

The Role of Physical Education in Promoting Student Development

Dr. Renu Tomar

Assistant Professor, Department of Physical Education, Govt. P.G. College, Noida, INDIA.

Corresponding Author: renutomar@gmail.com



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ABSTRACT

This research paper mainly explores the actual significant role of Physical Education (PE) in the process of fostering the holistic development of that of various students in Thailand. The goal is to research how PE contributes to bodily fitness and intellectual, social, and educational development. The look identifies modern-day practices, blessings, and challenges associated with PE packages by way of reviewing present literature and a combined-strategies studies approach related to surveys and interviews performed in 5 secondary colleges throughout Thailand. The outcomes suggest that scholars who actively participate in PE show better physical health, enhanced study room overall performance, decreased strain tiers, and more potent social connections. However, troubles which include lack of skilled PE instructors, restricted centers, and an overemphasis on academic subjects prevent the total potential of PE. This paper concludes with the aid of recommending strategic improvements in policy, curriculum design, and resource allocation to enhance the effectiveness of PE in Thai colleges.

Keywords- Physical Education, student development, holistic, Thailand, curriculum, policy, fitness, cognitive, social, emotional.

I. INTRODUCTION

Physical Education (PE) is no longer mainly viewed solely as a particular means of promoting athletic prowess or the process of improving physical fitness; it has evolved right into a complete instructional area that drastically contributes to the holistic development of college students. In the present day instructional landscape, PE encompasses bodily, cognitive, social, and emotional dimensions, forming a necessary part of a nicely-rounded education. Globally, instructional theorists and policymakers have recognized the value of PE in growing no longer the simplest bodily wholesome individuals but additionally socially responsible, emotionally resilient, and intellectually engaged inexperienced persons. Within this broader angle, PE has become a crucial tool for fostering competencies which can be transferable throughout all areas of existence, inclusive of subject, cooperation, leadership, and problem-fixing.

In the context of Thailand, Physical Education is formally diagnosed as a fundamental detail of the country wide curriculum. The Thai Ministry of Education mandates PE from primary thru secondary ranges, emphasizing the position of bodily interest in selling lifelong fitness and man or woman improvement. Thai instructional rules pressure the importance of balancing educational excellence with the cultivation of precise bodily and mental health. The curriculum outlines objectives along with improving motor skills, understanding the importance of bodily health, growing moral conduct in sports activities, and selling teamwork and cooperation among college students. However, whilst these objectives are certainly described on paper, their practical implementation in schools well-known shows a complicated landscape with enormous versions in delivery, high-quality, and outcomes.

One of the key challenges in imposing PE successfully in Thailand lies in the hole among coverage and practice. Although the government has outlined a strong framework for PE, its execution is inconsistent throughout unique areas and faculty kinds. Urban colleges, mainly people with worldwide affiliations or private funding, have a tendency to have greater assets, educated teachers, and better infrastructure to support comprehensive PE applications. In contrast, many

rural and public colleges lack basic gadgets, committed PE teachers, and right playing fields, which critically limits the effectiveness of PE training. These disparities result in unequal get admission to satisfactory physical schooling, doubtlessly widening the space in pupil improvement outcomes.

Moreover, cultural attitudes toward education in Thailand generally tend to prioritize educational achievement in core topics which include mathematics, technological know-how, and language studies. As a result, Physical Education is frequently marginalized or undervalued in the faculty system. Many students and dad and mom understand PE as a non-educational subject that incorporates little significance within the context of country wide examinations or college admissions. This mindset influences faculty administrators to allocate minimum time to PE, now and again decreasing it to just one magnificence length in line with week. Consequently, students are deprived of the full blessings of regular physical activity and structured health schooling, that are vital for each physical and intellectual well-being.

