Child Education Journal (2025), **7.2**, 127–136

Child Education Journal

Management practices and challenges of holistic integrative health and nutrition services in early childhood education institutions: A qualitative study in Jember Regency, Indonesia

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Article Information:

Submission	:	July 21, 2025
Revision	:	November 09, 2025
Accepted	:	November 28, 2025
Available Online	:	November 29, 2025
doi	:	10.33086/cej.v7i2.7789

Abstract

Management is a structured and planned process conducted through several stages to achieve predetermined goals and objectives. Health and nutrition services are defined as efforts provided by schools or health-related organizations to optimize early childhood development. Holistic Integrative (HI) activities are government-initiated programs designed to stimulate key aspects of early childhood development through collaboration with schools, parents, and relevant institutions or agencies. Holistic integrated health and nutrition service management consists of planning, organizing, implementing, and supervising the HI process. This research was conducted in Kaliwates District, Jember Regency, specifically at Rukun Harapan Kindergarten and PGRI Kebon Agung Kindergarten, utilizing a descriptive qualitative method. The data collection process involved interviews, observation, and documentation. This study aims to analyze and elucidate holistic integrative health and nutrition service management practices suitable for kindergarten institutions. Furthermore, the findings may help the local government make informed policy decisions and provide foundational considerations for the development of holistic integrative health and nutrition service management concepts. The results demonstrate that both institutions engage in planning for health and nutrition services, including scheduling, operational budgeting, allocation of human resources, provision of supporting resources, and organizational management related to the division of health and nutrition service tasks. Additionally, the study identifies aspects of implementation and supervision management, as well as obstacles encountered in delivering holistic health and nutrition services in both institutions. In conclusion, several aspects can be optimized since they are not in line with the rules set by the government regarding early childhood education (PAUD) in kindergarten.

Keywords: Management, Holistic Integrative, Health and Nutrition Services

INTRODUCTION

The quality of a nation's future is largely determined by the idealisation of child growth and development. However, empirical data in Indonesia indicate that there is a substantial gap between the ideal conditions and the reality of child development achievements that are not yet fully idealised (Norhayati et al., 2023). United Nations Childern's Fund abbreviated as Unicef, 2022 suggests that Indonesia has several major child nutrition challenges, one of which is children under five who have proportions of wasting, stunting, and obesity. This is reinforced by an excerpt from the Indonesian Nutrition Status Survey (SSIG) 2022, which states that the stunting rate in Indonesia is at 21.6%, the wasting rate in Indonesia is at 7.7%, the underweight rate is at 17.1% and the overweight rate is at 3.5% (Kemenkes RI, 2022). The impact of these problems is incentivized by deep and interrelated root causes, including pervasive social and gender inequalities, structural poverty, poor infrastructure and facilities, and unequal levels of education across Indonesia (Unicef, 2022). At the Kindergarten (TK) level, the Holistic Integrative Programme (HI) is defined as a planned and systematic approach implemented by the Institution to ensure that children's essential needs are met in a comprehensive manner. This approach includes the provision of multidimensional services covering aspects of child health, nutrition and care, education, protection, and welfare. The implementation of Health services in this context is realised through various organised initiatives such as integrated health service post (Posyandu) and Early Childhood Family Development (BKB), as well as preventive and promotive Health programmes (Kementerian Pendidikan dan Kebudayaan RI, 2015). Management can be understood as a discipline and practice that involves a series of strategic and systematic management of resources, with the main objective of ensuring the proper allocation of resources to achieve the main goal of ensuring the proper allocation of resources to achieve goals or objectives at the maximum level of effectiveness and efficiency. This process holistically includes crucial stages ranging from careful planning, structured organisation, measurable operational execution, continuous monitoring, and comprehensive performance evaluation, as defined by Nabila and Utami, 2023. Thus, Early Childhood Education (PAUD) services have a fundamental urgency. These services are crucial to facilitate and initiate the effectiveness of children's growth and development from an early age, so that their internal potential can be realised to the fullest.

