
Implementation of Daily Physical Activity (DPA) in Indonesian Elementary Schools: Challenges and Opportunities

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ABSTRACT

Despite established evidence supporting the benefits of physical activity for children's development, Indonesian elementary schools face significant challenges in implementing effective Daily Physical Activity (DPA) programs. This paper examines the implementation of DPA in Indonesian elementary schools through a comprehensive literature review and qualitative analysis of policy documents, academic research, and case studies. Research reveals that limited resources, insufficient systemic support, and increasingly sedentary lifestyles among students present major obstacles to DPA implementation. However, opportunities exist through government health policies, teacher innovation, community partnerships, and technology integration. The study proposes strategic interventions including enhanced teacher training, curriculum integration of physical activities, incentive systems, supportive school environment design, and multi-stakeholder partnerships. Findings indicate that successful DPA implementation requires coordinated efforts among schools, families, communities, and government to create sustainable programs that increase student physical activity beyond formal physical education classes. This research contributes valuable insights for education policymakers and practitioners seeking to improve children's health outcomes through school-based physical activity initiatives.

Keywords: Daily Physical Activity, elementary education, physical health, Indonesian schools, educational policy, curriculum integration



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1. INTRODUCTION

Physical activity is a crucial element in supporting the health and development of children, especially during their elementary school years. Children who are physically active tend to have healthier bodies, stable mental well-being, and better social and academic abilities. However, global and local data indicate a decline in children's physical activity over recent decades. Sedentary lifestyles, a lack of awareness regarding the importance of physical activity, and limited access to sports facilities are key factors contributing to this phenomenon. In Indonesia, this challenge is becoming increasingly evident as many elementary schools are still unable to meet daily physical activity recommendations for students.

Daily Physical Activity (DPA), or daily physical activity programs, aim to ensure that every child receives an adequate amount of physical activity each day. In the educational context, the implementation of DPA is not limited to formal physical education, sports, and health (PJOK) classes but also includes physical activities outside formal lesson hours. This program has been successfully implemented in several countries, such as Canada, with positive results in improving children's quality of life. However, in Indonesia, the implementation of DPA still faces various challenges, ranging from limited resources to insufficient systemic support from the government and society.

This article aims to provide an overview of the implementation of DPA in Indonesian elementary schools, focusing on the existing challenges and opportunities. Through a literature review and analysis, this article highlights strategies that can be used to increase students' physical activity outside PJOK lessons

1.1. The Importance of Physical Activity for Elementary School-Age Children

Physical activity has a significant impact on the physical, psychological, and social development of children (Oral et al., 2024). Physically, regular physical activity can enhance physical fitness, strengthen muscles and bones, and improve blood circulation (Salerno et al., 2025). Additionally, physical activity helps prevent chronic degenerative diseases such as obesity, diabetes, and heart disease, which are increasingly common among children due to unhealthy lifestyles (Gao et al., 2022).

On the other hand, the psychological benefits of physical activity are equally important. Research shows that children who are physically active tend to experience lower stress levels, higher self-esteem, and better cognitive abilities (Tambalis, 2022). Physical activity also plays a critical role in developing social skills such as cooperation, communication, and sportsmanship (Misriandi & Susanto, 2024). The combination of these benefits makes physical activity one of the main components in shaping character and improving children's quality of life.

Despite its proven benefits, many children in Indonesia still experience a deficit in physical activity. According to (Chagas, 2024), sedentary lifestyles caused by excessive technology use, limited sports facilities, and a lack of awareness among parents and teachers are the primary causes of low physical activity levels among children. Therefore, the implementation of DPA programs in elementary schools becomes highly relevant to address this issue.

1.2. The Concept of Daily Physical Activity (DPA)

Daily Physical Activity (DPA) is a program that requires every student to engage in physical activity for at least 30–90 minutes daily. This program was first introduced in Alberta, Canada, in 2004 through a policy mandating all students in grades 1 to 9 to participate in physical activity for a minimum of 30 minutes per day during school-organized activities (Stearns et al., 2021). DPA is not limited to formal sports activities but also includes light physical activities such as walking, playing, or even cleaning the school environment. The primary goal of DPA is to help students develop an active and healthy lifestyle. Unlike formal sports activities, which are usually conducted within limited timeframes, DPA is designed to integrate into students' daily routines, ensuring they remain active even outside PJOK lessons. Some key principles in implementing DPA include:

- Varied activities: To prevent boredom, DPA activities should be designed with engaging variations.
- Consideration of individual abilities: Each student has different physical capabilities, so DPA activities should be flexible and adaptable to each student's condition.
- Utilization of local resources: Schools can leverage available facilities in the surrounding environment to support DPA implementation.
- Active student participation: Students should be given the opportunity to choose activities they enjoy, motivating them to participate more actively.

