

Human Biofield Responses to Encountering a Sacred Object

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Abstract

Context. While advances in the Western sciences have increased our understanding of the human biofield, few studies have examined the effects of sacred objects on its functioning.

Design and Study Participants. The study examined the effects of a sacred object called the Sri Yantra / Durga Stone on the human biofield. Seventeen participants were studied on three separate occasions using the Bio-Well device: baseline, the day before exposure to the sacred object, pre-exposure, immediately prior to exposure to the sacred object, and post-exposure, immediately following exposure to the sacred object. A set of *a priori* hypotheses examined outcome effects on a set of variables including emotional pressure, energy state, multiple physiological systems, and chakra energy and chakra alignment.

Results. Emotional pressure ($p=0.017$) and overall energy state ($p=0.001$) readings were significantly elevated following exposure to the sacred object. Similarly, readings from each of the organ systems examined showed significant increases across the 3 assessment points ($p's < 0.05$). While the overall chakra energy readings were elevated following exposure to the stone ($p=0.001$), overall chakra alignment was not changed ($p=0.145$). For some variables, there were statistically significant differences between the baseline and the pre-exposure assessment suggesting that being in the vicinity of the sacred object (approximately 10 – 15 feet), but not yet having encountered it, influenced aspects of the body's energy systems.

Conclusions. The findings suggest that short-term human exposure to this particular sacred object had significant effects on multiple aspects of the human biofield.

Background

In the Western sciences, the human biofield is gaining increased attention for its role in creating and maintaining health and wellbeing (Hammerschlag et al., 2015; Rubik, Muehsam, Hammerschlag, & Jain, 2015; Yang et al., 2019).

There is a long tradition of people taking pilgrimages to special environments and so-called sacred spaces for healing (Young & Koopsen, 2011). Research by Govinda DeCastro suggests certain characteristics make up a sacred space, namely approach, threshold, proportion, sound vibration, light and shadow, color, memory, connection with nature, and the full engagement of the senses (DeCastro, 2012; Silva, 2016). So called “sacred objects” can be found within a sacred space or independent of such spaces. An excellent source on this topic is Alexandra Walsham's “Introduction: Relics and Remains”, which is a collection of essays by historians, anthropologists, archeologists and scholars of religion

considering relics in a broad comparative and chronological perspective ranging from antiquity to the modern day and including Europe, Africa, Latin America and China (Walsham, 2010).

For this study, we used the Bio-Well device to examine the effects of a sacred object called the Sri Yantra / Durga Stone. The stone contains within it a form of sacred geometry called a Sri Yantra (Kumar, 2014). A Sri Yantra, sometimes spelled Shri Yantra, or Shri Chakra, is a form of sacred geometry commonly used in Hinduism and Jainism (Pandya, Gadnis, Mānatuṅga, Siddhasena, & Hemacandra, 2004). Like mantras, there is an ancient tradition of using yantras for healing (Rosu, 1988).

Methodology

Study Site. The study site was on the grounds of the Sripuram, Sri Narayani Golden Temple in Vellore, India. At the Temple, the Durga Stone is constructed with a Sri Yantra incorporated into the top of it, which stood approximately 4 feet tall. At the temple, people regularly approach and encounter the Sri Yantra / Durga Stone. This is accomplished by the person putting a right hand on top of the stone and holding it there for several minutes. Signage next to the Durga Stone provides a mantra of “Om Mahadeviyay Sharanam” (I surrender to the Supreme Mother) and people are encouraged to quietly recite it while having their hand on the stone, although this is optional.

Study Population. Seventeen men and women (ages 38 to 79) were enrolled. All study activities were approved and overseen by the Institutional Review Board (IRB) at the Institute of Noetic Sciences (<https://noetic.org/>) (IORG#0003743). All study participants signed an informed consent document before participating in the study.

