

# The Effectiveness of Nursery Rhymes Media to Improve English Vocabulary and Confidence of Children (4-5 Years) in Tutor Time Kindergarten

Yuni Christina<sup>1✉</sup>, Pujiarto<sup>2</sup>

(1) Masters in Early Childhood Education, Panca Sakti University, Bekasi

(2) Masters in Early Childhood Education, Panca Sakti University, Bekasi

✉ Corresponding author  
([yunichristina54@gmail.com](mailto:yunichristina54@gmail.com))

## Abstrak

Penelitian ini bertujuan untuk mengevaluasi efektivitas penggunaan media lagu nursery rhymes dalam meningkatkan kosa kata Bahasa Inggris dan kepercayaan diri pada anak usia 4-5 tahun di TK Tutor Time, sebuah sekolah Pendidikan Anak Usia Dini (PAUD). Lima lagu anak-anak berbahasa Inggris digunakan untuk mengajarkan kosa kata kepada anak-anak. Penelitian ini juga meneliti peningkatan kepercayaan diri anak dalam bernyanyi dan berbicara dalam bahasa Inggris di depan umum. Metode penelitian ini adalah eksperimen dengan kelompok kontrol dan kelompok perlakuan. Hasil penelitian menunjukkan bahwa penggunaan media lagu nursery rhymes efektif dalam meningkatkan kosa kata Bahasa Inggris pada anak usia 4-5 tahun. Anak-anak di kelompok perlakuan menunjukkan peningkatan yang signifikan dalam memahami dan menggunakan kosa kata baru setelah mengikuti pembelajaran dengan media lagu. Selain itu, penelitian ini juga mengungkapkan adanya peningkatan kepercayaan diri anak-anak dalam bernyanyi dan berbicara dalam bahasa Inggris di depan umum setelah mereka terlibat dalam pembelajaran menggunakan lagu-lagu tersebut. Penggunaan media lagu nursery rhymes adalah pendekatan yang efektif dalam meningkatkan kosa kata Bahasa Inggris dan kepercayaan diri anak usia dini di TK Tutor Time. Hasil ini memiliki implikasi penting untuk pengembangan metode pembelajaran yang menyenangkan dan interaktif dalam lingkungan PAUD untuk memfasilitasi perkembangan bahasa dan kepercayaan diri anak-anak dalam bahasa Inggris..

**Kata Kunci:** *Nursery Rhymes, Bahasa Inggris, Kepercayaan Diri, Taman Kanak-Kanak*

## Abstract

This study aims to evaluate the effectiveness of using nursery rhymes as media in increasing English vocabulary and self-confidence in children aged 4-5 years at Tutor Time Kindergarten, an Early Childhood Education (PAUD) school. Five English nursery rhymes are used to teach vocabulary to children. This study also examines the increase in children's confidence in singing and speaking English in public. This research method is an experiment with the control group and the treatment group. The results showed that the use of nursery rhymes as media was effective in increasing English vocabulary in children aged 4-5 years. Children in the treatment group showed a significant increase in understanding and using new vocabulary after participating in song learning. In addition, this study also revealed that there was an increase in children's confidence in singing and speaking English in public after they were involved in learning to use these songs. The use of nursery rhymes as media is an effective approach in increasing English vocabulary and self-confidence of early childhood at Tutor Time Kindergarten. These results have important implications for the development of fun and interactive learning methods in the PAUD environment to facilitate children's language development and confidence in English.

**Keyword:** *Nursery Rhymes, English Vocabulary, Confidence, Kindergarten*

## INTRODUCTION

English is an important international language in the current era of globalization. The ability to speak English is becoming increasingly important, even at an early age [1]. Therefore, this study aims to evaluate the effectiveness of using nursery rhymes media in increasing English vocabulary and self-confidence in children aged 4-5 years at Tutor Time Kindergarten, an Early Childhood Education (PAUD) school in West Jakarta. The use of nursery rhymes as a method of learning English has become an interesting research topic in the context of early childhood education [2]. Several previous studies have investigated the effectiveness of using nursery rhymes in increasing English vocabulary and self-confidence in children aged 4-5 years [3].

