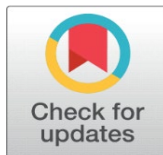


HOLISTIC APPROACH TOWARDS PHYSICAL EDUCATION IN ARCHITECTURE CURRICULUM

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DOI
[10.29121/shodhkosh.v4.i2.2023.2104](https://doi.org/10.29121/shodhkosh.v4.i2.2023.2104)

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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ABSTRACT

The field of Architecture demands immense dedication and commitment. Architecture students undergo significant stress and pressure to complete the workload of the subjects in a dedicated time frame. It is observed that the 1st year students sometimes find it difficult to adjust to this routine and curriculum as it is different from what they have studied in the Higher Secondary Education system. Therefore, it is necessary to familiarize the students with this creative field and also help them cope with stress and time management strategies. Physical education is essential for the physical well-being as well as the mental health of students. The architectural field being spatial Art, it engages body and mind in spaces where one lives, works or plays. The student has continuous interaction with the surroundings and the surrounding affects one's perception also the satisfaction of one's living quality. Introducing Physical education to students is a way to help them realize the importance of physical fitness and mental well-being. Physical Education is a curricular component in the F.Y. B.Arch., S.P.P.U. syllabus 2019 pattern; it creates an opportunity to help students explore the importance of 'Mind and Body' and its effect on academics.

This research paper explores the importance of physical education and mental well-being in achieving academic excellence. Activities along with assignments are curated based on the factors that examine various ways in which physical education can help architecture students develop the skills and knowledge necessary to succeed in the classroom and beyond.

Keywords: Architecture, Physical education, mental well-being, Academic performance, etc.

1. INTRODUCTION

Good Physical health of a student improves their academic performance. The mental and well being enable students to show creative ideas and actively participate in the curricular activities. Long-term participation in the physical and mental activities for fitness can enhance the cognitive performance and brain health of a person. To acquire academic knowledge, a student must have skills such as reasoning, problem solving ability and grasping information. Architecture, being a professional course, is quite tough as compared to other technical and professional courses. The duration of Architecture course is 5 years long which is similar to medical courses. Architectural course has very few theory-based subjects. However, most of the subject are objective and require continuous engagement and progress by the student. The major subject is Architectural design which requires daily progress of the project given. The project starts with basic planning, understanding, case studies, completion and innovation of a building project. Students need to try numerous times to design the building project until it becomes a well-designed project. This requires a lot of dedication, continuous work every day, creative thinking and hard work. The time required to archive minimum standards for each student is different. However, if a student is facing health issues, whether mentally or physically, it majorly affects their

performance and thinking capability. Architectural design is not only the subject which requires much attention, there are many other subjects which have same academic requirement. Thus, a student's needs to work simultaneously on different subjects. Physical and mental health is essential for a student to smoothly work on all difficulties.

Academic achievement is very important for students in this competitive world, the architecture students have to struggle a lot in terms of stress management, time management, complete the workload as required by the curriculum and also balance the Study and life ratio. As a need to cater these issues Physical Education was introduced as a curricular component in S.P.P.U B.Arch. 2019 pattern syllabus for First year students, aiming to introduce students to the importance of Physical Education and Mental well-being to improve their lifestyle.

This research study aims to understand the role of Physical education and mental well-being in enhancing the learning experience of the Architecture students.

2. IMPORTANCE OF PHYSICAL FITNESS FOR STUDENTS

Physical education helps improve the mind and body of a student. In addition, this curricular component involves exercise, sports and lots of fun; however, to make this session interesting the teaching methodology and objectives should be beyond games and sports. It should focus on improving one's behaviour, skills, concentration, reasoning ability, creative problem solving ability, analysing, observation and attentiveness. Moreover, it's essential to have a well-rounded, holistic education that goes beyond textbooks and lectures into the fields and gardens. Physical health is crucial for architecture students due to the physical and mental requirements of the profession:

1. STAMINA FOR LONG WORKING HOURS

Architecture students frequently engage in extended hours, particularly around project deadlines and studio sessions. Physical fitness enhances endurance, mitigates fatigue, and improves stamina to manage these demanding work times.

