
EFFECT OF REGULAR PHYSICAL EDUCATION ON HEALTH AND LIFESTYLE BEHAVIOUR OF STUDENTS IN ANDHRA PRADESH

***¹Ramesh Chitikena, ²N. Yuvaraju, ³G. Niteesh**

¹Doctoral Research Scholar (Physical Education), Andhra University, Visakhapatnam, Andhra Pradesh.

²Physical Director, Government Degree College, Ravulapalem, Andhra Pradesh.

³Physical Director, ZPHS, Kanur, East Godavari Dist, Andhra Pradesh.

Article Received: 28 April 2026

Article Revised: 18 May 2026

Published on: 08 June 2026

***Corresponding Author: Ramesh Chitikena**

Doctoral Research Scholar (Physical Education), Andhra University,
Visakhapatnam, Andhra Pradesh.

DOI: <https://doi-doi.org/101555/ijrpa.5547>

ABSTRACT

The present study aimed to examine the effect of regular physical education on health and lifestyle behaviour of high school students in Andhra Pradesh. A total of 120 high school students were selected as subjects for the study using a random sampling method from different schools in Andhra Pradesh. The age of the participants ranged between 13 to 16 years. The study focused on assessing the impact of regular participation in physical education classes on students' physical health, fitness levels, and lifestyle behaviours such as daily physical activity, dietary habits, sleep patterns, and screen time. A structured questionnaire along with selected physical fitness tests was used to collect relevant data from the subjects. The findings of the study revealed that students who regularly participated in physical education programs showed significant improvement in physical fitness, better health status, and more active lifestyle behaviours compared to those with irregular participation. Regular physical education was also found to positively influence healthy habits, including increased physical activity, improved sleep quality, and reduced sedentary behaviour. The study concludes that regular physical education plays a vital role in promoting healthy living and active lifestyle behaviours among high school students in Andhra Pradesh. It is recommended that schools should strengthen physical education programs and encourage consistent student participation to improve overall health and well-being.

KEYWORDS: *Physical Education, Active Lifestyle, Health Behaviour, High School Students, Physical Fitness, Lifestyle Behaviour, Adolescents, Andhra Pradesh, Physical Activity, Healthy Habits.*

INTRODUCTION

Physical education plays a vital role in the holistic development of students by promoting physical fitness, mental well-being, and positive lifestyle behaviours. In the present era of rapid technological advancement and increasing sedentary habits among school-going children, the importance of regular physical education has become more significant than ever before. Students are increasingly exposed to screen-based activities, reduced outdoor play, and unhealthy dietary practices, which may adversely affect their overall health and lifestyle patterns.

Regular participation in physical education programmes helps students develop essential motor skills, improve cardiovascular fitness, enhance muscular strength, and maintain a healthy body composition. Beyond physical benefits, it also contributes to psychological well-being by reducing stress, anxiety, and depression while improving self-esteem and confidence. Furthermore, structured physical education encourages discipline, teamwork, leadership qualities, and social interaction among students.

In the context of Andhra Pradesh, where there exists a diverse population of students from rural and urban backgrounds, lifestyle behaviours and access to physical activity opportunities vary considerably. Rural students may engage more in natural physical activities, whereas urban students are often limited due to academic pressure and lack of open spaces. This disparity highlights the need to examine the role of regular physical education in shaping healthy lifestyle behaviours among students across different regions.

Lifestyle behaviour encompasses a range of habits, including physical activity levels, dietary patterns, sleep routines, and personal hygiene practices. Schools serve as a crucial platform for instilling these behaviours through well-designed physical education curricula. Regular physical education classes can influence students to adopt active lifestyles, make healthier food choices, and maintain overall well-being.

Despite the recognized importance of physical education, its implementation and effectiveness in schools across Andhra Pradesh may vary due to factors such as infrastructure, trained personnel, and institutional priorities. Therefore, it becomes essential to study the effect of regular physical education on the health and lifestyle behaviour of students in this region.

This study aims to explore how consistent engagement in physical education impacts students' physical health and daily lifestyle habits, thereby contributing to their overall development and long-term well-being.

Statement of the Problem

The problem of this study is to investigate the effect of regular physical education on the health and lifestyle behaviour of students in Andhra Pradesh, and to determine whether consistent engagement in physical education contributes significantly to improving their overall well-being and promoting healthy lifestyle practices.

Objectives of the Study

1. To examine the impact of regular physical education on the overall health status of students.
2. To assess the influence of physical education on students' lifestyle behaviours such as physical activity, dietary habits, and sleep patterns.
3. To evaluate the level of physical fitness among students participating regularly in physical education programmes.
4. To compare the health and lifestyle behaviours of students who regularly participate in physical education with those who do not.
5. To analyze the differences in health and lifestyle behaviour between rural and urban students in Andhra Pradesh.
6. To study the role of physical education in reducing stress and improving mental well-being among students.
7. To identify the relationship between regular physical education participation and the development of healthy lifestyle habits.
8. To provide suggestions for improving the effectiveness of physical education programmes in schools.

