

The Role Of Early Children's Education In The Growth Of Children Aged 4-6 Years : A Literature Review

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ABSTRACT

Objectives: This literature review examines the influence of stimulation and intervention of growth of children aged 4-6 years, as well as training on growth issues conducted by PAUD teachers. The review uses data from various studies to understand the role of PAUD teachers on the growth of children aged 4-6 years.

The authors conducted a comprehensive search across multiple databases, including PubMed, MEDLINE, Science Direct, and ProQuest, for articles published between 2019-2024 .

Results: A total of eight studies met the inclusion criteria . Regular monitoring of child growth by PAUD teachers is essential to detect developmental problems early on, so that appropriate interventions can be carried out. PAUD teachers are now more skilled in identifying child growth problems, thanks to increased knowledge through training and activities. With a better understanding of child growth and development, teachers can create an environment that supports optimal physical, social, and emotional development of children.

Conclusions: Regular monitoring of child growth by PAUD teachers is important to ensure children's physical growth according to age stages and to detect problems such as malnutrition. IEC training and activities can improve teachers' knowledge in early detection of growth problems, so it is important to expand access to training and technology and encourage collaboration between teachers, parents, and medical personnel.

Keywords: Early Childhood Growth, Role of Teachers, PAUD Teachers

INTRODUCTION

In early childhood, especially in the age range of 4-6 years, children experience a significant phase of development, both physically, emotionally, and cognitively (Pura & Asnawati, 2019). The role of PAUD (Early Childhood Education) teachers is very important because at this stage children begin to develop the basics of their personality, intelligence, and social skills. PAUD teachers have the task of not only teaching basic knowledge, but also playing an active role in monitoring and supporting the development of children's growth, including observing signs of growth that require further attention (Purnomo & Cahyo, 2023). Research suggests that PAUD teachers in Indonesia must be equipped with sufficient knowledge about children's health and growth, including an understanding of normal growth and development standards at this age (Suryati & Miradwiyana, 2020).

Interaction Which quality between Early Childhood Education (early childhood education) children And Teacher is runway education Which quality. Proof international shows that the quality of interactions supports emotional organization and education is medium to high. Teaching Through Interaction is effort For to tie up And evaluate interaction teacher-child Which critical through live training. Program in service Which quality can increase interaction teacher-child And quality education. Furthermore, size effect from interaction Which related with support emotional, composition class, and support instructional is similar (Egert, Dederer, & Fukkink, 2020). PAUD teachers who understand early childhood development will ultimately influence the

selection of learning materials and the use of learning methods that are appropriate to child development.(Intarti, 2019)

Recent studies have shown that early childhood education teachers play a key role in creating a safe and supportive learning environment for children's growth. A positive stimulating environment allows children to explore and develop their gross and fine motor skills (Nasution & Harahap, 2024). Research by Firman and Anhusadar (2022) shows that teacher involvement in children's physical activities at school can affect children's motor and social development (Firman & Anhusadar, 2022). Gross motor development can be done through dance, one of which is creative dance which can significantly improve gross motor skills in early childhood. This activity is carried out through creative processes such as feeling/absorbing, experiencing, imagining and giving form (Rafifah, Anissa, Muklis, & Putri, 2024).

In addition to the role in physical aspects, PAUD teachers also play a role in supporting children's emotional and social growth. Emotional literacy in early childhood has been shown to influence their ability to interact with peers and manage their own feelings. Studies have found that emotional support from teachers can help children aged 4-6 years develop self- confidence and good social skills (Hanifa & Kurniati, 2024). Teachers who are sensitive to children's emotional needs and provide appropriate support and guidance have been shown to help children overcome anxiety, fear, and improve their empathy and social skills (Khairunnisa, Khadijah, Araminta, & Batubara, 2023).

MATERIALS AND METHODS

Eligibility

The articles considered covered child growth monitoring, the role of early childhood educators, early intervention of developmental problems, and the quality of early childhood education using quantitative, qualitative, experimental, research, and development methods. The scope of this investigation went beyond the focused geographic location. The research objectives were used to further refine the included studies. Despite containing some unrelated variables, many studies that excluded regions were excluded from the final separation process.

