



## The Importance of Lifestyle Physical Activity for Thai School Students

Kritchapol Arsapakdee<sup>1,2\*</sup>, Sirichai Sriprom<sup>2</sup>

<sup>1</sup>Rajabhat Mahasarakham University, Thailand

<sup>2</sup>Kasetsart University, Thailand

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### Abstract

Lifestyle physical activity in adolescence improve the level of physical activity and movement that young individuals engage in as part of their daily routines and activities outside of structured exercise or organized sports. It encompasses the everyday activities that adolescents do, such as walking, biking, playing. Physical fitness is essential for all ages, but it is significant for adolescence and children. A fit body can lead to a healthy mind and body, so it is important to make lifestyle physical activity a regular part of your life. Adolescence who are physically fit are less likely to suffer from obesity or other chronic health conditions, and they are also more likely to have better mental health. Physically active adolescence has been shown to have better academic performance and social skills. By encouraging your adolescence to be physically active, you set them up for a healthy and happy life, as lifestyle physical activity helps to improve focus and concentration. Being physically fit and well-being can also boost self-esteem and confidence, adolescence learn to appreciate their bodies and what they can do. In addition, PA changes over several transitional periods, including during the COVID-19 pandemic. In many settings, a low level of PA among children occurs as a result of adults' poor understanding of biological and environmental changes. By understanding the timing and period of the decline or increase in PA, the school, family, and home community can create more opportunities to incorporate PA into a child's daily life. The Thai government and policy makers can also use the results of this study as evidence in refining their strategies and designing appropriate interventions to improve PA of Thai adolescence people and prevent or delay the onset of non-communicable diseases (NCD) of the population in the long run.

\*Correspondence Author:  
E-mail: [nakrit.k1996@gmail.com](mailto:nakrit.k1996@gmail.com)

## INTRODUCTION

Lifestyle physical activity (LPA) is an important element of public health, and the benefits of an active lifestyle together with its effects on human health have been strongly emphasized around the world. The scientific evidence supporting the importance of LPA for health and well-being has been extensively documented important component of a healthy lifestyle for young people. However, an estimated 80% of adolescents globally are insufficiently active. Traditionally, health benefits were attributed only to physical activity of at least moderate intensity, and recommendations focused on achieving a threshold of moderate-to-vigorous physical activity, without consideration of other aspects of movement within the 24 h cycle. Recently, the overall daily balance of active and sedentary behaviours has gained recognition as an important determinant of health (Van Tuyckom, C., & Scheerder, J, 2010; Garber CE et al., 2011; Fontaine KR et al, 2011).

Lifestyle physical activity is a behavior that is broadly defined as any bodily movement produced by the contraction of muscles that substantially increases energy expenditure. This type of behaviour can be accumulated during one's daily routine by participating in 30 or more minutes of self-selected physical activities. This can include leisure activities such as a nice walk in the park, occupational work such as walking to a co-worker's desk rather than sending an email, transportation such as riding a bicycle to the store, gardening or even household chores such as vacuuming (Motl, R. W, 2014). For adolescence refers to the level of physical activity and movement that young individuals engage in as part of their daily routines and activities outside of structured exercise or organized sports. It encompasses the everyday activities that adolescents do, such as walking, biking, playing, and recreational activities that contribute to their overall physical fitness and well-being as it plays a significant role in the physical, mental, and emotional development of teenagers. It helps in maintaining a healthy weight, building strong bones and muscles, improving cardiovascular health, and reducing the risk of chronic diseases, reduce symptoms of anxiety and depression, and reduce the risk of developing health conditions such as: Heart disease, Cancer, Type 2 diabetes, High blood pressure, Osteoporosis and Obesity. Adolescence is a period of rapid growth and development, and engaging in regular physical activity can have a profound impact on a teenager's overall well-being, reduce the degree of anxiety and depression of teenagers, relieve tension, promote interpersonal relations, improve self-esteem and self-confidence, and promote the level of mental health. Here are some key reasons why physical activity is important during adolescence: (van Sluijs, E. M., et al., 2021; DiPietro, L. et al., 2019; Kumar, B., et al, 2015; Guo, Z., & Zhang, Y, 2022).

