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Healthy School Movement and Holistic-Integrative Early Childhood Development: A Kindergarten Case Study in Indonesia

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Abstract

Integrating health promotion into early childhood education remains an under-implemented priority in Indonesia. The Healthy School Movement (Gerakan Sekolah Sehat, GSS) is a government-mandated initiative that embeds health principles in educational institutions, yet little is known about how it operates within the Holistic-Integrative Early Childhood Development (PAUD HI) framework. This study aimed to explore how the GSS is implemented at the kindergarten level and how it contributes to holistic-integrative early childhood development. A qualitative single-case study was conducted at an Islamic kindergarten in Bekasi City, West Java. Data were collected through in-depth interviews, participatory observation, and document review involving 13 participants: four teachers, including the principal, six school committee members, and three parents. The data were analyzed using reflexive thematic analysis and mapped against the PAUD HI service pillars defined in Presidential Regulation No. 60 of 2013. The GSS was implemented across five domains: nutritional, physical, immunization, mental, and environmental health. These domains directly supported four PAUD HI pillars, namely education, caregiving, health and nutrition, and child welfare, whereas child protection was addressed through complementary partnerships with the police, fire services, and other agencies. Parental co-implementation and collaboration with community health centers and integrated health posts were the main enablers, while inconsistent program socialization, limited local government support, and the absence of a monitoring system were the main challenges. The GSS can serve as a practical vehicle for delivering PAUD HI services in kindergartens when supported by structured parent engagement, teacher training, and formal monitoring.



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1. INTRODUCTION

Early childhood, broadly defined as the period from conception to six years of age, is widely recognized as the most critical window for human development (Black et al., 2017). Investments in health, nutrition, and education during this period yield substantial long-term cognitive, social, and economic benefits (Britto et al., 2017). In low- and middle-income countries (LMICs), however, services for young children remain fragmented, with health and education systems often operating in silos (Grantham-McGregor et al., 2007). In Indonesia, a national programme review has documented persistent gaps between health, nutrition, and education services, with uneven coverage of integrated services across provinces (UNICEF Indonesia, 2025).

Indonesia has articulated a national commitment to early childhood development through Presidential Regulation No. 60 of 2013, which defines Holistic-Integrative Early Childhood Development (Pengembangan Anak Usia Dini Holistik-Integratif, PAUD HI) as a coordinated effort to fulfil children's essential needs in education, health, nutrition, caregiving, and social protection simultaneously (Peraturan Presiden Republik Indonesia, 2013). The PAUD HI framework comprises five service pillars (education, caregiving, child protection, health and nutrition, and child welfare) and requires the committed participation of families, communities, and government institutions (Aulia et al., 2022). This framework is reinforced by Health Law No. 17 of 2023, which replaced Law No. 36 of 2009 and mandates immunization and shared responsibility for child health (Undang-Undang Republik Indonesia, 2023). The nutritional dimension of this mandate is particularly pressing. Stunting prevention among toddlers depends on behavioral and biological determinants, including maternal knowledge and social support (Puspitadewi et al., 2026), birth history, and maternal height, and structured supplementary feeding has been reported to protect against stunting (Dahliansyah et al., 2026). Because kindergartens offer frequent and regular contact with young children and their families, they are well positioned to deliver nutrition programs alongside developmental services.

Within this policy landscape, the Healthy School Movement (Gerakan Sekolah Sehat, GSS) was introduced as a sustained, collaborative initiative engaging central and regional governments, educational institutions, and communities. Formalized through a 2022 Joint Ministerial Decree, the GSS is operationalized through the three pillars of the School Health Program (Usaha Kesehatan Sekolah, UKS): health education, health services, and the development of a healthy school environment (Menteri Pendidikan Kebudayaan Riset dan Teknologi RI et al., 2022). Its focal domains are nutritional health, physical health, immunization, mental health, and environmental health. This approach is consistent with the global health-promoting schools framework, which calls for health to be embedded in school governance, curricula, environments, and partnerships with families and health services (World Health Organization & UNESCO, 2021).

Previous studies have examined GSS implementation mainly in primary schools. Pradita (2017) documented how a healthy school environment was embedded in students' daily routines at SDN Tegalrejo 1 Yogyakarta and how health education was delivered through curricular and behavioral approaches. Aminah et al. (2022) reported that SDN Cokrowati implemented the program through intracurricular and extracurricular health education, periodic health services such as immunization and dental health programs, and environmental activities such as smoke-free zones and vector control. Both studies suggest that the GSS can be operationalized effectively when school leaders champion health as a cross-curricular priority and maintain environmental conditions consistently. However, both were conducted with older children, so their relevance to early childhood settings, where developmental needs, patterns of parental involvement, and institutional capacity differ substantially, remains largely unexamined.

