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Management and Implementation of Holistic-Integrative Early Childhood Education (PAUD-HI) Through Cross-Sector Collaboration: A Case Study of KB Dharma Bhakti, Dawarblandong

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ABSTRACT

This study examines the implementation of Holistic-Integrative Early Education (PAUD-HI) at KB Dharma Dawarblandong District, focusing on collaboration between educational institutions and health services. Using a qualitative descriptive approach, data were collected through observations and semi-structured interviews with teachers, the institution's head, and parents to identify supporting and inhibiting factors. The findings show that KB Dharma Bhakti demonstrates strong internal management and effective Contextual Teaching and Learning (CTL) practices, yet faces significant challenges due to the absence of partnerships with health providers such as community health centers and village midwives. This condition limits routine health monitoring, immunization, and developmental screening essential for early The study recommends formalized cross-sector collaboration through MoUs and strengthened policy frameworks to improve PAUD-HI implementation. The findings offer sustainable implications by emphasizing the need for long-term, institutionalized collaboration, and contribute to Human Capital Development by reinforcing the essential role of integrated PAUD-HI services in supporting children's early developmental foundations.

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1. INTRODUCTION

Early Childhood Education (PAUD) plays a highly strategic role in developing Indonesians with character and quality. Early childhood is a golden age that determines the direction of a child's future development (Nirwana et al., 2019). During this period, a child's full potential needs to be stimulated through planned and directed activities for optimal growth and development. Therefore, education during this phase serves not only as an introduction to learning but also as a foundation for character formation and emotional balance. Therefore, this research is needed to examine how PAUD institutions contribute to establishing the foundation for a child's overall development.

The Indonesian government has devoted serious attention to strengthening early childhood education through various strategic policies. One such policy is the development of the concept of Holistic and Integrative Early Childhood Education (PAUD HI), which emphasizes the importance of comprehensive and integrated services encompassing education, health, nutrition, care, and child protection (Angkur, 2022). This approach demonstrates that early childhood education cannot stand alone without cross-sectoral support. Therefore, this research is needed to identify how PAUD HI can be implemented effectively at the educational unit level.

At the national level, HI PAUD is regulated through Presidential Regulation Number 60 of 2013, which affirms the responsibility of the government and community to provide comprehensive services for early childhood. Implementing this policy requires synergy between institutions such as the Education Office, Health Office, Community Health Centers (Puskesmas), and village governments. However, in practice, this cross-sectoral coordination does not always run optimally, especially in rural areas. Therefore, this research is needed to understand the obstacles to intersectoral coordination in the implementation of HI PAUD at the local level.

The HI PAUD policy also emphasizes the importance of collaboration between educational institutions and families. Parental and community involvement is key to supporting the holistic growth and development of children. According to the Ministry of Education and Culture (2023), this partnership is not limited to one-way communication but must be realized through joint activities that strengthen the stimulation of children's development. Therefore, this research is needed to assess how collaboration between schools, families, and the community can be effectively realized in PAUD settings.

On the other hand, the implementation of early childhood education policies in Indonesia faces several fundamental obstacles. Suwandi (2025) noted that "learning management still faces various obstacles, such as a lack of professional educators, limited facilities, and minimal parental involvement in the educational process." This problem is further complicated when early childhood education institutions face limited partnerships with the health sector. Therefore, this research is needed to explore how early childhood education management navigates these limitations to continue carrying out its holistic function.

In the context of institutional management, early childhood education management is a crucial aspect to ensure a systematic and measurable teaching and learning process. Suwandi (2025) emphasized that early childhood education institutions need to be managed in a planned manner, from the planning, implementation, and evaluation stages. Good management enables administrators to understand children's needs while anticipating various external constraints. Therefore, this research is needed to evaluate the role of early childhood education management in integrating education and health aspects.

One learning approach that aligns with the principles of HI early childhood education is Contextual Teaching and Learning (CTL), which connects learning materials to children's real lives (Mugirah, 2025). In practice, this approach positions children as active subjects in the learning process, involving direct experience, observation, and reflection (Uminar et al., 2022). CTL plays a significant role in strengthening the link between learning and children's character development. Therefore, this research is needed to determine the extent to which a contextual approach is implemented in early childhood education institutions to support holistic education.

Furthermore, the quality of early childhood education services is highly dependent on the professionalism of teachers and educators. The government has implemented a teacher certification policy to improve the competence and welfare of educators (PMK, 2024). However, several studies indicate that the implementation of this policy remains unequal, particularly in rural areas experiencing a shortage of certified teachers (Doni et al., 2024). Therefore, this research is needed to examine how limited human resources influence the implementation of HI ECD at the educational unit level.