Information Source

The search included studies published during the last 5 years between 2019 and 2024. Eight articles were selected for evaluation from a total of 138 articles identified using the search terms. Data were collected in an Excel table as the articles were retrieved.

Search Strategy

Using keyword terms such as : preschool growth, preschool teacher, the role of preschool teacher, monitoring preschool teacher for child, PAUD , the role of PAUD teachers . Pubmed, Proquest, Google Scholar, Science Direct. Other sources such as electronic books, and national health reports are also used. Pubmed and Science Direct take articles that match the keywords with the title of literature review.

Selection Process

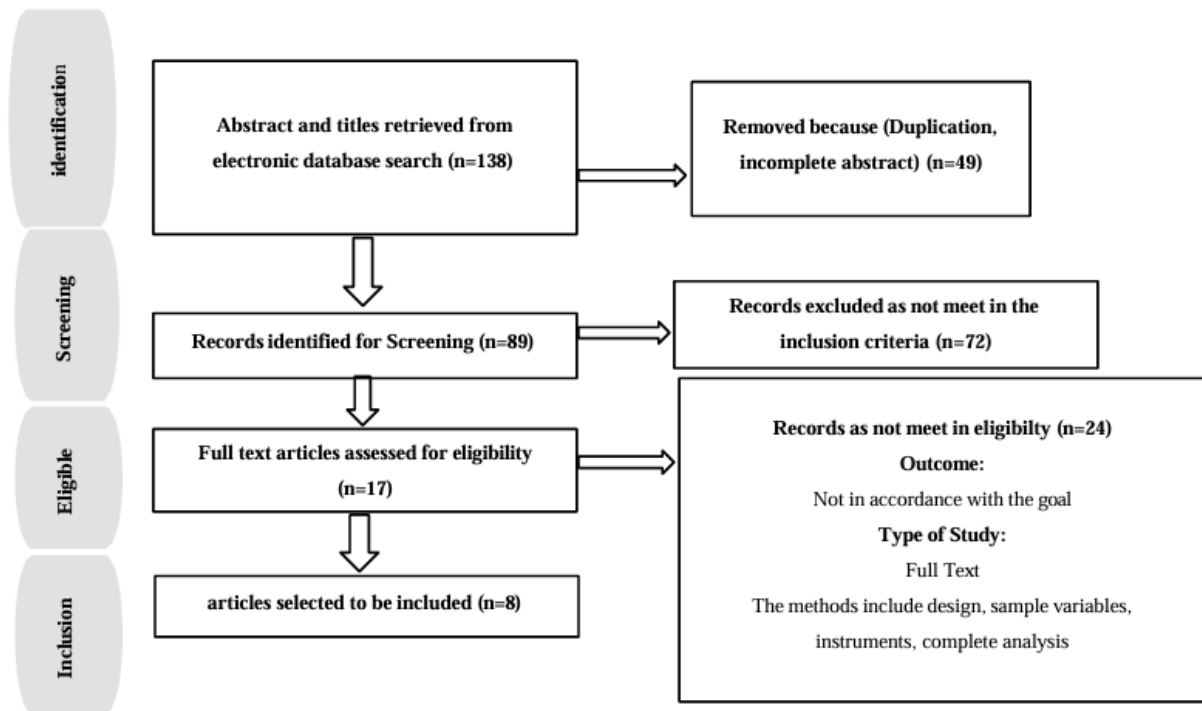
All studies were retrieved from databases, Mendeley was used as a search engine, and duplicates were removed through manual comparison of related instances and electronic configurations using Mendeley software. Articles that were not relevant to the study were removed at the screening stage, after the study titles and abstracts were checked. The full texts of the studies were independently assessed by the researchers using the inclusion criteria. A third expert decided to exclude the study if there was ambiguity or miscommunication between the two researchers. The listed references were checked to identify other relevant papers.

Data Collection

Data from included studies were extracted independently by members of the research team using data criteria divided into six categories: Title, Aim, Sample, Study Design, Outcome Variables, and Results.

Data Synthesis

The tabulation method is used to separate several key elements of the study, such as population, type of study, objectives, and findings. PRISMA The flowchart of the article search process is shown in Figure 1.



