Case Study
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A Longitudinal Single Case Study on Short-Duration Mind-Body Relaxation and Rejuvenation Technique Inspired from Ancient *Mālā Japa*

Anurag Jayswal [1], Kabita Devi [2], Bhabesh Deka[3,7], Deepeshwar Singh[4], Ramesh C Deka[5,7], Suvendra Kumar Ray[6,7]*

[1] Department of Molecular Biology and Biotechnology, Tezpur University, Tezpur—784028, Assam, India; anurag13198@gmail.com
[2] Department of Electronics and Communication Engineering, Tezpur University, Tezpur—784028, Assam, India; kabitadevi635@gmail.com
[3] Department of Electronics and Communication Engineering, Tezpur University, Tezpur—784028, Assam, India; bdeka@tezu.ac.in
[4] Department of Yoga, Babasaheb Bhimrao Ambedkar University, Lucknow-226025, Uttar Pradesh, India; deepeshwar.yoga@email.bbau.ac.in
[5] Department of Chemical Sciences, Tezpur University, Tezpur—784028, Assam, India; ramesh@tezu.ernet.in
[6] Department of Molecular Biology and Biotechnology, Tezpur University, Tezpur—784028, Assam, India; suven@tezu.ernet.in
[7] Centre for Multidisciplinary Research, Tezpur University, Tezpur—784028, Assam, India
* Correspondence: suven@tezu.ernet.in

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Abstract: In this case study, we describe the experience of a short-duration meditation method called mind-body relaxation and rejuvenation technique (MBRRT), inspired by the ancient *mālā japa*. A middle-aged person practiced it for a period of two and a half years. During the MBRRT performance, the experience in terms of sleep was collected through a self-report proforma for 60 practice sessions. It was observed that the participant could sleep well in 32 sessions (more than 50%), could sleep only for some time in 19 sessions (more than 30%), could feel the sensation of sleep in 4 sessions, and only in 5 sessions, the participant did not experience sleep. In addition, the participant expressed calmness, relaxation, and rejuvenation after the MBRRT in all the sessions. A single-trial electroencephalogram (EEG) study was also performed on the participant during meditative and non-meditative resting states. It was observed that the low-frequency brain waves such as delta, theta, and alpha increased during the MBRRT performance whereas the high-frequency brainwaves, beta, and gamma got lowered in all the brain regions such as frontal, central, parietal, occipital, and temporal. The EEG result supported the sleep and relaxation experienced by the participant due to MBRRT. We believe the easy-to-perform method may be adapted for brief sleep or naps and fast relief from a stressful and exhausted mind.

Keywords: Relaxation; Mind-body; Mala Japa; Rejuvenation; EEG

1. Introduction

The origins of *mālā japa* go back long before written history. It is described in many ancient and medieval texts in India, but they are commonly used across cultures globally. Japa has also been an important habit in Indian lifestyle. It is mentioned in Ṣāktānanda Ṭarangini, a 16th century work on Ṣāktā tradition, to do Japa daily, and keep it secret [1].

Ṣrīmadbhagvadgītā emphasizes Japa as an excellent in all yajña (yajñānāṃ japayajño'smi) [2]. According to Ṣvamī Ṃukundānanda, it is ‘simplest in all yajña’ [3]. Ṣvamī Ṣatyānanda describes, “The word japa itself means ‘to rotate’. Japa yoga means union of the self with the highest existence through the rotation of consciousness” [4]. It has been generally taken in sādhanā or spiritual procedure though it has also an inherent feature of mind-body interaction. The use of mālā with mantra japa keeps our minds engaged effectively, reducing the chances of wondering [5]. The word mālā means a series of manakā (beads) which has also been associated with the number of japa (chanting). There is another process of karamālā where fingers and finger divisions (parva) are treated as mālā and beads respectively [6]. Those who chant without numbers (or mālā) their mind get distracted while chanting [5]. Doing japa without mālā makes it difficult to maintain mind-body coordination. Though, it is an age-old practice that is abundantly observed among spiritual persons today. However, there are no adequate empirical studies to understand the scientific basis of this ancient practice. There is also a lack of literature and phenomenal evidence describing its logic from mind-body aspects. In mantra japa, the effect may be attributed to a complex set of components, which includes phonetic (uccāraṇa), reverence (śraddhā), and concentration (dhāraṇā), as well as japa-mālā integration, which seems to be responsible for mind-body integration. *Mālā japa* is a dual activity of chanting (japa) as well as the mechanical movement of mālā. Researchers have demonstrated that changing mental activity can cause measurable changes to our central nervous system activity, suggesting that mind-body interactions are real and can be useful [7]. Mantra meditation (japa) has been found effective in relieving stress and coping with hypertension according to a review [8]. In another study, mahāmantra japa has shown an increase in alpha relative power, resulting in a refreshed and relieved state of the brain [9]. Studies investigating brain function demonstrated that the progressive muscle relaxation (PMR) technique could increase posterior theta-band activity and decrease mid-frontal beta-band activity [10]. Moreover, fMRI results indicate diminished activity of the superior frontal gyrus (SFG), inferior frontal gyrus (IFG), and posterior cingulate cortex (PCC) during PMR [11]. A comparable study revealed that one week of 30-minute daily training with an integrative mind-body technique could enhance frontal midline theta power in participants, and may lead to brain information processing improvement [12]. These researches warrant that relaxation methods can be evidenced.

