

Level of Understanding of Paud Teachers About Stunting Mitigation in PAUD Units of Preschool Talaud Islands Regency North Sulawesi Province

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ABSTRACT

This study aims to determine the level of understanding of PAUD teachers about stunting mitigation in PAUD Units in Talaud Islands Regency, North Sulawesi Province. The researcher used a survey method by distributing questionnaires to PAUD teachers in Talaud Regency. With a sample of 35 teachers, the results showed that the level of understanding of PAUD teachers about stunting mitigation in PAUD Units in Talaud Islands Regency, North Sulawesi Province was "Medium" at 49.33% (37 teachers), "Low" at 36% (27 teachers), and "High" at 14.67% (11 teachers). Based on the average value, which is 3.28%, the level of understanding of PAUD Units about the Implementation of Stunting Mitigation in Talaud Islands Regency is in the "MEDIUM" category.

Keywords: *Paud Teachers' Understanding; Stunting Mitigation*

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INTRODUCTION

Early Childhood Education (ECE) is the foundation of all education a person receives from birth. According to the National Association for the Education of Young Children (NAEYC), ECE is the process of nurturing and educating children from birth to eight years old. This process involves providing educational stimuli to support children's physical and mental development, so they are prepared to enter the next level of education. Early childhood is the age range from 0 to 8 years, during which time children can develop their full potential. Human intelligence reaches 50% at age 4, 80% at age 8, and culminates around age 18 (Ernawulan et al., 2008). This indicates that the development occurring in the first four years is as significant as that of the next fourteen years, after which brain development stagnates. Therefore, early childhood (0-8 years) is also known as the golden age, and after this stage, any intelligence achieved will not increase significantly.

The period from birth to eight years old is referred to as the golden period or the foundational age in human life. During this phase, nearly all child potentials develop rapidly and significantly. John Locke (1632–1704) described children as blank slates. A child's development is greatly influenced by their environment (Morrison, 2018). Law No. 146 of

2014 explains that early childhood development includes physical and motor skills, socio-emotional, language, religious and moral, cognitive, and artistic aspects. Supporting this, research by Wulansuci (2021) emphasizes that the essence of early childhood education is to guide children in developing their potential, monitoring behavior, providing enjoyable experiences, building basic skills, and nurturing spiritual, intellectual, emotional, and social intelligence during their golden growth period through an educational and joyful environment. Piaget argued that children are individuals who construct their own experiences, needing child-focused assistance through exploration, deepening, intervention, and experience creation in free activities (Morrison, 2018).

Educational stimuli in early childhood aim to support their physical and mental development so they are ready to advance to higher education levels. Since brain development at this age reaches 80% of its full potential, early childhood education must be implemented effectively to produce a quality generation (Kulsum, 2021).

Each child possesses various potentials that must be developed. While children generally follow the same developmental patterns, the pace of development differs due to their individuality (Ardiana, 2021). This optimal growth includes cognitive, motor, and socio-emotional development. A lack of balance in caregiving, nutrition, and stimulation can result in developmental issues, such as stunting.

Stunting is a growth failure in toddlers due to prolonged undernutrition, repeated infections, and lack of stimulation. The difference between stunted and normal toddlers is primarily seen in height (WHO, 2015). Stunted children appear shorter than their peers. However, the invisible difference lies in brain development, which in stunted children does not progress well, leading to long-term impacts. Stunting not only hampers physical growth and increases disease vulnerability but also threatens cognitive development, affecting intelligence and future productivity. Stunting is influenced by adolescent health status, maternal health, toddler nutrition and care patterns, economic and cultural factors, and environmental aspects such as sanitation and access to healthcare.

According to Presidential Regulation No. 72 of 2021, stunting is a growth and developmental disorder in children caused by chronic malnutrition and repeated infections, characterized by a height or length below the standard set by the Ministry of Health. The Ministry of Health defines stunting as toddlers with a Z-score below -2.00 SD (stunted) and below -3.00 SD (severely stunted). Thus, stunting is a developmental disorder that causes growth delays in children, with both short- and long-term consequences.

The impacts of stunting include two types: short-term impacts such as impaired brain development, physical growth, intelligence, and metabolism, and long-term impacts like susceptibility to illness, diabetes, heart and vascular diseases, obesity, cancer, stroke, disabilities in old age, and reduced work productivity (Stranas, 2018).

Stunting mitigation is an action to reduce or prevent the negative effects of events such as stunting, diseases, and malnutrition. It is a crucial step to tackle the threatening condition of stunting. Several strategies are needed to enhance Indonesia's stunting mitigation preparedness. According to the Ministry of Health, stunting is one of the

Sustainable Development Goals (SDGs) targets, aiming to eliminate hunger and all forms of malnutrition by 2030 (Ministry of Health, 2020).