2. MENTAL CLARITY AND CONCENTRATION

Consistent physical exercise enhances cognitive abilities such as focus, memory retention, and analytical capabilities. Physical fitness directly influences mental acuity, essential for creativity, intricate design tasks, and problem-solving in architecture.

3. STRESS MITIGATION

The rigorous nature of architectural education can induce stress. Physical activity is recognized for alleviating stress and anxiety by generating endorphins, which enhance mood and mental well-being. This can assist architecture students in navigating the demands of projects and evaluations.

4. POSTURE AND PHYSIOLOGICAL WELL-BEING

Architecture students dedicate considerable time to desk work or computer use, potentially resulting in posture-related issues. Consistent exercise, particularly emphasizing posture and flexibility, might avert musculoskeletal disorders, enhance posture, and diminish the likelihood of back, neck, or wrist injuries prevalent in sedentary occupations.

5. PHYSICAL ENDURANCE FOR ON-SITE ASSESSMENTS

Architectural education frequently entails site visits, necessitating students to traverse construction sites, transport models, and engage in actual installations. Physical fitness enables pupils to perform these duties without discomfort or harm risk.

6. CREATIVITY AND EMOTIONAL STATE

Physical activity has been demonstrated to enhance creativity by augmenting cerebral blood circulation and facilitating problem-solving abilities. Engaging in physical activity can stimulate novel design concepts and methodologies, which are crucial for architectural innovation.

7. COLLABORATION AND LEADERSHIP

Physical activities, particularly sports or group exercises, can improve teamwork and leadership abilities. These are crucial for architecture students, as they frequently engage in collaborative group projects and subsequently in professional practice.

3. IMPORTANCE OF WELL-BEING IN STUDENTS

Architecture is a demanding field that requires hard work, dedication and a passion for design & built environment. It is very challenging for students to cope with the field due to the constant pressure and stress of completing the submissions in the dedicated time frame. To overcome this stress student can use a variety of strategies to foster mental wellbeing, such as mindfulness, exercise, and self-care activities. These activities can help to reduce stress, improve focus, and increase overall well-being.

4. CASE STUDY

Physical Education for the students was introduced as a fun and outcome based course where the students were equipped with the knowledge and importance of Physical education along with introducing them to the basics of visual language, material knowledge, construction techniques and understanding the user experience of the places as a designer. The Physical Education session was conducted in the public places like Parks, garden, hill, etc. instead of the conventional places like stadium, club, sports ground. The students were introduced to the importance of Physical Education and Mental well-being. The assignments were developed based on the factors which helped the students to cultivate interest in the field of Architecture and also develop the sense of creativity and problem solving ability.

4.1 RELEVANCE OF PLACE SELECTION FOR CONDUCTING THE PE SESSION

Students of Architecture were exposed to various activities in the course of Physical Education such as hill climbing, yoga, meditation, jogging, Abs exercises, full body workout, etc. These activities were conducted in various settings and students were engaged in activities which could help them understand the benefit of exercise and healthy lifestyle. The activities related to the spatial characteristics of these settings were introduced which evoked Art and spatial appreciation engagement.

4.1.1 SARASBAUG WAS SELECTED FOR CONDUCTING PHYSICAL EDUCATION AS IT IS A SIGNIFICANT HISTORICAL PLACE OF PUNE

Sarasbaug is famous garden in Pune city, Maharashtra State, India. It is related to the heritage and culture of Pune city. The park has a central Ganesh mandir which was surrounded by a lake many years ago. However, today the lake has disappeared and it remains as a garden. There is a hillock on which a Ganesh temple is situated and it is also known as 'Talyatla Ganapati'. The park has a jogging track for the citizens of Pune.

4.1.2 PARVATI HILL WAS SELECTED FOR CONDUCTING PHYSICAL EDUCATION AS THE PARVATI TEMPLE IS AN OLDEST HERITAGE STRUCTURE IN PUNE.

Parvati Hill is a hillock with approx. 108 steps leading to a temple situated on the hill top and its one of the most scenic locations in Pune. The temple is the oldest heritage building in Pune, constructed during the Peshwa dynasty's rule.