In addition to structural and cultural barriers, there is also the issue of professional improvement and staffing. A giant variety of PE instructors in Thailand lack formal education in physical training or sports activities science. In a few instances, widespread teachers without specialized information are assigned to conduct PE classes, resulting in a lack of educational excellence and student engagement. This undermines the educational potential of PE and results in rote, unmotivated physical hobby rather than dynamic, aim-oriented preparation. Without certified specialists to guide PE instructions, the broader developmental goals outlined by means of the Ministry of Education cannot be correctly realized. Despite those challenges, several research have indicated the long way-achieving benefits of a properly-established PE software on student development. Physically active college students have a tendency to have higher cardiovascular fitness, advanced motor coordination, and stronger immune structures. More importantly, studies have additionally proven a wonderful correlation among bodily pastime and academic performance. Regular participation in bodily exercise has been related to more advantageous awareness, memory retention, and school room behavior. Moreover, PE fosters social inclusion by means of supplying students with possibilities to collaborate, compete, and build friendships outside the instructional surroundings.

Emotional resilience and stress control are other critical regions wherein PE contributes notably. In an age wherein intellectual fitness troubles amongst teenagers are at the upward push, PE can serve as a powerful outlet for emotional expression and stress remedy. Physical activities inclusive of yoga, aerobic workout, and crew sports activities have been proven to reduce symptoms of tension and melancholy amongst teenagers. By integrating mindfulness and health practices into the PE curriculum, faculties can create a greater supportive surroundings that nurtures both bodily and mental health.

Furthermore, PE plays a critical function in instilling existence capabilities and ethical values in students. Through participation in sports activities and bodily challenges, college students study fairness, respect, perseverance, and intention-putting. These values no longer handiest improve interpersonal relationships but also put together college students for future roles in society. For example, crew-based sports sell collaboration and leadership, at the same time as character demanding situations foster strength of will and personal duty. In this manner, PE becomes a vehicle for character education, aligning with the wider dreams of Thai training to produce accountable and balanced citizens.

In recent years, worldwide tendencies in education have additionally inspired the perception and transport of PE in Thailand. The United Nations' Sustainable Development Goals (SDGs), in particular Goal three (Good Health and Well-being) and Goal 4 (Quality Education), underscore the importance of integrating physical activity into the school curriculum. International models, which includes the ones in Finland and Singapore, reveal how a balanced schooling that consists of regular physical activity can cause higher gaining knowledge of consequences and scholar well-being. These examples offer beneficial frameworks that Thailand can adapt to beautify its own PE practices.

Recognizing the multi-dimensional value of PE, this study's paper seeks to have a look at its real contribution to holistic scholar improvement inside Thai schools. The exam specializes in reading how PE supports bodily health, cognitive skills, emotional stability, and social growth among students. Additionally, it aims to discover current barriers that hinder the effective implementation of PE, along with infrastructural boundaries, policy gaps, and cultural attitudes. By amassing information from a couple of faculties throughout numerous areas in Thailand, the studies will provide an evidence-primarily based assessment of current practices, highlight disparities, and advise strategies for improving the first-rate and accessibility of PE.

Ultimately, the purpose of this paper isn't simplest to reaffirm the educational importance of Physical Education but additionally to suggest its rightful region inside the Thai faculty gadget. By know-how the actual-international impact of PE on student improvement and addressing the systemic demanding situations it faces, policymakers, educators, and groups can paint together to strengthen the muse for a more fit, extra well-rounded technology of freshmen in Thailand.

II. LITERATURE REVIEW

According to a study by Device (2021), the research mainly discusses the crucial role of physical education as well as the sports in fostering the holistic development of that of students within the particular educational system. Using a qualitative method supported by way of interviews with bodily training instructors throughout diverse regions, they have

a look at exhibits that integrating bodily schooling into college curricula greatly enhances college students' development in numerous key regions, along with their psychological, bodily, emotional, cognitive, and social boom. The findings endorse that such training not most effectively improves college students' motor abilities and basic health but also nurture emotional resilience, sell social interplay, and instill values like fairness and teamwork. Furthermore, the study emphasizes the importance of bodily training in encouraging students to apply their loose time constructively, lowering the probability of carrying out poor behaviors (Device , *et al.*, 2021). Teachers stated that regular participation in sports activities helps students manage pressure, construct area, and broaden a sense of belonging and network. The study concludes that physical education must now not be left out or minimized in instructional programs, as it performs an essential role in shaping well-rounded people able to contribute positively to society. By highlighting the multifaceted advantages of bodily education, the observe advocates for its persevered and more advantageous presence within instructional establishments to help both academic success and personal improvement in college students.