In this study, a short-duration meditation method inspired by the ancient *mālā japa* called a ‘mind-body relaxation and rejuvenation technique’ (MBRRT) was practiced by an experienced middle-aged participant for two and half years. Here, practice was done for five and ten minutes of duration across 60 sessions. A direct (using a self-report proforma and interview) and indirect (EEG) approaches were used to assess the impact of meditation on the practitioner. Experience in terms of sleep and calm was collected through a self-report proforma after each MBRRT session. Further evidence that the mind-body method was beneficial for relaxation and rejuvenation came from an electroencephalogram (EEG) record taken of the same person.

2. Materials and Methods

The research involves a long-term follow-up of MBRRT which is described in a previous study by authors [6]. The present case study is an observational one. The participant,

a male 52-year-old having experience with the technique, could complete 60 sessions lasting five to ten minutes each, and he could respond to his experiences using a proforma. Out of the sixty sessions conducted during the past two and a half years, forty-six lasted for five minutes, and fourteen lasted for ten. The individual provided his informed consent for this study.

2.1. Assessment Tools

Phenomenal assessment was done through a proforma designed by the researchers. It contains eight options where participant could select an appropriate option immediately after performing the MBRRT. Proforma can be found in Appendix (a). Moreover, he could include other experiences on the proforma in a section. Our main aim has been to find out the induction of sleep, a measure of relaxation, during MBRRT. We have also tried to keep the response sheet brief and easy which facilitates getting a quick response. The proforma was created after observing the responses of the participants. Therefore, it may be treated as pretested. The neural activity was assessed using an 8-channel Bio Signal acquisition system manufactured by ADInstruments, USA.

2.2. EEG Data Collection and Preprocessing

Raw EEG signals were acquired from the same participant in a trial. EEG signals were recorded at three distinct time points, each spanning five minutes. These time points included measurements taken before, during, and after the MBRRT practice, with a constant sampling frequency of 100 Hz. 8-channel ECI Electro-Cap Electrode System with international 10-20 placements covering the brain's frontal, central, parietal, occipital, and temporal regions was utilized. After the collection of EEG data, it was normalized with zero mean and unit variance. A band pass filter with a cut-off frequency of 0.5 to 45 Hz was applied because the information about five frequency bands lies within that band. The cut-off fixation also helped to remove artifacts. With ADInstruments' Biosignal acquisition system, the Bio amplifier is used to remove other potential noises and artifacts (such as motion artifacts and electrode impedance) during signal acquisition. Then, the filtered EEG data was divided into 3-second segments to increase the number of samples and reduce processing time. The segmentation also gives a clear identification of the necessary features within each segment. Feature extraction as mentioned below was performed using Python in Jupyter Notebook IDE on a Windows system. The entire workflow is illustrated in Figure 1.