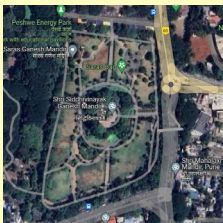

SR. NO.	LOCATION	MAP	ACTIVITY	RELEVANCE OF SUBJECTS
1	Sarasbaug, Pune Distance from College to Sarasbaug – 5 min walk	 Source- Google maps	<ul style="list-style-type: none"> • Warm up exercises. • Jogging. • Use of outdoor Gym equipment. • Yoga and Suryanamaskar session. • Games. • Abs exercise. • Cooling down exercise. • Live sketching • Photography session. 	<ul style="list-style-type: none"> • Building Construction and Materials • Architectural Graphics and Drawing • History of Architecture • Basic Design
2	Parvati, Pune Distance from College to Parvati Hill– 10-15 min walk, 5 min on bike	 Source- Google maps	<ul style="list-style-type: none"> • Warm up Exercises. • Climbing the Parvati hill (approx. 108 steps) • Use of outdoor Gym equipment. • Yoga and Suryanamaskar near the temple premises. • Meditation session in the serene atmosphere of Parvati. • Rope skipping. • Cooling down exercise. • Live sketching. • Photography session. 	<ul style="list-style-type: none"> • Building Construction and Materials • Architectural Graphics and Drawing • History of Architecture • Basic Design

Table 1- Showing the location and type of activities conducted for Physical education and mental well-being.

4.2 HOLISTIC APPROACH IN PEDAGOGY OF PHYSICAL EDUCATION:-

The theoretical framework of holistic education refers to a comprehensive learning strategy which takes into account every facet of human performance, including the physical, mental and spiritual components of individuals. The fundamental idea of this approach is that all three factors are interconnected and must be taken into account when aiming to enhance health and overall well-being.

In addition to fostering mental and physical health, holistic education has the potential to also encourage social and emotional learning (SEL). The development of social and emotional learning (SEL) abilities such as empathy, teamwork and self-regulation has been demonstrated to result in academic achievement, enhanced performance in the workplace and an overall improvement in well-being. By integrating social and emotional learning (SEL) in course of Physical Education, we can help students develop the necessary skill required for flourishing in all aspects of their lives.

1. Physical Activities and fitness.
2. Mental Built up and wellbeing.
3. Connect with nature through relevant activities.
4. Space Planning for healthy ambience.
5. Interaction with people of different age group.
6. Ambience and understanding of user experience designing.

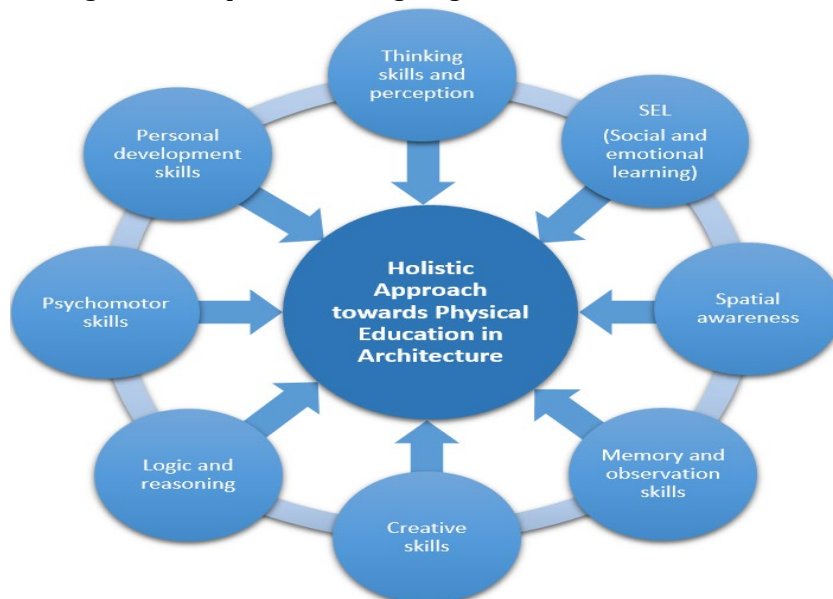


Figure 1- Model showing the skills required for Holistic approach towards Physical Education in Architecture.
(Source: Authors)

4.2.1 PHYSICAL ACTIVITIES-

The cardiovascular health of youngsters can be improved by undertaking frequent physical activity. The student's general physical fitness improves and their chance of acquiring cardiovascular problems as an adult decreases when they engage in cardiovascular exercise, which strengthens their heart and lungs.



