more spiritual weight in the *Nada Yoga* system as compared to *ahata nada*.³

“*Chakras*” are considered to be the energy centers located at the midline of the human body, responsible for the energy release of all major physical, mental, and spiritual journeys in human life.⁴ The seven primary *chakras* presented in the human body are *sahasrara* (crown *chakra*), *ajna* (third eye *chakra*), *vishuddha* (throat *chakra*), *anahata* (heart

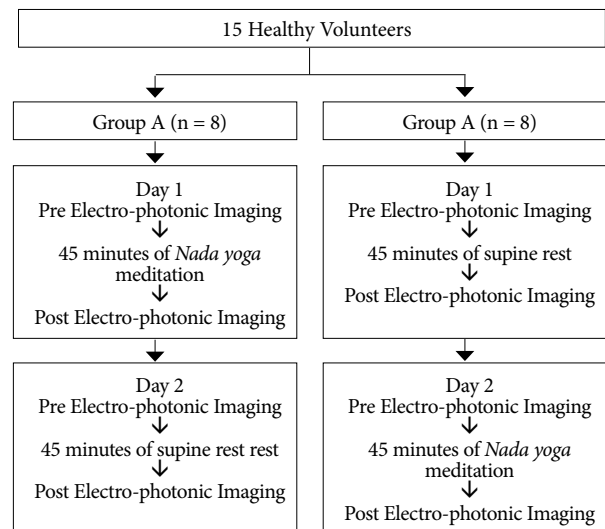
chakra), *manipura* (solar plexus *chakra*), *svadhisthana* (sacral *chakra*), and *muladhara* (root *chakra*).⁵ The seven *chakras* are concentrated centers in the body that are not physically seen but can be perceived through the subtle science of meditation.⁶ Each *chakra* is considered to be associated with different energy levels. The alignment of the *chakras* and the flow of energy through them determine the state of one's overall health. Greater alignment and higher energy levels of the *chakras* indicate higher levels of strength and consciousness.⁵ Every *chakra* is correlated with different physical, psychological, and spiritual characteristics of the human being. *Muladhara* is responsible for security and survival; *svadhisthana* is responsible for emotion, sexuality, and creativity; *manipura* is responsible for energy, assimilation, and digestion; *anahata* is responsible for love, equilibrium, and well-being; *vishuddha* is responsible for communication and growth; *ajna* is the *chakra* of awareness and light; and *sahasrara* is correlated with consciousness and liberation. All the *chakras* are commonly considered to be the centers allocated to different regions for different functions.⁷

Further, it is considered that each *chakra* is associated with one of the endocrine glands present in the human body. *Sahasrara* is associated with the pineal gland, *ajna* is associated with the pituitary, *vishuddha* is associated with the thyroid, *anahata* is associated with the thymus, *manipura* is associated with the pancreas, *svadhisthana* is associated with the gonads, and *muladhara* is associated with the adrenal glands.⁸

The *chakras* were traditionally studied in relation to life energy (*prana*) and energy channels (*nadis*). The major *nadis* described in yogic texts are *ida*, *pingala*, and *sushumna*. *Ida* lies to the left of the spine, *pingala* lies to the right side of the spine, and *sushumna* runs along the spinal cord at the center, through the seven *chakras*.⁴ It is believed that when a sufficient amount of *prana* flows freely through the *nadis* and *chakras*, one attains positive physical, mental, and spiritual health. The theories of *chakras*, *nadis*, and *prana* come from the ancient tradition of yoga.⁹

Electro-photonic imaging (EPI), also known as gas discharge visualization (GDV), works on the Kirlian effect.¹⁰ The technique is used in the measurement of electrical availability due to a pulsed electrical signal. It provides physiological, psycho-physiological, and subtle energy information about the test subject. The EPI technique works through the impression of capturing images of photons emitted from the body.^{11,12} Unlike the fairly stable homeostatic state, the characteristics of electron emission vary in humans, depending on their internal and external conditions.^{13,14} The EPI technique is a non-invasive biometric tool that can identify deviations from healthy function at early stages and in real-time. Utilizing electro-photonic emissions from the fingertips placed on the surface of an impulse analyzer, the technique provides values of the functional states of most organs, organ systems, and energy systems as well as the overall physiological, psycho-emotional, and bio-energy statuses.¹⁵ The electrical activity is quite different in the diseased conditions of a human body as compared to the