According to (Esteban-Cornejo et al., 2022), DPA also positively impacts students' academic performance. Physically active children tend to be more focused, creative, and ready to learn compared to those who are less active. Therefore, the implementation of DPA is not only beneficial for physical health but can also enhance the overall quality of education.

1.3. Implementation of DPA in Indonesia: Challenges and Opportunities

Challenges

The implementation of DPA in Indonesia faces several challenges that need to be addressed. First, limited resources are a major obstacle. Many elementary schools in Indonesia, particularly in rural areas, lack adequate sports facilities such as fields or sports equipment. Additionally, the number of competent PJOK teachers remains limited, making it difficult to implement DPA programs effectively.

Second, insufficient systemic support from the government and society is another significant challenge. Although the government has increased PJOK lesson hours to four hours per week, this policy is still insufficient to ensure that students remain active outside formal lesson hours. Moreover, parents and society often lack awareness of the importance of physical activity for children's development, resulting in inadequate support.

Third, the increasingly dominant sedentary lifestyle among children presents a unique challenge. Excessive use of gadgets and electronic media causes children to prefer spending time indoors rather than engaging in physical activities outdoors.

Opportunities

Despite these challenges, the implementation of DPA in Indonesia also offers several opportunities that can be leveraged. First, government policies supporting improvements in education and child health can serve as a

strong foundation for developing DPA programs. For example, the concept of Comprehensive School Health (CSH), introduced by the Ministry of Education and Culture, can be integrated with DPA programs to create a school environment that supports an active lifestyle.

Second, the role of teachers and school principals is crucial in implementing DPA. PJOK teachers must act as pioneers and innovators in developing interesting and varied DPA activities. Outreach by school principals to all staff can also increase awareness and participation in the program (A'yun & Muttaqin, 2025).

Third, partnerships with the community can serve as a solution to resource limitations. For instance, schools can collaborate with local communities to provide sports facilities or organize joint DPA activities, such as the "Walking School Bus," which involves volunteers from parents or seniors escorting and picking up students on foot.

Fourth, technology can be utilized to support DPA implementation. Mobile applications or digital platforms can be used to monitor students' physical activity, provide motivation, and offer information about DPA activities that can be performed at home.

1.4. Strategies for Implementing DPA in Indonesian Elementary Schools

To address challenges and leverage opportunities, several strategies can be applied in implementing DPA in Indonesian elementary schools. These strategies involve various stakeholders, including schools, families, communities, and the government.

- Teacher Training and Awareness: PJOK teachers need training to enhance their competence and confidence in implementing DPA programs. Additionally, outreach to all school staff is essential to ensure everyone shares the same understanding of the goals and benefits of DPA.
- Integration of DPA into the Curriculum: DPA can be integrated into other subjects, such as mathematics or language, through activities involving physical movement. For example, students can learn math while playing physical games that involve counting or logic.
- Development of Incentives and Competitions: To motivate students, schools can develop incentive programs or daily/weekly competitions, such as the "Daily Competition" (KOHAR) or "Ant Movement Campaign" (GEMES), which actively involve students in physical activities.
- School Environment Design: Schools need to design spaces and environments to be more conducive to physical activity. For instance, providing safe play areas or scheduling breaks that allow students to leave classrooms and move around.
- Partnerships with Parents and Communities: Parents and communities can be involved in DPA programs through activities such as the "Walking School Bus" or joint community service events. This not only increases students' physical activity but also strengthens relationships between schools, families, and communities.

The implementation of Daily Physical Activity (DPA) in Indonesian elementary schools holds great potential to improve students' quality of life, physically, psychologically, and academically. However, challenges such as limited resources, insufficient systemic support, and sedentary lifestyles must be addressed through strategies involving multiple stakeholders. With full support from the government, schools, families, and communities, DPA can become an effective solution for shaping a generation of young people who are healthy, active, and high-achieving.

Thus, this introduction and literature review on the implementation of DPA in Indonesian elementary schools aims to provide insights and inspiration for stakeholders in their efforts to increase students' physical activity outside PJOK lessons.

2. METHOD

This study employs a comprehensive literature review and analysis to examine the implementation of Daily Physical Activity (DPA) programs in Indonesian elementary schools, with a specific focus on strategies for increasing physical activity outside formal Physical Education (PE) classes. The research methodology is structured to address gaps in existing practices while drawing from international frameworks and local contexts to propose actionable recommendations.

The research adopts a qualitative approach, relying on document analysis, policy reviews, and scholarly literature to construct a robust understanding of the challenges and opportunities associated with DPA implementation. This methodological choice aligns with the exploratory nature of the study, as it seeks to identify effective strategies tailored to the Indonesian educational context. Data sources include academic journals, government policies, program

evaluations, and case studies from countries with established DPA frameworks, such as Canada's Comprehensive School Health (CSH) model.

