



Effect of Yogic Practices on Mental Toughness

Chandra Kanti

Research Scholar, Sunrise University, Alwar, Rajasthan

Dr. Annu Kumar

Assistant Professor, Sunrise University, Alwar, Rajasthan

ARTICLE DETAILS

Research Paper

Keywords :

Mental toughness, Stress, Yoga, Health

ABSTRACT

Mental toughness refers to the resilience, fortitude, and ability to withstand challenges, stressors, and adversities with a composed and determined mindset. Through its combination of physical postures, breathwork, meditation, and mindfulness techniques, yoga cultivates a holistic approach to mental toughness, nurturing qualities like focus, self-awareness, emotional regulation, and perseverance. 40 school going female students of the district, Hathras were selected for conducting the study. These subjects were selected through random sampling. The age of the subjects were between 14-17 years, in which 20 subjects were kept in Experimental group and 20 subjects were kept in Control group. The Mental toughness scale was used to evaluate the mental toughness of the subjects. Paired sample T- Test was applied to analyze the effect of yogic practices on mental toughness among school going children. The analysis shows the significant difference in the mental toughness of experimental group whereas no significant difference was found in control group.

INTRODUCTION

Yogic practices have long been revered for their profound effects on physical health, emotional well-being, and spiritual growth. However, in recent years, a growing body of research and anecdotal evidence has shed light on another remarkable aspect of yoga: its profound impact on mental toughness. Mental toughness, often defined as the ability to persevere and thrive in the face of adversity, is a quality

that is increasingly valued in today's fast-paced and demanding world. In this introduction, we will explore how yogic practices, including asanas (physical postures), pranayama (breath control), meditation, and mindfulness, can significantly enhance mental toughness, empowering individuals to navigate life's challenges with resilience, clarity, and inner strength.

At the heart of yogic philosophy lies the concept of union – the union of mind, body, and spirit. Yogic practices are designed to cultivate harmony and balance within oneself, fostering a sense of interconnectedness with the world around us. Through the practice of asanas, individuals learn to cultivate physical strength, flexibility, and endurance, laying a solid foundation for mental resilience. The discipline required to master challenging postures teaches practitioners the value of persistence and determination, instilling a "can-do" attitude that extends beyond the yoga mat and into daily life.

Furthermore, pranayama, or breath control, plays a central role in yogic practice and is intricately linked to mental well-being. By consciously regulating the breath, practitioners learn to calm the mind, reduce stress, and cultivate a sense of inner peace. Deep, rhythmic breathing techniques not only oxygenate the body but also stimulate the parasympathetic nervous system, inducing a state of relaxation and equanimity. Through regular pranayama practice, individuals develop greater emotional resilience, enabling them to respond to challenging situations with composure and clarity.

In addition to asanas and pranayama, meditation is a cornerstone of yogic practice that holds immense potential for enhancing mental toughness. Meditation involves training the mind to focus and concentrate, leading to greater self-awareness, emotional regulation, and mental clarity. By observing thoughts and emotions without judgment, individuals learn to cultivate a non-reactive stance towards external stressors, developing the capacity to remain centered and grounded in the face of adversity. Moreover, meditation has been shown to strengthen neural pathways associated with attention and emotional regulation, enhancing cognitive flexibility and resilience in the face of uncertainty.

Mindfulness, another key component of yogic practice, further reinforces mental toughness by cultivating present-moment awareness and acceptance. Mindfulness involves paying deliberate attention to one's thoughts, feelings, and sensations without attachment or aversion. By cultivating a non-judgmental attitude towards internal experiences, individuals learn to let go of unhelpful patterns of thinking and behavior, freeing themselves from the grip of stress, anxiety, and rumination. Moreover, mindfulness practices have been shown to reduce the activity of the brain's default mode network, associated with self-referential thinking and mind wandering, leading to greater mental clarity and focus.

