IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

A Comprehensive Review Of Mind Sound Resonance Technique (Msrt) And Its Impact On Overall Well-Being.

1Shivani Badonia, 2Dr. Rajni Nautiyal*, 3Hemant Kumar Kaushik

1Research Scholar, Department of Naturopathy and Yoga, 2Assistant Professor, Department of Naturopathy and Yoga, 3Research Scholar, Department of Naturopathy and Yoga

1H.N.B. Garhwal University, Srinagar Uttarakhand,

2H.N.B. Garhwal University, Srinagar Uttarakhand,

3H.N.B. Garhwal University, Srinagar Uttarakhand

ABSTRACT:

BACKGROUND:

In today's scenario, we see only a few completely healthy people. Others are afflicted with many physical and psychological problems. Other than communicable and infectious diseases or any injury, the main reason for all the non-communicable diseases is severe stress load. This stress, if left untreated, causes hurdles in living life to the fullest by causing hormonal imbalances, digestive disorders, heart problems, neurological disorders, and many other disorders. It is also evident that, no doubt, allopathic medicines are very successful in curbing the symptoms of diseases; they have an adverse impact on human beings as side effects. Other alternative therapies like yoga, naturopathy, ayurveda, etc., and following a good lifestyle have improved health. According to WHO, health is not merely the absence of disease; it's the state of complete physical, mental, social, and spiritual well-being. Yoga is evident in its effect on the mind, body, and consciousness. Meditation has a very calming and relaxing effect on the whole being. Both healthy and unhealthy people practice different meditations, and they have miraculous impacts on improving their well-being. One of the most prevalent meditations is the MIND SOUND RESONANCE TECHNIQUE, developed by SVYASA, BANGALORE. This review article explores its potential in improving various aspects of the mind, body, and consciousness.

METHODS:

We conducted this narrative review using published PubMed, Scopus, and Google Scholar literature. The main author also performed the screening. Other potentially eligible citations were also included. If the references of included articles were found helpful for the review, they were also searched. Relevant ancient books were also cited in the review.

OBSERVATIONS:

MSRT is a non-invasive, cost-effective, and easily applicable practice by people of even old age. Studies indicate that it contributes to better life quality by improving sleep quality and alleviating stress, depression, and anxiety caused either due to physical or psychological reasons. It also improves cognitive abilities (attention, concentration and executive functions), frontal hemodynamic activity of the brain, respiration, heart rate variability (HRV) and mindfulness. It has relieved psychological states like perceived stress, Anxiety, psychological distress, fatigue and Self-esteem. It was also helpful in relieving common neck pain.

CONCLUSION:

This review paves the way for further research on MSRT as a potential intervention for treating more fatal diseases like cancer. It encourages the researchers to find a more scientific understanding of its mechanism.

KEYWORDS: YOGA, MIND SOUND RESONANCE TECHNIQUE, PSYCHOLOGICAL*, PHYSIOLOGICAL*, COGNITIVE*

INTRODUCTION :

"Mind Sound Resonance Technique (MSRT)" is a structured yogic relaxation modality rooted in the principles of Nada Yoga, employing **mantra-based acoustic stimulation** to induce psychophysiological balance. In contrast to conventional meditative practices that primarily rely on breath or attentional control, MSRT utilizes **vibratory sound patterns** that interact directly with the sensory–neural pathways, producing measurable effects on the **central and autonomic nervous systems**. This unique mechanism has positioned MSRT as an emerging neurocognitive intervention with significant implications for overall well-being.(1)(2)(3).

From a neurological standpoint, MSRT operates through multisensory integration, involving auditory, somatosensory, and interoceptive circuits. The repetitive chanting and resonance-based sound exposure stimulate cochlear and cranial nerve pathways, particularly the vagus nerve, resulting in an enhanced parasympathetic tone(4). Functional neuroimaging and electrophysiological evidence suggest that mantra-related resonance influences neural processing within major cortical and subcortical areas, particularly those associated with executive control and emotional regulation, such as the prefrontal cortex, the anterior cingulate cortex, limbic structures, and the default mode network (DMN). These modulations correspond to improved emotional regulation, reduced cognitive rumination, and increased attentional stability (5,6).