Regarding PAUD HI, Sugian et al. (2021) found that implementation at PAUD LSM Ampenan in Mataram involved well-coordinated planning across education, health, nutrition, and caregiving, with strong institutional leadership supporting adherence to program guidelines. In contrast, Rachmayani et al. (2022) identified persistent implementation gaps in Central Lombok due to insufficient socialization and limited sub-national government support, and recommended regular training and structured mentoring for early childhood education institutions. These findings indicate that, although the PAUD HI framework is conceptually sound, its realization depends heavily on contextual factors such as stakeholder engagement and resource availability.

Despite the existence of both frameworks, to the best of our knowledge no published study has examined how the GSS and PAUD HI interact at the kindergarten level or whether their operational domains are mutually reinforcing. The novelty of this study lies in mapping each GSS domain onto the PAUD HI service pillars using qualitative evidence from teachers, school committee members, and parents, thereby identifying which pillars are directly supported by the GSS and which require complementary services. This study therefore aimed to explore how the GSS is implemented at TK Muslimat II, an Islamic kindergarten in Bekasi City, West Java, and how it contributes to holistic-integrative early childhood development, including the factors that facilitate and hinder implementation.

2. METHODS

This study used a qualitative single-case study design, which is appropriate for exploring contextually embedded phenomena and generating an in-depth understanding of implementation processes (Yin, 2018). The case was defined as the GSS as implemented within the PAUD HI framework at one kindergarten. A single-case design was chosen because TK Muslimat II represents a revelatory case in which systematic GSS implementation within a PAUD HI framework can be observed in its entirety and in sufficient depth to generate analytically meaningful insights (Yin, 2018). The findings are not statistically generalizable, but they may be analytically transferable to similar Islamic or faith-based kindergartens implementing PAUD HI in peri-urban Indonesia. The study is reported in accordance with the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Tong et al., 2007).

The study was conducted at TK Muslimat II, an Islamic kindergarten in Bekasi City, West Java, Indonesia, with 25 enrolled students. The school was selected purposively because it had implemented all five GSS domains since 2022, following the post-pandemic reopening of schools, a level of comprehensiveness that is relatively uncommon among kindergartens in the Bekasi area. Thirteen participants were recruited from three groups. The first group comprised four teachers, including the principal, who also served as the school administrator and primary GSS coordinator; all were directly involved in daily program planning and delivery. The second group comprised six school committee members, all of whom were parents of enrolled students and were included because of their role in school health activities, particularly in planning and preparing meals for the nutritional health program. The third group comprised three parents with direct experience of the school's health programs, who provided a family perspective. Data adequacy was judged by informational sufficiency: data collection continued until no new themes or perspectives emerged from the interviews and observations. Given the bounded nature of the case, all relevant stakeholder groups (administrators, teachers, committee members, and recipient parents) were represented.

Data were collected through three complementary methods. In-depth interviews elicited participants' perspectives, experiences, and understanding of GSS implementation and its relationship to holistic child development. Participatory observation

was used to examine health practices, physical facilities, and daily routines at the school. Document review covered school program documents, administrative records, and policy materials related to the GSS and PAUD HI. Methodological triangulation was applied by comparing interview accounts with observational field notes and verifying both against program documents and policy materials. Findings that converged across sources were treated as robust, and divergent findings were examined for contextual explanations.

Data were analyzed using reflexive thematic analysis following the six phases described by Braun et al. (2022): familiarization, coding, generating initial themes, reviewing themes, defining and naming themes, and writing up (Ahmed et al., 2025). Codes were generated inductively and then organized into themes related to implementation patterns, facilitating factors, barriers, and the intersections between GSS components and PAUD HI service pillars. Both authors coded the data independently, compared their coding outputs, and resolved discrepancies through discussion until consensus was reached. Alignment between the GSS and PAUD HI was established by comparing the themes with the five service pillars defined in Presidential Regulation No. 60 of 2013. To enhance trustworthiness, member checking was conducted by sharing a summary of the themes with two teacher participants, who confirmed that the interpretations reflected their experiences. Reflexivity was maintained by documenting the researchers' positionality and its potential influence on interpretation throughout the analysis.

Ethical approval was obtained from the Research Ethics Committee of Universitas Esa Unggul, Jakarta, Indonesia (Ethical Approval Statement No. 0923-12.084/DPKE-KEP/FINAL-EA/UEU/I/2024). Written informed consent was obtained from all participants before data collection. Confidentiality was protected throughout the study, and participants are identified only by their roles.

3. RESULTS AND DISCUSSION

Implementation was characterized using three convergent indicators derived from the data: (1) the regularity and consistency of program activities, as reported by teachers and observed at the school; (2) participants' perceptions of program benefit and functionality; and (3) the presence of supporting documents such as schedules, records, and policy materials. These indicators were applied to each of the five GSS domains.

Implementation of the Healthy School Movement at TK Muslimat II

The GSS has been implemented at TK Muslimat II since 2022 and is organized into five program domains.