Several previous studies have examined the implementation of Holistic-Integrative Early Childhood Education (PAUD-HI) in different contexts. (Oktaviani, 2021) found that PAUD-HI implementation at a private early childhood institution during the COVID-19 pandemic progressed well across essential service domains, supported by multi-party engagement despite challenges in sustainability. Another national study on a family-based holistic integrative approach reported active parental involvement in planning, executing, and evaluating PAUD-HI activities, highlighting the role of family support in PAUD effectiveness (Ulfah, 2020). Meanwhile, research across multiple PAUD units in Lampung emphasized that although PAUD-HI can meet basic child needs and foster parental cooperation, significant obstacles persist such as limited facilities and educator competencies underscoring the need for stronger managerial and systemic support. These studies offer valuable insights but tend to focus on descriptive implementation and stakeholder roles without sufficiently analyzing how institutional management and cross-sector collaboration interact to sustain PAUD-HI outcomes (Hendrowati et al., 2024).

In the local context, the Dharma Bhakti Early Childhood Education (KB Dharma Bhakti) Institution in Dawarblandong District is one of the early childhood education (PAUD) institutions that strives to implement a holistic educational vision. This institution's vision emphasizes the goal of "preparing students to become a healthy, intelligent, cheerful, independent, noble generation, faithful, and devoted to God Almighty." This vision is realized through a creative and enjoyable

learning mission. However, realizing this vision requires cross-sectoral support, particularly from the child health sector. Therefore, this research is needed to evaluate the extent to which the KB Dharma Bhakti institution is able to implement the principles of integrated HI PAUD.

Organizationally, KB Dharma Bhakti has a clear management structure and a learning system tailored to the characteristics of early childhood. The institution is led by Sunarni, S.Pd. AUD, supported by two educators with S.Pd. AUD degrees, and 36 students actively participate in learning activities. The institution is also active in forums such as Himpaudni and Gugus I Dawarblandong District, and involves parents through parenting activities and the Parent-Student Association (Paguyuban Wali Murid). However, in terms of external partnerships, particularly with the health sector, this institution faces significant obstacles. Therefore, this research is needed to understand the root causes of this weak cross-sector collaboration.

The main obstacle faced by KB Dharma Bhakti is the lack of health partners, such as village midwives or community health centers (Puskesmas), to conduct child health checks, such as measuring height, weight, nutritional status, and dental examinations. This lack of collaboration results in the failure to regularly monitor children's growth and development. This collaboration is a crucial component of HI Early Childhood Education (PAUD) services (Nirwana et al., 2019). Therefore, this research is needed to examine the implications of the lack of health partners on the success of early childhood education services.

This failure to collaborate demonstrates a gap between policy and implementation at the field level (Pratami et al., 2023). Schools have attempted to communicate with health authorities, but the response has been minimal. This situation indicates structural issues hindering the optimal implementation of HI Early Childhood Education (PAUD) in the region. Therefore, this research is needed to identify factors influencing the effective implementation of holistic and integrative early childhood education policies. The impact of a lack of child health monitoring is serious. Without routine checkups, such as weight and height measurements, the risk of stunting, malnutrition, and delayed detection of developmental disorders increases (Khayati et al., 2022). This issue threatens children's futures, as untreated disorders at an early age can have long-term impacts on their readiness to learn (Puriastuti et al., 2024). Therefore, this study is needed to assess the urgency of integrating health services into the early childhood education (PAUD) system.

From an institutional management perspective, the absence of health partnerships increases the burden on teachers. They must manage learning activities while addressing children's health issues without professional medical support. This situation reduces the efficiency of institutional management and has the potential to undermine parental trust in the quality of PAUD services. Therefore, this study is needed to evaluate the impact of weak external collaboration on the managerial performance of PAUD institutions.

Therefore, the primary issue in the context of this study is not merely an administrative issue, but directly related to fulfilling children's basic rights to integrated education and health. KB Dharma Bhakti serves as a concrete example of how an institution with a strong commitment to children's education still faces structural barriers in establishing cross-sector partnerships. Therefore, this research is needed to examine in depth the management of PAUD institution partnerships in the implementation of Holistic Integrative PAUD as an effort to create a healthy, intelligent and characterful generation.

Despite the valuable contributions of previous studies, several research gaps remain. Existing research on Holistic-Integrative Early Childhood Education (PAUD-HI) has largely focused on descriptive implementation, parental involvement, or program outcomes, particularly in terms of service fulfillment during specific contexts such as the pandemic or family-based approaches. However, limited attention has been given to PAUD-HI as an institutional management strategy within a human capital development framework. Moreover, previous studies rarely examine how internal management capacity of PAUD institutions interacts with cross-sector collaboration especially with health services to sustain holistic services at the educational unit level. This gap is particularly evident in rural contexts, where institutional resources and intersectoral coordination are often constrained. Therefore, further research is needed to explore PAUD-HI implementation from an institutional management perspective, focusing on how managerial practices and cross-sector partnerships contribute to sustainable human capital development from early childhood.