Holistic Integrative Early Childhood Development (PAUD HI) is an effort to develop the potential of early childhood consisting of several aspects, namely care, education, parenting, health, welfare, and protection with the aim of meeting various essential needs and involving several parties in an integrated, systematic, and simultaneous manner (Kementerian Pendidikan dan Kebudayaan RI, 2015).Hajati, 2018 states that there are several ways to provide PAUD HI services to the Indonesian community through Posyandu by conducting early detection interventions, nurturing or physical-biomedical needs, through BKB by holding activities related to child protection, emotional needs and affection, as well as various activities at the PAUD level that can stimulate and sharpen the minds of young children. Based on the Technical Guidelines for Implementing PAUD HI, the application of health and nutrition services in PAUD units is as follows: 1) Able to make health, nutrition, and care services part of the PAUD curriculum by conducting various activities such as weighing body weight and height, which are recorded in the Health Card (KMS) periodically, promoting healthy and balanced eating habits, promoting self-care and environmental care, introducing balanced nutrition with the involvement of parents, monitoring children's daily intake at school, providing first aid kits, and monitoring the physical condition of early childhood; 2) Conducting Early Growth and Development Detection (DDTK) by providing medical personnel at school; 3) Requesting assistance or collaborating with Indonesian Kindergarten Teachers Association (IGTKI)/Assosiation of Early Childhood Educators and Teachers of Indonesian (HIMPAUDI)/Inspectors/Community Leaders to expand partnerships (Kementerian Pendidikan dan Kebudayaan RI, 2015).

According to previous studies, several factors that hinder children's optimal access to health and nutrition services include being born into underprivileged families and living in underserved geographical locations, which can lead to inadequate health and nutrition services (Amara and Jemmali, 2017). Thus, early childhood has several problems as a result of the lack of facilities obtained, one of which is the lack of health and nutrition service facilities. This is supported by a statement from Purnamasari, 2018 which suggests that some problems as a result of the lack of health and nutrition service facilities include children with thin or very thin body proportions, fat, obese and short or very short. Several other problems stated by Astuti in (Sadiah et al., 2020) arise if health and nutrition services are not provided to children such as being susceptible to fever, cough or cold, diarrhoea, measles, tuberculosis (TB), skin infections, and skin diseases so that it will affect child growth and the achievement of less than ideal child development.

Based on preliminary observations conducted by researchers in various schools in several sub-districts in Jember, the Holistic Integrative (HI) programme is being intensified but has not been implemented effectively in Jember district. This can be seen from the absence of a Regent Regulation (Perbub) related to HI in Jember, as evidenced by the coordination meeting to draft the Perbub related to PAUD HI on Tuesday, October 1, 2024 (Dinas Pendidikan, 2024). In addition, several schools have not carried out routine DDTK checks, and there are several students who have not implemented habits of self-care and environmental care, such as routinely washing their hands before and after eating, disposing of trash in its proper place, or the lack of hygiene facilities in the school environment. The habit of eating healthy and balanced meals as well as the introduction of balanced nutrition to students and parents are also important to be implemented in schools. This is based on the statement from the SSIG data which shows that the stunting (34.9%), wasting (12.7%), and underweight (24.1%) rates in Jember District are much higher than the East Java Province average (stunting 19.2%) (Kemenkes RI, 2022). Such is the result of pre-observation of several sub-districts in Jember such as Kaliwates sub-district, Sumbersari sub-district, Jenggawah sub-district and Tempurejo sub-district which shows that some schools have not routinely conducted DDTK checks, self and environmental habituation, as well as the introduction of healthy food and balanced nutrition to students and parents. which has the potential to have a negative impact on early childhood development, causing anaemia, stunting, obesity, and other diseases.

Therefore, it is necessary to conduct research related to the management of holistic integrative development in health and nutrition services in kindergartens of Kaliwates District, Jember Regency so that it can answer the question of how the management of health and nutrition services holistically integrative in kindergartens of Kaliwates District, Jember Regency. This study helps analyze and understand holistic integrative health and nutrition service management suitable for implementation in kindergarten institutions. In addition, this study can serve as a determining factor for policy or recommendations for basic considerations and the development of a holistic integrative health and nutrition service management concept for local governments.