Study Design and Data Analysis. Bio-Well data were collected at three timepoints: 1) baseline, collected on the temple grounds but away from the sacred object area the day before study participants encountered the object, 2) pre-sacred object, collected approximately 5 minutes before encountering the

object, 3) post-sacred object, collected within approximately 5 minutes after encountering the object. The data was immediately captured on the computer's hard drive and uploaded to a secure and HIPAA-compliant cloud until subsequent compiling and analysis of the data. Data were initially examined using the SPSS descriptive statistics function "explore", which provides means, minimums, maximums, standard deviations, skewness, and kurtosis, as well as stem-and-leaf and histogram plots (SPSS version 27). Initial querying of the data looked for potential extreme outliers. Surprisingly there were no extreme outliers (i.e., > 3 standard deviations from the mean). Given the overall normal distribution of the data, a standardized parametric testing approach was deemed appropriate, using repeated measures analysis of variance (ANOVA). Given the large number of variables within the Bio-Well organs/systems output, to avoid conducting an excessive number of statistical tests, only the summary organ system variable was tested for each system. For example, for the endocrine system, the Bio-well provides quantitative data on the hypothalamus, epiphysis, pituitary gland, thyroid gland, pancreas, spleen, and adrenals. For the study, however, only the summary endocrine system data point was used as dependent variables. The same was done for each of the other system/organ systems examined.

Hypotheses Tested

Primary Hypothesis: Study participants' emotional pressure readings will decrease, and overall energy and symmetry balance will increase significantly following their exposure to the sacred object as compared to their initial baseline assessment and their pre-sacred object assessment.

Secondary Hypothesis: Study participant's organ system readings will show increases in energy and improved overall balance following their exposure to the sacred object as compared to their initial baseline assessment and their pre- sacred object assessment.

Exploratory Hypothesis: Study participant's Chakra System will show increases in energy and alignment, and potentially greater significance will be chakras from the waist up following their

exposure to the to the sacred object as compared to their initial baseline assessment and their pre- sacred object assessment as compared to their initial baseline assessment and their pre-sacred object assessment.

Results

Emotional Pressure. The overall emotional pressure measure was significantly increased across the 3 assessments ($F = 7.64, p=0.017$). Post-hoc analysis of the estimated marginal means showed that baseline was not significantly different from pre-exposure ($p=0.545$) yet was significantly different from post-exposure ($p=0.017$) as was pre-exposure from post-exposure ($p=0.039$) (Table 1).

Energy. The overall energy measure was significantly increased across the 3 assessments ($F = 11.34, p=0.001$). Post-hoc analysis of the estimated marginal means showed that baseline was significantly different from pre-exposure 2 ($p=0.024$). Pre-exposure ($p=0.000$) was not significantly different from post-exposure ($p=0.070$) (Table 1).

L/R Symmetry Balance. The overall symmetry measure was not significantly changed across the 3 assessments ($F = 2.038, p=0.156$). Post-hoc analysis of the estimated marginal means showed that baseline was not significantly different from pre-exposure ($p=0.590$) nor post-exposure ($p=0.191$). Post-exposure was marginally significant as compared to pre-exposure ($p=0.057$) (Table 1).

Head System. The overall head assessment was significantly changed across the 3 assessments ($F = 10.608, p=0.001$). Post-hoc analysis of the estimated marginal means showed that baseline was marginally significantly different from pre-exposure ($p=0.053$) and significantly different from post-exposure ($p=0.000$). Pre-exposure was significantly different as compared to post-exposure ($p=0.045$) (Table 1).

Cardiovascular System. The overall cardiovascular assessment was significantly changed across the 3 assessments ($F = 11.441, p<0.001$). Post-hoc analysis of the estimated marginal means showed that

baseline was significantly different from pre-exposure ($p=0.028$) and post-exposure ($p=0.000$). Pre-exposure was significantly different as compared to post-exposure ($p=0.045$) (Table 1).

Respiratory System. The overall respiratory assessment was significantly changed across the 3 assessments ($F = 8.67$, $p=0.012$). Post-hoc analysis of the estimated marginal means showed that baseline was marginally different from pre-exposure ($p=0.050$) and significantly different from post-exposure ($p=0.000$). Pre-exposure was not significantly different as compared to post-exposure ($p=0.119$) (Table 1).