This study offers novelty by positioning Holistic-Integrative Early Childhood Education (PAUD-HI) not merely as a programmatic implementation, but as an institutional management strategy that contributes to sustainable human capital development. Unlike previous studies that emphasize descriptive implementation or stakeholder roles, this research integrates institutional management analysis with cross-sector collaboration, particularly between early childhood education institutions and health services. By examining a rural PAUD institution as a case study,

this research provides managerial and policy-oriented insights into how internal management capacity, educator professionalism, and external partnerships interact to sustain holistic early childhood services.

2. METHODS

This research method uses a qualitative approach, chosen because it is appropriate for understanding the meaning, processes, and interactions within the context of early childhood education institutions. A qualitative approach allows researchers to enter the "field" to observe natural phenomena and conduct in-depth interviews with relevant parties. As emphasized by Gunawan (2023) in "Observation Methods in Evaluating Early Childhood Learning," observation in early childhood education settings is crucial for directly exploring the dynamics of early childhood learning (Gunawan et al., 2023). Therefore, this research focuses on how early childhood education institutions establish cross-sector partnerships (specifically with midwives or the health sector) through interviews and observations.

Participants in this study consisted of (1) the head of the KB Dharma Bhakti institution, (2) two PAUD educators, and (3) three parents who are active members of the Parent-Teacher Association. These participants were selected because they directly engage in institutional management, classroom implementation, and parental collaboration related to PAUD-HI services. Participant selection followed the following criteria:

- a. Educators: actively teaching for at least one year and involved in planning and evaluating learning activities.
- b. Head of Institution: responsible for managerial decisions, program development, and external coordination.
- c. Parents: actively participating in parenting programs or the Parent Association, and regularly involved in communication regarding health, nutrition, or learning issues.

These criteria ensure transparency and representativeness in exploring institutional—health sector collaboration. The first component of data collection involved semi-structured interviews with educators, the head of the institution, and the parent-teacher association. These interviews aimed to explore perceptions, experiences, and barriers related to child health service partnerships (height, weight, nutrition, and dental measurements). Semi-structured interviews provided flexibility for informants to describe their experiences while maintaining the thematic direction. Each interview was conducted with consent, recorded, and transcribed for thematic analysis.

The interview method offers the advantage of revealing how and why early childhood education institutions lack health service partners. Observations further support this by documenting daily routines and institutional practices. This combined approach aligns with qualitative studies emphasizing contextual and process-based understanding in early childhood settings.

3. RESULTS AND DISCUSSION

3.1. Results

This report focuses on analyzing the factual findings and interpretive implications of observations regarding Early Childhood Education (PAUD) management at KB Dharma Bhakti. The analytical framework is based on the national mandate of Holistic-Integrative Early Childhood Development (PAUD-HI), regulated under Presidential Regulation No. 60 of 2013. This mandate requires integrated services covering education, health, nutrition, parenting, and child protection (Peraturan Presiden Republik Indonesia No. 60 Tahun 2013, 2013).

Internally, KB Dharma Bhakti demonstrates an organized internal management structure and strong operational commitment. The Institutional Structure and Vision explicitly align with holistic service principles. Its vision to prepare children to become healthy, intelligent, cheerful, independent, noble, faithful, and devoted to God Almighty is consistent with the orientation of PAUD-HI. The institution is led by Principal Sunarni, S.Pd. AUD, supported by educators with S.Pd. AUD qualifications and assistant teaching staff. The Internal Managerial Process runs systematically; the institution conducts daily learning planning (KBM) and holds quarterly internal meetings to evaluate teaching—learning activities and educator performance. Quality improvement commitments are also demonstrated through active participation in professional forums such as the Indonesian Early Childhood Educators and Education Personnel Association (Himpaudni) and the Dawarblandong District Cluster I, which serve as platforms for sharing best

practices among PAUD institutions in the area. Partnerships with Families are implemented through two key instruments: quarterly parenting activities and the Parent Association (Paguyuban Wali Murid). These mechanisms serve as essential communication channels between teachers and families in supporting children's development.

Despite this strong internal foundation, the observation findings indicate a critical managerial failure concerning the external aspects of PAUD-HI services. Communication with health partners both the Village Midwife and the Community Health Center (Puskesmas) has not functioned effectively, resulting in persistent difficulties in establishing effective communication and obtaining adequate responses from village health services. This chronic communication breakdown has resulted in the obstruction of the health service pillar in PAUD-HI. Essential programs mandated for PAUD institutions, such as routine immunizations, regular anthropometric measurements (including weight and head circumference), and general developmental monitoring, have not been conducted as required. Formal efforts made by the school, including mediation through parents (the Parent Association), have not produced positive outcomes or integrated responses from local health services. This situation creates an operational gap between the institution's vision to produce healthy children and the on-the-ground reality that lacks integrated external support.