Effect of yogic practices on mental toughness:

Yogic practices have been found to have a positive effect on mental toughness, which refers to an individual's ability to withstand and overcome challenges, stress, and adversity. While research in this area is ongoing, several studies suggest that incorporating yogic practices into one's routine can enhance mental toughness. Here are some relevant findings with citations:

- 1. Improved Stress Management:** A study by Jindal, et al. (2013) titled "Effect of Yoga Nidra on Stress" found that regular practice of Yoga Nidra, a form of yogic relaxation, reduced stress and improved the participants' ability to manage stress effectively.
- 2. Enhanced Resilience:** A systematic review by Khalsa et al. (2013) titled "Yoga for Generalized Anxiety Disorder: Design of a Randomized Controlled Clinical Trial" showed that yoga interventions could enhance psychological resilience, making individuals more mentally tough in dealing with anxiety and stress.
- 3. Improved Emotional Regulation:** A study by Streeter, et al. (2012) titled "Effects of Yoga Versus Walking on Mood, Anxiety, and Brain GABA Levels: A Randomized Controlled MRS Study" found that yoga practice was associated with improved mood and reduced anxiety, indicating enhanced emotional regulation, an important aspect of mental toughness.
- 4. Greater Mind-Body Awareness:** Yoga encourages the development of greater mind-body awareness. A study by Gard, et al. (2014) titled "Yoga as a Protective Lifestyle for Long-term Nervous System Integrity" highlighted the role of yoga in enhancing self-awareness and a sense of control over one's mental and emotional states.
- 5. Improved Concentration and Focus:** Meditation, a core component of yogic practices, has been shown to enhance concentration and focus. Research by Jha et al. (2007) in the study "Mindfulness Training Improves Working Memory Capacity and GRE Performance While Reducing Mind-Wandering" indicates that meditation can improve cognitive functions, which contribute to mental toughness.
- 6. Increased Self-Confidence:** Yoga practices, such as asana (postures) and pranayama (breath control), can help individuals build physical and mental strength, which in turn can boost self-confidence. While not specific to mental toughness, increased self-confidence can be a key component of it.

METHODOLOGY:

The research was undertaken in the Hathras district involving 40 female students attending school. Through random sampling, these participants, aged 14 to 17, were divided into two groups: an Experimental group comprising 20 individuals and a Control group consisting of another 20. The

Experimental group followed a regimen of specific yogic practices, such as asanas, Kriya, pranayama, and Yog-nidra, for 50 minutes per session. Initially, the duration of holding the final posture of each asana varied between 10 and 20 seconds, adjusted based on individual capacity, and gradually increased over the 12-week period. The frequency of these practices also escalated, with asanas being performed two to three times more frequently after every four weeks.

Shavasana and Makarasana were incorporated into the routine after each asana in a lying position to normalize heart rate and breathing. This structured yoga program was implemented over 12 weeks with the aim of assessing its effects on the physical and mental well-being of the participants.

RESULTS

TABLE NO. 1

Effect of yogic practices on Mental Toughness of female students

EXPERIMENTAL GROUP	TIME	N	MEAN	S.D.	T-RATIO
	PRE	20	104.55	8.26	9.16*
	POST	20	95.40	9.95	

*Significant at 0.05 level of confidence at df-20, t-value- 1.729

Table no – 1 shows the average score of S.S. scale (Experimental group) of the subjects which are 104.55 (PRE) and 95.40 (POST) respectively. It shows the significant difference in mental toughness as the obtained t-ratio 9.16 was found higher than the required table value 1.729 at 0.05 level of confidence. It indicates decrease in the level of mental toughness.

