



IMPACT OF MIND SOUND RESONANCE TECHNIQUE AND MINDFULNESS MEDITATION ON METACOGNITION, SELF- ESTEEM, EMOTION REGULATION, AND SLEEP QUALITY AMONG YOUTH

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ABSTRACT

This study investigates the influence of mind sound resonance technique and mindfulness meditation on meta concentration, metamemory, self-esteem, quality of sleep and emotion regulation. A total sample of 90 college students has been analysed. The participants are within the age range of 17-25 years. Four set of instruments comprising Rosenberg self-esteem scale (Rosenberg, M 1965), The Mizan metamemory and meta-concentration scale for students (MMSS), Sleep Quality Scale. Yi, H., Shin, K., & Shin, C. (2006), Emotion Regulation Questionnaire and Gross, J.J., & John, O.P. (2003) has been used. Area of sampling is mostly in and around Coimbatore. Here both Random sampling method and survey method has been adopted for the data analysis. College students often face academic pressure, stress, and sleep disturbances, which can negatively impact their cognitive functioning, emotional well-being, and overall quality of life. Understanding how mindfulness meditation and mind sound resonance technique influence these factors can offer valuable insights for promoting mental health and resilience among this population. Purpose of the study is to contribute to the existing literature on mindfulness meditation and mind sound resonance technique by providing empirical evidence on their effects across multiple domains of mental health and cognitive functioning. Both the techniques, MSRT and Mindfulness meditation are effective in improving the variables meta concentration, metamemory, self-esteem, emotional regulation and quality of sleep.

Keywords; Mind sound resonance technique, Mindfulness Meditation, Self-esteem, Meta concentration, Metamemory, Emotion Regulation, Quality of sleep.

INTRODUCTION

In recent years, cognitive and emotional difficulties have increased significantly due to rapid technological advancement, information overload, and changing socio-cultural environments. Constant exposure to digital devices and social media has contributed to attentional deficits, reduced concentration, cognitive overload, and emotional distress. Excessive online engagement is also associated with anxiety, social comparison, cyberbullying, and decreased psychological well-being. Additionally, global challenges such as economic uncertainty, political instability, and environmental concerns have intensified stress and emotional vulnerability among individuals, particularly youth. These factors highlight the growing need for psychological strategies that enhance cognitive control, emotional resilience, and overall well-being.

Metamemory refers to the awareness and understanding of one's own memory processes, including knowledge about memory functioning, monitoring of recall accuracy, and the strategic regulation of memory techniques. It involves recognizing strengths and limitations in memory, evaluating performance, and applying appropriate strategies such as rehearsal or chunking to improve retention. As a component of broader metacognition, metamemory plays a crucial role in academic performance and cognitive efficiency. Closely related is meta-concentration, which refers to the ability to monitor and regulate one's own attentional focus. It involves awareness of distractions, evaluation of concentration levels, and deliberate efforts to sustain or redirect attention. Both metamemory and meta-concentration are essential higher-order cognitive processes that influence learning and productivity.

Self-esteem represents an individual's overall subjective evaluation of self-worth and competence. It includes both cognitive components, such as beliefs about one's abilities and value, and emotional components, such as feelings of confidence, pride, or inadequacy. High self-esteem is associated with resilience, motivation, and psychological well-being, whereas low self-esteem is linked to self-doubt, anxiety, and vulnerability to stress. Emotional regulation, another central psychological construct, refers to the ability to monitor, evaluate, and modify emotional responses in adaptive ways. Effective emotion regulation involves awareness of emotional states, selection of appropriate cognitive or behavioral strategies, implementation of those strategies, and evaluation of their effectiveness. Strong emotional regulation skills contribute to improved interpersonal relationships, stress management, and mental health.

Quality of sleep is an important physiological indicator of overall well-being and refers to the depth, continuity, and restorative nature of sleep beyond mere duration. Good sleep quality is characterized by efficient sleep onset, minimal awakenings, and feelings of refreshment upon waking. Poor sleep quality, often influenced by stress and cognitive hyperarousal, negatively affects concentration, emotional stability, and cognitive performance.

Yoga-based and mindfulness practices have gained increasing scientific recognition for their cognitive and emotional benefits. Research indicates that yoga enhances brain plasticity, improves attention and memory, reduces anxiety, and promotes emotional balance. The Mind Sound Resonance Technique (MSRT), developed at the Vyasa Institute in Bangalore, integrates sound vibration, mantra chanting, relaxation, and cognitive restructuring principles to promote deep mental calmness and self-awareness. Similarly, mindfulness meditation, rooted in ancient contemplative traditions and later adapted into modern clinical frameworks, emphasizes non-judgmental present-moment awareness and attentional regulation.