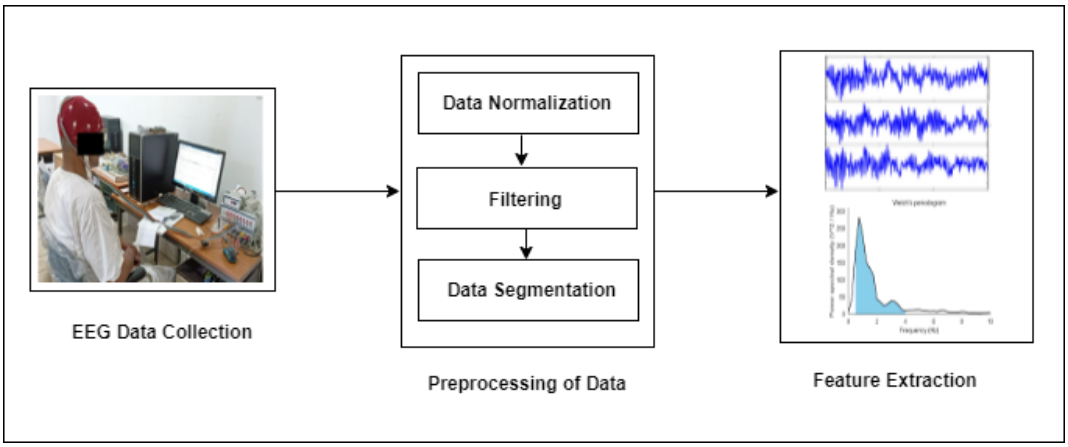

Figure 1. Schematic flowchart of EEG assessment for MBRRT

2.3. Analysis

Self-reported data was analyzed by categorization and using descriptive statistics. Responses obtained through proforma were described mainly into 5 classes (1. Slept fully 2. Slept for some time 3. Sleepy 4. Wakeful throughout 5. Remained wake but felt calm) as given in Table 1. For further analysis, the first two classes were considered under 'sleep' and the other three under 'wakeful calm' category. For statistical significance, a chi-square test was performed. Observed frequency was categorized into two categories – 1. Sleep 2. Wakeful calm. As per our knowledge, there was no earlier study available using these measures and study design, so a differential expected frequency was assumed and tested for significance.

Feature extraction: Filtered EEG data have been analyzed using Fast Fourier Transform (FFT) to convert from the time domain to the frequency domain. To determine the frequency sub-bands (Delta (0.5-4 Hz), Theta (4-8 Hz), Alpha (8-13 Hz), Beta (13-25 Hz), and Gamma (above 25 Hz)) present in the EEG signal reflecting different mental states in meditative and non-meditative conditions, Power Spectral Density (PSD) was calculated using Welch's periodogram method. Using the composite Simpson's Rule, the absolute power of EEG bands was calculated by integrating the area covered by Welch's Periodogram. Analyzed and subjective raw data can be found in Appendix (b, c).

3. Results and Discussion

3.1. Results

Out of 60 sessions of MBRRT, 46 were of five minutes and 14 were of ten minutes. Percentage under each category response is given in Table 1. Responses under cat. 1 and 2 were more after the 10-minute session (64.29%, 35.71%) in comparison to the session after 5 minutes (50.00%, 30.43%) making it obvious biases towards sleep responses ($p<0.01$). Statistically, the participant could experience significant sleep ($p<0.01$) during the five-minute follow-up. The number of sleep responses was not lower or equal to wakeful responses, but there was a bias towards sleep. (Table 2) A word spectrum from the additional notes provided by the participant has been depicted in Figure 2 which suggests feelings of being calm and relaxed were prominent in all sessions.

Table 1. Responses received from the participants during 5-minute and 10-minute sessions

	Categories (Cat.)				
Responses	**Slept fully**	**Slept for some time**	**Sleepy**	**Wakeful throughout**	**Wakeful calm**
Code	1	2	3	4	5
5 min	50.00%	30.43%	8.70%	0.00%	8.70%
10 min	64.29%	35.71%	0.00%	0.00%	0.00%

Table 2. A Chi-square test on responses after five minutes of the session

Category	**1**	**2**		
	Sleep	**Wakeful calm**	**χ^2 Value**	**p-value**
O	80	20		
E1	1	99	6304.04	p<0.01
E2	5	95	1184.21	p<0.01
E3	10	90	544.44	p<0.01
E4	20	80	225.00	p<0.01
E5	30	70	119.05	p<0.01
E6	40	60	66.67	p<0.01
E7	50	50	36	p<0.01

O: Observed; E: Expected, E1-E7 are different expected values to test against the observed value.