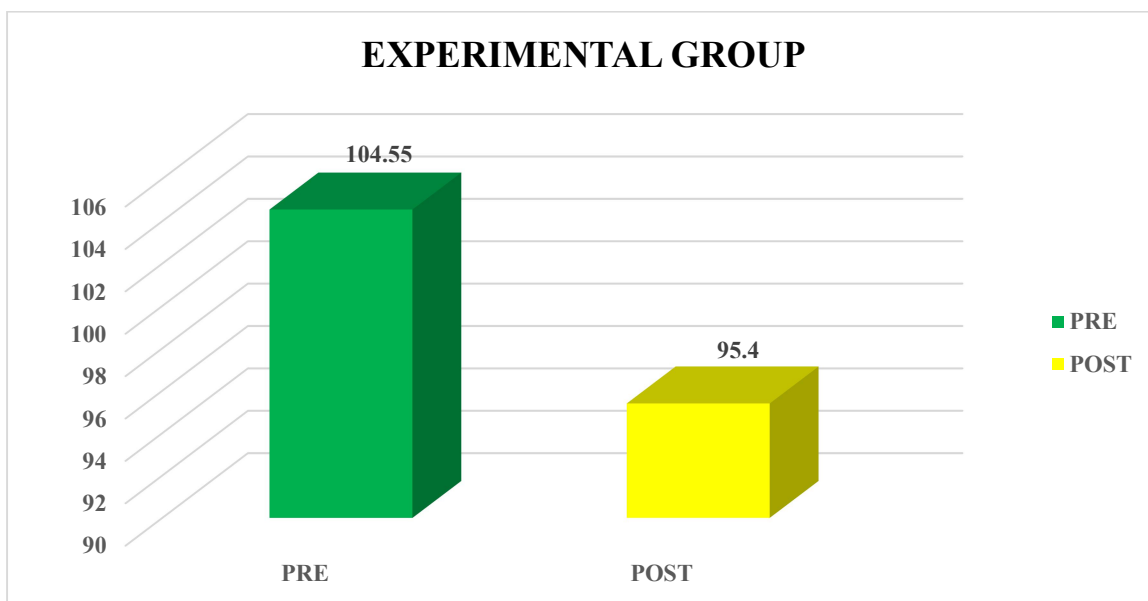


Figure No: 1 Graphical representation of mental toughness of Experimental group

TABLE NO. 2

Observation of Mental Toughness on female students

	TIME	N	MEAN	S.D.	T-RATIO
CONTROL GROUP	PRE	20	109.25	10.40	0.85
	POST	20	108.65	10.37	

*Significant at 0.05 level of confidence at df-20, t-value- 1.729

Table no – 2 shows the average score of S.S. scale (Control group) of the subjects which are 109.25 (PRE) and 108.65 (POST) respectively. It shows the insignificant difference in mental toughness as the obtained t-ratio 0.85 was found lower than the required table value 1.729 at 0.05 level of confidence. It indicates that there is no change in mental toughness of control group.

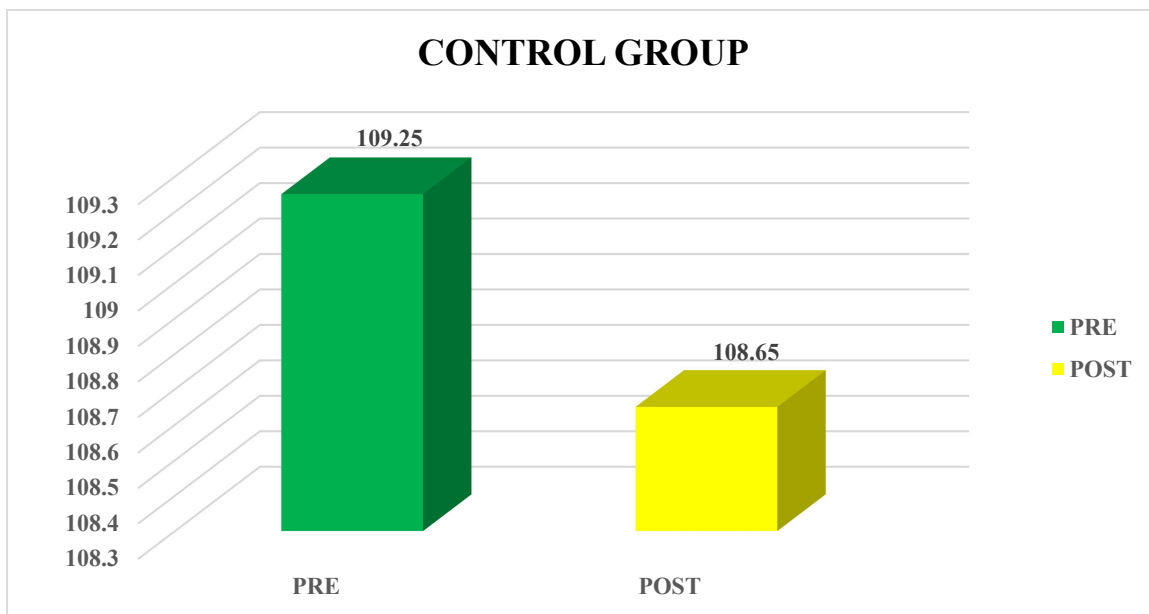


Figure No: 2 Graphical representation of mental toughness of Control group

CONCLUSION:

In conclusion, yogic practices offer a holistic approach to enhancing mental toughness, equipping individuals with the tools and techniques needed to navigate life's challenges with resilience, grace, and fortitude. By integrating the physical, mental, and spiritual dimensions of our being, yoga empowers us to cultivate inner strength, clarity, and equanimity in the face of adversity. As we embark on this journey of self-discovery and transformation, may we embrace the wisdom of yogic philosophy and harness the power of our breath, body, and mind to rise above life's challenges and thrive in every moment. It concludes that yoga helps to improve mental toughness in the female students.