1) Nutritional Health

The nutritional health program aims to improve students' health through appropriate dietary habits and nutritious food. Parents on the school committee prepare meals based on the national "My Plate" guideline (*Isi Piringku*). Menus vary daily and are planned to ensure a balanced intake, and meals are served at 09:00 after the morning activities. Short educational activities on the importance of nutritious food build children's awareness of healthy food choices, and children are encouraged to stay hydrated by bringing personal water bottles, supplemented by water dispensers at school.

2) Physical Health

The physical health program aims to improve the physical fitness of the whole school community. Each school day begins with morning exercises such as line formation and jumping routines, and structured weekly activities include morning gymnastics every Tuesday and traditional games every Friday. These activities are intended not only to

increase energy expenditure but also to improve fitness, stamina, and readiness to learn (Mulyana et al., 2024). Teachers observed that regular physical activity increased children's energy and concentration during lessons.

3) Immunization

The immunization program ensures that all students have received complete basic immunization. The school cooperates with the local community health center (*puskesmas*) and integrated health post (*posyandu*), particularly during the National School Immunization Month, and the program also includes deworming and vitamin A supplementation (UNICEF Indonesia, 2025). Before enrolment, each child must present the Maternal and Child Health Book (*Buku KIA*) documenting their immunization history. This screening allows the school to verify immunization status and to follow up incomplete immunization. Proactive awareness strategies of this kind complement routine health services, as targeted education has been shown to improve mothers' knowledge of immunization (Rosmaniah et al., 2026).

4) Mental Health

The mental health program addresses students' physical, mental, spiritual, and social development. Daily activities include the *Dhuha* prayer and Quranic recitation to cultivate spiritual values and character. Teachers use empathic approaches, listening to children and supporting them in managing emotional difficulties, which contributes to emotional development (Cooper, 2004; Nurdiah, 2025). Evidence from Indonesian adults with coronary heart disease suggests that Islamic spirituality is associated with psychological comfort and meaning (Wahyuningsih et al., 2026); although this population differs substantially from kindergarten children, the underlying mechanism offers a plausible rationale for embedding spiritual routines in the school's mental health program. Relaxation, play-based learning, and creative activities are also used to promote well-being (Mathiasen, 2014), helping children recognize their own capacities and develop emotional balance (Ahmed et al., 2023).

5) Environmental Health

The environmental health program aims to create conditions that support optimal child development. Strategies include promoting Clean and Healthy Living Behavior (*Perilaku Hidup Bersih dan Sehat*, PHBS), enforcing a smoke-free zone, and providing adequate sanitation. The school has handwashing stations with soap, separate toilets for boys and girls, and covered waste bins, and regular community clean-up activities (*kerja bakti*) maintain school cleanliness and foster children's sense of environmental responsibility.

PAUD HI Services at TK Muslimat II

The school delivers five categories of holistic-integrative services. Education services focus on foundational skills, creativity, and social development through interactive and play-based learning. Caregiving services provide a supportive environment in which teachers and parents respond to children's needs and help them feel accepted and valued. Child protection services focus on preventing violence, neglect, and exploitation, with child safety education delivered in partnership with the local police, fire services, and other agencies. Health and nutrition services include routine health checks, immunization, dietary counseling, scheduled communal meals, and regular monitoring of children's height and weight in collaboration with the *puskesmas* and *posyandu*. This partnership is important because mothers' participation in *posyandu* visits depends on knowledge, accessibility, and institutional support (Sarifah et al., 2026), all of which the school's coordinating role helps to strengthen. Child welfare services support social well-being and

civic identity through partnerships with the sub-district administration and the civil registration office (*Dukcapil*), ensuring that every child has a birth certificate, a National Identification Number (NIK), and family registry records, which later enable access to a National Student Identification Number (NISN) and continuity of education.

Alignment between the GSS and PAUD HI

Mapping the themes against the five PAUD HI pillars revealed consistent conceptual and operational overlap (Table 1). The principal described the nutritional health program as follows:

> *"…We see the meal program not just as feeding children; it is also part of educating them about health and involving their families in school life…" (school principal)*

This account shows that a single program can simultaneously enact the health and nutrition, education, and caregiving pillars of PAUD HI.

Table 1. Alignment of Healthy School Movement Domains with PAUD HI Service Pillars

GSS Domain	Corresponding PAUD HI Pillar	Key Activities
Nutritional Health	Health and nutrition (primary); education and caregiving	Isi Piringku meals, nutrition education, hydration
Physical Health	Education and caregiving	Daily exercise, traditional games, motor skill development
Immunization	Health and nutrition	Immunization screening, deworming, vitamin A
Mental Health	Child welfare; caregiving	Spiritual activities, empathic caregiving, creative play
Environmental Health	Education and caregiving	PHBS promotion, sanitation facilities, smoke-free zone

Note: *Child protection was addressed through school partnerships with the police, fire services, and other agencies rather than through a GSS domain.*

The nutritional health program directly supports the health and nutrition pillar by involving parents in meal provision and building children's dietary awareness (Sultana, 2017). This interpretation is consistent with a parent's account:

> *"…Since the school started the meal program, my child no longer refuses vegetables at home. I think seeing other children eat together makes a difference…" (parent)*

This suggests that structured mealtimes and peer modeling at school may reinforce healthy eating at home, consistent with the PAUD HI goal of supporting development across multiple life domains.