Regular physical activity (PA) is critical for children's physical and mental health. Despite its importance, less than one-quarter (24%) of children aged 6 to 17 meet the recommended 60 minutes of physical activity daily. In 2017, only 26.1% of high school students engaged in PA for 60 minutes on all seven days of the previous week, while just over half (51.1%) participated in muscle-strengthening exercises on at least three days (Merlo, 2020; CDC, 2011). Even more concerning is that only 29.9% of students attended daily physical education (PE) classes during the same year, emphasizing a need for improvement in youth PA participation.

In Thailand, physical inactivity among youth is equally concerning. To address this, the Physical Activity Promotional Plan for Children and Youth (2023–2030) was developed, complementing the national Physical Activity Plan 2018–2030. This promotional plan, along with its action plan, outlines six strategies (EMPACT) focusing on educational settings, family support, policy backing, academic involvement, community support, and technology integration. These strategies aim to bridge gaps in existing policies, emphasizing early intervention in childhood physical activity (Amornsriwatanakul et al., 2023).

Despite the development of such comprehensive plans, a gap persists in translating policy into concrete action to improve PA levels in children and youth. Furthermore, existing strategies may lack the multi-sectoral collaboration necessary to significantly boost PA participation in educational and social environments. Thus, a more robust, targeted approach is required to address these shortcomings and ensure the effectiveness of PA promotion efforts in schools, families, and communities.

This study aims to bridge the gap by exploring factors that influence physical activity (PA) participation among school students, utilizing a social ecological framework. It examines how self-efficacy, social environmental factors (such as support from parents, peers, and teachers), and physical environmental factors (including access to equipment and neighborhood safety) affect PA engagement. The findings will help design interventions that better promote physical activity in youth. School PE programs are critical in preparing children for lifelong physical activity, focusing on physical fitness,

health, and overall well-being. These programs include structured curricula that evolve with students, covering a variety of activities like team sports, fitness exercises, and health education. Inclusivity is a key component, allowing students of all fitness levels to participate safely. PE teachers, certified to provide age-appropriate activities, often incorporate fitness assessments to track progress. Schools are equipped with the necessary facilities and technology to support these activities. Comprehensive programs go beyond regular PE classes, encouraging daily physical activity through recess, classroom breaks, and after-school sports, aligning with school wellness policies and national guidelines. The collaboration of parents and the community is essential in fostering a healthy, active environment that benefits both physical and academic outcomes.

## **METHODS**

The purpose of this literature review was to synthesize existing research on the importance of lifestyle physical activity (LPA) for Thai school students. To conduct this review, a systematic approach was used to identify, evaluate, and synthesize relevant studies that address physical activity levels, benefits of LPA, barriers to activity, and intervention strategies among school-aged children in Thailand.

### **Literature Search Strategy**

The search for literature was conducted across multiple academic databases, including PubMed, Google Scholar, Scopus, and the Thai Journal Citation Index (TCI). The search terms were chosen to capture the key aspects of LPA and school-based physical activity interventions in Thailand. Specific keywords and phrases included: “Lifestyle physical activity AND Thai school students”; “Physical activity interventions in Thai schools”; “Physical education AND Thailand”; “Adolescent physical activity Thailand”; “School wellness programs Thailand”

Searches were filtered to include only peer-reviewed articles, reports, and theses published between 2010 and 2023. Studies in both English and Thai languages were included to ensure comprehensive coverage of the topic. Articles that focused on children and adolescents between the ages of 6 and 17 were prioritized, as they align with the school-going population in Thailand.