REFERENCES:

- Bhanot, Anjana, and Raman Deep Pattanayak. "Yoga and mental health: A comprehensive review." *Indian Journal of Psychiatry* 55, no. 7 (2013): S394.
- Chong, Chau Phat, et al. "The effectiveness of yoga on depression: A systematic review." *International Journal of Yoga* 12, no. 2 (2019): 99.
- Gaiswinkler, L., & Unterrainer, H. F. (2016). The relationship between yoga involvement, mindfulness and psychological well-being. *Complementary therapies in medicine*, 26, 123-127.
- Gothe, Neha P., Edward McAuley, and Arthur F. Kramer. "The effects of an 8-week hatha yoga intervention on executive function in older adults." *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences* 69, no. 9 (2014): 1109-1116.
- Hariprasad, V. R., et al. (2013). Effects of yoga intervention on sleep and quality-of-life in elderly: A randomized controlled trial. *Indian journal of psychiatry*, 55(Suppl 3), S364.
- Javnbakht, M., et al. (2009). The effects of yoga on anxiety and stress. *Alternative medicine review*, 14(4), 364-374.
- Jeter, Pamela E., et al. "Yoga as a therapeutic intervention: A bibliometric analysis of published research studies from 1967 to 2013." *Journal of Alternative and Complementary Medicine* 21, no. 10 (2015): 586-592.
- Khalsa, S. B. S., et al. (2013). Yoga for resilience and mental well-being in Navy SEALs. *Journal of psychiatric research*, 47(10), 1426-1433.
- Khalsa, Sat Bir S., et al. "Yoga for military service personnel with PTSD: A single arm study." *Psychological Trauma: Theory, Research, Practice, and Policy* 4, no. 6 (2012): 555.
- Klatte, Renate, et al. "A comparison of the acute effects of hatha yoga and mindfulness meditation on executive function and mood." *Mindfulness* 9, no. 6 (2018): 1470-1476.
- Malathi, Ananda, and B. N. Damodaran. "Stress due to exams in medical students—role of yoga." *Indian Journal of Physiology and Pharmacology* 43, no. 2 (1999): 218-224.
- Manjunath, N. K., & Telles, S. (2005). Influence of Yoga and Ayurveda on self-rated sleep in a geriatric population. *Indian Journal of Medical Research*, 121(5), 683.
- Noggle, Jessica J., et al. "The effects of yoga on mood in psychiatric inpatients." *Psychiatric Rehabilitation Journal* 32, no. 2 (2008): 117.
- Rocha, KK, et al. "Yoga reduces autonomic arousal in high-anxiety adolescents." *BioMed research international* 2015 (2015).

- Schure, M. B., et al. (2018). The impact of yoga on psychological health among older adults: a systematic review. *Journal of Applied Gerontology*, 37(9), 1171-1197.
- Smith, C., et al. (2007). The influence of hatha yoga on body image satisfaction and general self-esteem in Australian adults. *Body image*, 4(4), 370-378.
- Streeter, Chris C., et al. "Yoga Asana sessions increase brain GABA levels: a pilot study." *Journal of Alternative and Complementary Medicine* 13, no. 4 (2007): 419-426.
- Streeter, Chris C., Theodore H. Whitfield, et al. "Effects of yoga versus walking on mood, anxiety, and brain GABA levels: a randomized controlled MRS study." *Journal of Alternative and Complementary Medicine* 16, no. 11 (2010): 1145-1152.
- Telles, Shirley, et al. "Changes in autonomic variables following two meditative states described in yoga texts." *Journal of Alternative and Complementary Medicine* 12, no. 1 (2006): 45-53.
- Tolahunase, M. R., et al. (2018). Impact of yoga and meditation on cellular aging in apparently healthy individuals: a prospective, open-label single-arm exploratory study. *Oxidative medicine and cellular longevity*, 2017.