METHOD

Materials

The data from this study were taken from two kindergarten institutions located in the Sumbersari sub-district of Jember Regency through preliminary observations by filling out a questionnaire at the meeting of the IGTKI Kaliwates District in September 2024. Researchers collected initial data through distributing 56 questionnaires according to the number of kindergarten institutions in the Kaliwates sub-district, with atotal of 44 respondents from each institution, with a total of 44 filled forms and unfilled forms with information on meeting permits for 9 institutions and unwilling to fill out forms for 3 institutions. 1 questionnaire consists of 24 statements of HI PAUD implementation that are adjusted to the guidelines for HI PAUD guidelines and technical guidance in 2015. From several questionnaires distributed to 56 kindergarten institutions in Kaliwates sub-district,

Jember Regency, there are 2 kindergarten institutions that meet the highest criteria by having the implementation of 24 activities, namely Arni Kindergarten and Al-Furqon Kindergarten, but for several reasons Al-Furqon Kindergarten is not willing to be researched and Arni Kindergarten has B accreditation. Therefore, the researchers chose Rukun Harapan Kindergarten with Accreditation A and had 22 activity implementations from filling out the questionnaire, then the PGRI Kebon Agung Kindergarten institution which had 8 activity implementations. This was the reason why the researcher chose these two institutions.

In addition, there are data sources used in this research, namely primary data sources and secondary data. Primary data from this study are principals, teachers and student guardians as important sources related to the research, while secondary data are obtained from supporting documents such as Geographic Information Survey System (SSIG) data, Accreditation data from the National Accreditation Board (BAN) PAUD and Accreditation data for Kindergarten Institutions in Jember Regency. The informants involved in this research were principals, teachers and parents or guardians of students. The reason for the principal to be the subject of the research is because the principal is a high decision holder and policy maker in schools related to partners or external factors of the school so that he is able to provide clear and detailed information and sources of documentary data, besides that the principal plays an important role in planning health and nutrition programmes in both institutions. Meanwhile, teachers are educators who assist children or students in the process and activities at school and parents are the closest people in children's lives so that they can provide accurate information and sources of documentation data in accordance with activities in the field.

Data collection procedures

This research uses descriptive qualitative research methods with data collection methods used by researchers, namely observation, documentation and interviews. Qualitative method is a research process in the form of action, oral or written so that it explains the phenomenon in detail, clearly, in detail and in depth and does not use formulas, counts or statistical procedures so as to produce data in the form of narratives. (Bogdan & Tailor dalam (Murdiyanto, 2020); Strauss & Corbin dalam Bado, 2021).

Data analysis procedures

The data analysis techniques used by researchers in this study are data collection, data reduction, data presentation and conclusion drawing stages. The data analysis technique used in this research is the Miles, Huberman interactive model, namely data analysis in qualitative research is carried out interactively and continues continuously until completion.

There are four important components in data analysis techniques, namely: (1) Data collection conducted by researchers at Rukun Harapan Kindergarten and PGRI Kebon Agung Kindergarten using three methods, namely observation, interviews and documentation; 2) Data reduction in this study is focused on the management of holistic integrative health and nutrition services in the two institutions conducted through three data collection methods, namely observation, interviews and documentation; (3) Presentation of data generated by researchers in this study in the form of text narratives; (4) The researcher's conclusion from this study is how the management of holistic integrative health and nutrition services in kindergarten in Kaliwates District, Jember Regency. The following is a picture of the four technical stages of data analysis by Miles, Huberman.

Data Validity Test

Researchers used triangulation as a data validity test in this study. Triangulation is the process of checking information obtained from research sources with different methods and times. (Sinaga, 2023). Researchers tested the validity of data through triangulation techniques by rechecking the results of interviews, observation results and documents and archives related to health and nutrition services as well as the results of interviews with teachers and principals at Rukun Harapan

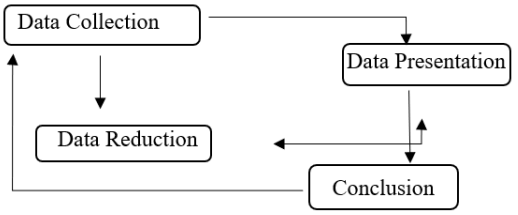

Figure 1. Technical Cycle of Interactive Model Data Analysis

Kindergarten and PGRI Kebon Agung Kindergarten, Jember Regency.

