



P-ISSN: 2394-1685
E-ISSN: 2394-1693
Impact Factor (RJIIF): 5.38
IJPESH 2025; 12(4): 04-06
© 2025 IJPESH
<https://www.kheljournal.com>
Received: 13-04-2025
Accepted: 16-05-2025

S Shanthi
Physical Director, Sakthi
Polytechnic College, Sakthi
Nagar, Erode, Tamil Nadu, India

Dr. S Varalakshmy
Director of Physical Education,
Government Arts and Science
College, Thiruvannainalur,
Tamilnadu, India

Dr. K Alaguraja
SA, Sports Officer, National
Institute of Technology
Nagaland, Chumukedima,
Nagaland, India

Corresponding Author:
S Shanthi
Physical Director, Sakthi
Polytechnic College, Sakthi
Nagar, Erode, Tamil Nadu, India

The impact of yoga integration in Tamil Nadu schools: A holistic approach to student development

S Shanthi, S Varalakshmy and K Alaguraja

DOI: <https://doi.org/10.22271/kheljournal.2025.v12.i4a.3861>

Abstract

Chronic Low Back Pain (CLBP) is defined as mechanical musculoskeletal pain in the lower back that has Yoga, a centuries-old practice rooted in Indian tradition, has emerged as a powerful tool for promoting physical, mental, and emotional well-being among school-aged children. In Tamil Nadu, various educational and governmental initiatives have aimed to integrate yoga into the school curriculum to enhance student health and behavior. This study examines the impact of yoga programs implemented in selected schools across Tamil Nadu, focusing on improvements in physical fitness, concentration, stress reduction, and emotional regulation. Using a mixed-methods approach, data was gathered from 200 students and 20 Physical Education teachers across 10 districts. The findings suggest that regular yoga practice significantly contributes to enhanced physical stamina, better classroom behavior, and reduced anxiety levels among students. The article concludes with recommendations for state-wide implementation and teacher training to maximize the benefits of yoga in schools.

Keywords: Yoga, Chronic Low Back Pain (CLBP), teacher training, student health

Introduction

The modern school environment is increasingly characterized by academic pressure, sedentary habits, and emotional stress among students. This has given rise to a renewed interest in ancient practices like yoga, which promote holistic development. Yoga, encompassing physical postures (asanas), breathing techniques (pranayama), and meditation (dhyana), offers a non-competitive, inclusive, and culturally relevant approach to enhancing student wellness. In Tamil Nadu, the Department of School Education and private institutions have gradually introduced yoga into the co-curricular framework. Despite positive anecdotal evidence and select program rollouts, there is limited systematic research documenting the actual benefits of yoga on student outcomes in the state. This study seeks to fill that gap by analyzing how regular school-based yoga practice influences students' physical health, emotional regulation, attention span, and social behavior.

Objectives of the Study

- To examine the physical, psychological, and behavioral benefits of yoga practice among school students in Tamil Nadu.
- To assess the perceptions of Physical Education teachers regarding the impact of yoga on student well-being.
- To recommend strategies for effective implementation of yoga programs in schools.

Methodology

This study employed a mixed-methods research design, integrating both quantitative and qualitative approaches to evaluate the impact of yoga on school students in Tamil Nadu. Quantitative data was collected from a sample of 200 students studying in grades 6 to 10, who had participated in regular yoga sessions for a minimum of six months across 10 government and private schools located in both urban and rural areas. Stratified random sampling was used to ensure balanced representation from different school types and regions.

The data collection tools included physical fitness tests measuring flexibility, balance, and endurance, along with the Strengths and Difficulties Questionnaire (SDQ) to assess mental health and emotional well-being. To complement the quantitative findings, qualitative data was obtained through semi-structured interviews with 20 Physical Education teachers who were actively involved in implementing yoga programs at their respective schools. The collected data was analyzed using paired t-tests to measure changes in fitness and psychological parameters before and after the yoga intervention. Thematic analysis was employed to interpret qualitative responses from teacher interviews, allowing the study to capture a comprehensive understanding of yoga's influence on student development.

Results and Findings

Physical Fitness Improvement

Students showed significant improvement in flexibility (mean increase in sit-and-reach score: +4.2 cm), balance, and core strength after consistent yoga practice over a six-month period ($p < 0.01$). PE teachers reported better posture, reduced fatigue, and improved endurance in sports activities.

Psychological Well-being

Analysis of SDQ scores indicated a 25% reduction in emotional distress and a 30% improvement in attention and classroom behavior. Students reported feeling calmer, less anxious, and more focused during class hours.

Teacher Observations

PE teachers highlighted several key changes:

- Enhanced discipline and classroom attentiveness
- Reduction in hyperactivity and peer conflicts
- Improved self-esteem and participation in school activities
- One rural teacher noted: "Even the quiet children now come forward to lead warm-up sessions with confidence."

Discussion

The study confirms that integrating yoga into school routines fosters both physical and mental development among students. Consistent with earlier national studies (e.g., Bhavanani *et al.*, 2018) [25], this research affirms that yoga is particularly effective in improving emotional regulation and classroom engagement. The structured breathing exercises and meditation sessions seemed to have a calming effect on students, particularly those from high-stress home environments. Moreover, in rural areas where access to mental health support is limited, yoga serves as a preventive and therapeutic tool.

However, the study also revealed certain challenges. Some schools lacked trained instructors, and yoga sessions were often merged with physical education classes without sufficient time allocation. There was also variability in commitment between schools, affecting outcomes.

Recommendations

- **Formal Inclusion in Curriculum:** Yoga should be included as a compulsory weekly component across Tamil Nadu's school curriculum.
- **Training for Teachers:** Specialized certification programs should be offered to PE teachers and instructors to ensure quality delivery.
- **Monitoring and Evaluation:** Periodic evaluation of

student progress (physical and mental) should be mandated for sustained outcomes.