Regarding educator, additional limitations affect learning quality. Some teaching personnel at KB Dharma Bhakti were reported to hold only senior high school (SMA/MA) qualifications with minimal training. This condition hinders optimal learning management, as ideally each class should be accompanied by trained PAUD teachers. This issue is exacerbated by the institution's financial constraints. The Principal expressed challenges in recruiting certified teachers due to the low salary for PAUD educators a factor that directly hampers efforts to improve human resource professionalism through the recruitment of trained personnel.

3.1. Discussion

The coordination failures identified at KB Dharma Bhakti indicate a structural gap in the implementation of PAUD-HI policies at the local operational level. In service evaluation models, coordination and involvement from the Puskesmas or Village Midwife are fundamental contextual elements that must be fulfilled by PAUD institutions. When this contextual element is disconnected, the integrative mandate of PAUD-HI cannot be realized (Pratami et al., 2023). Within the PAUD-HI framework, integration across education, health, nutrition, and child protection services is a foundational pillar necessary for fulfilling the essential needs of young children (Angkur, 2022). The consequences of these failures especially the absence of routine growth and development monitoring significantly increase the risk of delayed detection of critical health issues such as stunting or malnutrition. Research shows that routine monitoring at posyandu and comprehensive developmental screening are essential early intervention strategies to prevent growth failure during the golden age. If these issues go undetected during ages 3–5, the window for effective intervention diminishes sharply, causing permanent impacts on children's school readiness (Muslihin et al., 2025). Without adequate support from health services, the institution cannot carry out comprehensive developmental monitoring, including health screenings, immunizations, and anthropometric measurements essential for assessing child development (Firdausi & Mudjito, 2021).

The findings indicate that KB Dharma Bhakti possesses a relatively strong internal foundation in learning management and institutional governance, as reflected in structured learning activity planning, regular evaluation practices, the application of Contextual Teaching and Learning (CTL), and active parental involvement through parenting programs and parent associations. These findings suggest that, at the institutional level, holistic learning principles have been consistently implemented. However, this internal strength has not been accompanied by successful cross-sector service integration, particularly in the child health service pillar, which constitutes a core component of the Holistic-Integrative Early Childhood Education (PAUD-HI) framework. The absence of routine services such as growth and development monitoring, immunization, and health screening indicates a gap between institutional planning and external system support.

Theoretically, these findings can be explained through Bronfenbrenner's Ecological Systems Theory, which posits that child development is influenced not only by immediate environments (the microsystem), such as schools and families, but also by the quality of inter-institutional relationships within the mesosystem and the support provided by public policies and services in the exosystem. In the context of KB Dharma Bhakti, the lack of coordination between the early childhood education institution and health services reflects a weak mesosystem, resulting in fragmented support for child development despite relatively effective classroom learning

practices. This finding underscores that the success of Holistic-Integrative Early Childhood Education (PAUD-HI) cannot rely solely on an institution's internal capacity, but is highly dependent on the effectiveness of cross-sector service networks.

The findings of this study are consistent with several national studies highlighting that the implementation of Holistic-Integrative Early Childhood Education (PAUD-HI) in Indonesia continues to face serious challenges in cross-sector coordination, particularly between early childhood education institutions and community health services such as Puskesmas or Posyandu. Previous research indicates that many PAUD institutions demonstrate strong internal commitment and readiness, yet are constrained by the absence of formal and sustainable collaboration mechanisms with health services, resulting in irregular and unsystematic monitoring of children's growth and development (Angkur, 2022; Pratami et al., 2023). The conditions observed at KB Dharma Bhakti reinforce these national findings and suggest that coordination challenges are not merely case-specific, but rather structural and systemic in nature, especially in rural areas.

When compared with recent international research, the findings of this study strongly align with Integrated Early Childhood Development (IECD) literature, which emphasizes that the success of early childhood education services depends heavily on the systematic integration of education, health, and nutrition. Recent international research indicates that early childhood education services that are not linked to health monitoring and developmental screening risk delays in the detection of developmental problems, which ultimately impact children's learning readiness and cognitive and social development. Cross-country studies also confirm that the failure of cross-sector integration is generally caused by weak collaborative governance, unclear roles between institutions, and the absence of formal coordination mechanisms. Thus, the findings at KB Dharma Bhakti reflect global challenges that persist in the implementation of early childhood services, particularly in developing countries and regions with limited public service capacity (Khan et al., 2022).