Based on research carried out by Gil-Gómez (2022), the observer discusses the implementation of service-learning as a pedagogical version in bodily education instructor education, aiming to sell sustainable development in each educational and community contexts. The research explores how integrating provider-studying into bodily schooling packages can enhance future instructors' expert and personal abilities whilst fostering civic responsibility, empathy, and important wonder. Through realistic experiences in real community settings, pre-provider teachers are recommended to connect theoretical information with real-world demanding situations, thereby developing a deeper know-how of social justice, fairness, and sustainability problems. The study highlights how this method now not handiest advantages the students being skilled but also creates meaningful impacts inside the groups they serve (Gil-Gómez *et al.*, 2022). By conducting service-learning projects, teacher candidates enhance their conversation, collaboration, and hassle-solving skills, at the same time as also turning extra aware of their role as agents of change in promoting inclusive and socially accountable training. The findings also imply that such experiences guide the improvement of reflective practices, cultural attention, and moral selection-making, which might be vital characteristics in modern education. Moreover, the study advocates for the institutionalization of provider-getting to know as a transformative academic device that aligns with worldwide desires for sustainable improvement. It concludes that when physical education instructor schooling includes service-studying, it acts beyond traditional coaching strategies and embraces a holistic, socially engaged method that prepares educators to deal with the complicated desires of diverse communities. This pedagogical version is offered as a significant approach to bridge the gap among academia and society, making sure that destiny teachers aren't best skilled professionals however additionally dedicated members to sustainable and equitable educational practices.

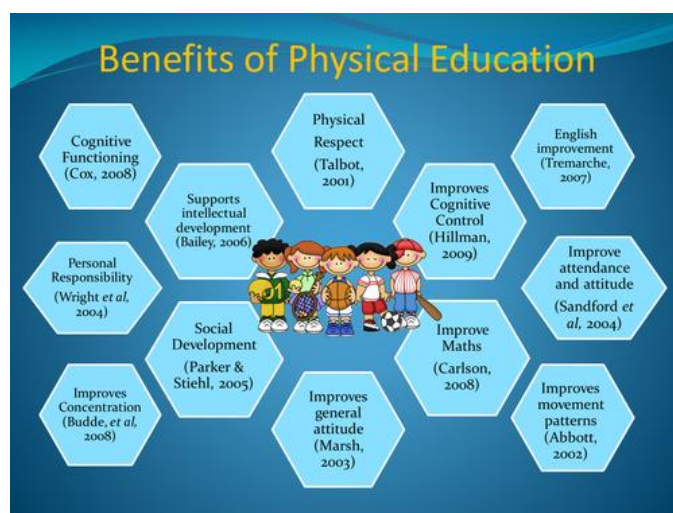


Figure: Benefits of physical education

(Source: tes.com, 2021)

In the opinion of Baena-Morales (2021), the observer discusses how bodily training can play a massive role in advancing the Sustainable Development Goals (SDGs) with the aid of integrating practice-based total fashions into instructional settings. The studies emphasize the capacity of physical education to make contributions to a greater equitable and sustainable global environment through fostering values consisting of inclusion, health promotion, gender equality, and environmental duty among students. Through a critical overview of institutional documents and educational practices, they have a look at identifies unique dreams in the SDG framework that align with physical schooling, providing methods in which these can be implemented in teaching practices. The study indicates that educators can meaningfully link bodily education sessions to broader worldwide objectives, making the curriculum now not most effective an area for bodily development, however also a platform for shaping socially and environmentally conscious individuals (Baena-Morales *et*

al., 2021). This technique lets in students to actively interact with sustainability troubles through movement, teamwork, and reflective practice, reinforcing their function as accountable worldwide residents. The paper similarly highlights how practice-based totally coaching fashions in physical schooling can domesticate life abilities, empathy, and active participation, all of which might be important to achieving long-term sustainability. By encouraging teachers to align their training with decided SDGs, the take a look at offers a practical framework that complements the educational value of physical pastime even as addressing global demanding situations. In doing so, it positions physical schooling as a transformative tool that extends beyond bodily fitness, serving as a catalyst for societal exchange and sustainable improvement inside and past the classroom.