The physical health program supports the education and caregiving pillars by promoting motor skill development, learning stamina, and an inclusive school atmosphere. Teachers consistently reported observable effects of physical activity on learning readiness:

> *"…The children are more focused after exercise. We can see the difference on days when we skip gymnastics; they are restless and harder to settle…" (teacher)*

Regular physical activity was therefore regarded not only as a health intervention but also as a pedagogical strategy that enhances children's capacity to learn. School committee members also recognized its social value:

"…On Fridays when they play traditional games, the children look forward to coming to school. It is not just exercise; it builds their social skills too…" (school committee member)

Traditional games thus serve a dual function, promoting physical fitness while developing the social competencies emphasized in the caregiving and education pillars.

The immunization program supports the health pillar through systematic tracking and preventive care. The principal described the school's approach:

"…We require the Buku KIA before enrolment. This way we know from day one which children are fully immunized and which need follow-up with the puskesmas…" (school principal)

This enrolment-based screening functions as an early identification system that helps close immunization gaps before children enter the classroom. Parents also benefited directly from the school's monitoring:

"…The school reminded me that my child needed a booster. I did not realize it from the health book alone; the teacher helped me understand what was missing…" (parent)

The school's oversight of immunization therefore extends its public health function beyond the classroom, supporting families who may lack the knowledge or resources to follow immunization schedules independently.

The mental health program contributes mainly to the child welfare and caregiving pillars by fostering psychological safety and resilience; it does not address child protection in the sense of preventing violence, neglect, or exploitation. Spiritual routines were described as a deliberate strategy to support children's emotional regulation, reflecting a culturally grounded view in which spiritual practice and emotional readiness are interconnected. Teachers also described themselves as emotionally responsive caregivers:

"…I always make time to listen if a child seems withdrawn or upset. Their emotional state affects everything: how they eat, how they learn, how they play…" (teacher)

Such empathic pedagogy positions teachers not only as educators but also as emotional anchors for children's development.

The environmental health program supports the education and caregiving pillars by creating a hygienic, safe, and developmentally supportive environment. Environmental health behaviors were described as self-sustaining routines rather than enforced rules:

"…We made handwashing a routine, not a rule. Now the children remind each other to wash their hands, so we do not have to enforce it anymore…" (school principal)

This shift from compliance to internalized habit reflects the program's long-term aim of cultivating children's intrinsic environmental responsibility. Parents reported that these habits transferred to the home:

"…My child now tells me to throw rubbish in the bin at home. The habits they learn here carry over; I noticed it within the first month…" (parent)

The carry-over of school-based habits into the home suggests that the environmental health program contributes to broader family health behavior change. The overall pattern of alignment, together with the enabling and constraining factors described below, is summarized in the conceptual framework in Figure 1.