Endocrine System. The overall endocrine assessment was significantly changed across the 3 assessments ($F = 10.34$, $p=0.001$). Post-hoc analysis of the estimated marginal means showed that baseline was significantly different from pre-exposure ($p=0.016$) and significantly different from post-exposure ($p=0.000$). Pre-exposure was not significantly different as compared to post-exposure ($p=0.123$) (Table 1).

Musculoskeletal System. The overall musculoskeletal assessment was significantly changed across the 3 assessments ($F = 7.36$, $p=0.003$). Post-hoc analysis of the estimated marginal means showed that baseline was significantly different from pre-exposure ($p=0.027$) and significantly different from post-exposure ($p=0.007$). Pre-exposure was not significantly different as compared to post-exposure ($p=0.072$) (Table 1).

Digestive System. The overall digestive assessment was significantly changed across the 3 assessments ($F = 10.09$, $p=0.001$). Post-hoc analysis of the estimated marginal means showed that baseline was significantly different from pre-exposure ($p=0.024$) and significantly different from post-exposure ($p<0.001$). Pre-exposure was not significantly different as compared to post-exposure ($p=0.133$) (Table 1).

Urino-genital System. The overall urino-genital assessment was significantly changed across the 3 assessments ($F = 8.39$, $p=0.002$). Post-hoc analysis of the estimated marginal means showed that

baseline was significantly different from pre-exposure ($p=0.015$) and significantly different from post-exposure ($p<0.003$). Pre-exposure was not significantly different as compared to post-exposure ($p=0.078$) (Table 1).

Nervous System. The overall nervous assessment was significantly changed across the 3 assessments ($F = 5.069$, $p=0.015$). Post-hoc analysis of the estimated marginal means showed that baseline was not significantly different from pre-exposure ($p=0.118$) but was significantly different from post-exposure ($p<0.007$). Pre-exposure was not significantly different as compared to post-exposure ($p=0.158$) (Table 1).

Immune System. The overall immune assessment was significantly changed across the 3 assessments ($F = 7.459$, $p=0.003$). Post-hoc analysis of the estimated marginal means showed that baseline was marginally different from pre-exposure ($p=0.059$) and significantly different from post-exposure ($p<0.001$). Pre-exposure was not significantly different as compared to post-exposure ($p=0.135$) (Table 1).

Chakra Energy. Overall chakra energy was significantly increased across the 3 assessments ($F = 10.705$, $p=0.001$). Post-hoc analysis of the estimated marginal means showed that baseline was significantly different from pre-exposure ($p=0.032$) as well as post-exposure ($p<0.001$). Pre-exposure was not significantly different from post-exposure ($p=0.066$) (Table 1).

Chakra Alignment. Overall chakra alignment was not significantly changed across the 3 assessments ($F = 2.17$, $p=0.145$). Post-hoc analysis of the estimated marginal means showed that none of the assessments were significantly different from another other (p 's >0.105) (Table 1).

Discussion

The study findings are reviewed and discussed sequentially in the order of the hypotheses tested in the context of the existing literature.

Primary hypothesis. The Bio-Well's emotional pressure output includes these words and associated numerical ranges, including "calm" (0 to 2), "optimal" (2 to 3), "anxiety" (3 to 4), "stress" (4 to 6), "heightened" (6 to 8), and "high" (8 to 10). The group's mean emotional pressure went from the high end of "optimal" at baseline to post-sacred object exposure to the high end of the "anxiety" range. Anxiety in the software, however, doesn't mean anxiety as typically understood clinically but more an excited state change which can be "good stress" (as in eustress) or "bad/negative stress" (as in distress). Our observation of the study participants was that they were in a state of euphoria and therefore interpreting the "anxiety" output as meaning a positive, excitatory emotional state change is most appropriate. The Bio-Well's energy output is an aggregate of all the energy system measures. This variable was significantly increased, primarily from the initial baseline to the pre-exposure but also showing a marginal increase at post-exposure. Commenting on statistics here, the observed increase in energy from an initial 53 to a final measure of 66 was highly significant in the sense of the usual greater stability of that particular variable. In contrast to emotional pressure and energy state, L/R symmetry (balance) was not significantly changed. Given that this was a healthy population and mentally stable, they had already showed a high L/R symmetry (balance). That is, as a group they were already in the "optimal" range (90 to 100) and therefore did not have much room to increase.