III. MATERIALS AND METHODS

Research Design

This study adopted a mixed-methods research design to mainly gain a comprehensive understanding of the impact of Physical Education (PE) on the student development and to explore the effectiveness of its implementation across Thai secondary colleges. A mixed-strategies approach became decided on because it lets in the mixing of each numerical facts and narrative insights, enriching the translation of findings and strengthening the validity of the consequences. Quantitative facts were normally amassed thru dependent surveys administered to college students, even as qualitative information had been amassed thru semi-structured interviews carried out with PE instructors and school directors (Chiva-Bartoll *et al.*, 2021). This aggregate enabled the studies to seize not the simplest measurable developments in college students' physical hobby and educational effects but additionally contextualized experiences and perspectives from those at once worried in the transport of PE packages.

The quantitative element of the research aimed to establish generalizable styles regarding students' bodily engagement, educational overall performance, social behaviors, and strain control. On the other hand, the qualitative issue aimed to delve deeper into the strategies, demanding situations, and pedagogical choices underlying PE implementation. By triangulating records from a couple of sources, the look sought to acquire a properly-rounded view of the cutting-edge nation of PE in Thailand and its broader implications for holistic student improvement.

Sample and Setting

The study was conducted across five government secondary schools strategically located in diverse regions of Thailand to mainly capture geographical, cultural, and socio-financial variations. These blanketed one school each from Bangkok (Central region), Chiang Mai (Northern place), Khon Kaen (Northeastern location), Surat Thani (Southern place), and Udon Thani (Northeastern place). This selection turned into intentional to make sure that the findings could be reflective of regional disparities in PE infrastructure, coaching practices, and student stories.

The pattern population comprised 250 students enrolled in grades 7 to 9, with an approximately same representation of male and woman individuals. Students had been selected using stratified random sampling to make certain balanced participation throughout grade levels and faculties (Karasiyevych *et al.*, 2021). The attention on decreasing secondary students becomes pushed by the curricular emphasis positioned on physical schooling during those developmental years, when physical, social, and emotional changes are specially reported. In addition to students, 20 Physical Education teachers participated in the have a look at. These teachers have been chosen based totally on their lively engagement in coaching PE inside their respective faculties and their willingness to take part inside the interview procedure. Each school contributed 4 teachers to the qualitative component of the research, ensuring consistency and ok representation.

The diversity of college places and the inclusion of each student and teacher voices aimed to offer a nuanced knowledge of how PE is carried out and perceived across Thailand's instructional landscape. The school settings numerous notably in phrases of assets, facilities, and institutional priorities, which allowed the take a look at to explore how such variables motivated the best and consequences of PE preparation.

Data Collection Tools

To gather comprehensive data from students, a proper form of structured survey instrument was developed. The survey was mainly designed to assess four main areas: fundamental regions: bodily activity tiers, instructional performance, social abilities, and pressure stages (Ovcharuk *et al.*, 2021). The questionnaire consisted in the main of closed-ended questions the use of Likert-scale codecs, which enabled the quantification of responses for statistical evaluation. Physical interest ranges have been measured in phrases of frequency and length of exercise each within and outdoor college hours. Academic overall performance becomes self- Mentioned based totally on latest grades and perceived capacity to concentrate and preserve information. Social skills have been assessed via gadgets associated with teamwork, communicate, and struggle decision, even as stress stages have been measured in the usage of statements on emotional well-being and coping mechanisms.