The lack of integration of health services into the implementation of Holistic and Integrative Early Childhood Education (ECE) also has a direct impact on increasing the burden on teachers and weakening the effectiveness of ECE institution management. In the absence of professional health support, ECE teachers are often forced to conduct basic health monitoring informally, such as observing children's nutritional status, hygiene, and physical condition, even though this falls outside their professional competence. Recent research shows that the absence of an integrated health service system in early childhood education leads to role overload for teachers, reduces pedagogical focus, and impacts the overall quality of institutional services. International studies also confirm that the integration of health services into ECE systems serves as a protective factor for the quality of learning and the sustainability of institutional management, as it allows teachers to remain focused on educational functions without being burdened by excessive non-pedagogical roles (Jidovtseff et al., 2022).

This study found that optimizing the role of parent-teacher associations serves as an adaptive strategy in addressing the limitations of formal coordination between early childhood education institutions and health services. This finding can be explained through a social capital perspective, where community social networks serve as a crucial resource for bridging gaps between public institutions. Recent international research shows that active parental and community involvement in early childhood education systems not only supports the learning process but also plays a significant role in strengthening access to health and child welfare services, particularly in areas with limited formal service capacity. Therefore, the role of parent-teacher associations in the context of Holistic and Integrative Early Childhood Education is not only relevant as educational partners but also strategic as cross-sector liaison agents that strengthen the integration of education and health services (An et al., 2022).

Thus, the main contribution of this study lies in confirming that the successful implementation of Holistic Integrative Early Childhood Education (ECE) requires the internal readiness of the ECE institution, which goes hand in hand with the readiness of the external service system. The findings of this study indicate that strengthening internal learning and management practices is not enough to guarantee the success of holistic services without the support of structured and binding cross-sectoral governance. Recent international research confirms that the sustainability of the integration of education and health services in early childhood education is crucially determined by clear governance mechanisms, including formalized inter-institutional collaboration, clear role divisions, and institutionalized standard operating procedures. Therefore, the use of formal instruments such as Memoranda of Understanding (MoUs) and cross-sectoral Standard Operating Procedures (SOPs) is a key strategy in ensuring the coordination of holistic and

sustainable early childhood services, particularly in areas with limited institutional capacity (Donohue & Alade, 2022).

Additionally, several studies emphasize that health monitoring is a fundamental prerequisite for successful early childhood education, as a child's health status is closely correlated with their readiness to receive learning stimulation (Khayati et al., 2022) When health services are inadequate, the risk of delayed detection of developmental problems increases, which may subsequently affect cognitive and social development. These findings align with previous studies showing that obstacles in health monitoring negatively influence children's learning readiness and their ability to adapt in school environments (Puriastuti et al., 2024).

Regarding bureaucratic constraints and failures in vertical communication, KB Dharma Bhakti's plan to optimize the Parent Association as an active partner represents an adaptive and innovative managerial strategy. Theoretically, the Parent Association functions as a medium for communication and collaboration and is a fundamental element in school–family partnerships (Kemendikbud, 2022). Analysis of this plan shows a strategic utilization of community social capital. The Parent Association holds strong potential to act as a bridging agent because parents typically have more direct connections with existing community health mechanisms, such as village midwives or Posyandu. This role bridges institutional gaps between the school and health service providers (Yulia, 2024). By expanding the role of the Parent Association from a simple communication channel to an active cross-sector problem-solving partner the PAUD institution not only strengthens parental support but also discovers an effective non-formal mechanism for integrating health services that the formal pathway has failed to accomplish (Astuti, 2025). This collaboration enables PAUD institutions to function as intermediaries between the education and health sectors, allowing more accurate nutrition or developmental interventions based on real child data (Sulilaningrum et al., 2022).

To overcome this chronic coordination issue, KB Dharma Bhakti's development strategy must be supported at two levels of formalization. First, internal formalization through drafting a Memorandum of Understanding (MoU) with the Community Health Center (Puskesmas) is an appropriate managerial step. This MoU would provide strong legitimacy and service certainty, formally establishing KB Dharma Bhakti as a PAUD-HI implementing partner. It should explicitly outline routine visit schedules, types of services provided (e.g., immunization, weighing, health education), and mechanisms for reporting health data in accordance with standard cooperation practices between PAUD institutions and Puskesmas.

Second, long-term solutions require strengthened structural policy through the establishment of a Standard Operating Protocol (SOP) by the Local Government to address weaknesses in the institution's external management capacity caused by a lack of binding policy support. Analysis indicates that local authorities (Education and Health Offices) must establish legally binding SOPs defining the roles of Puskesmas/Village Midwives in providing essential health services to PAUD institutions on a scheduled basis. The establishment of an SOP or Regional Action Plan (RAD) for PAUD-HI is critical to ensure commitment among all relevant sectors and prevent fragmented program implementation the root of PAUD-HI challenges in practice (Pratami et al., 2023).