2.1. Data collection involves two primary components:

A systematic review of peer-reviewed articles, policy documents, and educational frameworks related to physical activity promotion in schools. Key sources include works by (McMullen et al., 2022). These materials provide insights into global best practices and highlight lessons applicable to Indonesia.

Examination of initiatives like Indonesia's Model Sekolah Sehat (Healthy School Model) case studies serve as practical examples of DPA implementation, offering valuable lessons on stakeholder engagement, resource utilization, and sustainability.

The analysis is guided by three overarching dimensions:

Assessing how existing educational policies in Indonesia support or hinder DPA implementation. This includes reviewing the role of agencies such as the Ministry of Education and Culture and their initiatives, such as the Usaha Kesehatan Sekolah (UKS) program.

Identifying the responsibilities of key actors—teachers, school administrators, parents, and communities—in fostering an environment conducive to daily physical activity. For instance, the role of PE teachers as innovators and motivators is emphasized, alongside strategies for parental involvement through forums and community partnerships.

Evaluating specific tactics for integrating DPA into school routines, including curriculum adjustments, activity scheduling, and resource optimization. Tools such as Activity gram and incentive programs are explored for their potential to enhance student engagement.

Ethical rigor is maintained by ensuring all cited materials are appropriately referenced and acknowledging the intellectual contributions of original authors. Additionally, the study prioritizes inclusivity by considering diverse socioeconomic and geographic contexts within Indonesia, particularly rural areas where resource constraints may pose unique challenges.

While this study provides a detailed roadmap for DPA implementation, it acknowledges certain limitations. First, the reliance on secondary data means that findings are subject to the biases and gaps inherent in existing literature. Second, the dynamic nature of educational reforms necessitates ongoing monitoring and adaptation of proposed strategies. Finally, the absence of updated national data on physical activity levels among Indonesian students underscores the need for future empirical research to validate these recommendations.

This research methodology ensures a balanced integration of theoretical insights and practical applications, aiming to inform policymakers, educators, and other stakeholders about effective strategies for promoting physical activity in elementary schools. By synthesizing global best practices with localized solutions, the study contributes to the broader discourse on creating healthier, more active learning environments for children.

3. RESULTS AND DISCUSSION

3.1. Result

The study highlights several critical findings regarding the implementation of Daily Physical Activity (DPA) programs in Indonesian elementary schools. These findings are derived from a comprehensive review of literature, policy documents, and case studies, emphasizing the importance of integrating physical activity into students' daily routines. The primary results can be categorized into three dimensions: the physical, psychological, and social benefits of DPA; the challenges faced in its implementation; and actionable strategies to overcome these challenges.

The research underscores the multifaceted benefits of regular physical activity for elementary school students. Physically, DPA contributes to improved cardiovascular health, stronger muscles and bones, and better weight management (Walker et al., 2023). Psychologically, it enhances self-esteem, reduces stress, and fosters a positive self-image (Motevalli et al., 2022). Socially, participation in physical activities promotes teamwork, communication skills, and cooperation among students (Zou & Dacanay, 2024). These benefits align with global recommendations, such as those from the National Association for Sport and Physical Education (NASPE), which advocates for at least 60 minutes of daily physical activity for children (Demchenko et al., 2025).

In the Indonesian context, the integration of DPA into the school environment is particularly relevant given the rising prevalence of sedentary lifestyles and associated health risks among children. For instance, (Xu et

al., 2022) notes that excessive gadget use and limited access to recreational facilities have contributed to declining physical activity levels. Thus, implementing structured DPA programs becomes essential not only for physical health but also for holistic development.

Despite the clear benefits, several barriers hinder the effective implementation of DPA in Indonesian schools. First, resource constraints—such as inadequate sports facilities and equipment—are prevalent, particularly in rural areas. Second, there is insufficient systemic support from educational authorities and communities, limiting the sustainability of DPA initiatives. Third, cultural attitudes toward physical activity often prioritize academic achievement over physical education, resulting in minimal emphasis on DPA outside formal PE classes (Gallardo et al., 2023).

Additionally, the increasing reliance on technology has led to sedentary behaviors among students, further complicating efforts to promote active lifestyles. These challenges highlight the need for targeted interventions that address both structural and attitudinal barriers.

To address these challenges, the study proposes a range of strategies tailored to the Indonesian context. These strategies involve multiple stakeholders, including teachers, school administrators, parents, and local communities.

- **Teacher-Level Strategies:** Teachers play a pivotal role in promoting DPA. They can integrate health knowledge into other subjects, develop incentive programs like "Kompetisi Harian" (KOHAR) or "Gerakan Meniru Semut" (GEMES), and rearrange homework schedules to encourage movement. Furthermore, modeling active and healthy behaviors can inspire students to adopt similar habits (Cheung, 2020).