Figure 2- Physical fitness activities at Sarasbaug, Pune



Figure 3- Abs exercises at Sarasbaug, Pune

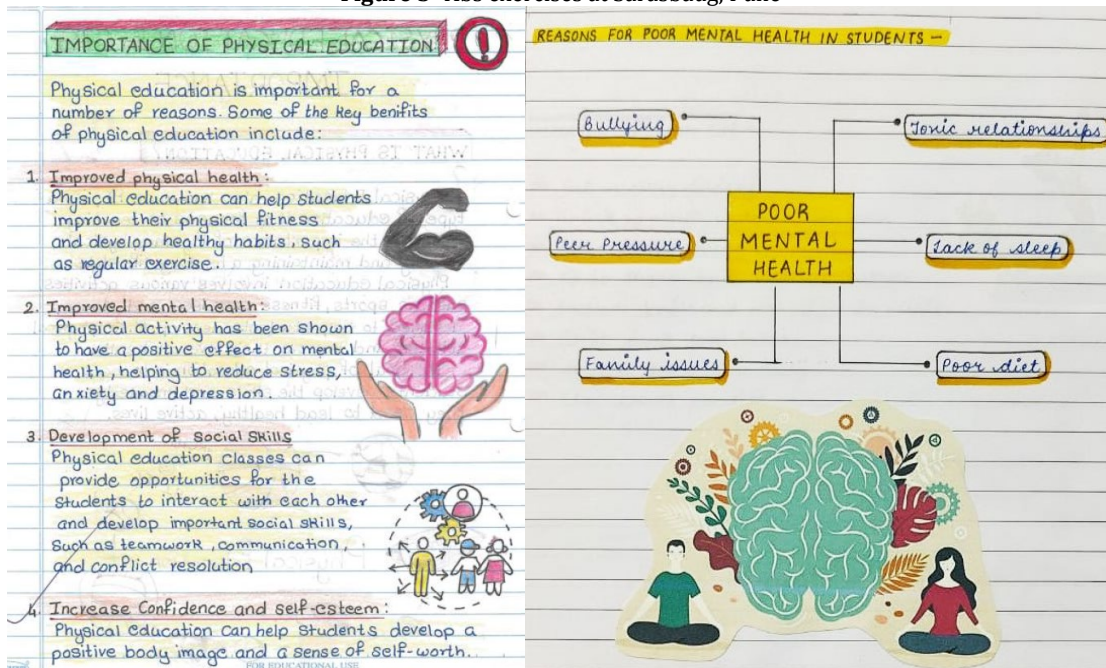


Figure 4- Image showing the student's work- Assignment 1 on Importance of exercise for students of architecture.