Figure 1. Trial Profile



activity in a healthy body. The biophysical principles in the investigation of the EPI technique are based on the ideas of quantum biophysics.¹³ The method of drawing stimulated electrons and photons from the surface of the skin under the influence of a pulsed electromagnetic field has been well studied through physical electronic methods and is known as “photoelectron emission.”¹⁵ The variation of 4.1% on a daily average and 6.6% on a 10-minute average of EPI parameters shows the high reliability of the technique.^{16,17}

Ancient sciences, such as yoga and meditation, have been fascinating areas of study for modern researchers. Studies have shown the therapeutic as well as spiritual benefits of these ancient sciences. The concepts of yoga and meditation are deeply rooted in the concepts of *chakras* (energy centers), *prana* (life energy), and *nada* (sound). However, very limited studies have been conducted in these areas. Hence, the current study aims to investigate the immediate effect of *Nada Yoga* meditation on the energy levels and alignment of the seven *chakras* in healthy subjects using a randomized, controlled crossover pilot study design.

METHODS

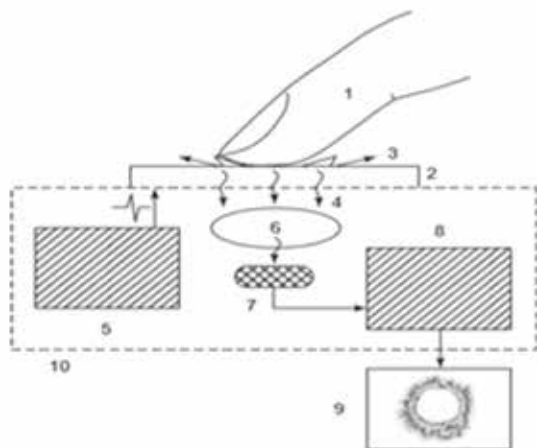
Participants

Fifteen healthy volunteers ($n = 15$ [5 males and 10 females] with a mean age of 28.40 ± 5.63 years) were selected as samples for the trial. They are all students of the Department of Integrative Medicine, National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru, India.

Design

We followed a randomized, controlled crossover design for the current trial. Fifteen subjects were randomized to one of the two groups: group A ($n = 8$) and group B ($n = 7$). On day 1, group A performed 45 minutes of *Nada Yoga* meditation (NYM) and group B performed 45 minutes of supine rest (SR). On day 2, the interventions were interchanged for the groups. The assessment was done using

Figure 2. The Experimental Scheme of the EPI Technique: 1) Subject under Study; 2) Optical Glass with Coating Underneath; 3) Gaseous Discharge; 4) Optical Radiation; 5) Impulse Generator; 6) Optical System; 7) Charge-coupled Device Camera; 8) Video Digitizer; 9) Personal Computer; 10) Device Box



Source: Korotkov, 2004

Figure 3. Finger Emission Sector Analysis used to Investigate Organ Energy in EPI Technique



Image Source: Rubik, 2009

the EPI technique (Bio-well 2.0) just before and immediately after each session (NYM and SR) on both days (See Figure 1). The RM-ANOVA (repeated measures-analysis of variance) test with Bonferroni correction was used to analyze the data.

Written informed consent was obtained from every participant before enrolling them in the study. Institutional ethical clearance was obtained from NIMHANS, Bengaluru.

Selection Criteria

The inclusion criteria of the study were (a) gender: male and female participants; (b) age range: 20 to 40 years; (c) knowledge of the English language; (d) GHQ-12 score less than 3; and (d) willingness to participate in the study. Exclusion criteria were (a) medical or psychiatric illness, (b) pain or injury to the body that can distract the mind, (c) women during menstrual period, breastfeeding, or pregnancy, and (d) subjects with missing finger(s).

Assessments

Energy and Alignment of Seven Chakras Measured by the Bio-well GDV Camera 2.0. The Bio-well GDV Camera, manufactured by Kirlionics International, Saint Petersburg, was used for the current study. In the Bio-well GDV (EPI) measurement, a low electrical current in microamperes (undetectable) with a high voltage (10 kV) and high frequency (1024 Hz) is applied to ten fingertips (every fingertip of both hands) for less than a millisecond as a stimulant to draw electrons and photons from the body.^{11,12} In this process, due to the effect of the electromagnetic field, electrons and photons are drawn from the cutaneous layer of skin.¹⁵ In response to the given stimulation, there is a formation of a glow around the fingers, which is captured by an optical

CCD (charge-coupled device) camera placed under a dielectric plate in the GDV system.¹⁸

It is advisable to allow the patient to relax for 15 minutes before imaging. The fingers of the subject should not be washed or wiped with alcohol before the assessment. In the case of sweaty or dirty hands, they should be washed; a 15-minute time gap for drying stands important. To obtain a reliable result, it is preferable to examine patients in the morning before breakfast or at least three hours after the intake of food.