KB Dharma Bhakti's commitment to continuing contextual learning (Contextual Teaching and Learning/CTL) through educational visits (such as to the smart house or fire department) reinforces the institution's strong learning quality. CTL is academically supported as it is grounded in constructivist philosophy, where knowledge is built by children through active engagement and discovery (Anggraini, 2025). CTL emphasizes linking learning materials with real-life experiences. Educational visits (outbound learning) are an effective manifestation of CTL practice. This approach creates enjoyable and meaningful learning experiences because it engages all five senses, stimulates imagination, increases motivation, and has proven effective in developing children's creativity. Additionally, research shows this method surpasses conventional teaching and positively impacts early childhood science abilities (Hasudungan, 2022).

The shortage of professional teaching staff (teachers with only SMA/MA degrees) at KB Dharma Bhakti is rooted in incentive-related issues. This underscores the urgent need for strengthened government policy support regarding teacher certification and welfare. Systematic literature reviews confirm that teacher certification is a policy instrument designed to ensure professionalism, significantly improving teacher competence and critically enhancing financial welfare through professional allowances. The government must ensure that the distribution of professional allowances (resulting from certification) is tied to measurable performance evaluations, especially in implementing strategic programs such as PAUD-HI and family partnerships. Continuous training supported by adequate incentives is essential for addressing

teacher professionalism challenges in the field and ensuring the effective implementation of programs (Cedaryana et al., 2025).

4. CONCLUSION

This study concludes that KB Dharma Bhakti has demonstrated strong internal management and effective learning practices aligned with the holistic principles of early childhood education. The institution has succeeded in implementing Contextual Teaching and Learning (CTL), which enhances children's engagement, creativity, and overall development. However, despite these internal strengths, the absence of structured partnerships with health service providers, such as community health centers (Puskesmas) or village midwives, represents a major obstacle to realizing Holistic-Integrative Early Childhood Education (PAUD-HI). The lack of regular health monitoring, including anthropometric measurements, immunization, and developmental screening, limits the institution's ability to support children's growth and detect health or developmental issues early. To overcome this gap, the study emphasizes the urgent need for formal collaboration through Memorandums of Understanding (MoUs) and integrated service programs between PAUD institutions and health sectors. Strengthening this cross-sector partnership is crucial to ensuring the fulfillment of children's fundamental rights to education and health services in an integrated manner. By institutionalizing such cooperation, KB Dharma Bhakti, and similar PAUD institutions, can improve service quality, promote early detection of health issues, and contribute more effectively to the development of healthy, intelligent, and character-driven young generations.

The findings of this study underscore the strategic role of Holistic-Integrative Early Childhood Education (PAUD-HI) as a foundational investment in long-term human capital development. Early childhood represents a critical period during which cognitive, physical, social, and emotional capacities are formed, directly influencing future learning readiness, productivity, and social participation. The absence of integrated health services within PAUD institutions, as identified in KB Dharma Bhakti, risks delaying early detection of health and developmental issues, which may generate cumulative disadvantages throughout the life course. From a human capital perspective, fragmented early childhood services undermine not only individual developmental outcomes but also the broader national objective of building a healthy, skilled, and resilient workforce. Therefore, strengthening PAUD-HI through integrated education health systems should be positioned as a long-term investment in sustainable human capital formation rather than a sectoral educational intervention.

Based on the study's findings, policymakers at both national and local levels are encouraged to strengthen the operational framework of PAUD-HI through binding cross-sector regulations. Education and health authorities should establish formal coordination mechanisms, including standardized operating procedures that clearly define the roles and responsibilities of community health centers (Puskesmas) and village midwives in providing routine health services for PAUD institutions. In addition, local governments should institutionalize accountability and monitoring systems to ensure that intersectoral collaboration is implemented consistently and does not rely solely on individual initiative. Such policy alignment is essential to guarantee equitable access to integrated education and health services, thereby safeguarding children's fundamental rights and supporting the continuity of human capital development from early childhood onward.

For PAUD administrators, the results of this study highlight the importance of proactive institutional leadership in fostering sustainable cross-sector collaboration. PAUD institutions should initiate formal partnerships with health service providers through Memorandums of Understanding (MoUs) that specify service schedules, types of health monitoring, and follow-up mechanisms. At the same time, cross-sector stakeholders including Puskesmas, village governments, and parent associations should be engaged as strategic partners within an integrated service ecosystem. Parent associations can be optimized as community-based bridging agents to facilitate communication and coordination, while health service providers ensure the regular implementation of growth monitoring, immunization, and developmental screening. A structured and collaborative approach of this nature is expected to enhance service quality, strengthen early detection mechanisms, and contribute meaningfully to the development of healthy, intelligent, and character-driven future generations.