Acoustic resonance generated during MSRT influences cortical oscillatory patterns—specifically **alpha and theta rhythms**—which are associated with relaxation, memory consolidation and heightened internal awareness. This rhythmic entrainment enhances **thalamocortical coherence**, facilitating efficient neural communication and reducing noise in neural processing pathways. Concurrently, MSRT has been reported to reduce sympathetic overactivation by lowering **hypothalamic–pituitary–adrenal (HPA) axis** activity, contributing to decreased stress hormone release and improved neuroendocrine balance(6) (7)At the autonomic level, MSRT exhibits a pronounced effect on heart rate variability (HRV), indicating enhanced vagal regulation and improved homeostatic adaptability. These neurological and autonomic shifts collectively contribute to enhancements in cognitive clarity, emotional stability, stress resilience and overall psychological well-being(8).

Despite growing empirical evidence supporting its neurophysiological benefits, a consolidated understanding of MSRT's mechanisms and its broader role in promoting well-being remains underdeveloped. Therefore, a comprehensive review is reasonable to synthesize current findings, evaluate methodological robustness and delineate the pathways through which MSRT influences neural functioning and holistic health.

This review aims to integrate existing literature from neuroscience, psychology, yogic science and clinical research to provide a structured and critical synthesis of MSRT and its multidimensional impact on overall well-being.

MIND SOUND RESONANCE TECHNIQUE(MSRT)

MSRT is a sound based meditation and relaxation practice in which the practitioner chants Mrityunjaya mantra, A, U, M, AUM in AHATA(sound which strucks) and ANAHATA(sound does not struck) way in a specific sequential manner(2) This practice is based on the concept of Nadanusandhana illustrated in Hathyogapradipika written by Swami Svatmarama (3). It is described in it as follows:

काष्ठे प्रवर्तितो वह्निः काष्ठेन सह शाम्यति । नादे प्रवर्तितं चित्तं नादेन सह लीयते ॥ 4.98 ॥

As fire burns wood and both subside together, so the mind which moves with nada is absorbed in it (HYP 4.98)

अनाहतस्य शब्दस्य ध्वनिर्य उपलभ्यते । ध्वनेरन्तर्गतं ज्ञेयं ज्ञेयस्यांतर्गतं मनः । मनस्तत्र लयं याति तद्विष्णोः परमं पदम् ॥ HYP 4.100 ॥

One hears the sound of the unstruck resonance (anahata shabda); the quintessence of that sound is the (supreme) object (consciousness). The mind becomes one with that object of knowledge and it dissolves therein. That is the supreme state of Vishnu (sthiti).

Understanding of MSRT:

MSRT is one of the mindful (9) yoga practices that include repeated Mrityunjaya mantra, A, U, M, AUM chanting and by generating resonance, induce meditative and relaxation effects in the practitioner (10). The mind can be understood as the forerunner of our actions and behavior, and a no. of factors dominate our actions, like our emotions, feelings, and cognition(11,12). Different states of mind(mental states) can be interpreted by analyzing the different types of brain waves identified with a specific range of frequency bands. Delta band represents deep sleep(1-4 Hz), theta represents drowsiness, deeply relaxed and inward focussed(4-8 Hz), alpha represents very relaxed and passive state of mind(8-12 Hz), and beta represents anxiety dominant, active, externally active and relaxed mental state(12-30 Hz), gamma represents concentrated state(>35 Hz)(12). According to Patanjali, there are five modifications of the mind. Some of them are obstructing, and others are non-obstructing. Patanjali yoga sutra (PYS) 1.6 states that these five modifications are Pramana (right knowledge/valid cognition), Viparyaya(wrong knowledge/misconception), Vikalpa (imagination), Nidra(sleep) and Smriti(memory). प्रमाणविपर्ययविकल्पनिद्रास्मृतयः॥६॥(13)Every modification or change in mental state carries some vibrations or waves throughout the body(11). These waves represent changes in cognition, consciousness, and mental disorders (14). Sound/Shabda/chanting also causes changes in cognition, different mental states, and quality of life(15).