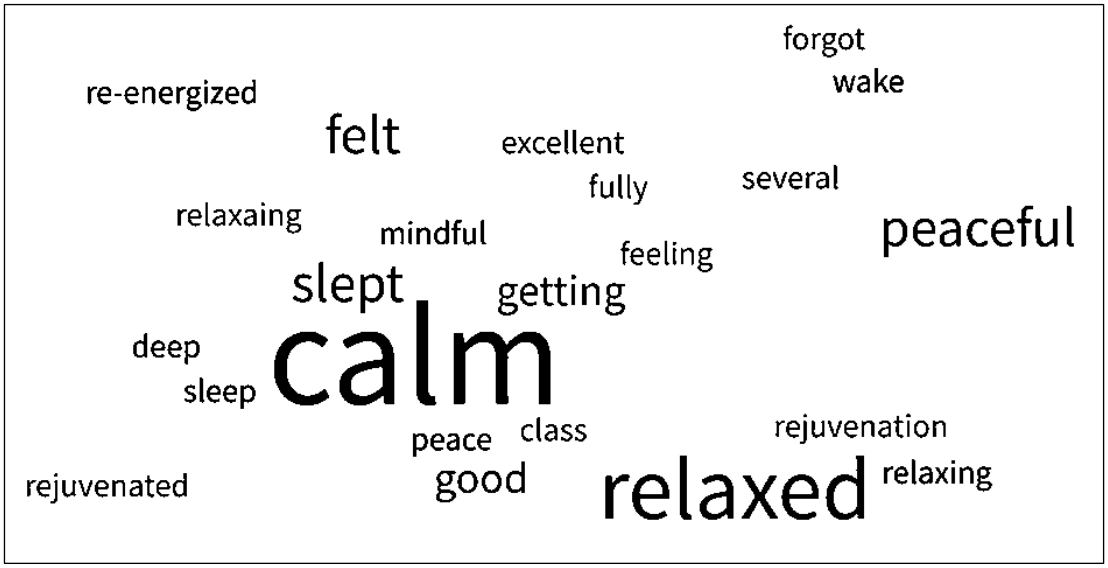

Figure 2. Spectra of words used by participant after mind-body practice

Considering neural response of the participant power of delta, theta, and alpha waves were increased (117.16%, 43.03%, and 65.74% respectively) during MBRRT practice than before and after times (Figure 3). Whereas higher frequency bands such as beta and gamma were decreased in magnitude (29.79% and 55.43% respectively) during the practice comparatively before and after times (Figure 3).