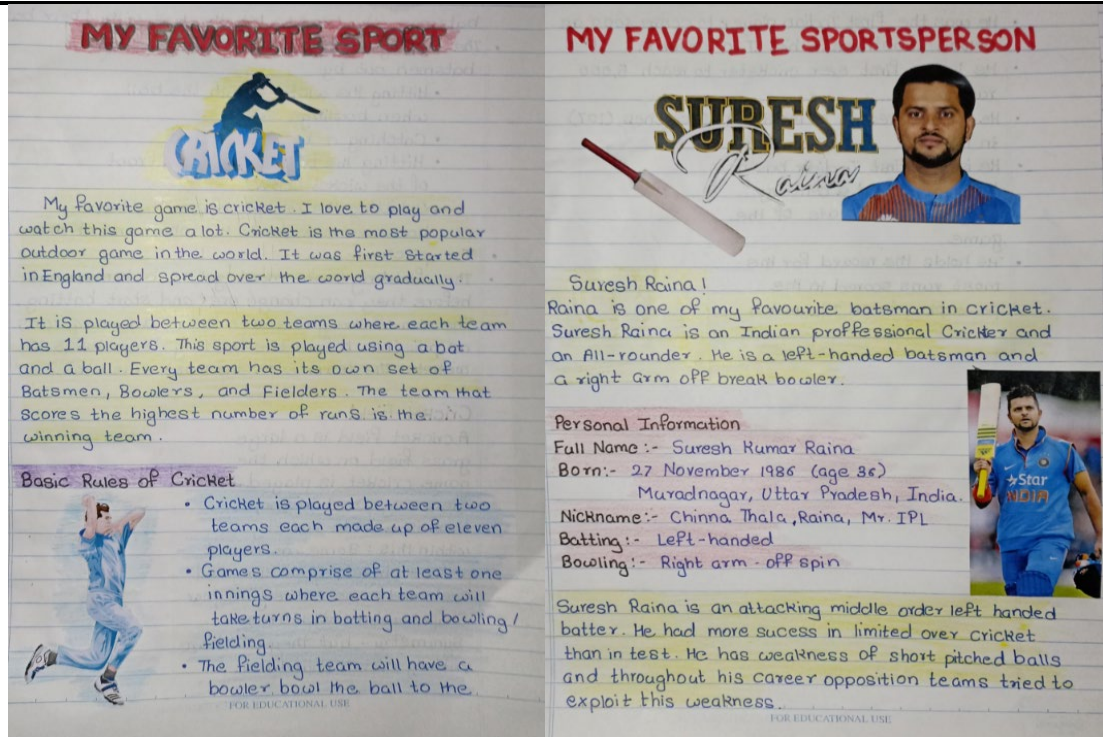


Figure 5- Image showing the student's work- Assignment 2 on Favourite Sports and sportsman.

4.2.2 MENTAL WELLNESS-

Meditation is an ancient practice with a long history. In its earliest forms, meditation served as a means of connecting with the mystical and holy aspects of existence. In today's world, meditation is the most common method for relieving stress and relaxing the mind.

1. Mantra meditation- In this type of meditation, you repeat a calming word, thought or phrase to keep out unwanted thoughts.



Figure 6- Mantra meditation (series of chanting 'Aum' (Om) ओम् (ॐ))

2. Mindfulness meditation- This type of meditation is based on being mindful. It means being more aware of the present. In mindfulness meditation, you focus on one thing, such as the flow of your breath. You can notice your thoughts and feelings. But let them pass without judging them.

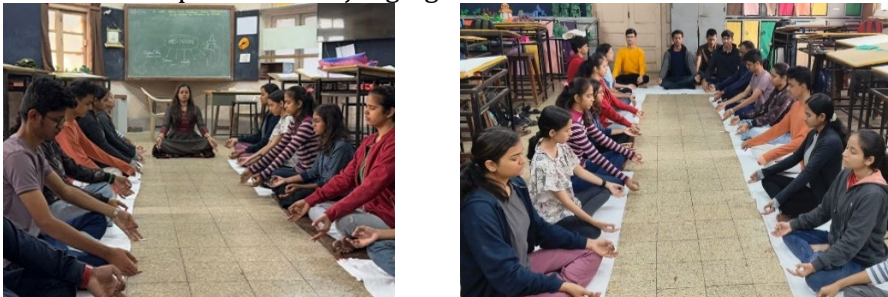


Figure 7- Mindfulness and guided meditation

3. Guided meditation- Also known as guided imagery or visualization, this meditation technique involves creating vivid mental images of calming places or scenarios to promote relaxation. The goal is to engage as many senses as

possible—sight, sound, smell, and touch—to enhance the experience. A guide or teacher often leads you through the process, helping you immerse fully in the mental imagery for a more profound sense of peace and relaxation.