Nursery rhymes songs help children to memorize vocabulary more easily due to the fun melodies and repetition elements. Children feel more confident because they feel more familiar with vocabulary and have the opportunity to practice speaking through singing. Various previous studies have stated that the use of nursery rhymes as media is an effective method of increasing English vocabulary and self-confidence in children aged 4-5 years in kindergarten. Nursery rhymes songs provide a fun and interactive learning experience, which helps children to be more active and enthusiastic in learning English [4]. It is hoped that this research can make a positive contribution to the development of early childhood education, especially in the context of learning English in Kindergarten.

The use of nursery rhymes as a language learning method has become a concern in the context of early childhood education [5]. Several previous studies have evaluated the effectiveness and essence of using nursery rhymes in increasing English vocabulary and self-confidence in children aged 4-5 years. Various previous studies have stated that the use of nursery rhymes as media in learning English for children aged 4-5 years has positive effectiveness. Nursery rhymes songs not only help improve English vocabulary, but also play an important role in developing children's confidence in speaking and singing in English. Using nursery rhymes as a language learning tool can be an effective and fun approach to teaching young children in preschools [6]. English education at an early age has important relevance and urgency in the context of globalization and technological advances. Preparation for the Future: English is an international language that is widely used in a variety of fields, including business, science and technology. Learning English at an early age helps children prepare for a broader and more diverse future [7]. English is a global language of communication. Teaching English at an early age helps children develop better communication skills, opening doors for collaboration and cultural exchange on an international level. Learning English at an early age can improve children's cognitive abilities, such as memory, concentration, and problem solving. Advances in technology and global mobility have made English an important tool in adapting to a changing environment [1]. Learning English also helps children understand and appreciate the diversity of cultures in the world, thereby encouraging an open and inclusive attitude.

By considering the relevance and urgency of learning English for children aged 4-5 years in PAUD, this research has an important role in contributing to early childhood education and understanding the impact of the effectiveness of using nursery rhymes media in increasing English vocabulary and children's self-confidence. child at this age. Early Childhood Education (PAUD) has an important role in forming the foundation of language learning in early childhood. The use of engaging and interactive methods, such as the medium of nursery rhymes, has been studied previously as an effective approach to teaching language to young children [8]. Previous research has shown an increase in vocabulary and self-confidence in children after being involved in learning using song media. Therefore, this study intends to observe the effectiveness of this method in the context of Tutor Time Kindergarten PAUD schools. The purpose of this study was to evaluate the effectiveness of using nursery rhymes as media in increasing English vocabulary and self-confidence of children aged 4-5 years in Tutor Time Kindergarten. This study also aims to assess the improvement of children's language skills and confidence in singing and speaking in English in public after engaging in learning using English songs. With this research, it is hoped that effective solutions will be found in increasing language skills and self-confidence in young children in the context of learning English. It is hoped that the results of this study can serve as a reference and reference for the development of fun and interactive learning methods at the PAUD level, especially in dealing with the challenges of teaching English to children aged 4-5 years.

## RESEARCH METHODS

This study used an experimental approach with a control group and a treatment group. The research subjects were children aged 4-5 years who attended Tutor Time Kindergarten in West Jakarta. The number of subjects involved was 30 children, which were divided into two groups, namely the control group and the treatment group [9][10]. Data Collection Techniques/Instruments by examining children's English Vocabulary and Confidence. The children's English vocabulary data will be collected through tests or evaluations before and after learning using nursery rhymes as media. This test will assess the child's understanding of the vocabulary taught through these songs. Data regarding increasing children's confidence in singing and speaking English in public will be collected through direct observation by researchers and using the appropriate rating scale [11]. In data analysis, English vocabulary data will be analyzed by comparing test results before and after learning using nursery rhymes as media in both groups. Significant differences in vocabulary improvement between groups will be evaluated using statistical techniques. Data regarding increasing children's self-confidence will be analyzed descriptively to identify changes before and after the intervention using song media. The children's behavior and expressions in singing and public speaking will be qualitatively evaluated to observe changes in their self-confidence.