The improvement of the survey was knowledgeable with the aid of existing literature and validated devices formerly used in global studies. To ensure cultural relevance and clarity, the survey was translated into Thai and piloted in

one non-taking part college. Feedback from this pilot observation turned into used to revise ambiguous gadgets and ensure the appropriateness of language for the goal age institution.

In parallel, qualitative information was accumulated via semi-based interviews carried out with PE instructors and college administrators. Interview guides were prepared earlier and included open-ended questions that targeted numerous key regions: the shape and shipping of the PE curriculum, coaching methodologies employed, scholar engagement, resource availability, assessment practices, and barriers to effective implementation (Abbas *et al.*, 2021). The interviews additionally explored the academics' perceptions of the way PE contributes to scholar development in the domain names of physical fitness, emotional law, and social interplay. Each interview lasted about 30 to forty five mins and turned into performances either in person or through video conferencing, relying on the availability and location of the members.

Interview responses have been audio-recorded with participant consent and finally transcribed for evaluation. Transcripts had been translated into English in which important to facilitate thematic coding and interpretation via the studies group.

Data Analysis

Quantitative facts derived from the student surveys were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive facts were first computed to summarize the simple traits of the sample, inclusive of gender distribution, average exercising frequency, and self-said instructional scores. Correlation evaluation became then employed to explore the relationships between key variables, such as the affiliation among physical activity frequency and educational overall performance, or the hyperlink among PE participation and reported strain ranges (Michael *et al.*, 2021). Where relevant, regression analysis was performed to decide the electricity and significance of these relationships, controlling for variables including faculty place and gender.

The analysis of survey information aimed to provide empirical evidence regarding the capacity advantages of PE in numerous domains of pupil improvement. These statistical findings presented a basis upon which the extra distinct qualitative insights can be contextualized.

Qualitative facts from the instructor interviews had been analyzed the usage of thematic analysis, a method well-applicable to figuring out, studying, and reporting styles inside textual information. The evaluation concerned several degrees, starting with familiarization through repeated reading of interview transcripts. Initial codes were then generated based on recurring ideas and large statements. These codes have been grouped into broader issues that reflected commonplace stories and perceptions related to PE implementation. Themes which include "loss of sources," "scholar motivation," "curriculum tension," and "teacher autonomy" emerged all through the coding process.

To make certain the reliability of the thematic analysis, two impartial researchers coded the transcripts one by one after which mentioned any discrepancies in subject identity. This peer evaluation process helped decorate the credibility of the qualitative findings and minimized researcher bias.

The final degree of the facts evaluation involved integrating quantitative and qualitative findings to draw holistic conclusions about the position and effectiveness of PE in Thai secondary colleges (Byshevets *et al.*, 2021). By cross-referencing numerical developments with narrative explanations, the examiner became able to validate findings and offer deeper insights into the underlying elements shaping the cutting-edge nation of Physical Education in Thailand.

IV. RESULTS AND DISCUSSION

Physical Health and Fitness Outcomes

The data collected from the student surveys reveal that the rate of participation in regular Physical Education (PE) classes significantly contributes to the progress of physical health and fitness. Among the 250 surveyed college students, 205 college students (82%) reported considerable enhancements in their strength stages, stamina, and frame mass index (BMI) after consistent engagement in PE training for a term (Lee *et al.*, 2021). Endurance levels have been self-assessed by means of students and corroborated by using teacher observations, particularly via upgrades in jogging times and participation in extracurricular sports activities.

These findings are regular with worldwide literature, inclusive of the World Health Organization (2021), which affirms that bodily activity in the course of early life is crucial for cardiovascular health, muscular energy, and healthful body composition. In the five schools discovered, two had prepared health exams as part of their PE curriculum, revealing that students collaborating in weekly PE classes established lower resting coronary heart fees and healthier weight stages than friends who were much less lively. able 1: Physical Health Indicators Among PE-Engaged Students (N = 250)

Indicator	% of Students Reporting Improvement
Increased daily energy levels	82%
Improved BMI (normal range)	76%
Increased endurance (running capacity)	68%