Secondary hypothesis. The secondary hypothesis was directed at examining the effects of exposure to the sacred object on different organ systems. For each of the systems examined, there was a significant increase across the three assessment points. The head and cardiovascular systems were significantly elevated post-exposure as compared to immediate pre-exposure. For the head, this could be expected as there was clearly an increased focus on the task at hand, plus there was the recitation of the mantra which took some concentration. For the cardiovascular system there was an increase across all 3 measures. For the other systems, the significant increase was from the baseline to the pre-exposure, with

no further significant increase from pre-exposure to the post-exposure. For these systems, therefore, it might have needed a longer exposure in order to activate them. For example, for the endocrine and immune systems, considering the metabolic machinery, more time could have been needed. The question naturally arises as to why were many of the pre-exposure assessments significantly higher than the baseline measures? This could be because the pre-exposure assessment was taken on the temple site, which itself possessed heightened energy.

Exploratory hypothesis. Given there is little quantitative research on the measurements of chakras, these analyses were considered exploratory. The analyses revealed that chakra energy was increased in response to the sacred object, however, chakra alignment was not significantly different. The increase in chakra energy was greater at pre-exposure as compared to baseline, while the immediate post- sacred object exposure was marginally elevated. The lack of change in alignment is in many ways a good thing in the sense that when one does intervention work you want stability of alignment. Chakras are considered to indicate the psycho-spiritual-emotional-energetics of a person. It's not that chakras should always be aligned straight up and down, they need to be moving in response to experience, albeit within a normal range. In contrast to alignment, chakra energy can and does often show more significant temporal effects in response to external or internal experiences. From a Bio-Well data perspective, chakras in general are sensitive to both internal and external influences. When chakras are observed on the right of the body this typically represents extroversion meaning relating to an external environment. The opposite placement equals introversion meaning when a person is more introverted and attending to their internal milieu.

Study Limitations. Potential limitations to be noted include the limited 3-minute duration of exposure to the sacred object and the modest sample size.

Future Research. In future studies it would be interesting to examine each study participant's spiritual beliefs or lack thereof on this type of experiential phenomenon.

Table 1. Study Variables and Outcomes

Name	Baseline	Pre-Sacred Object	Post-Sacred Object
Emotional Pressure *	3.01 (0.672)	3.17 (0.818)	3.96 (0.1.24)
Energy ** +	53.78 (4.48)	60.54 (9.42)	66.78 (7.72)
Balance	90.18 (3.77)	91.10 (3.38)	88.07 (3.61)
Head ** + ++ +++	4.456 (0.469)	4.987 (0.764)	5.537 (0.660)
Cardiovascular System * + ++ +++	4.823 (0.546)	5.446 (0.785)	6.034 (0.719)
Respiratory System * + ++	5.631 (0.668)	6.622 (1.800)	7.552 (1.401)
Endocrine System ** ++ +++	4.923 (0.493)	5.648 (0.926)	6.167 (0.764)
Musculoskeletal System * + ++	5.104 (0.752)	5.893 (1.097)	6.907 (1.758)
Digestive System * + ++	5.001 (0.526)	5.987 (1.282)	6.723 (1.096)
Urinogenital System * + ++	6.037 (1.081)	7.230 (1.710)	8.743 (2.525)
Nervous System * ++	4.520 (0.442)	5.071 (1.144)	5.634 (1.042)
Immune System * + ++	4.441 (0.569)	4.983 (0.850)	5.314 (0.731)
Chakra Energy ** + ++	5.123 (0.543)	5.931 (1.209)	6.780 (1.066)
Chakra Alignment	86.79 (7.179)	85.01 (6.927)	81.75 (7.634)

* Main effect of time, $p \leq 0.01$

** Main effect of time, $p \leq 0.001$

+ Baseline different from Pre-sacred object, $p \leq 0.05$

++ Baseline different from Post-sacred object, $p \leq 0.01$

+++ Pre-sacred object different from Post-sacred object, $p \leq 0.05$

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Competing Interests Statement. T.J.B is an authorized distributor and educator for the Bio-Well device. No other authors have competing interests to report.