- **School-Level Strategies:** Schools should improve management practices by forming leadership teams dedicated to DPA implementation. This includes preparing daily physical activity programs, arranging spaces and equipment to facilitate movement, and organizing forums for parental involvement (Morgan et al., 2022). For example, designing safe play areas and scheduling breaks that allow students to leave classrooms can significantly enhance opportunities for physical activity.

- **Community Engagement:** Partnerships with parents and local communities are crucial for extending DPA beyond school hours. Initiatives such as the "Bus Sekolah Berjalan" (Walking School Bus) or community-based physical activities can bridge the gap between school and home environments. Such collaborations not only increase students' physical activity but also strengthen ties between schools and their surrounding communities.

- **Policy Support:** Government policies must align with DPA goals to ensure systemic backing. For instance, incorporating DPA into national curricula and providing funding for infrastructure development can create an enabling environment for sustained implementation.

3.2. Discussion

The findings of this study have significant implications for policymakers, educators, and communities. By addressing the identified challenges through collaborative efforts, stakeholders can foster an environment where physical activity becomes an integral part of students' daily lives. This approach not only supports individual well-being but also contributes to broader societal benefits, such as reduced healthcare costs and enhanced productivity.

Moreover, the study emphasizes the importance of adapting global best practices to local contexts. While frameworks like Canada Comprehensive School Health model offer valuable insights, they must be modified to suit Indonesia's unique socio-cultural and economic conditions. For example, leveraging existing community resources and traditional games can make DPA programs more accessible and culturally relevant. While this study provides a robust foundation for understanding DPA implementation, it acknowledges certain limitations. The reliance on secondary data means that findings may not fully capture the nuances of on-the-ground realities. Additionally, the dynamic nature of educational reforms necessitates continuous evaluation and adaptation of proposed strategies.

Future research should focus on empirical studies to assess the effectiveness of DPA programs in diverse settings across Indonesia. Longitudinal studies could also explore the long-term impact of DPA on students' physical, psychological, and academic outcomes. Such evidence would further strengthen the case for prioritizing physical activity in educational policies.

This study demonstrates that implementing Daily Physical Activity programs in Indonesian elementary schools is both necessary and feasible. Despite existing challenges, strategic interventions involving teachers, schools, families, and communities can create an environment conducive to active lifestyles. By fostering

collaboration and leveraging available resources, stakeholders can ensure that every child receives the recommended 90 minutes of daily physical activity, thereby promoting healthier, happier, and more resilient generations.

4. CONCLUSION

This study has explored the critical importance of implementing Daily Physical Activity (DPA) programs in Indonesian elementary schools, emphasizing strategies to promote physical activity beyond formal Physical Education (PE) lessons. The findings underscore the multifaceted benefits of DPA, including improved physical health, enhanced psychological well-being, and strengthened social skills among students. These outcomes align with global recommendations, such as those from the National Association for Sport and Physical Education (NASPE), which advocate for at least 60 minutes of daily physical activity for children.

Despite these clear benefits, significant challenges hinder the effective implementation of DPA programs in Indonesia. Resource constraints, insufficient systemic support, and prevailing sedentary lifestyles among students are primary barriers that must be addressed. However, the study identifies actionable strategies involving multiple stakeholders—teachers, school administrators, parents, and communities—to overcome these obstacles. Key strategies include integrating health knowledge into other subjects, developing incentive programs, rearranging homework schedules, fostering community partnerships, and leveraging government policies to create a supportive environment.

The integration of international frameworks, such as Canada's Comprehensive School Health (CSH) model, into the Indonesian context offers valuable insights. By tailoring these frameworks to local needs and conditions, schools can create sustainable DPA programs that not only improve students' physical activity levels but also contribute to their holistic development. Furthermore, fostering collaboration among stakeholders is essential to ensure the long-term success of such initiatives.

While this study provides a robust foundation for understanding DPA implementation, it acknowledges certain limitations, including its reliance on secondary data and the dynamic nature of educational reforms. Future research should focus on empirical studies to evaluate the effectiveness of DPA programs in diverse settings across Indonesia. Longitudinal studies could further explore the long-term impact of DPA on students' physical, psychological, and academic outcomes, providing stronger evidence to support policy changes.

In conclusion, promoting Daily Physical Activity in Indonesian elementary schools is both a necessity and an opportunity to foster healthier, more active generations. By addressing existing challenges through collaborative efforts and innovative strategies, stakeholders can create an environment where physical activity becomes an integral part of students' daily lives. This approach not only supports individual well-being but also contributes to broader societal benefits, such as reduced healthcare costs and enhanced productivity. Through sustained commitment and systemic support, DPA programs have the potential to transform the educational landscape, ensuring that every child receives the recommended daily physical activity to thrive physically, mentally, and socially.

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