The image taken by the GDV camera is known as a GDV-gram (See Figure 2). The 10 images taken from the tips of the fingers of both hands reflect the subject's health status. If an image is asymmetrical, it shows a bio-energy imbalance in the related area of the human body.¹⁷ Further, the 10 acquired GDV images are divided into various sectors, which are correlated with different organ systems and energy systems within the body (See Figures 3 and 4).^{19,20} The sector diagnosis in GDV is based on the diagnostic table, correlating the glow characteristics of different zones of the fingers with the functional state of the body zones. The diagnostic table is based on the concepts of traditional Chinese and Indian medicine, micro-acupuncture systems, and empirical findings.^{17,19,21} Since then, the science behind the meridian system has been scientifically supported by a circulatory system called the Bonghan system (BHS). A functionally connected, thread-like structure was found superficially inside blood or lymph vessels, on the surface of internal organs, and in the brain ventricles.²²

The assessment of EPI was performed just before and immediately after every session. Sixteen electro-photonic parameters were selected for the study: *muladhara chakra*

Figure 4. Assignment of Finger Emission Sectors to Generate Chakra Diagram in EPI Technique

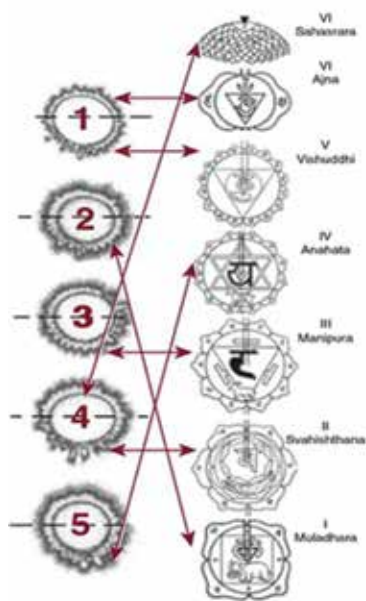


Image Source: Rubik, 2009

energy, *svadhisthana chakra* energy, *manipura chakra* energy, *anahata chakra* energy, *vishuddha chakra* energy, *ajna chakra* energy, *sahasrara chakra* energy, *muladhara chakra* alignment, *svadhisthana chakra* alignment, *manipura chakra* alignment, *anahata chakra* alignment, *vishuddha chakra* alignment, *ajna chakra* alignment, *sahasrara chakra* alignment, mid-align (average *chakra* alignment), and index (average *chakra* energy).

Intervention

Nada Yoga Meditation (NYM) Session for 45 minutes.

The 45-minute NYM session was fully instructed. At the beginning of the session, participants were asked to perform five minutes of yogic juggling as a preparatory practice to increase the flow of energy (*prana*) all over the body. Participants were asked to sit comfortably after the yogic juggling. Thereafter, they performed 10 rounds of dynamic *bhastrika pranayama* (bellows breathing) and 5 rounds of *nadi shodhana pranayama* (alternative nostril breathing) as cleansing practices to facilitate the free flow of *prana*. Following this, participants were asked to relax gently in *savasana* with a smiling face. In *savasana*, they observed every part of their body, one by one, from the toes to the head. They were also instructed to feel their *nadis* (energy channels), blood circulation, heartbeat, thoughts, and feelings. After that, they were instructed to relax every part of the body gradually, one by one, from the toes to the head. They were also instructed to relax their sense organs, thoughts, and feelings to attain a deep meditative state.

After attaining a relaxed and meditative state of mind, participants were brought to the journey of *chakras* with *Nada Yoga*, one by one, from *muladhara* to *sahasrara*. For

muladhara, they were asked to bring their awareness to the area between their anal and genital regions. They were also instructed to visualize the *muladhara chakra* having four petals in the area. Then, the instructor chanted the *bija mantra* (Vedic seed *mantra*) “*lam*,” long and loud, with the sound produced by a tuning fork with a frequency of 240 Hertz (Hz). While listening to the *bija mantra* and the sound produced by the tuning fork, the participants were instructed to visualize the red color, which corresponds to the *muladhara chakra*. This process was repeated four times while focusing on the *muladhara chakra*.