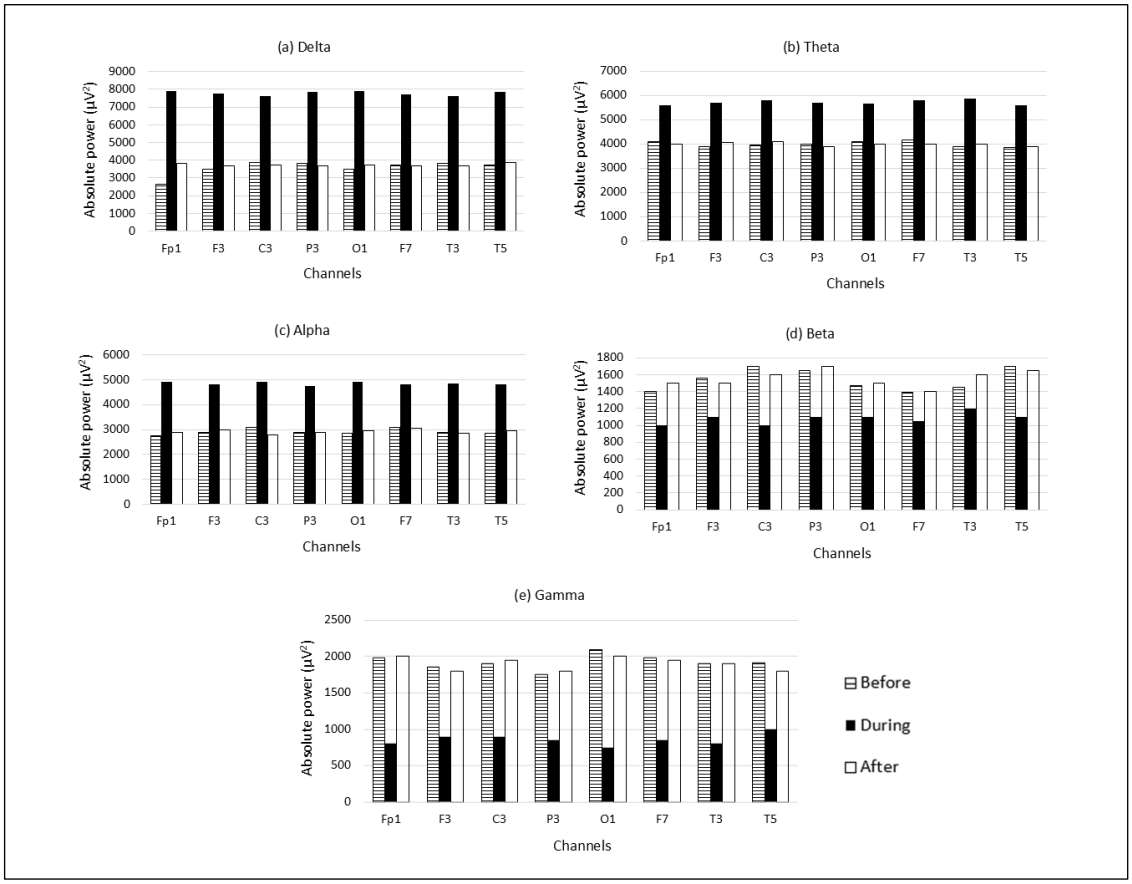

Figure 3. Graph of the absolute power in μV^2 of five frequency bands at three-time points: before, during, and after MBRRT practice

3.2. Discussion

The sedentary, modern lifestyle and use of machinery facilitate a lack of proper mind-body coordination among the population, which seems to exacerbate restlessness. Mind-body coordination is responsible for stability in humans. According to Śrīmadbhagvadgītā [2], the mind is restless (caṃcalama) and turbulent (pramāthi). When we engage it in a passive attentional task, it retires and recollects its faculties. Therefore, we believe that through the continuous mind-body association, the mind-body relaxation and rejuvenation technique (MBRRT) could facilitate a subconscious state of mind resulting in a brief sleep experience. Inspired by the *mālā japa* we could elicit a more acceptable, easy-to-follow, and time-effective method consisting of three components: breathing, fingers, and awareness which we named MBRRT.

In this study, MBRRT was effective in facilitating sleep or calmness for the participant. Based on the participant's phenomenological notes, the overall experience was relaxing, calm, and peaceful. During the time he spent performing before class, sometimes he felt like he had forgotten he was in the room and fell into a deep sleep. A power nap could rejuvenate the participant, and the participant could feel energized and mindful. In order to capture phenomenal changes in person and private diverse feelings, self-reports are considered highly predictable [13]. We kept the proforma short to collect immediate responses. In reporting subjective experiences, keeping the proforma brief and direct choices reduces cognitive interference [13]. Ten-minute sessions had more sleep experience than

five-minute sessions. However, the number of sessions could not be equal, which limits the potential to draw a comparative conclusion. Further research may be undertaken on the issue.

Physiologically, relaxation response is attributed to greater activation of the parasympathetic nervous system versus the sympathetic nervous system [14]. In a previous study, long-term Bhrahmakumari meditators showed alpha rhythms during premeditation and theta patterns during meditation [15]. In some of the subjects, delta waves were also observed and interpreted as a phase 'similar to deep sleep'. In our study, apart from the phenomenal note participant also went through an EEG trial, a non-invasive technology to capture neural states. Interestingly EEG results were in line with the participant's self-experience. Broadly, the outcome was in terms of the absolute power of five different frequency bands. Higher frequency bands; gamma and beta that are dominant in complex mental activity [16], anxiety, higher arousal, and active external attention [17] were decreased during MBRRT practice whereas lower bands such as alpha, theta, and delta were enhanced during the session. These lower-frequency waves lead to relaxation and calm. The optimum level of alpha and theta waves is associated with the feeling of deep relaxation, creativity, and emotional awareness [17]. Theta and delta frequency ranges help in restorative sleep and rejuvenation [17]. Notably, these changes in brain waves were short-lasting associated with during practice time and they reversed in post-session. After analyzing EEG records of meditators, an earlier study suggested meditation is a psychophysiologically hypnagogic state [18]. A recent review on meditation concluded that meditation as a mind-body intervention has the regenerative power to rejuvenate the body's processes [19]. Several disorders including sleep-related cause abnormal neural oscillations, so it is possible to identify specific patterns in the abnormal state and apply appropriate meditative approaches to reverse it [20]. In Āyurveda, it is said that sleep comes when the senses are dissociated from their objects (śleṣmāvṛtteṣu srotaḥsu śramāduparateṣu ca iṃdriyeṣu svakarmabhyo nidrā viśati dehinam) [21]. Interestingly, our study found dominant theta and delta patterns related to internalization suggesting its possible application in sleep-related difficulties. An earlier case study examining intracranial EEG patterns showed an increase in alpha power during brief breath awareness meditation. However, less consistent effects were observed for theta, beta, and gamma activity [22]. It is pertinent to note that our presentation here is a single case, which limits generalizing the impact of MBRRT. We believe individuals are different, and a future study involving more individuals will help to establish MBRRT as an effective relaxation tool. Taking additional physiological markers may provide further insights into its impact.