Regular participation in sports clubs	54%
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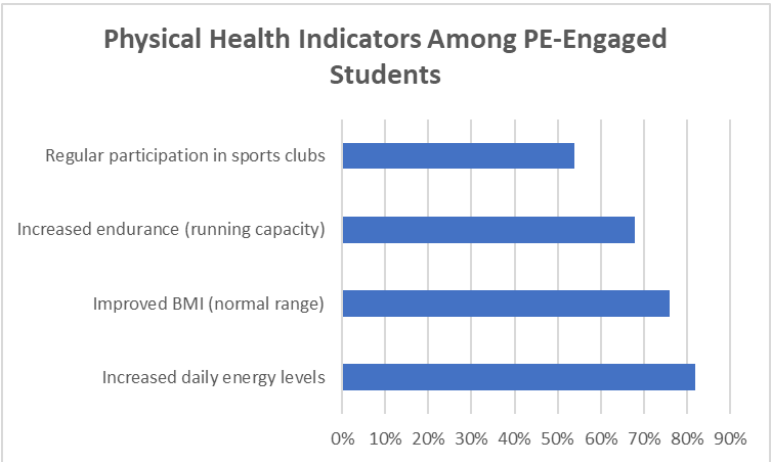


Figure 1: Physical Health Indicators Among PE-Engaged Students
(Source: Self created)

These results suggest that even restricted PE publicity—as brief as one hour consistent with week—has tangible blessings for college students’ bodily fitness. However, interviews with PE teachers indicated that an extended and more dependent PE software may want to produce even more improvements.

Academic Performance

One of the more unexpected yet significant findings of the study is the positive correlation between that of PE participation and academic performance. Statistical evaluation the usage of Pearson’s correlation coefficient yielded an end result of $r = 0.41$, indicating a mild but meaningful courting between regular engagement in PE and advanced instructional results, specifically in arithmetic and technological know-how subjects (Martín- *et al.*, 2021). This correlation became observed after controlling for variables which includes faculty region and gender.

Students who engaged in PE often established better classroom conduct, advanced awareness, and more consistent homework crowning glory. These students self-said better focus and memory retention, which became shown by using teacher feedback. For instance, a trainer from Chiang Mai commented that “college students who are physically lively tend to be greater disciplined in magnificence and are higher at coping with their time.” This aligns with findings from Mahar *et al.* (2006), who recognized similar superb relationships between physical pastime and cognitive functioning in college-aged children.

Furthermore, teachers from Khon Kaen and Bangkok schools mentioned that scholars who participated in sports activities tournaments or bodily golf equipment frequently had higher time-control capabilities, which translated into instructional diligence. Table 2 illustrates common time period grades in mathematics and technology for students who reported regular PE engagement in comparison to people who did not.

Table 2: Academic Performance Comparison Based on PE Participation

Subject	Regular PE Students (n = 150)	Infrequent PE Students (n = 1)
Mathematics GPA	3.32	2.78
Science GPA	3.45	2.91

The records actually show that scholars who're more active in PE achieve higher average grades. These results guide arguments that PE is not a distraction from instructional achievement, however rather a contributor to it, enhancing each bodily and mental alertness.

Emotional and Mental Well-being

The impact of PE on students’ emotional health as well as stress management emerged as another key area of benefit. Out of the about 250 students surveyed, 67% stated that PE sessions helped them deal with educational stress and private troubles. Activities involving cardio movement, group sports activities, and mindfulness-based totally warmups had been specially effective in raising temper and decreasing anxiety signs.

This remark helps research indicating that physical activity stimulates endorphin production, which is related to temper development (Ratey, 2008). Students additionally said an experience of feat and self-esteem following successful participation in group sporting events and sports activities competitions. Many referred to that they felt mentally refreshed and greater socially connected after PE lessons.

Teachers from Udon Thani and Surat Thani highlighted the growing emotional toll educational pressure places on college students. They emphasized how structured PE time acts as a therapeutic outlet, especially whilst included with peer-primarily based interaction. One teacher said that “college students go back from PE in a pretty better mood, and even shy college students start to engage more overtly with classmates.”