The same procedure was followed for the other six *chakras*, one at a time. An orange-colored *svadhisthana chakra* with six petals was visualized in the region below the navel. *Bija mantra* “*vam*” and a tuning fork with a frequency of 270 Hz were used for this *chakra*. A yellow-colored *manipura chakra* with 10 petals was visualized in the region above the navel. *Bija mantra* “*ram*” and a tuning fork with a frequency of 300 Hz were used for this *chakra*. A green-colored *anahata chakra* with 12 petals was visualized in the heart region. *Bija mantra* “*yam*” and a tuning fork with a frequency of 320 Hz were used for this *chakra*. A blue-colored *vishuddha chakra* with 16 petals was visualized in the throat region. *Bija mantra* “*ham*” and a tuning fork with a frequency of 360 Hz were used for this *chakra*. An indigo-colored *ajna chakra* with two petals was visualized in the region between the eyebrows. *Bija mantra* “*om*” and a tuning fork with a frequency of 400 Hz were used for this *chakra*. A violet-colored *sahasrara chakra* with 1,000 petals was visualized in the crown of the head; a tuning fork with a frequency of 450 Hz was used without chanting any *bija mantra*.

Participants observed a transcendental, meditative, and blissful state of mind in this stage. They were further instructed to relax all *chakras*, three times, whereupon they experienced deep physical and mental relaxation. Then, the instructor chanted *aa-kara* (*aa* sound), *uu-kara* (*uu* sound), and *ma-kara* (*mm* sound), long and loud, for further relaxation. After observing complete relaxation, participants brought their awareness to the fingers and toes, moving them slowly. Then, they came to the prone position after turning toward their right side and relaxed in *makarasana* for a few seconds, following which they slowly came to a sitting position with closed eyes. The session was concluded with *om-kara* and closing prayer in *namaskara mudra*.

The frequencies used in the NYM session were based on the ancient concept that the basic seven notes of the standard octave in Indian classical music—*sa, re, ga, ma, pa, dha, and ni*—correspond with the *muladhara, svadhisthana, manipura, anahata, vishuddha, ajna, and sahasrara chakras*, respectively.

The SR session (control session) also lasted for 45 minutes. Participants in the SR session performed non-yogic juggling and jumping exercises for five minutes. Then, they relaxed for five minutes in a sitting position. Following this, they were instructed to relax in a supine position for the remainder of the session (35 minutes).

Table 1. Changes in Energy and Alignment of the Seven *Chakras*

Variable	SR baseline (1)	SR post (2)	NYM baseline (3)	NYM post (4)	P value (1 vs 2)	P value (3 vs 4)	P value (1 vs 3)	P value (2 vs 4)	F value
Muladhara energy	4.32 ± 0.46	4.31 ± 0.33	4.45 ± 0.45	4.66 ± 0.34	1.000	.519	1.000	.012 ^a	4.295 (3,12)
Svadhithana energy	4.25 ± 0.36	4.28 ± 0.39	4.29 ± 0.40	4.59 ± 0.33	1.000	.125	1.000	.062	4.047 (3,12)
Manipura energy	4.32 ± 0.41	4.38 ± 0.33	4.33 ± 0.30	4.68 ± 0.32	1.000	.005 ^a	1.000	.008 ^a	6.066 (3,12)
Anahata energy	4.24 ± 0.39	4.28 ± 0.28	4.24 ± 0.45	4.55 ± 0.39	1.000	1.199	1.000	.011 ^a	3.896 (3,12)
Vishuddha energy	4.57 ± 0.45	4.59 ± 0.38	4.56 ± 0.57	5.05 ± 0.30	1.000	.012 ^a	1.000	.001 ^a	12.937 (3,12)
Ajna energy	3.81 ± 0.39	3.82 ± 0.31	3.83 ± 0.40	4.06 ± 0.30	1.000	.074	1.000	.074	6.320 (3,12)
Sahasrara energy	4.04 ± 0.34	4.04 ± 0.29	4.01 ± 0.40	4.20 ± 0.31	1.000	.067	1.000	.348	4.141 (3,12)
Muladhara alignment	86.43 ± 7.23	85.67 ± 10.31	87.06 ± 8.61	88.77 ± 7.56	1.000	1.000	1.000	1.000	0.590 (3,12)
Svadhithana alignment	86.67 ± 12.19	86.13 ± 13.57	88.73 ± 10.67	87.10 ± 9.63	1.000	1.000	1.000	1.000	0.082 (3,12)
Manipura alignment	85.73 ± 17.74	87.46 ± 9.93	88.75 ± 12.38	85.61 ± 11.49	1.000	1.000	1.000	1.000	0.590 (3,12)
Anahata alignment	81.91 ± 12.35	85.71 ± 15.07	83.8 ± 12.76	86.82 ± 10.20	1.000	1.000	1.000	1.000	2.147 (3,12)
Vishuddha alignment	86.41 ± 13.08	88.74 ± 9.27	85.86 ± 7.94	89.43 ± 7.25	1.000	.963	1.000	1.000	0.964 (3,12)
Ajna alignment	82.84 ± 13.23	89.32 ± 13.10	86.44 ± 12.48	89.17 ± 7.14	.647	1.000	1.000	1.000	1.400 (3,12)
Sahasrara alignment	88.31 ± 9.66	84.14 ± 11.98	84.71 ± 11.35	88.33 ± 9.63	.808	1.000	1.000	1.000	1.597 (3,12)
Mid-align	85.37 ± 7.18	86.74 ± 7.41	86.48 ± 5.53	87.89 ± 5.67	1.000	1.000	1.000	1.000	1.703 (3,12)
Index	60.04 ± 7.08	61.25 ± 5.83	61.07 ± 5.99	66.52 ± 5.58	1.000	.011 ^a	1.000	.001 ^a	9.238 (3,12)

