



Analysis of Singing Methods in Improving Cognitive Abilities in Early Childhood

Nurhaliza Mustika Maya Puteri

Universitas Sriwijaya

Reva Septiana

Universitas Sriwijaya

Nia Ramadhani

Universitas Sriwijaya

Windi Dwi Andika

Universitas Sriwijaya

Najlatul Fathiah

Universitas Sriwijaya

Alamat: Jl. Srijaya, Kec. Alang-Alang Lebar, Kota Palembang

Korespondensi penulis: windidwiandika@fkipunsri.ac.id

Abstract. *This study aims to explore the effectiveness of singing as a learning method in enhancing the cognitive development of early childhood learners. Using a descriptive qualitative approach through library research, data were gathered from five relevant scientific articles published within the last five years. The findings consistently show that singing is a powerful and enjoyable educational tool that improves children's memory, symbol recognition, and understanding of basic concepts. Additionally, singing activities contribute to language development, speaking skills, and self-confidence. The use of educational songs and audiovisual media creates an engaging learning environment that supports cognitive growth in a natural and stress-free manner. Therefore, integrating the singing method into early childhood education programs is recommended to optimize holistic child development, particularly in cognitive and communication aspects.*

Keywords: *singing method, cognitive development, early childhood education, learning strategy, educational songs.*

Abstrak. Penelitian ini bertujuan untuk mengeksplorasi efektivitas bernyanyi sebagai metode pembelajaran dalam meningkatkan perkembangan kognitif peserta didik anak usia dini. Dengan menggunakan pendekatan kualitatif deskriptif melalui penelitian kepustakaan, data dikumpulkan dari lima artikel ilmiah relevan yang diterbitkan dalam lima tahun terakhir. Temuan tersebut secara konsisten menunjukkan bahwa bernyanyi adalah alat pendidikan yang kuat dan menyenangkan yang meningkatkan daya ingat anak-anak, pengenalan simbol, dan pemahaman konsep dasar. Selain itu, kegiatan bernyanyi berkontribusi pada pengembangan bahasa, keterampilan berbicara, dan kepercayaan diri. Penggunaan lagu-lagu edukatif dan media audiovisual menciptakan lingkungan belajar yang menarik yang mendukung pertumbuhan kognitif secara alami dan bebas stres. Oleh karena itu, mengintegrasikan metode bernyanyi ke dalam program pendidikan anak usia dini direkomendasikan untuk mengoptimalkan perkembangan anak secara holistik, khususnya dalam aspek kognitif dan komunikasi.

Kata kunci: metode bernyanyi, perkembangan kognitif, pendidikan anak usia dini, strategi pembelajaran, lagu edukatif.

LATAR BELAKANG

Early Childhood Education (ECE) is a crucial foundation in shaping a child's personality and developing their potential holistically, including cognitive, socio-emotional, language, and motor aspects. Early childhood, ranging from ages 0 to 6, is often referred to as the *golden age* because, during this stage, a child's brain development occurs very rapidly. Therefore, it is

essential to provide the right stimulation to support this development, one of which is through singing activities.

Cognitive abilities include thinking processes such as remembering, understanding, classifying, and problem-solving. According to Piaget, in early childhood, children are in the preoperational stage, where they begin to develop symbolic abilities, such as using words or pictures to represent objects (Luthfillah et al., 2022). In this context, songs can serve as a powerful medium because they contain symbolic and repetitive elements, which help children remember and understand basic concepts such as letters, numbers, shapes, or colors. The singing method has proven to stimulate various aspects of child development. One study showed that singing activities encourage children to think logically through the lyrics they memorize, as well as help develop imagination and long-term memory (Luthfillah et al., 2022). This demonstrates a direct link between musical activities and enhanced cognitive abilities.

Another study by Khafifah (2020) supports this claim by showing an increase in the average score of children's cognitive abilities after the singing method was implemented at TK Permata Hati Aisyiyah. Children were more capable of naming days of the week, recognizing colors, shapes, and object characteristics after learning that incorporated songs as the delivery medium. This method is not only enjoyable but also effective in strengthening memory as well as training concentration and sensitivity. Meanwhile, Ambarwati (2023), in her research at TK Dharmawanita Wringinanom, stated that the singing method provides a positive stimulus in introducing letters and numbers. With this approach, children are quicker to remember the material because songs engage the affective and psychomotor domains, making learning more dynamic and meaningful.