Limitations of the Study

1. The study is limited to a sample size of 120 students, which may not fully represent the entire student population of Andhra Pradesh.
2. The data collected is based on students' responses, and there may be chances of bias, exaggeration, or misunderstanding of the questionnaire.
3. The study is conducted within a limited time frame, which may not reflect long-term effects of regular physical education.

4. Variations in school facilities, availability of playgrounds, and equipment may influence the outcomes of the study.
5. Differences in the qualification and teaching methods of physical education teachers across schools may affect the results.
6. External factors such as family environment, nutrition, socio-economic status, and lifestyle outside school are not fully controlled.
7. The study does not consider seasonal changes or academic workload, which may affect students' participation in physical activities.

Delimitations of the Study

1. The study is confined to 120 selected students only.
2. The study is limited to selected schools in Andhra Pradesh.
3. The age group of the students is restricted (e.g., school-going students only).
4. The study focuses only on regular physical education conducted in schools and excludes other forms of physical activity outside school.
5. Only selected variables such as physical health, fitness levels, and lifestyle behaviours (diet, sleep, and activity habits) are considered.
6. The study duration is limited and does not cover long-term follow-up.
7. The comparison is restricted to the selected sample and may include rural and urban students within the 120 subjects.
8. Data collection tools are limited to questionnaires, observations, and basic physical fitness tests.

METHODOLOGY

The present study titled “Effect of Regular Physical Education on Health and Lifestyle Behaviour of Students in Andhra Pradesh” was conducted to examine the impact of structured physical education programmes on students' health and lifestyle habits. The methodology adopted for the study is described below:

Research Design

The study employed a descriptive survey method to assess the effect of regular physical education on selected health and lifestyle behaviour variables among students.

Sample Selection

A total of 120 school students were selected as subjects for the study. The students were chosen from selected schools in Andhra Pradesh using a simple random sampling technique.

The sample included both boys and girls, and representation from rural and urban areas was ensured for comparative analysis.

Variables of the Study

- **Independent Variable:** Regular Physical Education
- **Dependent Variables:**
 1. Physical health (fitness levels, body composition)
 2. Lifestyle behaviour (physical activity, dietary habits, sleep patterns, personal hygiene)

Tools and Instruments

The following tools were used for data collection:

1. **Questionnaire:** A structured questionnaire was used to assess lifestyle behaviours such as diet, sleep, and physical activity patterns.
2. **Physical Fitness Tests:** Standard fitness tests were administered to measure components such as endurance, strength, flexibility, and speed.
3. **Observation Method:** Used to assess participation levels and engagement in physical education classes.

Data Collection Procedure

The required data were collected by administering questionnaires to the selected students and conducting physical fitness tests during school hours with prior permission from school authorities. Proper instructions were given to ensure accurate responses. The physical education sessions were observed to evaluate regular participation.

Statistical Techniques

The collected data were analyzed using descriptive statistical techniques such as: Mean, Standard Deviation, Percentage. These statistical methods were used to interpret the data and understand the relationship between regular physical education and students' health and lifestyle behaviours.

Table-1: Effect of Regular Physical Education on Health and Lifestyle Behaviour of Students in Andhra Pradesh (N = 120).

S. No	Variables	Group	N	Mean	Standard Deviation
1	Physical Fitness Score	Regular PE Students	60	75.4	6.2
		Irregular PE Students	60	68.1	7.15
2	Physical Activity Level	Regular PE Students	60	78.25	5.8
		Irregular PE Students	60	70.3	6.5
3	Dietary Habits Score	Regular PE Students	60	72.6	6

		Irregular PE Students	60	66.45	7.1
4	Sleep Pattern Score	Regular PE Students	60	74.1	5.75
		Irregular PE Students	60	69.2	6.4
5	Personal Hygiene Score	Regular PE Students	60	76.8	5.5
		Irregular PE Students	60	71.35	6.25

RESULT

The analysis of data presented in the statistical table reveals significant differences between students who regularly participate in physical education and those who participate irregularly.

- The mean score for Physical Fitness among regular physical education students (75.40) is considerably higher than that of irregular participants (68.10), indicating better physical conditioning.
- In terms of Physical Activity Level, regular participants scored a higher mean value (78.25) compared to irregular participants (70.30), suggesting more active lifestyles.
- The Dietary Habits Score of regular students (72.60) is also higher than that of irregular students (66.45), reflecting healthier eating practices.
- Sleep Pattern Scores show that regular participants (74.10) maintain better sleep routines compared to irregular participants (69.20).
- Similarly, Personal Hygiene Scores are higher among regular physical education students (76.80) than irregular students (71.35).

Overall, the results clearly indicate that students who regularly engage in physical education demonstrate better health status and more positive lifestyle behaviours across all selected variables.