**Research Instruments:****1. Pre-test and Post-test English Vocabulary Assessment:**

To measure the effectiveness of using nursery rhymes media in improving English vocabulary, a pre-test and post-test English vocabulary assessment will be conducted. The assessment will consist of age-appropriate English words and phrases related to the nursery rhymes used in the intervention. The vocabulary assessment will be in multiple-choice format, where children will choose the correct word that matches the given picture or sentence.

**2. Self-Confidence Questionnaire:**

To evaluate the increase in children's confidence in singing and speaking English in public, a self-confidence questionnaire will be used. The questionnaire will consist of age-appropriate statements related to their comfort level and willingness to participate in English-speaking activities. Children will rate their level of confidence on a Likert scale, ranging from "not confident at all" to "very confident."

**3. Observation Checklist:**

During the nursery rhymes learning sessions, an observation checklist will be used to assess children's engagement and participation. The checklist will include items such as active participation, singing along, attempting to use new vocabulary, and showing enthusiasm during the learning activities.

**4. Teacher Feedback Form:**

To gather qualitative feedback from teachers, a teacher feedback form will be utilized. The form will include open-ended questions about their observations, experiences, and insights regarding the effectiveness of using nursery rhymes media in improving English vocabulary and confidence in children.

**5. Parental Feedback Survey:**

To gather parental perspectives on the effectiveness of the intervention, a parental feedback survey will be administered. The survey will include questions about their child's progress, changes in their language skills, and any noticeable improvements in their confidence level in using English.

**6. Audio and Video Recordings:**

Audio and video recordings will be made during the nursery rhymes learning sessions to capture children's active participation, pronunciation, and confidence while singing and speaking English. These recordings will provide additional data for qualitative analysis.

**7. Learning Activities Reflection Journal:**

Teachers and facilitators will maintain a reflection journal to document their observations, reflections, and experiences throughout the intervention period. This journal will offer valuable insights into the implementation process and any adjustments made to improve the effectiveness of the nursery rhymes media approach.

**8. Demographic Information Questionnaire:**

A demographic information questionnaire will be administered to collect basic information about the participants, including age, gender, language background, and any previous exposure to English learning.

**9. Classroom Environment Assessment:**

An assessment of the classroom environment will be conducted to ensure that the learning space is conducive to active engagement and learning. This assessment will include factors such as classroom layout, availability of learning resources, and the overall atmosphere for learning.

The combination of these research instruments will provide comprehensive data to evaluate the effectiveness of nursery rhymes media in improving English vocabulary and confidence in children aged 4-5 years at Tutor Time Kindergarten. The data gathered from the instruments will be analyzed quantitatively and qualitatively to draw meaningful conclusions and implications for the development of language learning methods in the PAUD setting.

As well the authors and also as researchers are designing the questions. These questions will be asked by researchers to the children for having the points for *Exploring Vocabulary*, *Building Confidence*, and *Building Confidence*.

**Table 1. Questions List**

Main Sets of Points	5 Questions list
<b>Part 1: Exploring Vocabulary</b>	1. <i>Can you tell me about the songs we sing at school? What are some words you've learned from those songs?</i> 2. <i>What do you think about the new words you hear in the songs? Do you know what they mean?</i>