RESULTS AND DISCUSSION

Early childhood education teachers have an important role in supporting the physical growth of children aged 4-6 years through managing physical activities, introducing nutritious diets, and implementing healthy living habits. As companions in the learning environment, teachers are responsible for creating a safe atmosphere and supporting optimal child growth. Through structured activities and a comprehensive approach, teachers can contribute to achieving the quality of children's physical growth.

No	Name Writer, Country	Article Name Journal, Year Rise	Purpose of the Study	Study Sample (Amount, characteristics k)	Design Studies	Variables The outcome that Measured	Results Studies
1	Khadijah, Musdalifah, Beautiful Khoirunnisa Siregar, Amalia Qori, Hanifah Rangkuti Indonesia (Khadijah, Musdalifah, Siregar, Qori, & Rangkuti, 2022)	Journal of Learning and Self-Development, 2021	To learn or pay attention to the child development process	Early Childhood Education Teacher	Observation	Growth and development of early childhood	Teachers should detect every 3-6 months once the growth and development of early childhood in school, so that teachers know how development and growth of each child, whether it has improved or is still the same since the beginning of entering the school.

2	Chandra Dewi Blessings, Ika Purnamasari, Indonesia (Rahayu & Purnamasari, 2019)	Research Journal and Devotion To Public Unsiq, 2019	To know improvement teacher knowledge PAUD indo SDIDTK After given training	Early Childhood Education Teacher Regency Wonoboso	Study quantitative with pre approach and posttest design without control group	Level teacher knowledge Early Childhood Education	Test results with one sample t-test show after training is done to PAUD teachers there is an increase knowledge can seen from the average value flat teacher knowledge from 8,945 to 15.75 with Mark $p=0,000$.
3	WiwitDesi Intarti, Indonesia (Intarti,2019)	Journal Midwifery Mother's Hope Pekalongan, 2020	Know influence of IEC to level teacher knowledge PAUD about stimulation brain intelligence Early Childhood Education	All Teachers Early Childhood Education Kindergarten Islam Al Mujahideen Cilacap (22 respondents)	Quantitative with pre approach and posttest design without control group	Level teacher knowledge Early Childhood Education	Results test with one sample t-test show after done IEC to the teacher PAUD is available improvement knowledge can seen from the average value average 17.12 to 24.60withflatflat mean 7,480 mark $p=0,000$
4	Rinayati, Ambar Dwi Erawati,Sri Wahyuning Harsono Indonesia (Rinayati, Erawati, Wahyuning, & Harsono, 2021)	Journal Devotion To Public,2021	The purpose of implementation Devotion To Community (PKM)this is an effort assistance and role formation and PAUD teachers in doing Stimulation and growth detection toddler development. Activities that done is permission from local area, Focus Group Discussion(FGD) the role of PAUD teachers, Stimulation training development children use Card Flower Children(KKA),making Tool	Teacher Early Childhood Education	Use some types method for finish problem, Focus Group Discussion (FGD) Mentoring Tool making Game Educational (APE), mentoring filling practice Flower Card Children (KKA) at the moment implementation Early Childhood Education	Teacher knowledge Early Childhood Education use APE and filling KKA	Results, mentoring implementation of stimulation has been implemented well, it happened improvement knowledge and improvement teacher skills PAUD in to do stimulation using KKA, PAUD gets additional APE.
5	Jessica A Omand, Magdalene Janus, Jonathon L Maguire, Patricia C Parkin, Mary Aglipay , JanisRandall Simpson, Charles DG Keown-Stoneman, Eric Duku,	The Journal of Nutrition, 202 1	Determining whether nutritional risks in early childhood are related to school.	This study involved896 children.:53% male, 9% have high nutritional risk, and 17% are vulnerable to Early Development Instrument (EDI) .	Studies prospective cohort	Increase in total Nutri STEP score	Understanding Which better understanding of the impact of nutritional risk on robust, teacher-completed measures of school readiness can have important implications for early