Figure 8- Image showing the student's work- Assignment 3 on guided meditation

4. Yoga- A series of poses is executed while maintaining regulated respiration. This practice promotes enhanced physical flexibility and a state of tranquility in the mind. In order to perform the poses, it is essential to maintain a sense of balance and focus between your mind and body. This allows you to shift your attention away from your hectic schedule and fully embrace the present moment.



Figure 9- Students performing Suryanamaskar and meditation at Parvati, Pune

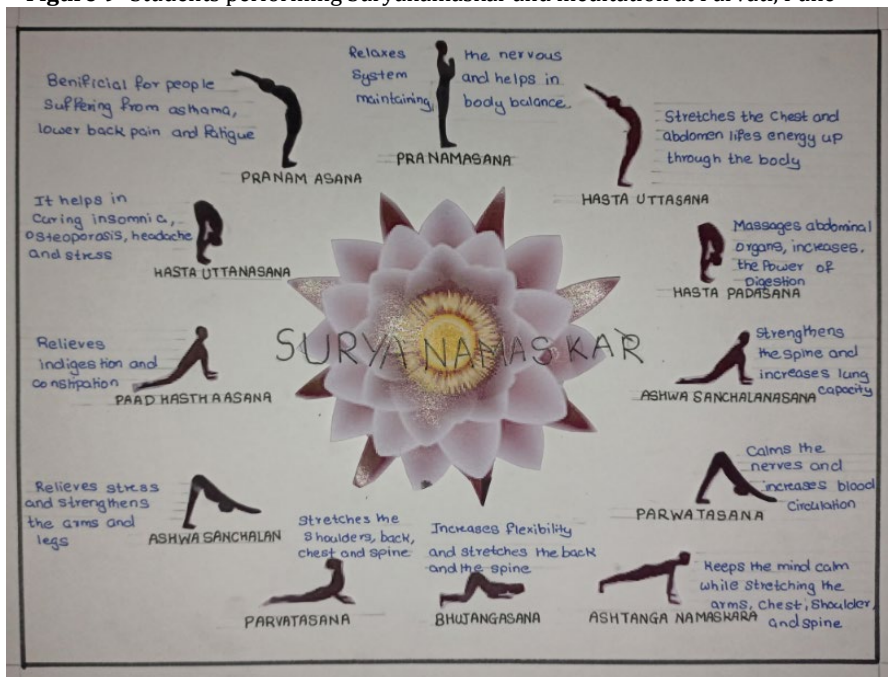


Figure 10- Image showing the student's work- Assignment 4 on Suryanamaskar poses.

4.2.3 CONNECT WITH NATURE THROUGH RELEVANT ACTIVITIES

Educating young minds about the environment, nature, and climate by linking it to the practice of architecture and designing rooms is an effective way of spreading awareness of climate responsive architecture. The students should be educated about the importance of maintaining a clean environment in order to preserve the traditions & culture of the community by cleaning heritage places, collecting the plastic waste and plantation of trees whenever required.

4.2.4 SOCIAL AND EMOTIONAL LEARNING (SEL)

SEL defines the process by which individuals acquire and implement a repertoire of social, emotional, and associated skills, attitudes, behaviours, and beliefs that facilitate students' social interactions. The interaction between the students and the people of various age groups help them to understand and implement experiential learning and daily good habits.



Figure 11- Students performing their activities in presence of regular visitors to the places.

5. CONCLUSION

As a result of the feedback and observations provided by the students, it would appear that the Physical Education exercises and assignments assisted them in feeling more comfortable and prepared for concentrating on all of the subjects that are included in the architecture curriculum. Additionally, this aids in achieving the level of excellence in the field of architecture curriculum.

6. ACKNOWLEDGMENT

The authors are thankful to the Principal of B. K. P. S. College of Architecture, Pune, Dr. Abhijit Natu for his timely guidance for writing the paper. The authors are also thankful to First Year B.Arch. students (Batch 2022-23 and 2023-24) of our college. The photographs produced here were taken during the Physical Education sessions by the authors. The physical activities and meditation sessions were conducted under the guidance of Ar. Gayatri Desai.

CONFLICT OF INTERESTS

None

ACKNOWLEDGMENTS

None

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