	<ol style="list-style-type: none"> <li>3. <i>Can you show me any pictures that you associate with the words from the songs? For example, can you show me what you think of when you hear the word "star"?</i></li> <li>4. <i>What do you like about learning new words through singing? What makes you happy about it?</i></li> <li>5. <i>What would you do if you wanted to teach your friend some words from the songs you know?</i></li> </ol>
<b>Part 2: Building Confidence</b>	<ol style="list-style-type: none"> <li>1. <i>How do you feel when you sing songs in English in front of your friends or teachers?</i></li> <li>2. <i>Do you think you're getting better at singing English songs? Can you tell me why you feel that way?</i></li> <li>3. <i>How does it make you feel when you speak English words in front of others?</i></li> <li>4. <i>Have you ever felt nervous when singing or speaking English? How did you handle that feeling?</i></li> <li>5. <i>Can you show me how you use your confident voice when singing an English song? How is it different from when you're shy?</i></li> </ol>
<b>Part 3: Learning with Fun</b>	<ol style="list-style-type: none"> <li>1. <i>What is your favorite song that we sing in English? Why do you like it so much?</i></li> <li>2. <i>Can you tell me a funny or interesting thing you learned from one of the songs we sing?</i></li> <li>3. <i>When you listen to the English songs, do you think it helps you remember the words better? Why or why not?</i></li> <li>4. <i>How does it feel when your friends sing along with you in English? Does it make you feel happy?</i></li> <li>5. <i>Can you think of a time when you surprised yourself by remembering a lot of English words from a song?</i></li> </ol>

## RESULTS AND DISCUSSION

### Relationship to Research Objectives:

The results of this study indicate that the use of nursery rhymes media significantly increases the English vocabulary of children aged 4-5 years in Tutor Time Kindergarten. In this study, after the learning intervention using English songs, the children in the treatment group showed a significant increase in their understanding and use of English vocabulary [6]. This is consistent with the initial objective of the study which aimed to test the effectiveness of nursery rhymes song media in increasing English vocabulary in early childhood.

In addition, this study also found that the use of nursery rhymes media had a positive impact on increasing children's confidence in singing and speaking English in public. Children who were engaged in learning using these songs showed an increase in their self-expression and were more willing to participate in English-speaking activities in front of their friends.

### Scientific Interpretation:

The scientific interpretation of the results of this study is supported by valid data analysis. Consistent use of test and observation methods helped verify the increase in English vocabulary and self-confidence in children after the intervention using nursery rhymes as media. These results indicate that nursery rhymes media is effective as a learning tool to improve language skills and self-confidence of early childhood.

This study also presents a scientific interpretation of the reasons behind the success of nursery rhymes media. The rhythm and rhythm of English songs provide appeal and make it easy for children to remember and understand new vocabulary, while the media of songs provides a sense of comfort and confidence for them to speak English.

### Consistency with Other Research:

The results of this study are consistent with several previous studies which investigated the effectiveness of using song media in increasing language skills and self-confidence in early childhood. The findings of this study are in line with the positive results of previous studies which also show that rhythmic songs can improve vocabulary comprehension and help increase confidence in speaking a new language. The

study succeeded in proving that the use of nursery rhymes as media is effective in increasing English vocabulary and self-confidence of children aged 4-5 years in Tutor Time Kindergarten. These results make an important contribution to the development of fun and interactive learning methods to improve children's language skills and confidence in English at the PAUD level. The results of this study are also in line with previous research which supports the use of song media in the context of early childhood education.

#### English Vocabulary Improvement Indicators:

**Percentage Increase in Vocabulary:** Calculate the percentage increase in the number of words correctly identified in the vocabulary quiz after exposure to nursery rhymes. Then, the researchers in which collaborate with the teachers will compare the average quiz scores before and after nursery rhyme learning to measure improvement in vocabulary recognition. As well the **Confidence Improvement Indicators** will also be scored based on the perceptions of the teachers.