	Caroline Reid-Westoby, and Catherine S Birken , Canada (Omand,et al., 2021)						intervention
6	Aylin Bayındır Gümüş, and Alev Keser Türkiye (Gümüş & Keser,2023)	Türkiye Klinikleri Journal of Health Sciences, 2023	To examine the impact of healthy nutrition education on the eating habits and anthropometric measurements of preschool children and the nutritional knowledge levels of Their teachers.	60 children preschool in Ankara and 6 Teachers	Experimental Study	Weight and height percentiles according to age of children and level of teacher knowledge	The results of this study indicate that education provided to teachers working in kindergartens will play an important role in children's nutrition and Preventing obesity
7	Ana I. Gomes, Rosa Lemos, Milica Miocevic, Ana I. Pereira, and Luísa Barros Portugal (Gomes, Lemos, Miocevic, Pereira, & Barros, 2023)	American Journal of Health Promotion 2023	To determine how accurate the teacher is parenting perception of preschool children's weight status compared to parents	319 parents, 32 teachers (response rates of 47.5% and 100% respectively), and 319 children.	Studies quantitative, cross-sectional.	Accuracy of caregivers' perception of child weight	The childcare teacher is an assessor who better than parents when evaluate the child's weight status
8	Judith Silkenbeumer, Luisa Marie Lüken, Manfred Holodyski, Joscha Kartner, German (Silkenbeumer, Lüken, Holodyski, & Kartner, 2024)	Social and Emotional Learning: Research, Practice, and Policy, 2024	to investigate, first, the link between emotional coaching and teacher co-regulation with child self-regulation, and, How Emotion coaching and teacher coregulation were associated with the characteristics of the particular emotional episode and child involved.	as many as 48 teachers and 213 aged children 2–6 years	observation	The relationship between emotional coaching and teacher coregulation with children's self-regulation	Teachers in PAUD play an important role in support settings children's emotions independently. The results of the current study indicate that in particular emotional coaching and meta-cognitive co-regulation encourage self-regulation. children to negative emotions.

Early childhood education teachers should monitor children's growth and development regularly, every three to six months, to ensure that children's development is in accordance with their age. By monitoring children's development regularly, teachers can detect problems as early as possible, whether they are related to developmental delays or other problems. This early detection is important for taking appropriate corrective measures, either by working with parents or medical personnel. In this way, teachers can ensure that each child receives attention that is appropriate to their developmental needs (Khadijah, Musdalifah, Siregar, Qori, & Rangkuti, 2022). Preschool children in low-resource settings are at higher risk of losing developmental potential due to the lack of standardized and validated methods for early detection of children with developmental delays or neurodevelopmental disorders. Preschool teachers are non-specialist resource liaisons in the community to detect and offer early intervention (Caldera, et al., 2023).

The increase in knowledge of PAUD teachers was also seen significantly in the study by Rahayu & Purnamasari (2019) based on the one-sample t-test statistical test conducted after the training. The average value of teacher knowledge increased from 8.945 to 15.75, with a very significant p-value ($p = 0.000$) (Rahayu & Purnamasari, 2019). This indicates that the training provided to PAUD teachers can substantially improve their understanding of child development stimulation. This better knowledge has a direct impact on the quality of teaching they provide to children, creating a more supportive environment for child growth and development. Through early detection of growth and development, it can help in finding possible disorders in child growth and development so as to prevent permanent disabilities in children, and can also optimize child growth and development by providing appropriate stimulation for them. In its development, early childhood education (PAUD) must be able to provide educational services, care, health and nutrition, protection, care and welfare to children (Ramadhani & Sumanto, 2023).

In addition to training, IEC (Communication, Information, and Education) activities also play an important role in improving the knowledge of PAUD teachers. Based on the results of the one-sample t-test, the average value of teacher knowledge increased from 17.12 to 24.60 after the implementation of IEC, with an average increase of 7.480 and a significant p-value ($p = 0.000$) (Intarti, 2019). This activity provides in-depth information on the effects of stimulation on child development and effective methods for implementing it in the classroom. Therefore, IEC is an important addition in order to improve teacher capacity in supporting early childhood development. Providing nutritional IEC has been proven to be effective in increasing teacher knowledge about stunting (Rochmayani, Zulaika, & Budiono, 2020).