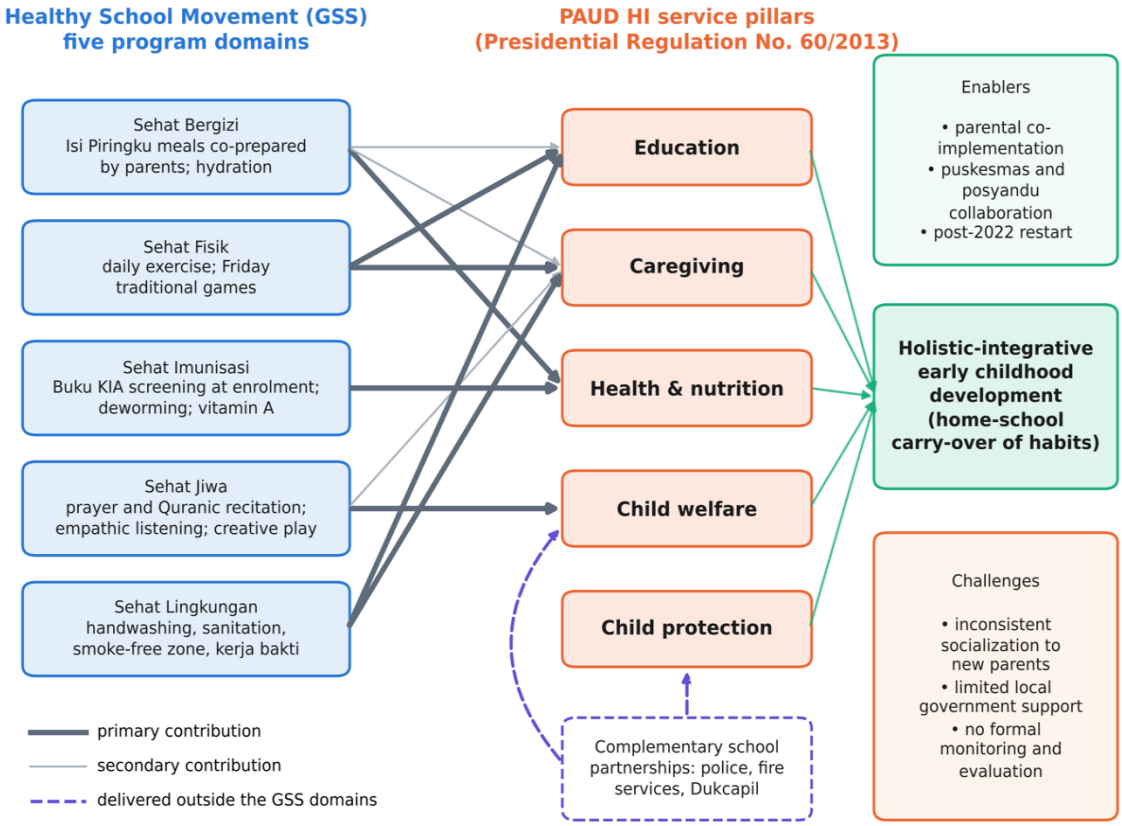


Figure 1. Conceptual framework of how the healthy school movement domains contribute.

Facilitating Factors and Challenges

Active parental participation was the most consistently cited enabler across all participant groups, particularly in the nutritional program. Established collaboration with local health facilities and government agencies also supported delivery, and the school's post-pandemic restart in 2022 provided institutional motivation to reinforce health-promoting norms. One school committee member noted:

> *"…Without us helping in the kitchen, the Sehat Bergizi program would not run every day…" (school committee member)*

This dependence on volunteer labor implies a sustainability risk if parental engagement declines.

Inconsistent socialization of program objectives was the most frequently cited barrier, particularly among newly enrolled parents. Teachers reported spending additional time re-explaining the rationale for the programs at the start of each academic year, which reduced instructional time and indicates the need for a structured orientation for incoming families. Limited local government support was reported for some program areas. The

principal also identified the absence of a formal monitoring system as a constraint on accountability:

> *"…We know the programs are running, but we do not have a way to show the outside world how well they are working…" (school principal)*

This gap limits the school's ability to advocate for additional government support or external resources.

This study suggests that the GSS, when implemented in a kindergarten, can serve as a practical vehicle for delivering holistic-integrative early childhood services. The five GSS domains directly supported four of the five PAUD HI pillars (education, caregiving, health and nutrition, and child welfare), whereas child protection relied on complementary partnerships outside the GSS domains (Figure 1). This finding extends previous work conducted in primary schools (Aminah et al., 2022; Pradita, 2017) by showing that, at the kindergarten level, the two frameworks are operationally complementary rather than fully overlapping, and that protection services need to be planned explicitly alongside GSS activities.

The nutritional program's reliance on parental co-implementation reflects a broader pattern in which family engagement improves program reach and behavioral consistency (Garbacz et al., 2016). Integrated behavioral practices among mothers of young children, combining knowledge, attitudes, and practices, have also been associated with better nutritional outcomes (Marlenywati et al., 2026). This is particularly relevant in early childhood, when health habits formed at school are most effective if they are reinforced at home (Haines et al., 2013; Xu et al., 2024), as illustrated by parents' accounts of children accepting vegetables and disposing of waste properly at home. The involvement of the school committee in meal planning operationalizes PAUD HI's emphasis on families and communities as co-responsible actors in child development (Aulia et al., 2022; Refrigeri, 2025). Evidence that supplementary feeding protects against stunting (Dahliansyah et al., 2026) supports the relevance of this model, although its nutritional impact was not measured in the present study.

The requirement to present the *Buku KIA* at enrolment represents a practical point-of-entry strategy for identifying children who may otherwise fall through gaps in immunization services. A comparable approach has been evaluated in Zambia, where school-based vaccination checks helped identify and reach under-vaccinated students (Hasan et al., 2026), suggesting that enrolment-based screening is feasible in other LMIC school systems. Family-level education targeting both mothers and fathers has also improved immunization knowledge and household support for basic immunization (Lestari et al., 2026), indicating that the school's reminders to parents could be strengthened with structured educational materials.

The mental health program's use of spiritual practice and empathic pedagogy reflects the sociocultural context of an Islamic institution. These specific practices are unlikely to transfer directly to non-Muslim or secular settings, but the underlying principle of supporting psychological safety through routinized, identity-affirming activities may be adapted to other faith-based or culturally grounded early childhood programs, where context-sensitive approaches to quality and well-being are increasingly emphasized (Chen & Wolf, 2021).