To prevent stunting, communities must form Stunting Mitigation Task Forces to identify and record affected individuals and determine high-risk areas. The Task Force's duties include:

1. Assessing individual risk levels for stunting.
2. Managing community resources and training residents to recognize symptoms and prevention of stunting.
3. Responding swiftly post-disaster to reduce harm, focusing on rescue and minimizing damage (Katadata.co.id).

Preventing stunting is a shared responsibility of parents, the government, and ECE teachers. Teachers are responsible for translating government policies and educational principles into student learning. Thus, teachers must be competent and skillful. A country's education system and quality can be judged by its teachers, who are crucial in the learning process and outcomes (Widiarto, 2020).

Teaching skills include initiating and closing lessons, conveying materials, managing interactive classrooms, conducting Q&A sessions, empowering students, and varying activities to prevent boredom (Akbar et al., 2021). Teachers also shape students' characters to become respectful individuals from an early age. According to Jannah et al. (2023), a teacher's success is influenced by planning, implementation, and evaluation efficiency. Government policy implementation also depends on teacher dedication and commitment (Mustaghfiroh et al., 2020).

Teachers play a pivotal role in education. Law No. 14 of 2005 defines teachers as professional educators responsible for educating, guiding, teaching, directing, assessing, training, and evaluating students. Professional teachers must have academic qualifications, teaching certificates, competencies, and sound physical and mental health (Aqylah & Islam Kalimantan Muhammad Arsyad Al Banjari, n.d.). The national education policy for teachers aims to:

1. Produce highly motivated teachers focused on quality across all educational levels.
2. Encourage creativity among teachers.
3. Help teachers adapt to social life.
4. Foster commitment to national education goals.
5. Provide teachers with intellectual and professional backgrounds.
6. Equip teachers to adapt to changing conditions.
7. Strengthen teacher commitment to the teaching profession.

Stunting is a pressing issue requiring urgent attention. The Ministry of Education and Culture has issued modules and organized basic-level training to combat stunting in Indonesia, including North Sulawesi Province. Each city or regency in the province sent 20 ECE teachers for training. Talaud Regency sent 20 teachers to be trained as potential trainers (PCPs) to educate other village ECE teachers about accelerating stunting reduction.

ECE teachers play a strategic role in accelerating stunting reduction as they interact closely and consistently with young children and parents. They can help identify early signs

of stunting, collaborate with health centers for growth monitoring, create joyful learning environments for psychosocial stimulation, hold parent classes to educate on stunting, and organize programs like supplementary feeding.

Since 2019, the Directorate of ECE and Community Education has enhanced ECE teachers' capacity in stunting stimulation through "Basic-Level Training for Prospective Trainers". These trainers are expected to meet the target of the Presidential Regulation: by 2024, 90% of villages must have ECE teachers trained in stunting stimulation. Therefore, it is essential for district trainers to cascade this training to other teachers through nutrition-sensitive training or holistic-integrative ECE (HI-ECE). The Directorate also provides guidelines and modules for training implementation in Talaud Islands Regency.

This training produces competent ECE teachers in stunting stimulation and handling, ensuring optimal services. Thus, this activity requires cross-sector collaboration and local government support to cascade training results and accelerate stunting reduction. Talaud Islands Regency has disseminated training outcomes to all ECE teachers across its 17 districts. Based on this context, the researcher is interested in conducting a study titled: "The Level of Understanding of ECE Teachers Regarding Stunting Mitigation in ECE Units in Talaud Islands Regency, North Sulawesi Province."

METHOD

This type of research is quantitative descriptive research. The method used is the survey method, with data collection techniques using a Yes-No multiple-choice test. This test consists of a series of questions or tasks designed to gather information about educational traits or attributes, where each item has a correct or expected answer, as explained in the book on educational evaluation (Supriyadi, 2021). This research aims to determine the extent of ECE teachers' understanding of the implementation of stunting mitigation in ECE units in Talaud Islands Regency, North Sulawesi Province.

The data collected is ratio data designed for analysis using the Rasch Model. The Rasch Model applies probability principles to each available answer choice, unlike classical test theory which focuses more on total scores from tests or questionnaires (Sumintono & Widhiarso, 2015).

One of the advantages of Rasch analysis using Winsteps software is its ability to generate a map illustrating the distribution of subject abilities and item difficulty on the same scale. This map is known as the Wright Map, which visually represents the person-item interaction. The person-item map generated by Winsteps for dichotomous data is in the form of a text file (*.txt), which can be modified as needed. For example, to observe differences in individual abilities, the map can be manually adjusted without altering the location of logits.