^a*P* < .0125

Abbreviations: ^pRM-ANOVA with Bonferroni correction; SR, supine rest; NYM, *nada* yoga meditation.

Statistical Analysis

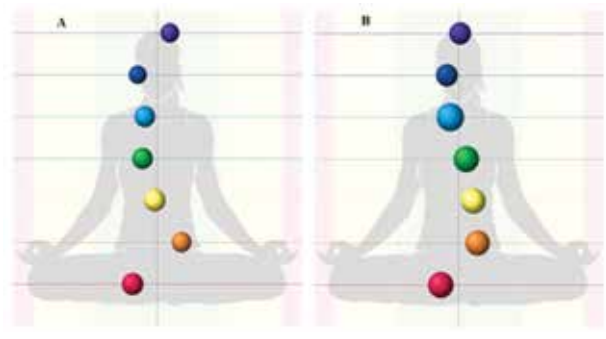
All the EPI data extracted through the Bio-well software were arranged together based on four points of measurement (NYM baseline; NYM post; SR baseline; SR post). RM-ANOVA with Bonferroni correction was applied to see the changes.

RESULTS

Out of 16 electro-photonic variables, 3 showed significant within-session changes and 5 showed significant between-session differences in RM-ANOVA. *Manipura* energy [*P* = .005, *F* = 6.066 (3, 12)], *vishuddha* energy [*P* = .012, *F* = 12.937 (3, 12)], and index (average *chakra* energy) [*P* = .011, *F* = 9.238 (3, 12)] showed significant within-session improvement after 45 minutes of NYM. However, *muladhara* energy [*P* = .012, *F* = 4.295 (3, 12)], *manipura* energy [*P* = .008, *F* = 6.066 (3, 12)], *anahata* energy [*P* = .011, *F* = 3.896 (3, 12)], and *vishuddha* energy [*P* = .001, *F* = 12.937 (3, 12)] increased significantly after the intervention, favoring the NYM session as compared to the SR session (See Table 1 and Figure 5). *Svadhishthana* energy, *ajna* energy, and *sahasrara* energy did not increase significantly. However, the index [*P* = .001, *F* = 9.238 (3, 12)] increased significantly, favoring the NYM session as compared to the SR session.

Muladhara alignment, *svadhishthana* alignment, *manipura* alignment, *anahata* alignment, *vishuddha* alignment, *ajna* alignment, *sahasrara* alignment, and mid-align (average *chakra* alignment) did not change significantly after the intervention. However, all the alignment variables, except *svadhishthana* and *manipura*, showed a trend of improvement after the NYM session.