In addition, singing activities help children develop language as part of their cognitive abilities. A literature study found that the singing method allows children to expand their vocabulary, express emotions, and confidently share their opinions (Luthfillah et al., 2022). This indicates a synergistic relationship between language development and cognition through musical activities. Thus, the singing method is not merely a classroom entertainment activity, but rather an effective pedagogical strategy in enhancing the cognitive aspects of early childhood. Therefore, an in-depth analysis of this method is necessary to understand how its implementation can be optimized in ECE learning activities

KAJIAN TEORITIS

COGNITIVE DEVELOPMENT IN EARLY CHILDHOOD

Cognitive development refers to the progression of a child's ability to think, reason, remember, and solve problems. According to Jean Piaget's theory, early childhood falls

within the *preoperational stage* (ages 2 to 7). During this stage, children begin to use language and symbols to represent objects and ideas. However, their thinking is still intuitive and egocentric, and they are not yet capable of logical operations. Hurlock (1978) emphasizes that cognitive development is influenced by stimulation from the environment, learning experiences, and social interactions. Children exposed to rich and varied stimuli tend to show more advanced cognitive growth. Stimulating activities such as storytelling, play, and singing can significantly contribute to the development of memory, attention, and conceptual understanding.

DEFINITION AND CHARACTERISTICS OF THE SINGING METHOD

The singing method is a teaching strategy that uses songs and music as educational tools. Children's songs usually feature simple lyrics, repetition, and rhythmic patterns, making them easy to memorize and enjoyable (Campbell & Scott-Kassner, 2006). Through singing, children can be introduced to cognitive concepts such as numbers, letters, shapes, colors, and daily routines in a fun and interactive way. From a behaviorist perspective, singing reinforces learning through repetition and stimulus-response associations (Skinner, 1957). Meanwhile, from a cognitive perspective, songs help children to organize information and form conceptual connections by engaging mental processes such as memory encoding and retrieval (Ormrod, 2012).

RELATIONSHIP BETWEEN SINGING AND COGNITIVE ABILITY DEVELOPMENT

Singing activities provide multisensory stimulation that can enhance various cognitive functions. When children sing, they engage in pattern recognition, language processing, memory recall, and concentration (Paquette & Rieg, 2008). Educational songs can support the understanding of basic math, vocabulary development, scientific concepts. According to Gardner's theory of *Multiple Intelligences*, musical intelligence interacts with other forms of intelligence, including linguistic and logical-mathematical intelligence. Children exposed to musical activities tend to have better memory retention and language skills (Gardner, 1983). Songs also make learning more enjoyable, allowing children to internalize knowledge without pressure.

EFFECTIVE LEARNING STRATEGIES FOR EARLY CHILDHOOD

Effective early childhood education emphasizes play-based learning, thematic instruction, and experiential activities. Singing fits well within these principles, as it fosters engagement, enjoyment, and conceptual understanding (Essa, 2016). Teachers can incorporate songs into daily routines during transitions, lesson openings, or thematic instruction. Teachers play a crucial role in selecting age-appropriate and educationally meaningful songs. A good song should be simple, clear, culturally relevant, and aligned with the intended cognitive goals. With proper implementation, singing becomes more than entertainment; it becomes a powerful instructional method that supports cognitive development holistically (Brewer, 2007).

PREVIOUS RELATED STUDIES

Several empirical studies have examined the effectiveness of the singing method in improving various aspects of early childhood development, particularly cognitive and language skills. A study conducted by Darmayanti, Pamungkas, and Indrawati (2022) revealed that the singing method significantly increased children's self-confidence, especially within the context of distance learning during the COVID-19 pandemic. Through structured singing activities, children demonstrated improvements in intonation control and became more comfortable performing in front of peers. This finding indicates that singing not only supports cognitive growth but also reinforces socio-emotional development and self-expression.