In MSRT practice, the practitioner generates two types of sounds: ahata (struck or external) and anahata (unstruck or internal), by chanting mantras. Ahata chant starts producing resonance to a lesser extent, followed by Anahata chant, which increases the resonance in the entire being, causing improvement in all the spheres of health, as found out through various previous studies(9,10,16). Through resonance, the whole body system vibrates at high frequency, leading to the state of our own realisation, i.e., at higher vibration (17) (18).

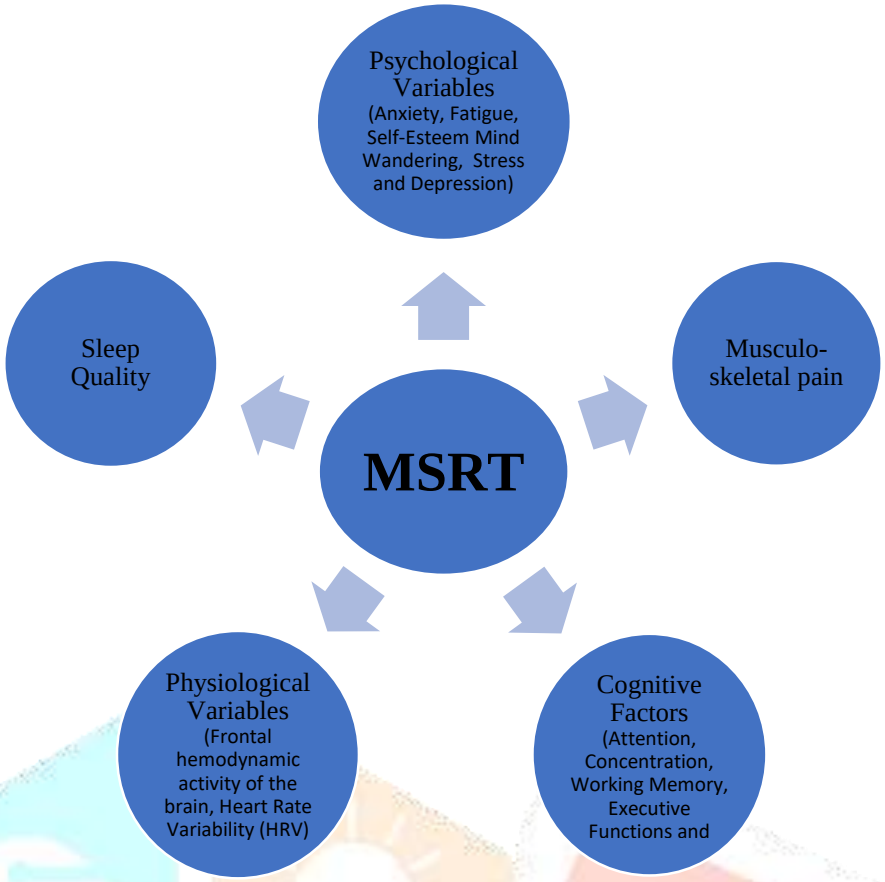

Fig. 1: Illustrates the relationship between the Mind Sound Resonance Technique (MSRT) and psychological, Physiological, cognitive factors as well as sleep quality and Musculoskeletal pain.