Figure 5. Changes in the Energy Level (Bigger Sizes of the *Chakras* Indicate Greater Energy Level) and Alignment of the Seven *Chakras* (*Chakras* Closer to the Midline of the Body Indicate Greater Alignment) in a 25-year-old Female Participant of the Current Study, Before and After 45 Minutes of *Nada Yoga* Meditation Practice (A = Before NYM; B = After NYM)



DISCUSSION

Based on the physiological correlations of the *chakra* system with the physical human body, the results of the current study show that the energy levels of the following organs or organ systems, which are associated with the *muladhara*, *manipura*, *anahata*, and *vishuddha* *chakras*, increased after the NYM intervention: adrenal gland, skeleton, backbone, spinal cord, kidney, rectum, stomach, pancreas, excretory glands, liver, solar plexus, cardiovascular system, blood circulation, lungs, heart, thyroid gland, mammary glands, throat, neck, and esophagus.²³ Similarly, increased energy levels of the aforementioned *chakras* after

the *Nada Yoga* session are associated with an increase in the following psychological variables: the feelings of security, survival, assimilation, love, equilibrium, well-being, communication, and growth.⁷

To the best of our knowledge, this is the first study that has investigated the effect of the comprehensive chakra-based NYM technique on energy levels and the alignment of the seven *chakras* of the human body. However, there is one earlier study that also attempted to observe the effect of 15-minute crystal-bowl toning with a C-scale on the EPI *chakras*.²⁴ The study reports significant changes in the *muladhara*, *manipura*, and *sahasrara chakras* after the 15 minutes of crystal bowl toning as compared to a passive control group. However, the study shows negative changes in the *manipura* and *sahasrara chakras*.²⁴ Moreover, the study was unable to clarify whether the changes were related to energy levels or the alignment of the *chakras*. Despite having an unclear presentation of the results in the earlier study, the sensitivity of the *muladhara* and *manipura chakras* after crystal-bowl toning is in line with the current study, irrespective of the direction of the change. Changes in five energy variables in the current study, including the energy levels of four *chakras* and one index variable, may be due to the comprehensive and long intervention employed for the study.

Although earlier studies investigating the effect of the *Nada Yoga* technique on *chakras* are very rare, few studies have investigated the therapeutic benefits of the *Nada Yoga* technique. A recent study observes the effect of *Nada Yoga* on anxiety and hypertension levels. The study concludes that the *Nada Yoga* technique can help improve health and reduce anxiety and hypertension.² Similarly, studies report that a music intervention, which is also considered to be a form of external sound (*ahata nada*), facilitates deep meditation, reduces stress, enhances mood, and improves relationships.³ The current study also indicates an improvement in the feelings of security, survival, assimilation, love, equilibrium, well-being, communication, and growth based on the corresponding *chakras* (*muladhara*, *manipura*, *anahata*, and *vishuddha*) affected by the NYM intervention.

Improvement in five energy variables in the current study, including the energy levels of four *chakras* (*muladhara*, *manipura*, *anahata*, and *vishuddha*) and one index variable (average *chakra* energy) may be due to the comprehensive NYM intervention with the powerful components of individualized *bija mantras* and visualization of colors and sound frequencies used for each *chakra*, as described in ancient yogic scriptures. Further, the components of awareness, relaxation, and breathing techniques also have the potential to bring the mind to the present moment and reduce the level of stress,²⁵ which may further help reduce energy expenditure in the human body. That may be the primary reason for increased, reserved subtle energy levels in the participants after the NYM intervention. Additionally, the insignificant improvement (trend of improvement) in the alignment of most of the *chakras* and mid-align (average *chakra* alignment) indicates that long-term intervention of

NYM is required to improve the alignment of the *chakras* significantly.

Initiation of the advanced scientific investigation in the subtlest dimensions of yoga philosophy, a robust methodology, and objective assessment tools are the strengths of this study. The small sample size and short intervention duration are the study's limitations.

CONCLUSION

There was an immediate energy-enhancing effect from the 45-minute NYM practice on the energy levels of the *muladhara chakra*, *manipura chakra*, *anahata chakra*, *vishuddha chakra*, and average *chakra* energy in healthy individuals. Future studies should assess the associated physiological correlations and possible clinical implications of these findings.