RESULT AND DISCUSSION

Management of health and nutrition services in kindergartens in Kaliwates sub-district, Jember district

Planning Management of Health and Nutrition Services in Kindergartens in Kaliwates District, Jember Regency

Observations at Rukun Harapan Kindergarten show that the schedule of weighing activities is different for each class according to the condition of the students and the time of the inspection activities with partners is determined based on the agreement of both parties. While PGRI Kebon Agung Kindergarten shows independent DDTK measurement planning (BB, TB, LK) once every 6 months with conditional implementation time and other activity planning is planned conditionally. Meanwhile, in a study by Wisudaningsih et al., 2024 the planning of an activity must be based on objectives, vision, and mission so as to support the success of an organization or institution's activities. This is evidenced by research results stating that educational planning at the Salafiyah Karangpandan Pasuruan Al-Qur'an Education Institution (TPQ) refers to the vision and mission of the institution. As well as the use of the Qira'ati book for examinations, with the intention of ensuring that the planning objectives are optimally achieved. Nurdin, 2019 states that a plan is characterised by the planning of time, place, strategy, plan, analysis of the preparation of an activity programme to be carried out.

Rukun Harapan Kindergarten provides health and nutrition services through collaboration with partners such as Puskesmas Jember Kidul, Faculty of Dentistry (FKG) University of Jember (UNEJ), parents / guardians of students and other partners who have professions in the field of health and nutrition. However, in the implementation of Supplementary Feeding (PMT) does not collaborate with student guardians, other human resources in this institution are teachers, principals and 3 school cleaning staff. Meanwhile, the human resources involved in TK PGRI Kebon Agung in health and nutrition service activities are teachers, principals, student guardians and puskesmas personnel who visit the school, so it can be said that TK PGRI Kebon Agung has not collaborated with any partners, even the local puskesmas. Nurdin, (2019) argues that Human Resources (HR) is anyone involved in the DDTK examination process in schools which includes targets and services from health workers and teachers involved in the process of implementing activities in schools, besides that HR also functions as an implementer or manager of determining the needs of an activity, such as the needs of human resources that will be needed, facilities and infrastructure, targets and managers of the required cost budget.

The infrastructure at Rukun Harapan Kindergarten included : 1) DDTK weighing tools, namely weight scales, height measuring tools in the form of rulers or wall stickers and clothes meters available in each class; 2) Personal and environmental hygiene tools such as bathrooms, hand washing stations, soap, cloths, trash cans; 3) Drinking cutlery; 4) Emergency Room (UKS), and first aid kit, 5) Classroom, cleaning room, and kitchen. The design of the budget for financing service and nutrition

activities in this kindergarten uses the Operational Expenses (BOP) fund and private school funds from the foundation. Records of BB, TB and LK measurements, invitations to partner activities and records of DDTK results as supporting resources. This institution does not yet have a written agreement or Memorandum of Understanding (MOU) because coordination is considered to have gone well. Meanwhile, the infrastructure related to health and nutrition services at this institution are: 1) Weight scales, microtoise, and arm metre 2) 3 washbasins (in a condition where 1 is not kept clean, 1 is not functioning properly, 1 is fit for use), soap, and the absence of trash bins in the school environment; 3) eating and drinking utensils; 4) 2 first aid kits (1 is not kept clean, 1 is not functioning properly, 1 is fit for use). This institution uses a budget from BOP or school personal funds and there are supporting resources such as records of students' DDTK results. With regard to that, some of the tools that are in accordance with the Ministry of Health standards, (2016) are the measurement of Body Weight (BB) using weight scales such as dacin scales, manual body scales, digital body scales, measurement of Body Length (PB) or Body Height (TB) using microtoise measurement tools for children over 24 months of age, and body examinations carried out by trained health workers using a stethoscope which is an examination tool commonly used by doctors in examining the body.

The results of the study are based on research objectives, namely to determine the effectiveness of the use of flashcard media in physical education learning to improve the physical fitness of elementary school students. Measurements are made using the TKSI Phase C instrument, with five test items that have good validity and reliability. Analysis includes a comparison of pre-test and post-test scores in each group, as well as differences in the increase between experimental and control groups. The following is the data on the results of the physical fitness test and the results of the analysis using the help of the SPSS program version 27.

Organising Management of Health and Nutrition Services in Kindergartens in Kaliwates District, Jember Regency

The organisational management in these two institutions does not have a specific chart related to the person in charge of health and nutrition services, the highest policy and decision maker is the school principal. However, there are differences such as the management of the budget from the BOP of TK Rukun Harapan is carried out by the principal, but if the school uses private funds, it is managed by the foundation treasurer. Meanwhile, TK PGRI Kebon Agung is managed by the school treasurer and in the implementation of PMT, teachers collaborate with student guardians and there is a PMT coordinator from the teacher who is appointed in turn. In Wisudaningsih et al., 2024 research, the research location had an organizational structure consisting of boarding school director who has a final command in the institution and a team of teachers. Meanwhile, according to Subekti, 2022 good organisation of an institution is seen from the existence of an organisational structure which includes several aspects, namely normal organisational bodies, chains of unity and command, division of labour, hierarchical management, communication channels and the use of institutional or organisational committees. So that the organising procedure is divided into three steps, namely dividing the workload according to ability, rational load and proper qualifications for a person, detailing the tasks or work to be done so as to achieve the objectives of the activity and developing and establishing mechanisms with the aim of coordinating the work.