S. N.	Parameters and Author.	Duration of the study	Participants	**RESULTS OF MSRT**		
				Between-group (BG)	Within-group (WG)	
				Experimental vs. Control	Experimental (MSRT)	Control (Supine Rest (SR))
1.	**Psychological Variables and Cognition**. (10)	2 weeks (30 minutes daily)	School children	P=0.0308 for State Anxiety (decreased), p=0.0017 for state mindfulness(improved), p<0.001 for mind wandering (decreased), and p<0.001 for cognition (attention & working memory improved).	Significant reductions were found in state anxiety and mind-wandering scores. State mindfulness and performance in cognitive tasks were also improved.	Mind wandering increases with p=0.049. Time taken to complete a cognitive task increases with p=0.01. The other two variables remained the same.
2.	**Frontal hemodynamic activity of the brain, Heart Rate Variability (HRV), Respiration, Mindfulness, and anxiety.** (19)	1-month orientation (30 minutes daily for 5 days a week)	50 Healthy participants of both genders from S-Vyasa, an educational institute in Bengaluru	(i)Significant increase in HbO2(oxygenated haemoglobin) in the right hemisphere (RH) relative to the left hemisphere (LH) during the intervention with p<0.001 and post-intervention with p<0.05. (ii) Significant decrease in HbR (deoxygenated haemoglobin) in RH relative to LH at the baseline of the MSRT group, with p<0.05. (ii.a) Significant effect in frequency domains of HRV, i.e., a significant decrease in Lfnu(low-frequency power in normalized units) with p<0.05, a significant increase in Hfnu(high-frequency power in normalized units), and a significant decrease in LF/HF with p<0.05. (ii.b) Significant effect in the time domain	Significant change in HbO2 with p<0.05 and HbR with p<0.05 between the baseline and during MSRT practice in the RH. (ii) In the frequency domain analysis, there is a significant increase in Lfnu (between S1 and S2)(p<0.05) and a significant	There was no significant change in cerebral oxy-Hb variation. (ii)No significant changes in the time, frequency, and respiratory measures.

				measure, i.e., SDNN (standard deviation of normal R-R intervals) in S2 (during intervention) state, with $p<0.05$. (iii.c) There are no significant differences in respiratory data. *S1: Before intervention. *S2: During intervention. *S3: After intervention. (iii)No significant difference between MSRT and SR groups at post-intervention.	decrease in Lfnu(between S2 and S3)($p<0.01$). Significant reduction in Hfnu (between S1 and S2) ($p<0.05$) and significant increase in Hfnu (between S2 and S3) ($p<0.05$). Significant decrease in LF/HF ratio(between S2 and S3)($p=0.001$). (ii.b)There is no significant main effect in time-domain variables. (ii.c)There are no significant differences in respiratory data. (iii)Significant decrease in anxiety score ($p<0.05$) and significant decrease in mindfulness score($p<0.05$).	(iii)No significant difference in anxiety and mindfulness.

3.	**State Anxiety, Trait Anxiety, Stress, and depression**. (2)	60 people of age between 18 and 30 were chosen from Alvas College of Naturopathy and yogic sciences, Karnataka.	8 Weeks	Significant difference in state anxiety(p</=0.05), trait anxiety(p</=0.05), DASS depression scores(p</=0.05), DASS anxiety scores(p</=0.05), DASS stress scores(p</=0.05).	Substantial decrease in state anxiety, trait anxiety and depression, anxiety and stress scores (DASS) (p</=0.05).	Trait anxiety increased significantly (p</=0.05). Less extent of reduction in DASS scores(p</=0.05).
4.	**Cognitive Functions (Attention, Concentration and Executive Functions)** (16)	30 healthy elders(age from 60-80 years)	1 month (30 days)	It was a single-group pre-post-study design, so there was no between-group comparison.	(i)Significant increase in net scores of Single letter cancellation test (SLCT) (for attention and concentration). (ii)Significant increase in net scores of Trail Making Test B (for executive functions).	-
5.	**Cognitive Functions, Sleep quality, Psychological states (Perceived stress, Anxiety, psychological distress, fatigue, and Self-esteem)** (20)	60 Female teachers from 2 primary schools in Bangalore City, India.	30 minutes, 5 days a week for a month.	Significant Difference in perceived stress(p<0.001), Quality of sleep(p<0.001), state anxiety(p<0.001), trait anxiety(p<0.001), psychological distress(p=0.006), fatigue(p=0.005), self-esteem(p<0.001). No significant differences in cognitive function between the groups for p=0.083.	Significant reduction in perceived stress(p<0.01), state anxiety(p<0.01), trait anxiety(p<0.01), psychological distress(p<0.001) and fatigue(p<0.001). Significant improvem	Significant increase in perceived stress(p<0.001), state anxiety(p<0.01), trait anxiety(p<0.01), psychological distress(p=0.006), fatigue(p<0.001). Significant decrease in self-esteem, quality of