### **Inclusion and Exclusion Criteria**

To ensure relevance to the topic, inclusion and exclusion criteria were established:

**Inclusion Criteria:** Studies focused on LPA and its importance for school-aged children. Research conducted specifically in Thailand or involving Thai populations. Articles that provided evidence on physical, mental, and social health benefits of LPA for students. Studies that examined barriers to physical activity or intervention strategies in school settings.

**Exclusion Criteria:** Studies focusing on adult populations or those unrelated to school students.

Research that did not include empirical data or evidence-based analysis. Articles published before 2010, unless deemed foundational to the topic.

### **Critical Appraisal**

Each study was critically appraised to assess its methodological quality. This included evaluating the appropriateness of the research design, the validity and reliability of the data collection instruments, and the rigor of the analysis. Special attention was paid to studies that utilized robust methodologies.

### **Synthesis of Findings**

The synthesis process involved comparing and contrasting the findings from the different studies. Common themes were identified, such as the positive correlation between LPA and academic performance, the role of physical education programs in fostering PA, and the importance of supportive environments (e.g., safe neighborhoods, school facilities). The barriers to LPA, such as lack of time, resources, or family support, were also discussed.

### **Discussion and Interpretation**

The findings from the literature review were discussed in relation to existing theories and models of physical activity promotion, such as the Social Ecological Model. The review aimed to contextualize the importance of LPA within the unique social and cultural environment of Thai schools. Recommendations for future interventions, policy changes, and school programs were based on the

synthesis of the literature.

## RESULTS AND DISCUSSION

### Literature Review Findings

Through the systematic search of databases and manual searches, a total of **25 articles** were identified as directly relevant to the topic of Lifestyle Physical Activity (LPA) among Thai school students. These articles were selected based on their focus on physical activity participation, the benefits of LPA, barriers to activity, and intervention strategies in Thailand. The key themes derived from the literature were categorized into four primary areas for discussion:

#### *Physical Health Benefits of LPA*

10 studies focused on the physical health outcomes of LPA, showing positive impacts such as weight management, reduced risk of chronic diseases, and improved cardiovascular fitness.

One prominent finding was that LPA, even at moderate levels, contributed to improved metabolic health in students, reducing risks associated with obesity, diabetes, and hypertension (Kumar et al., 2015).

#### *Mental and Emotional Benefits of LPA*

7 articles highlighted the mental and emotional benefits of physical activity in adolescents, including reduced symptoms of anxiety and depression, improved self-esteem, and enhanced social relationships (Guo & Zhang, 2022; Motl, 2014).

Thai students participating in LPA were found to have lower stress levels, particularly when engaged in outdoor activities such as biking and walking (Amornsriwatanakul et al., 2023).

#### *Barriers to LPA Participation*

5 articles specifically examined barriers to physical activity, such as lack of infrastructure, safety concerns in neighborhoods, and academic pressures that limited time for exercise (Van Tuyckom & Scheerder, 2010).

Cultural factors also played a role in limiting LPA among Thai students, with traditional academic focus often overshadowing the importance of physical activity (Garber et al., 2011).

#### *Intervention Strategies in Thai Schools*

3 articles discussed interventions aimed at increasing LPA participation, including school-based physical education programs, community support initiatives, and family involvement (Merlo, 2020).

Successful interventions often incorporated technology (e.g., fitness trackers) to motivate students and encourage daily movement (Amornsriwatanakul et al., 2023).

### Discussion: Indicators of Analysis

The discussion of these findings is structured around key indicators derived from the literature, with a focus on understanding the factors influencing LPA participation and its impacts on Thai school students.

#### *Physical Health Indicators*

The literature overwhelmingly indicated that regular LPA had significant physical health benefits for students. Indicators of success included improvements in:

**Body Mass Index (BMI):** Many studies noted reductions in BMI among students engaged in daily LPA activities (Kumar et al., 2015).

**Cardiovascular Health:** Increased cardiovascular endurance and improved blood pressure levels were consistently reported as outcomes of regular physical activity (Garber et al., 2011).

These findings align with global trends, indicating that moderate-to-vigorous physical activity is essential for maintaining healthy body composition and reducing the risk of lifestyle diseases.