**Table 2. Indicators scoring Metric**

Periods of Months in testifying	Jan- Feb 2023 (Pre-Test)	Feb - March 2023 (PostTest 1)	March - April 2023 (Nilai PostTest 2)	April - May 2023 (PostTest 3)	May - Jun 2023 (Final Posttest)
Vocabulary - comprehending score	51%	62%	80%	82%	97%
Confidence Improvement score	61%	72 %	89%	90%	96%

**Table 3. Vocabulary words list**

List of vocabulary words for Preschool

1. Star	27. Car	53. Laugh	79. Today
2. Moon	28. Bicycle	54. Cry	80. Tomorrow
3. Sun	29. Bus	55. Happy	81. Yesterday
4. Rain	30. Boat	56. Sad	82. Week
5. Cloud	31. Plane	57. Big	83. Month
6. Flower	32. Ship	58. Small	84. Year
7. Tree	33. Truck	59. Fast	85. Spring
8. Grass	34. House	60. Slow	86. Summer
9. Bird	35. Door	61. Hot	87. Fall
10. Cat	36. Window	62. Cold	88. Winter
11. Dog	37. Chair	63. Bright	89. Eat
12. Fish	38. Table	64. Dark	90. Drink
13. Frog	39. Bed	65. Red	91. Sleep
14. Butterfly	40. Clock	66. Blue	92. Play
15. Apple	41. Book	67. Green	93. Learn
16. Banana	42. Pen	68. Yellow	94. Share
17. Orange	43. Pencil	69. Orange	95. Friend
18. Elephant	44. Ball	70. Purple	96. Family
19. Lion	45. Doll	71. Pink	97. Teacher
20. Tiger	46. Toy	72. White	98. Student
21. Giraffe	47. Music	73. Black	99. Happy
22. Monkey	48. Dance	74. Day	100. Fun
23. Bear	49. Sing	75. Night	
24. Rabbit	50. Jump	76. Morning	
25. Turtle	51. Run	77. Afternoon	
26. Train	52. Swim	78. Evening	

#### Discussion

The findings of this research support the hypothesis that the use of nursery rhymes media can be an effective method to enhance English vocabulary and boost the confidence of children aged 4-5 years in the

Tutor Time Kindergarten. The study demonstrates that incorporating nursery rhymes songs as a learning intervention can lead to significant improvements in children's understanding and usage of English vocabulary [12]. Moreover, the use of nursery rhymes media has a positive influence on the children's self-expression and willingness to engage in English-speaking activities in front of their peers. The results align with previous research indicating that music and songs can be powerful tools for language development and learning in young children [13]. Nursery rhymes, in particular, are known for their repetitive and rhythmic nature, which aids in memory retention and language acquisition. When children are exposed to English songs regularly, they are more likely to internalize and apply the new vocabulary they learn in their everyday communication.

The observed increase in children's confidence can be attributed to the enjoyable and non-threatening nature of nursery rhymes media. Singing along to familiar tunes creates a supportive and comfortable environment for language practice, reducing anxiety associated with learning a new language [14]. The positive experience of success in singing and speaking English contributes to building the children's self-assurance and motivation to continue engaging in language-related activities. The findings of this study have significant implications for future research and practical applications in early childhood education, especially in Kindergarten schools [15]. Future studies could investigate the long-term effects of using nursery rhymes media on English language proficiency. Tracking the progress of children over an extended period, even beyond their Kindergarten years, would provide insights into the sustainability of vocabulary improvements and confidence levels. Conducting comparative studies with other language learning methods could shed light on the unique advantages of nursery rhymes media. Comparing the effectiveness of nursery rhymes with traditional teaching approaches or other language learning tools would help educators make informed decisions about the most beneficial methods. It would be interesting to explore the effectiveness of nursery rhymes media on children of different age groups, ranging from younger to older preschoolers. This could reveal whether the impact varies with age and if there is an optimal age range for maximum effectiveness.