Both MSRT and mindfulness meditation have shown promising effects on metacognitive functioning, emotional regulation, self-esteem, and sleep quality. These practices encourage focused attention, reduce psychological arousal, enhance self-awareness, and foster emotional stability. By integrating sound resonance, relaxation, and mindful awareness, they may strengthen meta-concentration and metamemory while simultaneously promoting psychological resilience and restorative sleep. Therefore, examining the combined and comparative influence of MSRT and mindfulness meditation offers valuable insight into holistic approaches for enhancing cognitive performance, emotional well-being, and overall quality of life among youth.

REVIEW OF LITERATURE

Anusuya et al (2021) Effect of Mind Sound Resonance Technique (MSRT – A yoga-based relaxation technique) on psychological variables and cognition in school children: A randomized controlled trial. School children undergo stress, which could impact their psychological functions and cognitive abilities. This study was a parallel-group randomized controlled trial conducted at a government school in south India. Results of the current trial indicate the beneficial role of MSRT in enhancing psychological and cognitive functions in children.

Subarna Mohanty et al (2015) immediate effect of mind sound resonance technique (msrt- a yogic relaxation technique) on cognitive functions in type 2 diabetic patients. Diabetes is one of the chronic medical conditions with high prevalence rates. Long standing diabetes is associated with impaired cognitive functioning. Yoga is known to improve the cognitive functions in normal and many health conditions. Mind Sound Resonance Technique (MSRT) is one of the mindfulness based yogic relaxation technique, know to enhance cognitive functions. There was significant improvement in total score ($p = 0.001$; +24.99%) and net score ($p = 0.001$; +25.47%) of DLST.

Sharma Deepika et al (2014) Effect of mind sound resonance technique as an add on to yoga therapy on quality of sleep, pain, stress and state anxiety levels in patients suffering from chronic musculoskeletal pain: matched controlled trial. : To compare the add-on effect of a weeklong mind sound resonance technique (MSRT) with supine rest (SR) on quality of sleep, pain, stress and state anxiety levels in 62 (34 females; age range: 49 ± 12.2 years) patients suffering from Chronic Musculoskeletal Pain (CMP) since 6.6 ± 5.5 years. This study suggests that both MSRT and SR done for 30 minutes at bedtime as an add on IAYT program helps enhance sleep quality and reduce stress, pain and anxiety levels of CMP patients, suggesting beneficial effect of IAYT program on CMP patients. Patients who do MSRT feel significantly more rested the next morning than those who perform SR.

Chinmay Surpur et al (2021) Cross-cultural study on the effects of 10 days of Online Mind Sound Resonance Technique (MSRT) on state anxiety, stress, quality of sleep, and mindfulness. The purpose of this pilot randomized control trial study was to understand the effects of a 10- day online intervention of a yoga and chanting-based relaxation technique called Mind Sound Resonance Technique (MSRT) on measures of anxiety, stress, sleep, and mindfulness. The findings of this pilot study suggest that further refined research within the effectiveness of an online Mind Sound Resonance Technique intervention - specifically on various aspects of sleep such as insomnia and quality of sleep - should be designed and implemented

Jeff Spinner-Halevet al (2003) National Identity and Self-Esteem Is the self-esteem of individuals tied to their nation? If so, is that a good reason to strive for a world of safe, secure nations? Many liberal nationalists answer yes to these questions, but they do so without looking at the large social- psychology literature on groups and self-esteem. Although we do not think that problems caused by national identity and self-esteem can be fully solved, we do suggest ways in which they can be contained.

Maxine S. Thompson et al (2001) The Blacker the Berry: Gender, Skin Tone, Self-Esteem, and Self-Efficacy Using data from the National Survey of Black Americans, this study examines the way in which gender socially constructs the importance of skin tone for evaluations of self-worth and self-competence. The impact of skin tone on self-esteem was much weaker for women from higher social class. Those who had lower self-esteem scores were dark-skinned women from working classes and dark-skinned women who were judged unattractive.

Jen-Hao Chen et al (2015) Marriage, Relationship Quality, and Sleep among U.S. Older Adults Sleep is a restorative behavior essential for health. Poor sleep has been linked to adverse health outcomes among older adults; however, we know little about the social processes that affect sleep. Using innovative actigraphy data from the National Social Life, Health, and Aging Project (N = 727), we considered the role of marriage, positive marital relationship support, and negative marital relationship strain on older adults' (ages 62-90) self-reported and actigraph-measured sleep characteristics. The married who reported more positive aspects of their marital relationship showed better actigraph- estimated sleep characteristics; taking characteristics of the physical and mental health and home environment into account reduced this association.

Michelle Van Laethem et al (2013) Psychosocial work characteristics and sleep quality: a systematic review of longitudinal and intervention research Objectives The objective of this study was to review longitudinal and intervention studies examining the association between psychosocial work characteristics (e.g., job demands, job control, and social support) and sleep quality .More high-quality research is needed to examine the possible causal relationship between these and other psychosocial work characteristics with sleep quality, in addition to research focusing on reversed and reciprocal relations.