In another study, Prawinda, Rachmah, and colleagues (2023) found a strong correlation between the use of singing as an instructional tool and the enhancement of children's language abilities. Children who regularly engaged in learning through songs exhibited notable improvements in both spoken and written language. They were able to expand their vocabulary, respond verbally to questions more effectively, and construct simple written sentences. These results support the notion that singing facilitates a fun, natural process of language acquisition.

Additionally, research by Widiani, Putra, and Agustika (2019) focused on the integration of audiovisual media in singing activities. Their findings showed a significant increase in the speaking abilities of children in the experimental group compared to those in the control group. The use of audiovisual aids in singing not only encouraged more

active verbal expression but also improved fluency and confidence in speaking. This demonstrates the method's strong potential to stimulate early verbal communication.

Collectively, these studies emphasize that the singing method positively impacts multiple domains of development, including vocabulary acquisition, logical thinking, and language pattern recognition. Given its multifaceted benefits, singing can be considered a powerful pedagogical tool that supports foundational cognitive development and should therefore be integrated more systematically into early childhood education curricula.

METODE PENELITIAN

This research uses a literature study method (library research) with a descriptive qualitative approach. The literature study was chosen because this research aims to analyze and summarize various scientific findings related to the effectiveness of the singing method in enhancing the cognitive abilities of early childhood. According to Randolph (2009), a literature study is a systematic method of identifying, analyzing, and synthesizing findings. method of systematically identifying, analyzing, and synthesizing findings from written documents (such as journal articles or books) to answer questions. findings from written documents (such as journal articles or books) in order to answer the research questions. The data used comes from five relevant scientific articles published within the last five years. These articles were sourced from nationally accredited journals and several publications from higher education institutions.

The data collection process was carried out through stages of identification, selection, and analysis of articles that align with the focus of the study, namely on the application of the singing method and its impact on the cognitive development of early childhood. The data analysis technique was conducted qualitatively through data reduction, data presentation, and conclusion drawing. The researcher thoroughly read each article to identify themes, the theories used, research methods, as well as findings that support the relationship between the singing method and cognitive development.

HASIL DAN PEMBAHASAN

In the process of early childhood education, cognitive development plays a very important role. Cognition is related to the child's ability to think, remember, understand, and solve problems. One learning method that has proven effective in stimulating cognitive development is the singing method. Singing is not only an enjoyable activity

for children but also an effective learning tool to introduce basic concepts such as numbers, letters, vocabulary, and even language structure. Several studies have shown that the singing method can improve memory skills, symbol recognition, and enrich the understanding of other cognitive concepts. Educational songs can help children remember lessons more easily, as the rhythm and repetition in songs strengthen children's memory. In addition, singing creates an enjoyable learning atmosphere and reduces stress in children while learning.

To provide a theoretical and empirical foundation for the use of the singing method in developing children's cognitive abilities, the following presents several relevant previous studies that can serve as references in research development.

Table 1. references

No	Researcher & Year	Research Title	Research Findings
1	Rulli Fatmawati, Oyib Sulaeman, Niknik Dewi Pramanik (2022)	The Effect of Singing Method on the Ability to Remember Number Symbols in Early Childhood	There was a positive and significant effect ($r_s = 0.41$); the singing method contributed 34.81% to the ability to remember number symbols.
2	Dani Puspitasari, Grace Arta Wijayanti Gea, Mersisanti Hura, Neci Larichi Hudi Limu, Veronica Aprilian Telaumbanua, Yulia Setia (2024)	The Effect of the Singing Method on the Cognitive Development of Children Aged 4–5 Years	The singing method effectively improved children's cognitive abilities; the average cognitive score reached 97.5.
3	Dewi Murni, Asri Hente, Nurmiati (2020)	Enhancing Early Childhood Cognitive Skills Through Singing Method in	Significant increase: from 0% to 80% of children reached the "Very Well Developed" category in

		Group B TK Al-Khairaat Poi	recognizing numbers and symbols.
4	Maharani Dewintha Stani, Hisham Abdul Malik (2025)	Improving Letter Recognition Skills Through the Singing Method	Letter recognition improved from 37.5% to 75% after two cycles of implementing the singing method.
5	Muhammad Radhi Al Mardhi, Fauziah Bachtiar (2024)	Singing Method in Arabic Language Learning for Early Childhood	Singing supported phonological, morphological, and syntactic aspects of the language; also enhanced cognitive development through mastery of symbols and language concepts.