					ent in quality of sleep($p<0.01$) and self-esteem($p<0.001$)	sleep($p=0.003$), and cognitive function($p=0.002$).
6.	**Musculo-skeletal pain-** (Common neck pain) (21)	60 patients taking physiotherapy from Ebenezer's orthopaedic unit of Parimala Hospital, Bengaluru, India	10 days	There were significant differences($p<0.05$) between groups on all the variables studied, with higher differences in yoga than in the control group. Non-significant difference in diastolic B.P. and PR. ((*BP-Blood pressure, *PR-Pulse Rate, *RLF- Right lateral flexion, *LLF- Right lateral flexion, *RLR- Right lateral rotation, *LLR- Right lateral rotation)).	Significant differences were found between the groups in pain, tenderness, flexion, extension, RLF, LLF, RLR, LLR, movements of the neck and pain anxiety, and systolic B.P.($p<0.01$).	
					Significant reduction in Diastolic B.P. and PR($p<0.01$)	No significant reduction in B.P. and PR.

Table 1: Shows the effect of MSRT on the given physiological, psychological and Cognitive Variables.

METHODOLOGY:

To identify relevant literature, a comprehensive search was conducted using two primary databases - PubMed and Google Scholar.

1. **PubMed Search**: Advanced search techniques were utilized in PubMed with the keyword *"mind sound resonance technology"*, "*Psychological outcomes*", "*Physiological outcomes*", "*Physiological outcomes*". The search strategy was tailored to retrieve articles explicitly addressing the concept, ensuring the inclusion of relevant peer-reviewed studies.

2. **Google Scholar Search**: To supplement the findings, Google Scholar was used to explore additional literature. Keywords relevant to the topic of interest were employed to identify studies that might not have been indexed in PubMed, thereby broadening the scope of the review.

The search aimed to capture a wide range of perspectives and ensure the inclusion of foundational and recent research on the topic.

RESULTS:

Anusuya et al. reported statistically significant differences in between-group comparisons for STAI-SF ($p = 0.0308$), SMAAS ($p = 0.0017$), MWQ ($p < 0.001$), and all components of the TMT ($p < 0.001$). Within the experimental group, there were notable reductions in STAI-SF and MWQ scores, along with improvements in SMAAS and TMT performance. In contrast, the control group showed significant changes in only two variables: MWQ scores increased ($p = 0.049$), indicating more frequent mind-wandering, and the time taken to complete TMT part B also increased significantly ($p = 0.01$), reflecting a decline in cognitive performance.