Management of the Implementation of Health and Nutrition Services in Kindergartens of Kaliwates District, Jember Regency

HI health and nutrition service activities at Rukun Harapan Kindergarten such as DDTK are carried out once a month, while the implementation of health and nutrition services at TK PGRI Kebon Agung such as DDTK is carried out once every 6 months at the beginning and end of the semester for data needs in dapodik and student report cards. According to Susilo, 2016. The DDTK examination has a certain schedule or time and criteria according to the age of the child, in children aged 3-6 years, it is carried out once every 6 months. DDTK can be conducted when the child is 0-72 months old (0-6 years old) so that children who have not reached the standard age have

not been examined. In addition, the NSPK (Norms, Standards, Procedures and Criteria) Technical Guidelines for the Implementation of HI ECD in PAUD Units for weighing Body Weight (BB) and Height (TB) are organised every month at regular intervals by teachers in PAUD units (Kementerian Pendidikan dan Kebudayaan RI, 2015).

The habit of clean and healthy living such as washing hands at Rukun Harapan Kindergarten is carried out before and after eating and drinking and after core (dirty) activities. Whereas at PGRI Kebon Agung Kindergarten, hand washing activities are carried out before and after eating and drinking, but during the observation one of the teachers gave an order that children were not required to wash their hands after eating and drinking activities took place. Clean and Healthy Living Behaviour (PHBS) must be applied from an early age, one of which is through hand washing activities. There are recommendations for hand washing times as follows washing hands after handling animals, washing hands before and after eating and drinking activities, washing hands after gardening activities, washing hands before giving breast milk (ASI) and washing hands after defecating and washing children or babies (Purnamasari, 2018). In addition, according to the Maternal and Child Health Book, there are 5 steps to proper hand washing, namely wetting all hands with clean running water, rubbing soap evenly, rubbing soap evenly into the palms of the back, between the fingers, palms on the left and right hands, palms on the right and left backs, clean the bottom of the nails, rinse hands with clean running water and the last is to dry hands with a towel, tissue or in the air. (Kemenkes RI, 2020).

Environmental cleanliness at Rukun Harapan Kindergarten can be said to be effective according to the results of observations made by researchers, namely the existence of janitors who clean the school environment including classrooms, toilets, playgrounds, teachers' rooms, principal's rooms, kitchens, UKS and school yards every morning and afternoon or afternoon and there are also trash bins in each classroom, corridor and in the school yard. Whereas in PGRI Kebon Agung Kindergarten, it can be said that it is not optimal regarding cleanliness in the school environment as evidenced by the absence of trash bins in the school environment and researchers did not find the location of the bathroom, several sinks and first aid boxes in a state where 1 is not kept clean, 1 is not functioning properly, 1 is suitable for use. PMT at Rukun Harapan Kindergarten is carried out once a month, the principal of the institution cooks and processes its own food in accordance with the recommendations or standards of healthy feeding according to the Ministry of Health (Kemenkes), namely the contents of my plate and based on interviews with the principal confirmed the absence of Monosodium Gultamate (MSG) or food preservatives in the child's healthy eating menu. Meanwhile, PMT at TK PGRI Kebon Agung is carried out every two months in collaboration with student guardians and the school cannot confirm the presence or absence of MSG in the food. Good food is food that fulfils micro and macro nutrients and in the presentation and administration is maintained and hygienic. The nutritional adequacy of children aged 4-6 years regarding the serving of portions of food for the average child in one day consists of 1400 energy (kcal), 25 protein (grams), 50 fat (grams) and 220 carbohydrates (Purba et al., 2021; Riska et al., 2023).