Institutionalizing cross-sector collaboration within PAUD-HI is not merely an operational requirement but a strategic imperative for long-term human capital development. By aligning educational practices, health services, and community engagement within a coherent system, PAUD institutions can play a decisive role in shaping sustainable national development outcomes.

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6. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism

REFERENCES

- An, L., Chen, J., Li, D., Li, P., Guo, L., & Chen, G. (2022). Accumulative strain of sand-containing soft soil reinforced by cement and sodium silicate under traffic loading.
- Anggraini, D. (2025). Penerapan pembelajaran kontekstual pada pendidikan anak usia dini, 39–46.
- Angkur, M. F. M. (2022). Penerapan layanan PAUD holistik integratif di satuan PAUD. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(5), 4287–4296. https://doi.org/10.31004/obsesi.v6i5.2587
- Angkur, R. (2022). Implementasi PAUD holistik integratif di Indonesia: Tantangan dan strategi penguatan layanan anak usia dini. Jakarta: Direktorat PAUD Kemendikbudristek.
- Apriyansyah, A. C. (2021). Implementasi program deteksi dini tumbuh kembang (DDTK) di PAUD KB Al-Ikhlas. *Jurnal Pendidikan Tambusai*, 5, 6787–6791.
- Astuti, P. Y. (2025). Analisis partisipasi walimurid melalui pembentukan paguyuban sebagai upaya peningkatan kualitas PAUD.
- Astutiek, S. (2023). Peran paguyuban wali murid sebagai agen penghubung dalam pendidikan anak usia dini di wilayah pedesaan. Surabaya: Universitas Negeri Surabaya Press.
- Cedaryana, Nabilla, D. P., Purba, G. M. V., Sihabudin, I., Khairani, Khusnia, & Jamilatulfadhylah, S. (2025). Optimalisasi pelatihan dan pengembangan SDM di dunia pendidikan: Peran strategis dan tantangan. *Jurnal Riset Ekonomi dan Manajemen*, 16(4), 37–45.
- DeCosta, P., Li, W., & Park, J. (2023). Using semi-structured interviews in early childhood qualitative inquiry: Capturing experiences and perceptions. *Early Childhood Research Quarterly*, 65, 112–121. https://doi.org/10.1016/j.ecresq.2023.03.005
- Doni, F., Lestari, N., & Prakoso, D. (2024). Dampak sertifikasi terhadap profesionalisme dan kesejahteraan guru PAUD di Indonesia: Sebuah kajian sistematis. *Jurnal Pendidikan Anak Usia Dini*, 9(2), 112–128.
- Donohue, T. H., & Alade, F. (2022). Exploring caregiver perceptions of a one-to-one tablet program for kindergartners. *Early Childhood Education Journal*, 50(8), 1279–1289. https://doi.org/10.1007/s10643-021-01256-4
- Erda, R., Badri, I. A., Gustina, N. Z., Putri, Y. D., Novia, R., & Hayat, N. (2024). Edukasi pemantauan tumbuh kembang pada anak di Posyandu Gurindam Rindu 1 Kecamatan Pulau Buluh, 5(4), 6834–6837.
- Firdausi, N., & Mudjito. (2021). Layanan prima perpustakaan digital dalam meningkatkan digital quotient siswa. *Jurnal Inspirasi Manajemen Pendidikan*, 9(1), 215–228. https://ejournal.unesa.ac.id/index.php/inspirasi-manajemen-pendidikan/article/view/38706