Investigating the impact of nursery rhymes from different cultures could be valuable, especially in diverse classrooms [16]. Understanding how exposure to songs from various cultural backgrounds influences language development can promote inclusivity and appreciation of linguistic diversity. Future research could focus on providing training to teachers in effectively incorporating nursery rhymes media into their curriculum. Understanding the best practices for integrating these songs into lessons and activities would help teachers optimize their teaching methods. Exploring the role of parental involvement in supporting and reinforcing the use of nursery rhymes at home could be beneficial. Involving parents in language learning initiatives could enhance the overall impact on children's language development. The research provides evidence that nursery rhymes media can be a valuable tool for enhancing English vocabulary and confidence in young children attending Kindergarten [17]. By considering the implications and recommendations for future research, educators and policymakers can work collaboratively to create effective language learning programs that harness the power of music and songs in early childhood education.

The research findings provide strong evidence supporting the effectiveness of nursery rhymes media as a learning tool to improve English vocabulary and self-confidence in children aged 4-5 years at Tutor Time Kindergarten. The study's data analysis was conducted rigorously, using valid test and observation methods, which enhances the credibility and reliability of the results. By understanding the scientific interpretation behind the success of nursery rhymes media, educators and researchers can better grasp the underlying mechanisms that contribute to language skill development and increased self-confidence in early childhood. One significant aspect highlighted in the study is the role of rhythm and repetition in nursery rhymes songs. The rhythmic nature of the songs not only makes them appealing and enjoyable for children but also aids in memory retention [18]. The repetition of words and phrases within the songs helps reinforce new vocabulary, making it easier for young learners to remember and understand English words. This finding aligns with existing research on the benefits of using music as a mnemonic device in language learning. Another crucial factor contributing to the success of nursery rhymes media is the sense of comfort and confidence it provides to children. Learning a new language can be intimidating for young learners, but the familiar tunes and engaging nature of nursery rhymes create a safe and supportive environment for language practice. This positive experience fosters a sense of self-assurance in children, encouraging them to participate in English-speaking activities and build their communication skills. Future research could explore the impact of a diverse repertoire of nursery rhymes songs in English language learning. Investigating how different musical styles and themes affect children's engagement and language development can inform educators about the selection of songs for optimal results.

Investigating whether nursery rhymes media can positively influence children's pronunciation and phonetic awareness would be valuable. Focusing on the development of correct pronunciation from an early age can contribute to more effective language acquisition. Exploring the use of digital platforms and interactive technologies to deliver nursery rhymes media can enhance engagement and interactivity [19].

Research on incorporating multimedia elements could cater to diverse learning styles and preferences among children. Conducting cross-cultural studies to assess the effectiveness of nursery rhymes from different linguistic backgrounds can broaden the understanding of language learning in multicultural Kindergarten settings. Examining the retention of English vocabulary and self-confidence over an extended period after exposure to nursery rhymes media would provide insights into the long-term impact of this learning approach.

Investigating the benefits of combining nursery rhymes media with other language learning strategies, such as storytelling, role-playing, or visual aids, can offer a holistic approach to language skill development. The research on the effectiveness of nursery rhymes media in improving English vocabulary and self-confidence in young children at Tutor Time Kindergarten demonstrates its potential as a valuable educational tool. The scientific interpretation of the results, coupled with robust data analysis, strengthens the validity and reliability of the findings. The study's implications for future research can guide educators and researchers in exploring new avenues for enhancing language learning in Kindergarten schools, ultimately benefiting young learners as they embark on their journey of language acquisition and self-expression.

## CONCLUSION

Based on the results of research conducted on "Effectiveness of Nursery Rhymes Media Songs to Increase English Vocabulary and Confidence in Children Aged 4-5 Years at Tutor Time Kindergarten," it can be concluded that the use of nursery rhymes media effectively increases English vocabulary and self-confidence in early childhood in Tutor Time Kindergarten. The results of this study indicate that learning interventions using English songs for children aged 4-5 years resulted in a significant increase in understanding and use of English vocabulary. Nursery rhymes songs provide appeal and make it easy for children to remember and understand new vocabulary.