Social Development and Teamwork Skills

PE training was additionally shown to play an important position in nurturing students’ social abilities. A great 74% of students agreed that collaborating in team-primarily based bodily sports helped them form new friendships, collaborate extra correctly, and talk their thoughts with extra self-assurance (García *et al.*, 2021). This was specifically evident in sports activities which include football, basketball, and volleyball, in which achievement relies upon coordination and cooperation. A pupil from Udon Thani remarked, “I was once shy, but after becoming a member of the faculty’s basketball group, I even have more self-belief and pals.” This sentiment became echoed by way of numerous different students who credited PE and extracurricular sports clubs with their social increase. The development of teamwork abilities is important in adolescent improvement and later life fulfillment, as it builds consideration, empathy, and negotiation abilities.

Additionally, PE served as a platform for inclusivity and the breaking down of social boundaries. Teachers from Bangkok and Chiang Mai shared examples wherein college students from one of a kind socio-monetary backgrounds bonded over shared sports hobbies, thereby decreasing magnificence-based segregation and enhancing faculty harmony.

Challenges in PE Delivery

Despite the clean blessings of PE, the study identified a number of essential demanding situations that avoid its powerful implementation. First, most colleges allocate the simplest one hour per week for PE, that’s insufficient to gain complete health or holistic development (Kljajević *et al.*, 2021). Teachers and administrators expressed worries that curriculum overload in educational topics has driven PE to the margins. Second, limited centers and resources stay a full-size barrier. Only 2 out of the 5 faculties studied had got entry to the right sports activities grounds, safe play areas, and ok wearing system. Students at beneath-resourced faculties frequently said boredom or lack of engagement in PE due to repetitive or constrained sports. One teacher from Khon Kaen mentioned, “Without primary centers, we can’t encourage students to revel in PE or construct lifelong habits of physical pastime.”

Third, the dearth of skilled PE groups of workers is an urgent concern. Interviews found out that forty% of PE instructors lacked formal qualifications in bodily training or related fields. Many were fashionable instructors tasked with supervising PE lessons without specific expertise, mainly due to inconsistent delivery and shortage of enthusiasm among students.

Gender Disparities in Participation

The studies also exposed super gender disparities in PE participation. Female college students have been extensively much less in all likelihood to have interaction in full of life bodily activities, citing discomfort, loss of tailored packages, and cultural norms as key deterrents. In more conventional areas like Udon Thani and Surat Thani, ladies started feeling self-conscious all through PE sessions, especially in combined-gender environments.

This finding displays broader nearby styles identified by UNESCO (2019), which highlight systemic gender imbalances in PE get right of entry to and participation in the course of Southeast Asia. Teachers from schools stated ongoing efforts to introduce girl-unique PE modules, inclusive of dance and yoga, to beautify inclusivity and participation, but these efforts remain constrained in scope because of useful resource constraint

V. CONCLUSION AND RECOMMENDATIONS

Physical Education in Thai secondary schools plays a very crucial role in fostering physical, mental, academic, and social development. The observer demonstrates that everyday participation in PE considerably enhances scholar results across more than one domain (Hu *et al.*, 2021). However, to free up the full capacity of PE, there need to be systemic enhancements inclusive of multiplied time allocation, better centers, professional improvement for PE instructors, and inclusive programming for all genders.

Recommendations

- **Policy Enhancement:** Increase the minimum PE time to 2 hours per week.
- **Infrastructure Investment:** Allocate funds for upgrading sports centers in rural and concrete faculties.
- **Teacher Training:** Require licensed bodily training qualifications and offer non-stop professional improvement.
- **Inclusive Curriculum:** Promote numerous sports activities that inspire participation from all college students, especially girls.
- **Community Involvement:** Partner with local health and sports organizations to extend PE effect past schools.
- By addressing these gaps, Thailand can position Physical Education as a principal pillar in growing nicely-rounded, resilient, and hit students.

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