Mohanty et al. observed that the RM-ANOVA analysis of fNIRS data showed no significant interaction effect for HbO_2 levels, but a significant interaction was found between state and hemisphere for HbR ($F(2,72) = 3.12$, $p = 0.05$, $\eta p^2 = 0.08$). Post-hoc analysis using Bonferroni correction revealed a significant increase in HbO_2 in the right hemisphere (RH) compared to the left hemisphere (LH) during ($p < 0.001$) and after the intervention ($p < 0.05$). Additionally, at baseline, the MSRT group showed a significant reduction in HbR in the RH compared to the LH ($p < 0.05$). Significant changes in both HbO_2 and HbR levels ($p < 0.05$ for both) were noted in the RH when comparing baseline to during MSRT practice. In contrast, the control group showed no significant variation in cerebral oxyhemoglobin levels. A consistent upward trend in HbO_2 was observed across sessions in the right prefrontal cortex. The repeated measures ANOVA results for the frequency-domain parameters of HRV analysis revealed a significant main effect for LFnu ($F(1.63, 55.45) = 4.51$, $p < 0.05$, $\eta p^2 = 0.12$), HFnu ($F(1.64, 55.58) = 4.55$, $p < 0.05$, $\eta p^2 = 0.12$), and the LF/HF ratio ($F(1.81, 61.62) = 4.02$, $p < 0.05$, $\eta p^2 = 0.11$). However, in the time-domain parameters of HRV, no significant main effects were observed. The post-hoc analysis using Bonferroni correction for the frequency-domain HRV measures indicated a significant rise in LFnu between sessions S1 and S2 ($p < 0.05$) and in HFnu between sessions S2 and S3 ($p < 0.01$). Additionally, there was a significant reduction in the LF/HF ratio ($p = 0.001$), LFnu ($p < 0.01$), and HFnu ($p < 0.05$) between sessions S2 and S3 and S1 and S2, respectively, during the MSRT sessions. In the time-domain analysis, SDNN showed a significant increase during the intervention phase (S2) in the MSRT group compared to the SR group. In contrast, no notable changes were observed in either the frequency- or time-domain HRV measures for the SR group (see Table 3). Furthermore, respiration data did not reveal any significant differences or changes in either group.

Joychand Singh et al., found that in the experimental group, there was a notable reduction in state anxiety (STAI−Y1), trait anxiety (STAI−Y2), and scores for depression, anxiety, and stress on the DASS scale (all $p \leq 0.05$). Interestingly, the control group showed a significant increase in trait anxiety (STAI−Y2) ($p \leq 0.05$), along with a moderate decrease in depression, anxiety, and stress scores on the DASS (all $p \leq 0.05$), although the reduction was less pronounced than in the experimental group. Between−group comparisons, conducted using analysis of covariance (ANCOVA) and adjusted for baseline values, revealed statistically significant differences across all measured outcomes: State Anxiety (STAI−Y1): $F(1, 53) = 237.92$, $p \leq 0.05$, partial $\eta^2 = 0.818$, Trait Anxiety (STAI−Y2): $F(1, 53) = 289.18$, $p \leq 0.05$, partial $\eta^2 = 0.845$, Depression (DASS): $F(1, 53) = 142.82$, $p \leq 0.05$, partial $\eta^2 = 0.729$, Anxiety (DASS): $F(1, 53) = 210.15$, $p \leq 0.05$, partial $\eta^2 = 0.799$ and Stress (DASS): $F(1, 53) = 172.44$, $p \leq 0.05$, partial $\eta^2 = 0.764$. These results suggest that the intervention had a significant and substantial impact on reducing psychological distress in the experimental group compared to the control group.

PS et al., found that the paired sample t-test showed a significant reduction ($P<0.000$) in time taken to complete the trail making test and also a significant improvement ($p < 0.000$) was observed in the net scores of the Six Letter Cancellation Test after one month of MSRT practice compared to the pre-intervention scores.

Rao et al. (2017), in their systematic review of 13 studies on Mind Sound Resonance Technique (MSRT), found that MSRT contributes to improvements in both physiological and psychological health, as well as cognitive functioning.

Yogitha et al. found that the non-parametric Wilcoxon test revealed significant improvements in both groups for pain, tenderness, NDS, and various dimensions of spinal flexibility—including flexion, extension, right and left lateral flexion (RLF, LLF), and right and left lateral rotation (RLR, LLR)—as well as state anxiety (all $p < 0.01$). Between-group comparisons showed statistically significant differences ($p < 0.05$) for all these parameters, with the yoga group exhibiting greater percentage improvements than the control group. Additionally, while systolic blood pressure significantly decreased in both groups ($p < 0.01$), a significant reduction in diastolic blood pressure and pulse rate was observed only in the yoga group ($p < 0.01$), with no significant between-group differences for these two variables.