The study of mind-body medicine, a field that has recently emerged, has already been addressed in Indian health sciences since ancient times. It is categorized as satvāvajaya cikitsā, in which relaxation and self-regulation methods are included. This mode of intervention underscores the yoga sādhanā to rejuvenate the mind-body system [23]. Among several tools and approaches, japa yoga has been profoundly intertwined in the Indian tradition not only among spiritual seekers but somehow as a part of our routine. There is a potential for it to provide self-care support outside of the spiritual room. *Mālā japa* practice may have created limitations in modern-day academic and workplace settings might be due to some religious stigma, and the mind-body aspect of this process has not been taken benefit of. Here, we attempted to understand and implement this mind-body feature through an approach that links to breathing, a generalized phenomenon for wider acceptability and self-

management. By extrapolating a specific feature of this *mālā japa* tradition, this is likely the first study to examine its mind-body aspects and understand its mysterious phenomena. Furthermore, *mālā japa* involves more sophisticated components such as mantra type, Guru (for guidance), Dīkṣā (initiation), and Sādhanā (proper follow-up). Although our study is very preliminary, it suggests an easy-to-follow approach to self-regulation in the workplace and stress. In yoga centers and psychotherapeutic settings, meditation training may be helpful to beginners.

4. Conclusions

A long-term follow-up of MBRRT could suggest a brief sleep and calmness in an experienced participant. Five and ten minutes were followed, and both practice periods were effective for this participant. This method may be useful for napping and reversing fatigue. The feature of mind-body integration underlined by age-old *mālā japa* may be relevant to the general well-being paradigm and public health concerns. As technological advancements are evident, a multidisciplinary approach becomes important to understand the traditional knowledge in current terms and contexts. Time-bound and discipline bias may be key challenges during such studies.

Multidisciplinary Domains

This research covers the domains: (a) Yoga, (b) Indian Knowledge System (consciousness and well-being), and (c) Psychophysiology

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Conflicts of Interest

The authors declare no conflict of interest.

References

[1] Tripathi R (editor). Ṣāktānanda Ṭarangini, 1st ed.; Sampūrṇānanda Saṃskṛta Viśvavidyālaya – Varanasi, India, **1987**; *śloka* 8/1,73
[2] Ṣrīmadbhagvadgītā - (10/25, 6/34)
[3] Available online: https://www.holy-bhagavad-gita.org/chapter/10/verse/25 (accessed on October 14, 2024)