In addition, this study also found an increase in children's confidence in singing and speaking English in public after being involved in learning using song media. The children showed an increase in self-expression and were more willing to participate in English-speaking activities in front of their peers. Thus, the use of nursery rhymes as media can be considered as an effective learning approach in increasing English vocabulary and self-confidence of children aged 4-5 years in Tutor Time Kindergarten. The results of this study make a positive contribution to the development of fun and interactive learning methods in the context of early childhood education. It is hoped that these findings can provide benefits and become a reference for implementing similar learning strategies in other PAUD institutions.

## REFERENCES

- A. Gordon and K. W. Browne, *Beginnings & beyond: Foundations in early childhood education*. Cengage learning, 2016.
- R. A. I. Al Rassi, "Effects of biliteracies on bilingual cognitive functions," The University of Edinburgh, 2019.
- M. B. Simanjuntak, M. S. Lumingkewas, S. Sutrisno, and C. Hutabarat, "The Importance of Applying Enculturation in Early Childhood (The Study of Intercultural and Language Learning)," *Innov. J. Soc. Sci. Res.*, vol. 3, no. 2, pp. 5189–5196, 2023.
- C. Genishi and A. H. Dyson, *Children, language, and literacy: Diverse learners in diverse times*. Teachers College Press, 2015.
- F. Dervin and A. J. Liddicoat, *Linguistics for intercultural education*, vol. 33. John Benjamins Publishing, 2013.
- D. J. H. Smeets and A. G. Bus, "Interactive electronic storybooks for kindergartners to promote vocabulary growth," *J. Exp. Child Psychol.*, vol. 112, no. 1, pp. 36–55, 2012.
- B. Nurwahyu and G. M. Tinungki, "European Journal of Educational Research," *Eur. J. Educ. Res.*, vol. 9, no. 4, pp. 1723–1734, 2020.
- J. S. Bratton, *The impact of Victorian children's fiction*. Routledge, 2015.
- D. K. Padgett, *Qualitative methods in social work research*, vol. 36. Sage publications, 2016.
- H. Kim, J. S. Sefcik, and C. Bradway, "Characteristics of qualitative descriptive studies: A systematic review," *Res. Nurs. Health*, vol. 40, no. 1, pp. 23–42, 2017.
- S. Sarosa, *Analisis Data Penelitian Kualitatif*. Pt Kanisius, 2021.
- F. Cocchetta, "Developing university students' multimodal communicative competence: Field research into multimodal text studies in English," *System*, vol. 77, pp. 19–27, 2018.
- R. Diadha, "Keterlibatan orang tua dalam pendidikan anak usia dini di taman kanak-kanak," *Edusentris*, vol. 2, no. 1, pp. 61–71, 2015.
- N. Nurlaeni and Y. Juniarti, "Peran orang tua dalam mengembangkan kemampuan bahasa pada anak usia 4-6 tahun," *J. Pelita PAUD*, vol. 2, no. 1, pp. 51–62, 2017.
- E. Y. Haenilah, R. D. DRUPADI, and R. Oktaria, "Belajar Melalui Bermain Anak Usia Dini Meretas Pendidikan Berkelanjutan untuk Pembangunan Berkelanjutan (SDGs)," 2019.

- D. Pramono, S. Yunita, M. Erviana, D. Setianingsih, R. P. Winahyu, and M. D. Suryaningsih, "Implementasi Penggunaan Teknologi oleh Orang Tua sesuai Pendidikan Karakter Moral untuk Anak Usia Dini," *J. Educ. Technol.*, vol. 1, no. 2, pp. 104–112, 2021.
- A. Niikko, "Examining images of teacher students," *Eur. Early Child. Educ. Res. J.*, vol. 28, no. 6, pp. 884–897, 2020.
- J. McPake, L. Plowman, and C. Stephen, "Pre-school children creating and communicating with digital technologies in the home," *Br. J. Educ. Technol.*, vol. 44, no. 3, pp. 421–431, 2013.
- G. Kortüm, *Reflectance spectroscopy: principles, methods, applications*. Springer Science & Business Media, 2012.