The environmental health activities address a persistent public health challenge. Handwashing facilities with soap, separate toilets, and waste management remain unmet basic standards in many schools worldwide (World Health Organization & UNICEF, 2024),

underscoring that behavioral programming such as PHBS needs to be accompanied by investment in infrastructure.

The challenges identified, namely inconsistent socialization and limited local government support, echo findings on PAUD HI implementation in Central Lombok (Rachmayani et al., 2022), suggesting that these barriers are systemic rather than institution-specific. The absence of a formal monitoring and evaluation system is an additional gap, because without outcome data it is difficult to demonstrate program effectiveness to funders and policymakers. Practically, integrating the GSS into PAUD HI planning is a low-cost strategy for extending preventive health services to young children at a developmentally critical age. District governments could institutionalize this integration through joint planning cycles, shared data systems, and co-funded training for early childhood educators.

This study has several limitations. It was based on a single site with 13 participants, and the findings reflect participants' perceptions rather than measured child outcomes. The Islamic context of the school limits transferability to other types of institutions, and the observation period may not have captured the full range of activities across an academic year. Future research should use multi-site designs and validated outcome measures, such as height-for-age and weight-for-age Z-scores for nutrition, developmental screening tools such as the Ages and Stages Questionnaire (ASQ-3), and immunization coverage at school entry, to evaluate the impact of integrated GSS and PAUD HI delivery more robustly.

4. CONCLUSION

This study shows that the Healthy School Movement was implemented at TK Muslimat II across five domains (nutritional, physical, immunization, mental, and environmental health) and that these domains directly supported four PAUD HI service pillars (education, caregiving, health and nutrition, and child welfare), while child protection was delivered through complementary partnerships with external agencies. Parental co-implementation and collaboration with the puskesmas and posyandu were the key enablers, whereas inconsistent socialization, limited local government support, and the lack of formal monitoring constrained the program. These findings indicate that the GSS can function as a practical vehicle for holistic-integrative early childhood development in Islamic kindergartens in Indonesia.

Kindergartens implementing the GSS are recommended to introduce a structured orientation for new families, to provide teacher training on nutrition communication, emotional support, and program documentation, and to adopt simple monitoring indicators such as meal attendance, immunization verification at enrolment, and the frequency of physical activity. Local governments and community health centers should formalize written agreements with kindergartens and plan child protection services explicitly alongside GSS activities. Future studies should test these findings in multiple sites and diverse institutional contexts using child-level outcome measures.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ETHICAL CONSIDERATIONS

Ethical approval was obtained from the Research Ethics Committee of Universitas Esa Unggul, Jakarta, Indonesia (Ethical Approval Statement No. 0923-12.084/DPKE-KEP/FINAL-EA/UEU/I/2024). Written informed consent was obtained from all participants

before data collection. Confidentiality was protected throughout the study, and participants are identified only by their roles.

AUTHOR CONTRIBUTIONS

Lintang Purwara Dewanti contributed to conceptualization, methodology, data collection, formal analysis, and writing (original draft). Agita Violy contributed to data curation, formal analysis, visualization, and writing (review and editing). Both authors read and approved the final manuscript.

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DECLARATION OF ARTIFICIAL INTELLIGENCE USE

The authors used AI-assisted tools solely to improve the language, grammar, and readability of the manuscript. These tools were not used to generate data, conduct analyses, or interpret the findings. The authors reviewed all edits and take full responsibility for the accuracy, originality, and integrity of the manuscript.

REFERENCES

Ahmed, S., Khan, D. S., & Mehmood, A. S. (2023). Let them play: A systematic review investigating the benefits of free play in emotional development of children. *Academy of Education and Social Sciences Review*, 3(4), 509–520. https://doi.org/10.48112/aessr.v3i4.660

Ahmed, S. K., Mohammed, R. A., Nashwan, A. J., Ibrahim, R. H., Abdalla, A. Q., M. Ameen, B. M., & Khdhir, R. M. (2025). Using thematic analysis in qualitative research. *Journal of Medicine, Surgery, and Public Health*, 6, 100198. https://doi.org/10.1016/j.glmedi.2025.100198

Aminah, H. K., Sukarno, & Yulisetiani, S. (2022). Analisis implementasi program sekolah sehat dalam membangun karakter peduli lingkungan di sekolah dasar. *Didaktika Dwija Indria*, 10(4), 1–6. https://jurnal.uns.ac.id/JDDI/article/view/63775

Aulia, R., Yaswinda, & Movitaria, M. A. (2022). Penerapan model evaluasi CIPP dalam mengevaluasi penyelenggaraan lembaga PAUD tentang pendidikan holistik integratif di Nagari Taram. *Jurnal Inovasi Penelitian*, 2(8), 2363–2372.