The implementation of first aid at Rukun Harapan Kindergarten is evidenced by the UKS room which can be accessed by school residents when there are health problems. Meanwhile, at TK PGRI Kebon Agung there is a first aid kit placed in the principal's room and teacher's room and can be accessed by all school residents. Providing immediate assistance to victims who need basic medical treatment which is a treatment action based on the rules of medkriical science that can be owned by lay people who have been trained to provide first aid, namely the definition of first aid (Tambipi et al., 2020). The purpose of First Aid (PP) according to Ramadhina et al., 2025 is to prevent injuries that arise so that they do not get worse, and support healing so as to prevent pain and ensure airway function, so that victims can be saved from deadly danger as much as possible.

Supervisory Management of Health and Nutrition Services in Kindergartens in Kaliwates Sub-district, Jember Regency

Supervision activities in both institutions are monitored by the school principal. The school principal supervises the health and nutrition service activities and conducts an evaluation at the end of the activity. However, based on the results of observations and observations in both institutions, the principals have supervised the activities but there are no records related to the results of evaluations and observations of HI health and nutrition service activities in schools. Meanwhile, the results of research by Purnamasari, 2018 found that intensive and incidental supervision was carried out by objective and positive evaluators so that the evaluation process was conducted honestly and constructively, thereby enabling the evaluation results to be used as a record of innovation or improvement. George R. Terry states that supervision is carried out to monitor whether resources are utilized efficiently and effectively without any misappropriation and the implementation of activities in accordance with the plan. This function is very important and determines the implementation of the management process, therefore it must be carried out as well as possible by the organizers (Umanansyah, 2015). Some of the activities included in the supervision process according to Kristiwati, 2023 are correcting and evaluating deviations in an activity, to determine the level of success or achievement of activity performance from an activity implementation, finding and getting solutions to obstacles or obstacles faced in achieving goals, getting input in planning activities in the coming year.

CONCLUCION

The planning management of health and nutrition services in HI at Rukun Harapan Kindergarten has been carried out optimally but one component related to facilities and infrastructure is not in accordance with the Ministry of Health standards. Management of organization and implementation in the institution has been carried out in accordance with procedures but there is no specific chart in this institution. Meanwhile, the absence of supervisory management can be seen from the absence of supervisory records owned by the principal. The conclusion from TK PGRI Kebon Agung regarding the management of health and nutrition service planning in its technical aspects has not been running effectively as seen from the school facilities and infrastructure that are not functioning properly, tools or facilities and infrastructure that are not kept clean, and there is no cooperation between the school and the posyandu, village midwife or local health center. While the organizational management in this institution has not been carried out effectively which can be seen from the absence of a chart or person in charge of HI health and nutrition service activities. Some aspects of implementation management in these institutions have been carried out optimally except in the aspect of habituation to protect themselves, the environment and washing hands not according to the schedule when children wash their hands besides the absence of trash bins in the school environment. Some of the obstacles or barriers that occur in the management aspect of supervision at PGRI Kebon Agung Kindergarten are the absence of supervision records conducted by the principal and the obstacles felt by teachers and principals such as the lack of literacy and information related to health and nutrition services.

This study is expected to provide an overview of early childhood education management and health and nutrition service policies in HI, as seen from the implementation and management of activities. Similarly, with regard to aspects that have not been implemented or are not in line with local government policies, this study can be used as an overview of the condition of health and nutrition services in HI in Jember.

AUTHOR CONTRIBUTION STATEMENT

Almaziyah (A) and Fifi Khoirul Fitriyah (FKF) was responsible for conceptualization, methodo logy, writing original draft, data curation, resources, supervision, and project administration. Berda Asmara (BA) contributed to conceptualization and investigation. Jauharotur Rihlah (JR) contributed to formal analysis and visualization. Rachma Aliefie Putri (RAP) contributed to data curation and resources. All authors have read and agreed to the published version of the manuscript.

DECLARATION

The author declares that this research was conducted independently and that the manuscript is an original work which has not been published or submitted elsewhere. The author states that there is no conflict of interest related to the research, authorship, or publication of this article. This study did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors. All ethical considerations in data collection and analysis were followed to ensure the validity and integrity of the research.

DATA AVAILABILITY

The dataset generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

ACKNOWLEDGMENT

This research was funded by the Institute for Research and Community Service, Universitas Nahdlatul Ulama Surabaya for its support through a derivative contract Number: 1286/UNUSA-LPPM/Adm.I/V/2025. Thanks are also extended to the participating institutions, lecturers, parents, and children, as well as colleagues and academic advisors, for their invaluable contributions to this research.

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