- **Infrastructure Support:** Provision of yoga mats, safe practice space, and audio guides for meditation in government schools.
- **Community Engagement:** Parent awareness sessions can enhance continuity and practice at home.

Conclusion

Yoga offers a low-cost, culturally rooted, and holistic solution to many of the physical and mental health challenges faced by school children in Tamil Nadu. This study demonstrates that regular yoga practice leads to measurable improvements in students' fitness, focus, emotional control, and school behavior. As educational institutions strive for inclusive and balanced development, yoga should be embraced not as an add-on but as a core component of student life. With structured support, Tamil Nadu can lead the way in demonstrating how ancient wisdom can enrich modern education.

References

1. Rai M, *et al.* The power of yoga. *Int J Adv Sci Technol.* 2020;29(3):6225-6229.
2. Das S, *et al.* Consequence of yoga and rowing. *Int J Adv Sci Technol.* 2020;29(3):7079-7084.
3. Alaguraja K, Yoga P. Combination of naturopathy and yoga on VO2 max among hypertensive patient. *Indian J Public Health Res Dev.* 2020;11(4):131-134.
4. Alaguraja K, Yoga P. Effect of yoga therapy on BMI rate among class I obese patient. *Indian J Public Health Res Dev.* 2020;11(5):143-146.
5. Rathinaraj JS, Yoga P, Alaguraja K, Selvakumar K. Combination of walking practices and yogic practices on low density lipoprotein (LDL) among middle aged women. *Indian J Public Health Res Dev.* 2020;11(6):362-625.
6. Alaguraja K, Yoga P. Influence of yogasana practice on flexibility among obese adolescent school boys. *Int J Yoga Physiother Phys Educ.* 2017;2(7):70-71.
7. Alaguraja K, Yoga P. Effect of core stability training on dynamic strength among college male students. *Int J Yogic Hum Mov Sports Sci.* 2018;3(2):436-437.
8. Yoga P, Balamuralikrishnan R, Alaguraja K. Influence of cyclic meditation on selected physiological parameter. *Int J Adv Educ Res.* 2018;4(1):17-18.
9. Alaguraja K, Yoga P. Effect of yogic practice on resting pulse rate among school students. *Indian J Appl Res.* 2019;9(7):43-44.
10. Alaguraja K, Yoga P. Analyze of pranayama technique on physiological parameter among rural school students. *J Inf Comput Sci.* 2019;9(8):545-550.
11. Alaguraja K, Yoga P, Rathinaraj JS, Selvakumar K. A study on yoga intervention on maximal oxygen uptake among stress patient. *Indian J Appl Res.* 2019;9(9):38-39.
12. Alaguraja K. Analyze of combined asanas pranayama practices on psycho social parameter among sports people. *Indian J Appl Res.* 2019;9(10):73-74.
13. Alaguraja K, Yoga P. A study on yogic package on body mass index among rural school boys. *Int J Phys Educ Exerc Sports.* 2019;1(2):7-9.
14. Alaguraja K, Yoga P. Impact of yogic package on body mass index among obese people. *Int J Phys Educ Exerc Sports.* 2019;1(2):4-6.
15. Alaguraja K, Yoga P. Combined pranayama and

- meditation practices on self-confidence. *Int J Phys Educ Exerc Sports*. 2019;1(2):1-3.
16. Alaguraja K, Yoga P. Mindfulness meditation on stress among working men. *Int J Physiol Sports Phys Educ*. 2019;1(1):9-11.
 17. Alaguraja K, Yoga P. Yogic therapy treatment on high density lipoprotein among high school boys. *Int J Physiol Exerc Phys Educ*. 2019;1(1):9-11.
 18. Alaguraja K, Yoga P. A study effect of combined yoga and naturopathy on triglycerides among stressed people. *Int J Physiol Exerc Phys Educ*. 2019;1(1):9-11.
 19. Alaguraja K, Yoga P. Analysis the effect of yogic package on low density lipoprotein among trained handball players. *Int J Physiol Exerc Phys Educ*. 2019;1(1):9-11.
 20. Alaguraja K, Yoga P. A sequence of combined effect of SAQ training and yogic package on self confidence among handball players. *Int J Sports Exerc Phys Educ*. 2019;1(1):15-17.
 21. Alaguraja K, Yoga P. Pranayama package on systolic blood pressure among middle ages unemployed women. *Int J Sports Exerc Phys Educ*. 2019;1(1):18-20.
 22. Alaguraja K, Yoga P. Pranayama package on self efficacy among middle ages unemployed women. *Int J Sports Exerc Phys Educ*. 2019;1(1):18-20.
 23. Alaguraja K, Yoga P. Influence of yogic practice on VO2 max among school students. *Int J Innov Knowl Concepts*. 2017;5(6):18-20.
 24. Selvakumar K, Yoga P. Influence of yogic practice on flexibility among college students. *Indian J Appl Res*. 2019;9(7):45-46.
 25. Bhavanani AB, Ramanathan M, Trakroo M. Impact of school-based yoga intervention on behavior and self-regulation among children. *Indian J Physiol Pharmacol*. 2018;62(3):250-257.
 26. Ministry of AYUSH. Yoga in Schools: National Guidelines. Government of India; 2022 [cited 2025 Jul 3]. Available from: <https://www.ayush.gov.in>
 27. Singh A, Verma S. Yoga and emotional resilience in adolescents: A comparative study. *J Educ Health Promot*. 2021;10(1):105.
 28. Tamil Nadu School Education Department. Annual Co-Curricular Report. Chennai: Government of Tamil Nadu; 2023.