DISCUSSION:

This narrative review aimed to investigate the effects of MSRT on the body, mind, and consciousness. This review helped us discover that MSRT, a relaxation and meditation practice, has profound effects on improving the physiological, psychological, emotional, and intellectual aspects of our overall well-being. There can be many reasons why MSRT is such an important tool for alleviating health disorders, as yoga is not only a spiritual practice but also a science rooted in our ancient wisdom (13). Yoga can improve the functioning of the disturbed HPA axis, thereby facilitating hormonal balance and coordination & control of nervous system activities (22). Meditation plays a vital role in moderating the psych-immunological effects of stress(23). More specifically, MSRT, which is based on the concept of Nadanusandhana (2), has the potential not only to manage the health system but also to awaken the kundalini (3). The higher the volume of sound, the lower its frequency, and the lower the volume of sound, the higher its frequency (3). In MSRT, when high-frequency sound resonates with mental sound waves, nada is heard, which is a very subtle experience, leading to calmness and relaxation in psychic fields, also known as a mindless state. When the mantras are repeated, it leads to freedom from the slavery of the mind, i.e., impurities and impressions are cleaned. Mind-wandering stops (3). Various studies have been conducted to investigate the effects of MSRT on various aspects of our overall well-being, which clearly demonstrate the efficacy of this practice. Still, more work needs to be done on how it affects different structures and functions of our brain and neural pathways. More scientific evidence is needed to establish this practice as a reliable and valid method for healing humans. Researchers must collaborate with neurologists and sound engineers to understand its working mechanism. Longer, comparative, randomised controlled studies on a large number of samples can add more knowledge and depth to their practical applications.

CONCLUSION:

This narrative review acknowledged the role of MSRT in mitigating stress and its effects. As it was done to find its implication on the functioning of the mind, body, and consciousness, the review brought a positive understanding of its overall effect. The scientific mechanism of MSRT is under exploration, which, when unleashed, can bring massive shifts by adding scientific shards of evidence to the pool of meditation.

REFERENCES:

1. Mohanty SK, Singh AK, Mohanty SS, Dwivedi K, Nagaratana R, Nagendra HR, et al. Effect of Mind Sound Resonance Technique (MSRT) on Cognitive and Psychophysiological Functions in College Students: A Randomised Controlled Study. Ann Neurosci. 2025 Feb;09727531251316696.

2. Joychand Singh, Archana K, Anupritha A Shetty, Babbychand Bash, Geetarani Devi. Efficacy of Mind Sound Resonance Technique [MSRT] on Anxiety among Young Male Adults - A Randomized Controlled Trial. J Ayurveda Integr Med Sci. 2024;9(1):46–53.

3. Svatmarama Y. The Hatha Yoga Pradipika. 2002. 31 p.

4. Gerritsen RJS, Band GPH. Breath of Life: The Respiratory Vagal Stimulation Model of Contemplative Activity. Front Hum Neurosci. 2018;12(October):1–25.

5. Simon R, Pihlsgård J, Berglind U, Söderfeldt B, Engström M. Mantra Meditation Suppression of Default Mode Beyond an Active Task: a Pilot Study. J Cogn Enhanc. 2017;1(2):219–27.

6. Rathore M, Verma M, Nirwan M, Trivedi S, Pai V. Functional Connectivity of Prefrontal Cortex in Various Meditation Techniques – A Mini-Review. Int J Yoga. 2022;15(3):187–94.

7. Kanwade A, Thune N. Bridging Science and Spirituality : Investigating the Effects of OM Chanting on Brain Waves. 2025;8(4):651–63.