#### *Mental and Emotional Health Indicators*

Several articles provided compelling evidence of the role of LPA in improving mental health among students. Key indicators included:

**Reduced Anxiety and Depression:** Engaging in regular physical activity was found to lower

levels of anxiety and depression in adolescents (Guo & Zhang, 2022).

**Enhanced Social Skills and Self-Esteem:** Social interaction through physical activity, especially in team sports or group activities, contributed to increased self-confidence and improved peer relationships (Motl, 2014).

In the context of Thai students, LPA played a vital role in helping students manage academic stress and build positive mental health habits.

#### ***Barriers to LPA Participation***

The most common barriers to LPA participation included:

**Time Constraints:** Students often cited academic workloads as a primary reason for not engaging in LPA (Van Tuyckom & Scheerder, 2010).

**Safety Concerns:** In urban areas, lack of safe spaces for outdoor activities was frequently mentioned as a deterrent to participation (Završnik, J et al., 2019).

**Cultural Barriers:** Traditional academic focus and a lack of emphasis on physical activity in schools were also identified as key factors limiting participation (Amornsriwatanakul et al., 2023).

Addressing these barriers requires a multi-sectoral approach that involves schools, parents, and local governments in creating environments that support active lifestyles.

#### ***Intervention Effectiveness Indicators***

Successful interventions were those that involved:

**Community and Family Support:** Programs that involved parents and community members in promoting LPA saw higher levels of student participation (Amornsriwatanakul et al., 2023).

**School-Based Programs:** Schools that integrated daily LPA into their curricula, beyond traditional physical education classes, demonstrated better health outcomes for students (Merlo, 2020).

**Use of Technology:** Fitness tracking devices and digital tools were effective in motivating students to engage in daily LPA, particularly when combined with goal-setting activities (Kumar et al., 2015).

These findings suggest that successful interventions are those that are multifaceted and integrated into the students' broader social environments.

#### ***Implications for Policy and Practice***

The evidence from the reviewed literature supports the argument that promoting LPA among Thai school students is crucial for both their physical and mental well-being. However, overcoming barriers such as time constraints, safety concerns, and cultural norms requires targeted interventions that involve multiple stakeholders, including schools, families, and communities.

Based on these findings, several recommendations can be made:

**Policy Recommendations:** The Thai government should strengthen policies that mandate daily LPA in schools and invest in safe public spaces for physical activity.

**School Programs:** Schools should adopt comprehensive physical activity programs that go beyond traditional PE, incorporating recess, after-school activities, and community engagement.

**Parental Involvement:** Families should be encouraged to participate in LPA with their children, promoting active lifestyles at home.

## **CONCLUSION**

This literature review highlighted the significant benefits of LPA for Thai school students and identified key barriers that need to be addressed to improve participation rates. With collaborative efforts from schools, families, and policymakers, it is possible to foster a culture of physical activity that will benefit the health and well-being of the younger generation.

Lifestyle physical activity is crucial for the well-being and development of Thai school students, as it offers a wide range of physical, mental, and social benefits. To promote lifestyle physical activity among Thai school students, it is essential to integrate physical education programs, extra-curricular activities, and community initiatives that encourage active living and holistic development. This approach will contribute to creating a generation of physically and mentally resilient individuals.

In conclusion, integrating physical education and psychomotor skill development in early years and primary schools creates a positive impact that extends far beyond the physical realm, shaping well-rounded individuals with enhanced cognitive, emotional, and social capabilities. Promoting phy-



sical activity, a physical activity promotion program, that will sustain adolescents' PA and PF, needs to be developed and implemented throughout Thailand. A method needs to be built in the program that will provide a boost to those participating in such a program, so as to enhance goal setting of doing physical activity weekly to maintain one's physical health and physical fitness. In addition, a longitudinal study, lasting one to two years, with repeated follow-ups, needs to be carried out to further evaluate the effectiveness of the physical activity promotion program.

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