REFERENCES

1. Hersey B. *The Practice of Nada Yoga*. Inner Traditions; 2013:209.
2. Kumar N, Singh K. Effect of nada yoga on hypertension & anxiety level. *GIS Bus*. 2019;14(6):1-16. doi:10.26643/gis.v14i6.10460
3. Kumar K, Naudiyal S. Practice of nada yoga and its psychological benefits. *Int J Sci Conscious*. 2020;6(3):31-34.
4. Motoyama H. *Theories of the Chakras: Bridge to Higher Consciousness*. New Age Books; 2001:1-193.
5. Soni A, Wadhvani S, Chatirvedi DK. Measurement of chakra energy: effect of different activities on consciousness. *Int J Electr Commun Eng*. 2016;2(1):1-5.
6. Patel M. Healing chakras. *Tradit Med Clin Naturop*. 2016;5(3):1-2.
7. Maxwell RW. The physiological foundation of yoga chakra expression. *Zygon*. 2009;44(4):807-824. doi:10.1111/j.1467-9744.2009.01035.x
8. Lansdowne ZF. *The Chakras & Esoteric Healing*. Motilal Banarsidass Publishers; 1993:144.
9. Grubbs G. The chakras in sandplay therapy. *J Sandplay Ther*. 2016;25(2):1-7.
10. Kirlian SD, Kirlian VK. Photographing and visual observation by means of high-frequency currents. *Sci Appl Photogr*. 1961;6(6):397-403.
11. Wróbel ILC, Szadkowska I, Masajtis J, Goch JH. Images of corona discharges in patients with cardiovascular diseases as a preliminary analysis for research of the influence of textiles on images of corona discharges in textiles' users. *AUTEX Res J*. 2010;10(1):26-30.
12. Ciesielska IL. Images of corona discharges as a source of information about the influence of textiles on humans. *AUTEX Res J*. 2009;9(1):36-41.
13. Korotkov K, Williams B, Wisneski LA. Assessing biophysical energy transfer mechanisms in living systems: the basis of life processes. *J Altern Complement Med*. 2004;10(1):49-57. doi:10.1089/107555304322848959
14. Bhargav H, Srinivasan TM, Bista S, et al. Acute effects of mobile phone radiations on subtle energy levels of teenagers using electrophotonic imaging technique: A randomized controlled study. *Int J Yoga*. 2017;10(1):16-23. doi:10.4103/0973-6131.186163
15. Kostyuk N, Cole P, Meghanathan N, Isokpehi RD, Cohly HH. Gas discharge visualization: an imaging and modeling tool for medical biometrics. *Int J Biomed Imaging*. 2011;2011:196460. doi:10.1155/2011/196460
16. Korotkov KG. *Energy Fields Electrophotonic Analysis in Humans and Nature*. Amazon Publishing; 2011.
17. Korotkov K. *Human Energy Field: Study with GDV Bioelectrography*. Fair Lawn: Backbone Publishing Company; 2002.
18. Hacker GW, Pawlak E, Pauser G, et al. Biomedical evidence of influence of geopathic zones on the human body: scientifically traceable effects and ways of harmonization. *Forsch Komplementarmed Klass Naturheilkd*. 2005;12(6):315-327.
19. Korotkov K, Shelkov O, Shevtsov A, et al. Stress reduction with osteopathy assessed with GDV electrophotonic imaging: effects of osteopathy treatment. *J Altern Complement Med*. 2012;18(3):251-257. doi:10.1089/acm.2010.0853
20. Rubik B. Measurement of the human biofield. In: Freeman LW, ed. *Mosby's Complementary and Alternative Medicine: a Research-based Approach*. Mosby/Elsevier; 2009:555-573.
21. Korotkov K. *Diagnosis and Monitoring of the Human Energy – Informational State and Analysis of Subtle Energies, Applying Gas Discharge Visualization Technique*. Saint-Petersburg Technical University SPIFMO; 2004:1-18.
22. Soh KS. Bonghan circulatory system as an extension of acupuncture meridians. *J Acupunct Meridian Stud*. 2009;2(2):93-106. doi:10.1016/S2005-2901(09)60041-8
23. Korotkov K. *Human Energy Field: Study with GDV Bioelectrography*. Fair Lawn: Backbone Publishing Company; 2002.
24. Cowan M, Nunley B. *The effects of crystal bowl toning on the chakras as measured by the gas discharge visualization technique (GDV) and scores on the profile of mood states scale*. *Subtle Energies & Energy Medicine Journal Archives*; 2005:16.
25. Brown RP, Gerberg PL. Yoga breathing, meditation, and longevity. *Ann N Y Acad Sci*. 2009;1172(1):54-62. doi:10.1111/j.1749-6632.2009.04394.x