[4] Svāmī Satyānaṃda Sarasvatī. Meditation from the Tantras, 2nd ed.;Yoga Publications Trust, Munger, India, **1983**; pp. 153
[5] Gurvendra A. Mantra Mahāvijñāna, 1st ed.; Kitāba Mahala - New Delhi, India, **2020;** pp. 202
[6] Jayswal A, Devi K, Deka A, et al. An easy and time-effective mind-body technique for relaxation and rejuvenation of the body and mind. *Science and Culture* (In Press)
[7] Jacobs GD. The Physiology of Mind–Body Interactions: The Stress Response and the Relaxation Response. *The Journal of Alternative and Complementary Medicine* **2001**, *7*(supplement 1), 83–92, doi:10.1089/107555301753393841
[8] Tseng AA. Scientific Evidence of Health Benefits by Practicing Mantra Meditation: Narrative Review. *Int J Yoga* **2022,** *15*(2), 89-95, doi: 10.4103/ijoy.ijoy_53_22
[9] Mohanty SN, Satpathy S, Chopra R, Mahato S. Investigating the impact of Mahā Mantra chanting on anxiety and depression: An EEG Rhythm Analysis Approach. *Advances in Integrative Medicine* **2024,** *11*(2), 74–83, https://doi.org/10.1016/j.aimed.2024.04.003
[10] Lee EJ, Bhattacharya J, Sohn C, Verres R. Monochord sounds and progressive muscle relaxation reduce anxiety and improve relaxation during chemotherapy: a pilot EEG study. *Complement Ther Med* **2012,** *20*, 409–416, DOI: 10.1016/j.ctim.2012.07.002
[11] Kobayashi S, Koitabashi K. Effects of progressive muscle relaxation on cerebral activity: An fMRI investigation. *Complement Ther Med* **2016**, *26*, 33–39. https://doi.org/10.1016/j.ctim.2016.02.010
[12] Xue, S., Tang, Y., Tang, R., & Posner, M. I. Short-term meditation induces changes in brain resting EEG theta networks. *Brain and Cognition* **2014**, *87*, 1–6. https://doi.org/10.1016/j.bandc.2014.02.008
[13] Steghaus S, Poth CH. Assessing momentary relaxation using the Relaxation State Questionnaire (RSQ). *Scientific Reports* **2022,** *12*(1), 16341, https://doi.org/10.1038/s41598-022-20524-w
[14] Luberto CM, Hall DL, Park ER, Haramati A, Cotton S. A perspective on the Similarities and Differences Between Mindfulness and Relaxation. *Global Advances in Health and Medicine* **2020,** *9*, 1–13, doi:10.1177/2164956120905597
[15] Gupta N, Arora J, Dixit R, Garg S, Agarwal JL. EEG patterns in long-term Brahmakumari meditators and their possible significance. *Natl J Physiol Pharm Pharmacol* **2024,** *14*(05):890-893, doi: 10.5455/njppp.2023.13.08422202315102023
[16] Jirakittayakorn N, Wongsawat Y. Brain responses to 40-Hz binaural beat and effects on emotion and memory. *International Journal of Psychophysiology* **2017,** *120*, 96–107 https://doi.org/10.1016/j.ijpsycho.2017.07.010
[17] Abhang PA, Gawali BW, Mehrotra SC. Technical Aspects of Brain Rhythms and Speech Parameters. In: self (ed) Introduction to EEG- and Speech-Based Emotion Recognition; Academic Press, United States, **2016,** pp 51–79, https://doi.org/10.1016/C2015-0-01959-1
[18] West MA. Meditation and the EEG. *Psychological Medicine* **1980**, *10*(2), 369–375, https://doi.org/10.1017/s0033291700044147
[19] Jayswal A. Physiological effects of Meditation (Dhyāna): A short review of study results from the past 5 years. *J Res Ayurvedic Sci* **2024,** *8*, 113-8, doi: 10.4103/jras.jras_249_23
[20] Lee DJ, Kulubya E, Goldin P, Goodarzi A, Girgis F. Review of the Neural Oscillations Underlying Meditation. *Frontiers in Neuroscience* **2018**, *12*, 178, https://doi.org/10.3389/fnins.2018.00178
[21] Gupta Atridev (Translator). Aṣṭāṃga Saṃgraha, Nirnay Sāgar Publication, Mumbai, India, **1951**; *śloka* (1/9/39)
[22] Colgan DD, Memmott T, Klee D, Ernst L, Han SJ, Oken B. A single case design to examine short-term intracranial EEG patterns during focused meditation. Neuroscience Letters **2019,** *711*, 134441, https://doi.org/10.1016/j.neulet.2019.134441
[23] Rawal P, Vyas M, Baghel AS, Kamble S. Efficacy of Sattvavajaya Chikitsa in the form of relaxation techniques and Guda Pippalimula Churna in the management of Anidra (insomnia) – An open labelled, randomized comparative clinical trial. *Ayu* **2019**, *40*, 89-96, doi: 10.4103/ayu.AYU_91_17

Appendix

Roll no./ID: Gender: M / F Age: Below 30 Yr / Above 30 Yr

Practice time: ____am/pm Practice duration: 5 minute/10 minute

You may choose one or more than one option from given as below

☐ Slept fully/slept several times	☐ Remained awake but felt calm
☐ Slept for some time only	☐ Closed eyes but either willingly or forgot to move the thumb
☐ Was feeling sleepy	☐ Kept eyes close only for some time or did not close eyes
☐ Remained awake throughout	☐ Unable to say