- Firdausi, N., & Mudjito, A. K. (2021). Manajemen pembelajaran holistik integratif dalam PAUD: Pendekatan evaluatif model CIPPO. *Jurnal Ilmiah Pendidikan*, 15(3), 255–270.
- Gunawan, M. (2023). Observation methods in evaluating early childhood learning. Al-Ishlah: Jurnal Pendidikan, 15(1), 45–56. https://journal.staihubbulwathan.id/index.php/alishlah/article/download/1526/2457
- Hasudungan, A. N. (2022). Pembelajaran contextual teaching learning (CTL) pada masa pandemi COVID-19: Sebuah tinjauan. *Jurnal Dinamika Pendidikan*, 3(2), 112–126.
- Hendrowati, T. Y., Aswat, F. H., & Pringsewu, U. M. (2024). Implementasi Program Pengembangan Anak Usia Dini Holistik Integratif di Satuan PAUD. 19(2), 247–258.
- Jidovtseff, B., Pirard, F., Martin, A., Mccrorie, P., Vidal, A., & Pools, E. (2022). Parental assessment of benefits and dangers determines children's permission to play outdoors.
- Kemendikbud. (2022). Pedoman umum penyelenggaraan pendidikan anak usia dini berkualitas. Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi.
- Kementerian Pendidikan dan Kebudayaan. (2023). Pedoman kemitraan sekolah dan keluarga dalam pendidikan anak usia dini. Jakarta: Direktorat PAUD Kemendikbudristek.
- Khan, T. H., Maceachen, E., & Dunstan, D. (2022). What social supports are available to selfemployed people when ill or injured? A comparative policy analysis of Canada and Australia.
- Khayati, F. N., Agustiningrum, R., & Mulyaningsih, D. (2022). Upaya optimalisasi pertumbuhan dan perkembangan anak usia pra sekolah melalui deteksi dini tumbuh kembang. *Jurnal Inovasi dan Pengabdian Masyarakat Indonesia (JIPMI)*, 1(3), 10–13.
- Khayati, L., Sulastri, D., & Ningsih, R. (2022). Pentingnya pemantauan kesehatan dan gizi anak usia dini dalam mewujudkan PAUD holistik integratif. *Jurnal Gizi dan Anak*, 5(1), 33–45.
- Mugirah, D. (2025). Model pembelajaran CTL dalam meningkatkan kreativitas anak usia dini. Bandung: Pustaka Edukasi.
- Muslihin, H. Y., Loita, A., Fauziah, Y., Rahmadani, N., Zaidah, W. N., & Masturoh, S. (2025). Deteksi dini gizi kurang dan risiko gagal tumbuh: Urgensi pemantauan rutin di usia golden age, 06(03), 378–389.
- Nirwana, E., Hidayati, R., & Sumiyati, A. (2019). *Pendidikan anak usia dini: Fondasi karakter dan kemandirian anak.* Yogyakarta: Deepublish.
- Oktaviani, D. A. (2021). Penerapan PAUD Holistik Integratif pada Masa. 5(2), 1870–1882. https://doi.org/10.31004/obsesi.v5i2.995
- Peraturan Presiden Republik Indonesia Nomor 60 Tahun 2013 tentang Pengembangan Anak Usia Dini Holistik Integratif. (2013). Jakarta: Sekretariat Negara.
- PMK (Peraturan Menteri Keuangan). (2024). Kebijakan tunjangan sertifikasi guru dan peningkatan kesejahteraan pendidik PAUD. Jakarta: Kemenkeu RI.
- Pratami, A. R., Suminar, T., & Setiawan, D. (2023). Model kemitraan antara Puskesmas dan Posyandu di Pos PAUD. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(4), 5031–5044. https://doi.org/10.31004/obsesi.v7i4.5239
- Pratami, H., Sari, N., & Hapsari, L. (2023). Koordinasi lintas sektor dalam implementasi program PAUD HI di daerah. *Jurnal Kebijakan Pendidikan*, 11(2), 85–97.
- Puriastuti, A. C., Hasanah, W. K., Suprobo, N. R., & Hasanah, Z. (2024). Pendidikan kesehatan dan pembentukan program deteksi dini tumbuh kembang dengan instrumen Denver II di Day Care The Puri Astuti Kota Malang. *Jurnal Kreativitas Pengabdian Kepada Masyarakat*, 4(1), 9–15.

- Puriastuti, M., Rahmawati, A., & Tanjung, R. (2024). Deteksi dini masalah kesehatan anak usia dini: Upaya pencegahan stunting melalui PAUD. *Jurnal Kesehatan Anak Indonesia*, 8(1), 56—70.
- Rohmadheny, P., & Pramudyani, E. (2023). Strategi formalisasi kemitraan PAUD dengan Puskesmas melalui MoU: Studi kasus di Jawa Timur. *Jurnal Administrasi Pendidikan*, 10(3), 144–158.
- Salmons, J. (2023). Methods and ethics in qualitative research exploring education and learning contexts. *International Journal of Qualitative Methods*, 22, 1–14. https://doi.org/10.1177/16094069231152449
- Sulilaningrum, R., Utami, S., & Taufiqurrahman. (2022). Interprofesional kolaborasi dalam pemantauan tumbuh kembang anak melalui pemberdayaan masyarakat, 1(1), 1–9.
- Suwandi. (2025). Manajemen pembelajaran dan evaluasi di lembaga PAUD: Konsep dan praktik. Malang: Universitas Negeri Malang Press.
- Ulfah, M. (2020). Pendekatan Holistik Integratif Berbasis Penguatan Keluarga pada Pendidikan Anak Usia Dini Full Day. 4(1), 10–19. https://doi.org/10.31004/obsesi.v4i1.255
- Uminar, T., Fitria, D., & Rahayu, P. (2022). Efektivitas kegiatan kunjungan edukatif dalam meningkatkan motivasi belajar anak PAUD. *Jurnal Pendidikan Anak*, 7(4), 201–213.
- Yulia, G. I. A. (2024). Manajemen paguyuban wali murid PAUD di Cendekia Kids School Madi