Results analysis mentoring Teacher in monitoring Child growth involves increased knowledge and increased skills PAUD teachers in carrying out stimulation using KKA, PAUD gets additional APE. After carrying out KIE for PAUD teachers, there was an increase knowledge. With proper training, teachers can design and implement more effective stimulation, support optimal child development, and utilize APE to attract attention and increase children's interest in learning. These results indicate that teacher capacity development contributes greatly to the quality of early childhood education (Rinayati, Erawati, Wahyuning, & Harsono, 2021). The level of professional well-being that Increases teacher knowledge (caregivers) about child development with the help of SDIDTK, so that teachers can monitor children's growth and development optimally. high (i.e. efficacy) self, involvement Work) Teacher Early Childhood Education inherently motivated And dedicated For Work with child small.

Early childhood education teachers' understanding of the impact of nutrition on children's school readiness is also very important. Teachers who understand the risks of malnutrition can be more sensitive to nutritional problems that children may experience and take early intervention measures. This understanding not only strengthens teachers' ability to detect children's health problems, but also ensures that every child is in good physical and mental condition to enter formal education. This can have a long-term impact on children's readiness and success in school (Omand, et al., 2021). Optimizing school readiness can have long-term consequences for improving children's academic achievement, future employment potential, and overall well-being. (Schwarzenberg & Georgieff, 2018)

Education provided to teachers in kindergartens plays a vital role in improving their understanding of child nutrition and obesity prevention. With proper training, teachers can identify signs of nutritional problems earlier and provide more effective guidance to parents, helping children develop healthy eating habits and prevent the risk of obesity in the future. This education also enables teachers to support better nutrition programs in early childhood education settings (Gümüş & Keser, 2023). Although childcare teachers are not directly responsible for children's health care, they do have a role in supporting families in providing the best care for their children. They are often the first to provide advice to parents on developmental and health issues (Lemos, Gomes, & Baros, 2022).

Childcare teachers are often considered to be more accurate assessors of a child's weight status than parents. Research shows that while both teachers and parents often have difficulty accurately assessing a child's weight, childcare teachers have a higher level of accuracy in identifying a child's overweight status. This is due to the professional training and experience teachers have in observing and understanding physical signs of a child's nutritional status. Teachers can provide parents with more accurate information about their child's health and

weight, allowing for earlier and more effective interventions to prevent health problems related to obesity or malnutrition (Gomes, Lemos, Miocevic, Pereira, & Barros, 2023).

In addition to cognitive aspects, PAUD teachers also play a very important role in regulating children's emotions. Research shows that emotional coaching and self-regulation through a meta-cognitive approach can encourage children to better manage their negative emotions. PAUD teachers, as the main companions of children at school, can help children to understand and manage their feelings, as well as develop emotional intelligence which is important for their development. This shows the importance of the role of teachers in supporting children's emotional aspects in addition to academic teaching (Silkenbeumer, Lüken, Holodyski, & Kartner, 2024). Teachers are people who facilitate the process of transferring knowledge from learning sources to students, teachers can also develop early childhood social emotions in learning when children interact with people around them in accordance with social rules and children are also able to control their emotions better, so that the ability to recognize to express emotions is obtained by children gradually through the process of reinforcement and modeling (Khairunnisa, Khadijah, Araminta, & Batubara, 2023).

CONCLUSION

The conclusion of this study is that regular monitoring of child growth by PAUD teachers is very important to ensure that children's physical growth is in accordance with their age stages. With early detection of growth problems, such as underweight or other nutritional disorders, teachers can immediately take the necessary intervention steps, working together with parents and medical personnel. Research shows that IEC (Communication, Information, and Education) training and activities can improve PAUD teachers' knowledge in monitoring and supporting child growth, including detecting nutritional problems such as stunting and obesity. Thus, increasing the capacity of PAUD teachers in terms of growth monitoring can ensure that children get the right attention to support their physical development. It is important to ensure better access to educational resources and technology to support early detection of growth problems, as well as encourage closer collaboration between teachers, parents, and medical personnel in dealing with child growth problems.

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