



## A STUDY ON THE IMPACT OF MEDITATION AND YOGA ACTIVITIES ON THE ACADEMIC PERFORMANCE OF SECONDARY SCHOOL STUDENTS IN YAVATMAL DISTRICT

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### ABSTRACT

*In today's competitive era, students at the secondary level face increasing academic, social, and technological pressures, which negatively affect their concentration, memory, and overall academic performance. Against this background, meditation and yoga traditional Indian practices are gaining importance as effective tools for holistic student development. This study investigates the impact of meditation and yoga activities on the academic performance of rural and urban secondary school students. Using a descriptive survey method, data were collected from 300 students (150 rural, 150 urban) through a structured questionnaire covering meditation yoga participation, academic learning attitude, and academic performance. Pre-test and post-test mean scores indicated significant improvement in both rural (42.35 to 58.70) and urban (44.10 to 61.25) groups, with calculated 't' values (6.42 and 6.88) statistically significant at the 0.05 level. The findings reveal that regular practice of meditation and yoga enhances students' concentration, self-confidence, memory, and stress management, ultimately leading to noticeable academic improvement. The study highlights the need for integrating meditation and yoga into the secondary school curriculum to ensure students' intellectual, emotional, and physical well-being. It provides useful insights for teachers, school management, parents, and educational policymakers in improving both academic quality and overall student development.*

**KEYWORDS** : *Meditation, Yoga, Academic Performance, Concentration, Stress Management, Self-Confidence, Secondary School Students, Rural–Urban Comparison, Holistic Development, Educational Policy*

### BACKGROUND

In today's competitive era, students are under immense pressure to excel in academic performance. The increasing burden of the curriculum, the race for higher grades, the expectations of parents and teachers, as well as distractions caused by overexposure to technology, all have a significant impact on students' mental and physical health. As a result, issues such as stress, fear, instability, lack of concentration, and declining academic performance are becoming more evident. Against this background, for the holistic development of students, scientific practices rooted in Indian tradition such as meditation and yoga are gaining importance in school life.

Meditation is a mental process that helps students develop self-control, inner peace, and positive thinking. Regular meditation enhances concentration, emotional balance, and the quality of memory. Similarly, yoga not only improves physical fitness through various postures but also provides the brain with sufficient oxygen through breathing techniques, thereby strengthening students' learning abilities. Yoga practice also helps in reducing stress, eliminating fatigue, and fostering mental well-being. Various research studies have shown that integrating meditation and yoga into the curriculum significantly improves students' overall academic performance.

Through meditation and yoga, students develop confidence, patience, time management, and efficiency. At the same time, the classroom learning process becomes smoother, more enjoyable, and more effective. The secondary level of education is considered a crucial stage for personality development and future building of students. At this stage, along with academic foundation, the development of mental resilience and a healthy lifestyle is essential. Therefore, meditation and yoga activities need to be considered as an integral part of school education.

Hence, the objective of this study is to explore the exact impact of meditation and yoga activities on the academic performance of secondary-level students. The findings of this study are expected to provide valuable insights for formulating educational policies that enhance students' intellectual, mental, and physical development along with improving their academic quality.

### **NEED OF THE STUDY**

In today's technology-driven and competitive era, students at the secondary level are increasingly subjected to mental, intellectual, and social pressures. The rising academic burden, competition in the examination system, expectations from parents and teachers, along with the excessive use of mobile phones and digital media, have negatively affected students' concentration, memory, and overall academic performance. In this context, it becomes essential to develop mental stability, self-discipline, and a positive outlook for the holistic development of students.

Meditation and yoga have been regarded as effective tools for self-development in Indian culture since ancient times. Meditation enhances concentration of mind, emotional balance, self-confidence, and stress management, while yoga improves physical fitness, breath regulation, and mental peace. Modern research has also revealed that regular practice of yoga and meditation has a positive effect on brain functioning, creativity, and the ability to concentrate on studies.

Students at the secondary level are passing through a highly sensitive stage of life. During this period, they undergo significant physical, mental, and emotional changes. At such a stage, proper guidance, emotional balance, and the development of concentration become even more necessary. Therefore, it is important to study the impact of meditation and yoga on academic performance.

Such research can provide valuable guidance to teachers, school management, and parents in improving the academic quality of students. Moreover, the findings can offer a scientific basis to educational policymakers for including meditation and yoga in the curriculum. This would not only enhance academic success but also contribute to the overall development of students, ultimately helping to create healthy, balanced, and responsible citizens in society. Hence, conducting research on this topic is truly a need of the hour.

## SIGNIFICANCE OF THE STUDY

In students' academic progress, not only intellectual ability but also mental stability, self-discipline, and concentration play an equally important role. At the secondary level today, students face mental pressure due to curriculum overload, competitive environments, social expectations, and excessive use of technological tools. This adversely affects both their academic performance and personality development. Against this background, the study of traditional Indian practices such as meditation and yoga becomes highly significant. Meditation helps calm the mind, maintain emotional balance, boost self-confidence, and improve concentration on studies. Regular practice of yoga enhances physical fitness, breath control, mental peace, and endurance. Together, these practices positively influence students' memory, learning ability, and stress management. Hence, research on this subject can prove to be highly effective for students' academic success.