Any other experience you wish to mention -

(a) Self-reporting Proforma

Conditions	Freq. Band	*Fp1*	*F3*	*C3*	*P3*	*O1*	*F7*	*T3*	*T5*
Before Practice	Delta	2650	3500	3860	3800	3500	3750	3810	3750
	Theta	4100	3900	3950	4000	4100	4150	3900	3865
	Alpha	2750	2900	3100	2900	2850	3100	2900	2850
	Beta	1400	1560	1700	1650	1470	1390	1450	1700
	Gamma	1980	1850	1900	1750	2100	1980	1900	1910
During Practice	Delta	7900	7750	7600	7850	7900	7700	7600	7850
	Theta	5600	5700	5800	5700	5650	5800	5870	5600
	Alpha	4900	4800	4900	4750	4900	4800	4850	4800
	Beta	1000	1100	1000	1100	1100	1050	1200	1100
	Gamma	800	900	900	850	750	850	800	1000
After Practice	Delta	3800	3700	3750	3700	3750	3700	3700	3850
	Theta	4000	4050	4100	3900	4000	4000	4000	3900
	Alpha	2900	3000	2800	2900	2950	3050	2850	2950
	Beta	1500	1500	1600	1700	1500	1400	1600	1650
	Gamma	2000	1800	1950	1800	2000	1950	1900	1800

(b) Absolute power (in μV^2) of five frequency bands at three time points: before, during, and after MBRRT practice across 8 channels.

SN	Date	Time	Duration	Response	SN	Date	Time	Duration	Response
1	5/3/2022	11:30 AM	5 minute	1	31	19/10/2023	3:50 PM	5 minute	1
2	7/4/2022	9:30 AM	5 minute	2	32	22/12/2023	5:30 PM	5 minute	2
3	7/4/2022	11:45 AM	5 minute	1	33	4/1/2024	11:30 AM	5 minute	1
4	19/4/2022	10:40 AM	5 minute	2	34	13/1/2024	1:50 PM	5 minute	2
5	22/4/2022	9:10 AM	5 minute	5	35	23/1/2024	1:35 PM	5 minute	2
6	23/4/2022	3:15 PM	5 minute	5	36	27/1/2024	1:30 PM	5 minute	3
7	23/5/2022	11:45 AM	5 minute	2	37	27/1/2024	1:30 PM	5 minute	3
8	26/5/2022	11:00 AM	5 minute	1	38	29/1/2024	3:00 PM	5 minute	1
9	26/5/2022	2:00 PM	5 minute	2	39	30/1/2024	1:50 PM	5 minute	1
10	30/5/2022	2:00 PM	5 minute	2	40	30/1/2024	2:40 PM	5 minute	2
11	1/6/2022	10:30 AM	5 minute	1	41	31/1/2024	7:00 PM	10 minute	1
12	2/6/2022	10:30 AM	5 minute	5	42	5/2/2024	11:30 AM	5 minute	2
13	30/8/2022	9:30 AM	5 minute	2	43	21/2/2024	10:40 AM	5 minute	3
14	6/9/2022	10:45 AM	5 minute	2	44	16/4/2024	11:50 AM	10 minute	1
15	19/9/2022	5:30 PM	5 minute	2	45	20/4/2024	1:45 PM	10 minute	2
16	25/9/2022	11:00 AM	5 minute	5	46	24/4/2024	10:40 AM	10 minute	1
17	3/1/2023	3:51 PM	5 minute	1	47	26/4/2024	2:00 PM	5 minute	1
18	31/01/2023	7:00 PM	5 minute	1	48	27/4/2024	1:00 PM	10 minute	1
19	2/2/2023	10:30 AM	5 minute	1	49	29/4/2024	1:45 PM	10 minute	1
20	6/2/2023	11:30 AM	5 minute	1	50	4/5/2024	12:05 PM	5 minute	1
21	7/2/2023	11:30 AM	5 minute	1	51	6/5/2024	12:45 PM	10 minute	1
22	13/2/2023	11:30 AM	5 minute	1	52	13/7/2024	12:25 PM	10 minute	1
23	23/02/2023	1:30 PM	5 minute	2	53	17/7/2024	5:00 PM	10 minute	2
24	5/4/2023	2:00 PM	5 minute	3	54	17/7/2024	10:00 AM	5 minute	1
25	6/4/2023	1:30 PM	5 minute	1	55	19/7/2024	12:20 PM	5 minute	1
26	20/4/2023	2:00 PM	5 minute	1	56	21/7/2024	1:00 PM	10 minute	1
27	6/8/2023	3:00 PM	5 minute	1	57	23/7/2024	11:30 AM	10 minute	2
28	22/8/2023	12:30 PM	5 minute	5	58	29/7/2024	1:00 PM	10 minute	1
29	7/9/2023	10:30 AM	5 minute	1	59	1/8/2024	1:00 PM	10 minute	2
30	19/10/2023	9:45 AM	5 minute	1	60	6/8/2024	12:00 PM	10 minute	2

(c) Responses across all the 60 MBRRT sessions by participant in the last two and half years.