Based on the findings of the five studies summarized in the table, it can be concluded that the singing method has a significant impact on the improvement of cognitive aspects in early childhood. Each study indicates that singing activities are not only enjoyable for children but also enhance their thinking abilities, symbol recognition, and memory retention of learning materials. Besides its impact on cognition, the singing method also contributes significantly to children's personal development, language, and speaking skills. In a study conducted by Erma Darmayanti, Joko Pamungkas, and Indrawati (2022), the singing method proved to increase children's confidence, especially in the context of distance learning during the pandemic. Through singing activities, children showed improvements in singing with proper intonation and became more confident performing in front of others, indicating reinforcement of socio-emotional aspects and self-expression.

Furthermore, research by Raras Ayu Prawinda, Laela Luthfiana Rachmah, and team (2023) highlighted a significant correlation between the application of the singing method and children's language abilities. Children who frequently learned through songs showed improvements in both spoken and written language. They expanded their vocabulary,

responded verbally to questions, and were able to write simple sentences. This demonstrates that the singing method supports a fun and natural language acquisition process. Another study by Ni Luh Wayan Dina Widiani, I Ketut Adnyana Putra, and Gusti Ngurah Sastra Agustika (2019) revealed that implementing the singing method through audiovisual media significantly improved children's speaking skills. Children became more active in expressing ideas and more fluent in speaking. The significant increase in the average speaking skills score compared to the control group proves that this method effectively stimulates early verbal communication.

Moreover, the singing method not only impacts one cognitive aspect but also helps in developing vocabulary, logical thinking, and language pattern recognition. This makes singing a highly potential approach in early childhood education, especially in building the foundations of thinking skills that will be beneficial in the next stages of education. Therefore, this method deserves to be systematically integrated into the early childhood education curriculum.

KESIMPULAN DAN SARAN

Based on the theoretical framework and the findings from various studies that have been analyzed, it can be concluded that singing is an effective and relevant learning strategy for enhancing the cognitive development of early childhood learners. Singing activities have been proven to help children improve their memory, symbol recognition, understanding of basic concepts, and overall thinking abilities. The effectiveness of this method is further supported by the rhythm and repetition found in songs, which naturally facilitate information retention.

In addition to its positive impact on cognitive development, the singing method also contributes to improvements in children's language abilities, speaking skills, and self-confidence. Educational songs create an engaging and pressure-free learning environment that fosters enjoyment and interaction. The use of supporting media such as audiovisual tools further enhances the appeal and effectiveness of this approach. Therefore, the singing method deserves to be systematically integrated into the early childhood education curriculum. It not only helps optimize cognitive development but also supports the holistic growth of children, particularly in building foundational communication and thinking skills that are essential for future learning stages.

UCAPAN TERIMA KASIH

The authors wish to extend their sincere appreciation to Dr. Windi Dwi Andika, M.Pd, and Najlatul Fathiah, M.Pd for their great guidance and scholarly comments during the preparation of this manuscript. Dr. Andika's expertise in profoundly influenced the theoretical framework of this study, while Mrs. Fathiah's critical feedback are greatly enhanced the methodological firm. Their dedication as mentors and willingness to engage in thoughtful discussions were instrumental in shaping this work. We also acknowledge the academic support provided by Universitas Sriwijaya, alongside our friends whose constructive dialogues really helped this research. To the anonymous reviewers, we are grateful for their awesome evaluation and suggestions that strengthened the final version of this article.