James J. Gross et al (2001) Emotion Regulation in Adulthood: Timing Is Everything Emotions seem to come and go as they please. However, we actually hold considerable sway over our emotions: We influence which emotions we have and how we experience and express these emotions. The process model of emotion regulation described here suggests that how we regulate our emotions matters. By contrast, suppression decreases behavioral expression, but fails to decrease the experience of emotion, and actually impairs memory. Suppression also increases physiological responding in both the suppressors and their social partners.

Ross A. Thompson Emotion Regulation: A Theme in Search of Definition. Research on the development of emotions and their functional characteristics as regulators of behavior has grown dramatically over the past 10 years. There is currently renewed emphasis on the importance of emotion regulation and dysregulation for our understanding of normal development and the development of psychopathology. This perspective reflects a functionalist view of emotions and provides evidence for the role that emotions play as regulators even as they themselves are being regulated during behavioral interaction.

BACKGROUND & NEED FOR THE CONCEPT

The report states that youth are increasingly exposed to academic stress, emotional disturbances, reduced concentration, poor memory regulation, and sleep-related problems due to modern lifestyle patterns and psychosocial pressures. College students experience difficulties in sustaining attention, regulating emotions, maintaining healthy self-esteem, and achieving adequate sleep quality. The study highlights that metacognitive abilities such as metamemory and meta-concentration are essential for academic success, yet they are often neglected in psychological interventions. Emotional dysregulation and low self-esteem further contribute to stress and impaired functioning among youth. Although meditation and yogic techniques have been practiced traditionally for mental well-being, limited research has examined their influence on metacognitive variables along with emotional regulation and sleep quality simultaneously. Therefore, the study identifies the need to scientifically examine the effectiveness of Mind Sound Resonance Technique (MSRT) and Mindfulness Meditation as structured interventions to enhance cognitive monitoring, emotional balance, self-esteem, and sleep quality among college students.

CONCEPTUAL DEVELOPMENT / ARGUMENT

The conceptual basis of the report is that meditative practices influence higher-order cognitive processes and emotional regulation mechanisms. The study considers MSRT and Mindfulness Meditation as independent variables that impact metamemory, meta-concentration, self-esteem, emotion regulation, and quality of sleep. The report explains that MSRT involves mantra chanting, sound vibration practices (A, U, M, and AUM), silent resonance, and affirmation, which induce deep relaxation and heightened awareness. This relaxation response improves attention control and memory monitoring. Similarly, mindfulness meditation, through breath awareness and present-moment observation without judgment, enhances sustained attention and emotional stability. The argument presented in the report is that regular practice of these techniques strengthens awareness, which in turn improves regulation of thoughts, emotions, and physiological states, thereby enhancing cognitive functioning and psychological well-being.

DIMENSIONS AND ELEMENTS OF THE CONCEPT

The report includes the following key dimensions. The cognitive dimension consists of metamemory, defined as awareness and regulation of one's own memory processes, and meta-concentration, defined as the ability to monitor and control attention. The emotional dimension includes self-esteem, referring to an individual's evaluation of self-worth, and emotion regulation, which involves managing and modifying emotional responses. The physiological dimension is represented by quality of sleep, which includes aspects such as sleep satisfaction, restfulness, and overall sleep effectiveness. The intervention dimension includes the structured practices of MSRT (chanting of Maha Mrutyunjaya Mantra, A-U-M resonance, silent OM awareness, and sankalpa) and mindfulness meditation (breath awareness and non-judgmental observation). These elements together form the framework examined in the study

IMPLICATIONS

The report discusses that the findings have theoretical, practical, and research implications. Theoretically, the study contributes to understanding how yogic and mindfulness practices influence higher-order cognitive functions such as metamemory and meta-concentration along with emotional and sleep variables. Practically, the results suggest that MSRT and mindfulness meditation can be incorporated into college settings to promote academic performance, emotional stability, and better sleep quality. The report also indicates that these techniques serve as cost-effective, non-pharmacological interventions for managing stress and emotional disturbances among youth. For future research, the study recommends larger samples and further investigations to strengthen the evidence base. Overall, the report concludes that regular practice of MSRT and mindfulness meditation significantly enhances cognitive clarity, emotional regulation, self-esteem, and sleep quality among college students

CONCLUSION

This study aimed to investigate the impact of Mind Sound Resonance Technique (MSRT) and Mindfulness Meditation on metaconcentration, metamemory, self-esteem, emotion regulation, and quality of sleep in youth. The findings showed a significant improvement in metaconcentration and metamemory among participants who practiced MSRT and mindfulness meditation. The results also highlighted a notable increase in self-esteem and emotion regulation in the experimental groups compared to the control group. Additionally, the quality of sleep improved significantly after the intervention period. In summary, the study concludes that consistent practice of Mind Sound Resonance Technique and Mindfulness Meditation positively affects cognitive functions, emotional regulation, and sleep quality in youth. These practices can be effectively used to improve psychological well-being and academic performance in college students.

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