Black, M. M., Walker, S. P., Fernald, L. C. H., Andersen, C. T., DiGirolamo, A. M., Lu, C., McCoy, D. C., Fink, G., Shawar, Y. R., Shiffman, J., Devercelli, A. E., Wodon, Q. T., Vargas-Barón, E., Grantham-McGregor, S., & Lancet Early Childhood Development Series Steering Committee. (2017). Early childhood development coming of age: Science through the life course. *The Lancet*, 389(10064), 77–90. https://doi.org/10.1016/S0140-6736(16)31389-7

Braun, V., Clarke, V., Hayfield, N., Davey, L., & Jenkinson, E. (2022). Doing reflexive thematic analysis. In S. Bager-Charleson & A. McBeath (Eds.), *Supporting research in counselling and psychotherapy* (pp. 19–38). Springer International Publishing. https://doi.org/10.1007/978-3-031-13942-0_2

Britto, P. R., Lye, S. J., Proulx, K., Yousafzai, A. K., Matthews, S. G., Vaivada, T., Perez-Escamilla, R., Rao, N., Ip, P., Fernald, L. C. H., MacMillan, H., Hanson, M., Wachs, T. D., Yao, H., Yoshikawa, H., Cerezo, A., Leckman, J. F., & Bhutta, Z. A. (2017).

Nurturing care: Promoting early childhood development. *The Lancet*, 389(10064), 91–102. https://doi.org/10.1016/S0140-6736(16)31390-3

Chen, S., & Wolf, S. (2021). Measuring the quality of early childhood education in low- and middle-income countries. *Frontiers in Psychology*, 12, 774740. https://doi.org/10.3389/fpsyg.2021.774740

Cooper, B. (2004). Empathy, interaction and caring: Teachers' roles in a constrained environment. *Pastoral Care in Education*, 22(3), 12–21. https://doi.org/10.1111/j.0264-3944.2004.00299.x

Dahliansyah, D., Desi, D., Rafiony, A., & Trihardiani, I. (2026). Determinant factors of stunting among toddlers based on birth history, exclusive breastfeeding, supplementary feeding, and maternal height status. *MEDICA (International Medical Scientific Journal)*, 8(4), 184–199. https://doi.org/10.53770/medica.v8i4.950

Garbacz, S. A., McIntosh, K., Eagle, J. W., Dowd-Eagle, S. E., Hirano, K. A., & Ruppert, T. (2016). Family engagement within schoolwide positive behavioral interventions and supports. *Preventing School Failure: Alternative Education for Children and Youth*, 60(1), 60–69. https://doi.org/10.1080/1045988X.2014.976809

Grantham-McGregor, S., Cheung, Y. B., Cueto, S., Glewwe, P., Richter, L., & Strupp, B. (2007). Developmental potential in the first 5 years for children in developing countries. *The Lancet*, 369(9555), 60–70. https://doi.org/10.1016/S0140-6736(07)60032-4

Haines, J., McDonald, J., O'Brien, A., Sherry, B., Bottino, C. J., Schmidt, M. E., & Taveras, E. M. (2013). Healthy habits, happy homes: Randomized trial to improve household routines for obesity prevention among preschool-aged children. *JAMA Pediatrics*, 167(11), 1072–1079. https://doi.org/10.1001/jamapediatrics.2013.2356

Hasan, A. Z., Dombola, A. M., Prosperi, C., Mufwambi, W., Sakala, R., Kapungu, K., Chongwe, G., Singh, P., Wang, Q., Siputuma, K., Luulu, M., Muchengwa, M. M., Sakala, C., Kamiji, E., Bobo, P., Sakala, J., Matanda, K., Mwansa, F. D., Ward, K., … Mutembo, S. (2026). Assessing the effectiveness of school-based vaccination checks to identify and reach un- and under-vaccinated students in Zambia. *Vaccine*, 79, 128453. https://doi.org/10.1016/j.vaccine.2026.128453

Lestari, S. S., Rosita, D., & Yulianti, E. (2026). The effect of booklets on husbands' knowledge and support regarding basic immunization. *MEDICA (International Medical Scientific Journal)*, 8(1), 30–36. https://doi.org/10.53770/medica.v8i1.761

Marlenywati, M., Budiastutik, I., Trisnawati, E., Rizky, A., & Ningsih, W. M. (2026). Integrated behavioral practices among mothers of stunted children in a river basin community. *MEDICA (International Medical Scientific Journal)*, 8(3), 113–122. https://doi.org/10.53770/medica.v8i3.949

Mathiasen, L. (2014). Prevention is better than cure: A hands-on, play-based, innovative, health and well-being program in remote Australia. *Children*, 1(3), 318–338. https://doi.org/10.3390/children1030318

Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi RI, Menteri Kesehatan RI, Menteri Agama RI, dan Menteri Dalam Negeri RI. (2022). *Keputusan bersama tentang penyelenggaraan peningkatan status kesehatan peserta didik*. Kementerian Kesehatan Republik Indonesia.