DAFTAR REFERENSI

- Al Mardhi, M. R., & Bachtiar, F. (2024). Metode bernyanyi dalam pembelajaran bahasa Arab untuk anak usia dini. *J-CEKI: Jurnal Cendekia Ilmiah*, 3(5), 3432–3434.
- Ambarwati, W. D. (2023). Pengembangan kemampuan kognitif anak didik PAUD di TK Dharmawanita Wringinanom melalui metode bernyanyi. *Jurnal Pendidikan Sendratasik*, 12(1), 166–173.
- Brewer, C. (2007). *Soundtracks for learning: Using music in the classroom*.
- Campbell, P. S., & Scott-Kassner, C. (2006). *Music in childhood: From preschool through the elementary grades*.
- Darmayanti, E., Pamungkas, J., & Indrawati. (2022). Penerapan metode bernyanyi berbasis pengembangan diri anak pada masa pandemi Covid-19. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(6), 5495–5505. <https://doi.org/10.31004/obsesi.v6i6.2992>
- Essa, E. L. (2016). *Introduction to early childhood education* (7th ed.).
- Fatmawati, R., Sulaeman, O., & Pramanik, N. D. (2022). Pengaruh penggunaan metode bernyanyi terhadap kemampuan mengingat lambang bilangan pada anak usia dini. *IAILM Tasikmalaya*.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*.
- Hurlock, E. B. (1978). *Child development* (6th ed.).
- Kastanja, J., & Watini, S. (2022). Implementasi metode bernyanyi Asyik dalam meningkatkan rasa percaya diri anak kelompok A1 TK Negeri Pembina Nasional. *Jurnal Ilmiah Ilmu Pendidikan (JIIP)*, 5(7), 2636–2639.
- Khafifah, N. R. (2020). Meningkatkan perkembangan kognitif dengan metode bernyanyi pada anak usia dini. *Universitas Siliwangi*.
- Luthfillah, N., Muslihin, H. Y., & Rahman, T. (2022). Analisis pengembangan bahasa dan kognitif anak usia dini melalui metode bernyanyi. *Early Childhood: Jurnal Pendidikan*, 6(1), 1–7.

- Murni, D., Hente, A., & Nurmiati. (2020). Meningkatkan kognitif anak usia dini melalui metode bernyanyi di Kelompok B TK Al-Khairaat Poi. *Early Childhood Education Indonesian Journal (ECEIJ)*, 3(2), 31–40.
- Paquette, K. R., & Rieg, S. A. (2008). Using music to support the literacy development of young English language learners. *Early Childhood Education Journal*, 36(3), 227–232. <https://doi.org/10.1007/s10643-008-0277-9>
- Piaget, J. (1952). *The origins of intelligence in children*.
- Prawinda, R. A., Rachmah, L. L., Farantika, D., & Nindiya, D. C. (2023). Analisis hubungan penerapan metode bernyanyi pada perkembangan bahasa anak di PAUD Al Hidayah Tanggung. *Jurnal Terapan Pendidikan Dasar dan Menengah*, 2(4), 606–608. <https://doi.org/10.28926/jtpdm.v2i4.631>
- Puspitasari, D., Gea, G. A. W., Hura, M., Limu, N. L. H., Telaumbanua, V. A., & Setia, Y. (2024). Pengaruh metode bernyanyi pada perkembangan kognitif anak usia 4–5 tahun. *AUDIENSI: Jurnal Pendidikan dan Perkembangan Anak*, 3(1), 1–10.
- Randolph, J. J. (2009). A guide to writing the dissertation literature review. *Practical Assessment, Research & Evaluation*, 14(13), 1–13. <https://scholarworks.umass.edu/pare/vol14/iss1/13/>
- Skinner, B. F. (1957). *Verbal behavior*.
- Stani, M. D., & Malik, H. A. (2025). Meningkatkan kemampuan mengenal huruf abjad melalui metode bernyanyi. *Jurnal Cerlang Pendidikan Anak Usia Dini (JCPAUD)*, 2(1), 1–5. <https://doi.org/10.37640/jcpaud.v2i1.2286>
- Widiani, N. L. W. D., Putra, I. K. A., & Agustika, G. N. S. (2019). Pengaruh metode bernyanyi melalui media audio visual terhadap keterampilan berbicara anak kelompok A TK Triamarta Kediri Tabanan. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 7(1), 68–77.