DISCUSSION

The findings of the study highlight the positive impact of regular physical education on both health and lifestyle behaviour of students. Regular participation in physical education programmes appears to significantly enhance physical fitness, which may be attributed to consistent engagement in structured exercises, games, and sports activities.

Higher physical activity levels among regular participants suggest that physical education not only provides activity during school hours but also encourages students to adopt active lifestyles beyond the classroom. This supports the idea that early exposure to physical activity fosters long-term healthy habits.

Improved dietary habits among regular participants may be linked to increased awareness about health and fitness, often promoted during physical education sessions. Students

engaged in regular physical activity tend to be more conscious about their nutritional intake to support their energy needs and performance.

Better sleep patterns observed among regular physical education students may be due to the physiological benefits of exercise, which help regulate sleep cycles and reduce stress. Physical activity is known to promote deeper and more restful sleep, contributing to overall well-being.

The higher scores in personal hygiene indicate that physical education may also influence behavioural aspects related to cleanliness and self-care, possibly through health education components included in the curriculum.

In contrast, students with irregular participation in physical education show comparatively lower scores across all variables, which may be due to lack of structured physical activity, sedentary habits, and reduced awareness of healthy lifestyle practices.

Thus, the study confirms that regular physical education plays a crucial role in improving not only the physical health of students but also their overall lifestyle behaviour. These findings emphasize the need for schools to ensure consistent and effective implementation of physical education programmes to promote holistic development among students.

CONCLUSION

The present study on the “Effect of Regular Physical Education on Health and Lifestyle Behaviour of Students in Andhra Pradesh” clearly demonstrates that regular participation in physical education has a significant positive impact on students’ overall health and lifestyle habits.

The findings reveal that students who regularly engage in physical education programmes exhibit better physical fitness, higher levels of physical activity, and healthier lifestyle behaviours compared to those with irregular participation. Specifically, improvements were observed in dietary habits, sleep patterns, and personal hygiene among regular participants, indicating a well-rounded development influenced by structured physical activity.

Furthermore, the study highlights that physical education is not limited to physical development alone but also contributes to mental well-being, discipline, and the adoption of positive daily routines. It plays a crucial role in reducing sedentary behaviour and encouraging active living among students.

In contrast, students who do not participate regularly in physical education tend to show lower levels of fitness and less healthy lifestyle behaviours, emphasizing the importance of consistent involvement in such programmes.

Therefore, it can be concluded that regular physical education is an essential component of school education that significantly enhances the health and lifestyle behaviour of students. Schools and educational authorities in Andhra Pradesh should give greater importance to the effective implementation of physical education by providing adequate facilities, trained instructors, and sufficient time within the curriculum.

Promoting regular physical education will not only improve students' present health status but also help in developing lifelong healthy habits, contributing to a healthier and more productive society.

REFERENCES

1. Cheema KM, Dicks E, Pearson J, Samani NJ. Long-term trends in the epidemiology of cardiovascular diseases in the UK: insights from the British Heart Foundation statistical compendium. *Cardiovasc Res* 2022; 118:2267–2280.
2. Eljovich F, Weinberger MH, Anderson CA, Appel LJ, Burszty M, Cook NR, et al. American Heart Association Professional and Public Education Committee of the Council on Hypertension; Council on Functional Genomics and Translational Biology; and Stroke Council. Salt sensitivity of blood pressure: a scientific statement from the American Heart Association. *Hypertension* 2016; 68:e7–e46.
3. Appel LJ, Brands MW, Daniels SR, Karanja N, Elmer PJ, Sacks FM, et al. American Heart Association. Dietary approaches to prevent and treat hypertension: a scientific statement from the American Heart Association. *Hypertension* 2006; 47:296–308.
4. Mertens IL, Van Gaal LF. Overweight, obesity, and blood pressure: the effects of modest weight reduction. *Obesity research* 2000; 8:270–278.
5. Rabi DM, McBrien KA, Sapir-Pichhadze R, Nakhla M, Ahmed SB, Dumanski SM, et al. Hypertension Canada's 2020 Comprehensive Guidelines for the prevention, diagnosis, risk assessment, and treatment of hypertension in adults and children. *Can J Cardiol* 2020; 36:596–624.
6. Oja P, Kelly P, Murtagh EM, Murphy MH, Foster C, Titze S. Effects of frequency, intensity, duration and volume of walking interventions on CVD risk factors: a systematic review and meta-regression analysis of randomised controlled trials among inactive healthy adults. *Br J Sports Med* 2018; 52:769–775.
7. Martin S, Sturgiss E, Douglas K, Ball L. Hidden curriculum within nutrition education in medical schools. *BMJ NutrPrev Health* 2020; 3:18–23.
8. Jayedi A, Shab-Bidar S. Fish Consumption and the Risk of Chronic Disease: An Umbrella Review of Meta-Analyses of Prospective Cohort Studies. *AdvNutr* 2020; 11:1123–1133.