Mulyana, A., Adriawan, A. N. A., Safitri, A., Dwitami, D., Melisa, D. C., Hanapiah, F. N., Khotimah, H. H., & Mansyur, L. S. A. S. (2024). Efektivitas gerakan senam dasar dalam meningkatkan konsentrasi belajar anak. *Indo-MathEdu Intellectuals Journal*, 5(3), 3078–3085. https://doi.org/10.54373/imeij.v5i3.1209

Nurdiah, S. (2025). Empathic communication and emotional regulation training for elementary school teachers: Fostering a more supportive learning environment at SD

Muhammadiyah Blunyah, Yogyakarta. *Journal of Economic Empowerment and Community Service*, 1(2), 30–41. https://doi.org/10.70375/jeecoms.v1i2.175

Peraturan Presiden Republik Indonesia. (2013). *Peraturan Presiden Nomor 60 Tahun 2013 tentang pengembangan anak usia dini holistik-integratif*. https://peraturan.bpk.go.id/Details/41430/perpres-no-60-tahun-2013

Pradita, H. N. (2017). Implementasi program sekolah sehat di SD N Tegalrejo 1 Yogyakarta. *Spektrum Analisis Kebijakan Pendidikan*, *6*(1), 20–28.

Puspitadewi, T. R., Jannah, R., & Wahyuriyanto, Y. (2026). Factors analysis of stunting prevention effort in mother of toddlers through Snehandu B. Karr theory approach. *MEDICA (International Medical Scientific Journal)*, 8(3), 133–141. https://doi.org/10.53770/medica.v8i3.978

Rachmayani, I., Suarta, I. N., Astini, B. N., & Nurhasanah. (2022). Pendampingan penyelenggaraan PAUD HI di Kabupaten Lombok Tengah tahun 2022. *Indonesian Journal of Education and Community Services*, 2(2), 245–253.

Refrigeri, L. (2025). Working towards an education policy for promoting interaction among educational institutions and families. *Agora International Journal of Juridical Sciences*, 19(2), 443–454. https://doi.org/10.15837/aijjs.v19i2.7395

Rosmaniah, R., Rakhmawati, R., & Akbarini, O. F. (2026). The effect of education using audiovisual media on mothers' knowledge about Japanese encephalitis immunization. *MEDICA (International Medical Scientific Journal)*, 8(1), 1–8. https://doi.org/10.53770/medica.v8i1.758

Sarifah, S., Dianna, D., & Fajrin, D. H. (2026). Factors influencing mothers' participation in visiting integrated health posts for infants and toddlers. *MEDICA (International Medical Scientific Journal)*, 8(1), 16–22. https://doi.org/10.53770/medica.v8i1.759

Sugian, E., Fahruddin, F., & Witono, A. H. (2021). Implementasi program pengembangan PAUD "holistik integratif" di PAUD LSM Ampenan Kota Mataram. *Jurnal Ilmiah Mandala Education*, 7(3), 675–685. https://doi.org/10.36312/jime.v7i3.2342

Sultana, N. (2017). Nutritional awareness among the parents of primary school going children. *Saudi Journal of Humanities and Social Sciences*, *2*(8), 708–725.

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349–357. https://doi.org/10.1093/intqhc/mzm042

Undang-Undang Republik Indonesia. (2023). *Undang-Undang Nomor 17 Tahun 2023 tentang kesehatan*. https://peraturan.bpk.go.id/Details/258028/uu-no-17-tahun-2023

UNICEF Indonesia. (2025). *Indonesia 2018–2024 national nutrition programme review: Synthesis report*. UNICEF. https://www.unicef.org/indonesia/reports

Wahyuningsih, I. S., Sukartini, T., Dewi, Y. S. D., & Luthfa, I. (2026). Investigating the correlation among variables in the Islamic spirituality model for comfort in patients with coronary heart disease. *MEDICA (International Medical Scientific Journal)*, 8(4), 168–183. https://doi.org/10.53770/medica.v8i4.898

World Health Organization & UNESCO. (2021). *Making every school a health-promoting school: Global standards and indicators*. World Health Organization. https://www.who.int/publications/i/item/9789240025059

World Health Organization & UNICEF. (2024). *Progress on drinking water, sanitation and hygiene in schools 2015–2023: Special focus on menstrual health*. World Health Organization and United Nations Children's Fund. https://washdata.org/report/jmp-2024-wash-schools

Xu, J., Liu, D., & Zhu, X. (2024). Research on early childhood health education strategies based on home-home cooperation. *Applied & Educational Psychology*, 5(3), 157-163. https://doi.org/10.23977/appep.2024.050320

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.