The significance of this research can be explained as follows: Meditation and yoga improve students' concentration, memory, and learning processes, thereby contributing to noticeable progress in their academic performance. In the face of rising competition, meditation and yoga serve as effective tools for controlling stress and anxiety. By fostering physical, mental, and emotional balance, these practices help students develop self-confidence, a sense of responsibility, and a positive outlook. The findings of this study may encourage school management, teachers, and educational policymakers to incorporate meditation and yoga into the curriculum. The widespread practice of such activities can contribute to building a healthy, balanced, and efficient generation in society. Overall, studying the impact of meditation and yoga on the academic performance of secondary-level students is not only educationally important but also socially, culturally, and in terms of mental health. This research can pave the way for students to grow into more successful, confident, and responsible citizens.

## OBJECTIVES

- 1) To study the effectiveness of meditation and yoga activities on the academic performance of students studying in rural and urban secondary schools.
- 2) To examine the changes in concentration, memory, stress management, and self-confidence among secondary-level students as a result of meditation and yoga activities.
- 3) To make recommendations regarding the inclusion of meditation and yoga activities in the curriculum for improving students' academic progress.

## Hypothesis

There is no significant difference in the mean effectiveness of meditation and yoga activities on the academic performance of students studying in rural and urban secondary schools.

## RESEARCH METHODOLOGY

For this study, the **Descriptive Survey Method** has been adopted. Data related to students' participation in meditation and yoga activities, frequency, duration, and their academic performance/attitude toward learning was collected to identify patterns and trends in a comparative sample of rural and urban students. A total of **300 students** were selected for the research, including **150 from rural** and **150 from urban** secondary schools. To collect factual information, a **researcher-constructed questionnaire/scale** was used. This tool consisted of items/statements based on three major components: **Meditation–Yoga Participation and Practice** (frequency, duration, trainer/self-practice). **Academic Learning Attitude** (concentration, time management, stress

management, self-confidence). **Academic Performance** (self-reported performance and objective records such as recent marks/grades—wherever possible verified from school records. A **pilot study (n≈50)** was conducted, followed by item analysis. Internal consistency was targeted with **Cronbach's alpha  $\geq 0.80$** , and **test-retest reliability (r  $\geq 0.70$ )** was attempted at a two-week interval. Content Validity was ensured with experts' review using **Content Validity Index (CVI  $\geq 0.80$ )**. **Exploratory Factor Analysis (EFA)** and, if required, **Confirmatory Factor Analysis (CFA)** were used to verify construct validity. **Face validity** was confirmed through expert feedback. Necessary permissions from schools and **parental consent** were obtained. The questionnaires were administered at the classroom level in groups, with clear instructions, and responses were collected within **20–25 minutes**. Confidentiality was maintained while recording attendance, frequency of participation, and recent academic grades (where available). Ethical considerations such as **confidentiality, voluntary participation, and right to withdraw** were strictly followed. For data analysis, **descriptive statistics** (mean, standard deviation, percentage) and **inferential tests** were used to compare groups based on rural–urban background, gender, and levels of participation.

### Analysis and interpretation:

Table No. 4.1

Table showing the significant difference in the mean effectiveness of meditation and yoga activities on the academic performance of students studying in rural and urban secondary schools.

Group	Students (N)	Pre-test Mean	Post-test Mean	't' Value	Conclusion
Rural	150	42.35	58.70	6.42	Significant Improvement
Urban	150	44.10	61.25	6.88	Significant Improvement
एकूण	300	43.22	59.97	6.65	Significant Improvement

From the above table, it is seen that in the **pre-test scores**, the mean of the rural group was **42.35** while that of the urban group was **44.10**. Both groups were almost similar at the beginning. In the **post-test scores**, the mean of the rural group increased to **58.70** and that of the urban group to **61.25**, indicating a substantial improvement in both groups. The calculated **'t' values (6.42 and 6.88)** were found to be statistically significant at the **0.05 level**. The combined group mean also showed a clear difference between the **pre-test (43.22)** and **post-test (59.97)** scores. This indicates that **meditation and yoga activities had a positive impact on the academic performance of students**. Although both rural and urban groups showed improvement, the progress of the urban students was slightly higher. It can be inferred that meditation and yoga enhanced students' **concentration, mental stability, self-confidence, and memory**, which in turn led to significant improvement in their academic outcomes. Based on these findings, it can be concluded that **meditation and yoga activities are effective tools for enhancing academic quality**.

### CONCLUSION

The study of the effectiveness of meditation and yoga activities on the academic performance of secondary-level students is highly useful for the field of education. In today's scenario, students are increasingly affected by academic pressure, competitive environments, mental stress, and physical fatigue. In such circumstances, it

becomes essential to foster mental peace, self-discipline, concentration, and physical fitness for the overall development of students. Meditation and yoga activities serve as effective tools in this regard.

This research reveals how students' concentration, memory, learning ability, and self-confidence improve through meditation and yoga. Regular practice not only helps students to focus better on studies but also reduces stress, maintains emotional balance, and encourages a healthy lifestyle. Consequently, significant improvement in their academic performance is observed.

For teachers and educational institutions, this study holds great significance. It provides guidance on how meditation and yoga activities can be used to enhance students' learning pace, concentration ability, and examination performance. It also emphasizes the need to focus not only on curriculum but also on students' mental and physical well-being.

The study is also useful for educational policymakers, school management, and parents. By giving importance to meditation and yoga as supplementary educational activities for the holistic development of students, continuous improvement in academic quality can be achieved. Therefore, this study proves to be highly valuable for enhancing the quality of the education system.

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