Population refers to the group of objects or subjects with certain qualities and characteristics that become the generalization area for the researcher to study and draw conclusions from. It encompasses the entire research subject. The research population includes ECE and kindergarten teachers in Talaud Islands Regency, North Sulawesi Province, along with their numbers.

The sample must truly represent the population's condition, meaning that the conclusions drawn from the sample must be generalizable to the population. The number of samples was determined using the purposive sampling method, which involves selecting samples based on specific criteria that align with the desired characteristics.

In this research, the test used is a Yes or No question format. The instrument was developed based on materials from the 2022 basic-level stunting reduction training issued by the Ministry of Education, Culture, Research, and Technology. The test instrument is scored by giving 1 point for a "Yes" answer and 0 for a "No" answer. Respondents were also asked to provide reasons or comments for each selected answer. All test items were carefully composed into a comprehensive test.

RESULTS

This research employs descriptive statistics using percentage-based descriptive analysis techniques, which categorize the data into three levels: high, medium, and low. The descriptive results of the study are presented in the following table:

Table 4.1. Frequency Distribution of Teachers' Understanding

No	Interval	Category	Frequency	Percentage (%)
1	$x \leq 5$	Low	6	17.14%
2	$6 \leq x \leq 10$	Medium	25	71.42%
3	$x > 10$	High	4	11.42%
	Total		35	100%

Based on Table 4.1, it can be seen that 4 teachers (11.42%) from ECE units across Talaud Islands Regency have a high level of understanding regarding the implementation of stunting mitigation. Meanwhile, 25 teachers (71.42%) fall into the medium level, and 6 teachers (17.14%) are in the low category of understanding.

The average score (mean) of respondents in the study regarding the understanding of stunting mitigation implementation in ECE units across Talaud Islands Regency is 7.3, which falls under the medium category.

These findings indicate that the understanding of ECE units concerning the implementation of stunting mitigation—specifically regarding nutritional improvement for young children—is still far from optimal. This implies that the level of understanding among ECE units in Talaud Islands Regency about stunting mitigation and nutritional interventions for young children needs significant improvement.

The results of this study demonstrate that the overall understanding level of stunting mitigation implementation in Talaud Islands Regency remains moderate. The survey results show that most ECE units in the region lack a thorough comprehension of how to effectively implement stunting mitigation strategies, particularly in terms of improving child nutrition.

Therefore, based on these findings, efforts must be made to enhance ECE teachers' understanding, so they gain better knowledge and competence in promoting the optimal

and holistic development of young children. In turn, the implementation of the stunting mitigation program in Talaud Islands Regency can be carried out effectively and appropriately.

DISCUSSION

The findings of this study reveal that Early Childhood Education (ECE) teachers in the Talaud Islands Regency possess a generally moderate level of understanding regarding the implementation of stunting mitigation, particularly in relation to child nutritional improvement. The descriptive analysis shows that only 11.42% of teachers demonstrate a high level of understanding, while the majority—71.42%—fall into the medium category, and 17.14% remain at a low level. This distribution suggests variability in teachers' comprehension, indicating gaps in knowledge that may affect the quality and consistency of stunting mitigation practices in ECE settings.

The mean score of 7.3, categorized as medium, further reinforces that teachers' overall understanding is not yet optimal. This moderate level of knowledge highlights that many teachers may understand basic concepts but lack deeper insight into practical implementation strategies such as identifying early signs of stunting, promoting balanced nutrition, monitoring growth indicators, and collaborating with parents or health workers. The limited number of teachers in the high category suggests that best practices in stunting prevention have not been widely internalized or effectively disseminated across ECE units.

These results underscore the need for targeted capacity-building efforts to strengthen teachers' competency in stunting mitigation. Given that early childhood educators play a crucial role in monitoring children's growth and delivering health-related educational interventions, insufficient understanding can hinder the success of national stunting reduction initiatives. Enhancing teacher training, providing accessible learning resources, and fostering partnerships with health professionals may help bridge these knowledge gaps. Improving teachers' understanding is essential not only for ensuring effective program implementation but also for supporting the holistic development of young children in the Talaud Islands Regency.

CONCLUSION

Based on the results of data analysis and discussion, it can be concluded that the level of understanding of PAUD Units regarding the Implementation of Stunting Mitigation in Talaud Islands Regency is in the category of "Medium" at 49.33% (37 teachers), "Low" at 36% (27 teachers), and "High" at 14.67% (11 teachers). Based on the average value, which is 3.28%, the level of understanding of PAUD Units regarding the Implementation of Stunting Mitigation in Talaud Islands Regency is in the category of "MEDIUM".

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