8. Natarajan A. Heart rate variability during mindful breathing meditation. Front Physiol. 2023;13(January):1–12.

9. Bhargav H, Metri K, Dhansoia V. Immediate effect of mind sound resonance technique on state anxiety and cognitive functions in patients suffering from generalized anxiety disorder: A self-controlled pilot study. Int J Yoga. 2015;8(1):70.

10. Anusuya US, Mohanty S, Saoji AA. Effect of Mind Sound Resonance Technique (MSRT - A yoga-based relaxation technique) on psychological variables and cognition in school children: A randomized controlled trial. Complement Ther Med [Internet]. 2021 Jan 1 [cited 2024 Aug 31];56. Available from: https://pubmed.ncbi.nlm.nih.gov/33197570/

11. Rolls ET. On the relation between the mind and the brain: A neuroscience perspective. Vol. 17, Philosophia Scientiae. 2013. 31–70 p.

12. van Atteveldt N, Janssen TWP, Davidesco I. Measuring Brain Waves in the Classroom. Front Young Minds. 2020;8.

13. The Science of Yoga - I. K. Taimni - Google Books [Internet]. [cited 2024 Dec 31]. Available from: https://books.google.co.in/books?hl=hi&lr=&id=_15bBgAAQBAJ&oi=fnd&pg=PT16&dq=yoga+is+a+science&ots=y2hKdKjuri&sig=0oEljGfz7IYG_1vInljEQYWOw6Y&redir_esc=y#v=onepage&q=yoga is a science&f=false

14. Roohi-Azizi M, Azimi L, Heysieattalab S, Aamidfar M. Changes of the brain's bioelectrical activity in cognition, consciousness, and some mental disorders. Med J Islam Repub Iran. 2017;31(1):307–12.

15. Perry G, Polito V, Sankaran N, Thompson WF. How Chanting Relates to Cognitive Function, Altered States and Quality of Life. Brain Sci. 2022;12(11).

16. PS DVK, AU S, Rangarajan V. "Effect of Mind Sound Resonance Technique (A Yogic Relaxation Technique) on Cognitive Functions in Elderly Population." Sch Int J Tradit Complement Med. 2020;3(7):144–8.

17. ResearchGate [Internet]. [cited 2024 Dec 31]. Available from: https://www.researchgate.net/publication/354326235_The_Vibrational_Frequencies_of_the_Human_Body/link/613156f50360302a00764ef6/download?_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6InB1YmxpY2F0aW9uIiwicGFnZSI6InB1YmxpY2F0aW9uIn19

18. Duman N. Retuning the Universe: Examining the Cosmic Significance of Sound Frequencies, Music and Human Perception. Online J Music Sci. 2023;8(2):160–71.

19. Mohanty S, Singh D, Singh A, Krishna D, Mohanty S. Improving Prefrontal Oxygenation and Cardiac Autonomic Activity Following Meditation : A Functional Near-Infrared Spectroscopy (fNIRS) Study. 2024;16(8):1–13.

20. Rao M, Metri KG, Raghuram N, Hongasandra NR. Effects of Mind Sound Resonance Technique (Yogic Relaxation) on Psychological States, Sleep Quality, and Cognitive Functions in Female Teachers: A Randomized, Controlled Trial. Adv Mind Body Med. 2017;31(1):4–9.

21. Yogitha B, Nagarathna R, John E, Nagendra H. Complimentary effect of yogic sound resonance relaxation technique in patients with common neck pain. Int J Yoga. 2010;3(1):18.

22. Aggarwal A. Hypothalamo-Pituitary-Adrenal axis and Brain during Stress, Yoga and Meditation: A Review. Int J Heal Clin Res [Internet]. 2020;3(9):96–103. Available from: www.ijhcr.com

23. Magan D, Yadav RK. Psychoneuroimmunology of Meditation. Ann Neurosci. 2022;29(2–3):170–6.