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Early Childhood Symbolic Thinking Skills through Loose Part-Based Busy Jar Learning Media

Aina Yulifa'atun Mufida

ainamufida18@gmail.com

UIN Sunan Kalijaga Yogyakarta, Indonesia

Hibana

hibana@uin.suka.ac.id

UIN Sunan Kalijaga Yogyakarta, Indonesia

Abstract

Early childhood cognitive development is a very important and decisive phase. This ability refers to the ability of children to use certain symbols or representations to describe objects that are not in front of them. Through symbolic thinking skills, children can begin to develop the ability to think abstractly and imaginatively. This is an important foundation that will support their ability to think critically and creatively in the future. This research uses qualitative descriptive research. The subjects in this research were 23 children from KB Paud Aisyiah 02 Tambakromo. The data in this research was collected through several techniques, namely observation, interviews and documentation. The data obtained in this research was collected and analyzed using thematic analysis techniques with data analysis steps including Data Reduction, Data Presentation, and Conclusion Drawing. The result obtained is that symbolic thinking ability is one of the initial stages in the development of pre-operational thinking. At this stage, children begin to be able to mentally imagine an object even though the object is not present in front of them. Busy jar is a variety of children's games, which consists of jars (jars) that contain game materials and can be used as a means of learning for children. Through loose part-based busy jar learning media, it can help the development of symbolic abilities in early childhood.

Keywords: Learning Media, Early Childhood, Symbolic Thinking Skills, Busy Jar



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INTRODUCTION

The cognitive development of early childhood is a crucial and determining phase. At this stage, one of the main aspects that develop is the ability to think symbolically. According to Wicaksono et al. (2022), in early childhood, children's abilities develop very rapidly, which is why this period is called the "golden age." This ability refers to the child's capacity to use symbols or specific representations to describe objects, actions, or concepts that are not physically present in front of them.

Thus, stimulation can help children's development optimally (Wardani & Suryana, 2021).

Symbolic ability enables children to begin developing the capacity for abstract thinking and imagination. This is an important foundation that will support their ability to think critically and creatively in the future. Through symbolic thinking, children learn to imagine and understand things they cannot directly see, which is highly useful in learning and problem-solving processes later in life. According to the Ministry of Education and Culture Regulation No. 146 of 2014, Article 5, the aspects developed in early childhood education include religious values, moral values, physical and motor development, cognitive, social-emotional, language, and arts to enhance children's thinking abilities (Firman & Anhusadar, 2022).

Loose part-based busy jars are a creative and innovative learning medium to develop symbolic thinking in early childhood. This learning medium consists of various small, loose objects that can be manipulated, such as buttons, pebbles, wood pieces, and other safe items for children. There are no rules or limitations in using these objects, allowing children to play and create freely. Learning media should be enjoyable to motivate children to participate (Ramlah et al., 2023). Through playing with busy jars, children are encouraged to explore different possibilities, imagine new situations, and create their own scenarios. This activity helps children develop abstract and creative thinking skills, as they learn to use simple objects to represent complex ideas or build stories they create themselves. According to Bodedarsyah & Yulianti (2019), learning media are essential to support material explanations. Thus, loose part-based busy jars become an effective tool to support children's cognitive and imaginative development, helping them learn through exploration and free play.

This learning approach aligns with the concept of learning through play, which emphasizes the importance of giving children the freedom to use their imagination and hone their symbolic thinking abilities. Strategies and media can maximize the development of abilities (Umaroh et al., 2023). With this method, children can learn naturally through exploration and play, reinforcing their thinking skills in a fun and pressure-free context. Moreover, the use of loose part-based busy jars not only supports the development of symbolic thinking but also promotes progress in fine motor skills. When children manipulate small objects like buttons, pebbles, and wood pieces, they indirectly train their hand-eye coordination and fine motor skills. Additionally, this activity facilitates the development of problem-solving skills. As children try to build or create something with the materials available, they must think critically and creatively to find the best way to achieve their goals. This process helps them learn how to analyze situations, plan actions, and make decisions, all of which contribute to building a strong cognitive foundation.

Loose part-based busy jars are considered a highly effective tool in early childhood education because they benefit children's overall development. This tool not only serves as a means to stimulate symbolic thinking but also plays a crucial role in enriching children's fine motor development. As children interact with small objects such as buttons, pebbles, and wood pieces, they are trained to develop the hand-eye coordination and fine motor skills essential for everyday activities like writing and drawing.

Additionally, busy jars help children sharpen their problem-solving skills. By facing various challenges that arise during play and attempting to construct or build something, children learn to think logically and creatively, explore different solutions, and make decisions. This process strengthens their analytical and cognitive abilities, which are essential for future intellectual development. Furthermore, the use of loose part-based busy jars encourages children to learn in a fun and pressure-free way, allowing them to explore their own ideas and boost their confidence. Loose parts can help children improve their understanding of numbers in a fun way and foster a sense of familiarity among peers (Khasanah et al., 2023). Thus, this tool not only supports cognitive and motor development but also helps shape other important aspects such as creativity, critical thinking, and emotional resilience, all of which contribute to building a strong foundation for future learning.

METHODS

This research utilizes a descriptive qualitative approach. This method was chosen to identify, analyze, and interpret content from various information sources related to symbolic thinking abilities in early childhood and the use of loose part-based busy jars as a learning medium. The subjects of this study consist of 23 children from KB Paud Aisyiah 02 Tambakromo, located in Tambaharjo, Tambakromo District, Pati Regency, Central Java Province. The data in this study were collected using several techniques, including observation, interviews, and documentation. The collected data were analyzed using thematic analysis, with the data analysis steps consisting of Data Reduction, Data Presentation, and Conclusion Drawing (Sugiyono, 2010).

RESULTS AND DISCUSSION

The initial step in this research is to design a Lesson Plan (RPP). The RPP is based on interviews with teachers, which revealed that KB Paud Aisyiah 02 Tambakromo requires supportive learning media to enhance children's symbolic thinking abilities. The goal of this learning activity is to develop early childhood symbolic thinking skills, improve children's creativity and imagination in using everyday objects to create symbolic representations, teach children to recognize shapes, colors, and sizes through enjoyable learning media, and promote fine motor skills and hand-eye coordination through activities involving loose parts.

The learning activities are carried out in several stages, including the introduction, core, and closing activities. The introduction begins with the teacher engaging the children in a discussion about objects around them. The teacher introduces the concept of symbolic thinking, which is the ability to use one object to represent another object or idea (for example, a button can represent a car wheel). The teacher presents the Busy Jar and explains that it contains various objects they can use to play and learn.

In the core activity, children are given time to take objects from the Busy Jar and are encouraged to explore the loose parts. They can play freely and use these objects to create shapes or items according to their imagination. The teacher asks the children to select an object from the Busy Jar and demonstrate how that object can represent something else (e.g., a bottle cap as a wheel, a twig as a tree trunk). The children are

divided into small groups, and each group is tasked with creating a form that can represent an object or scene (e.g., a house, car, or playground). They are then asked to explain their creations to their classmates.

In the closing activity, the teacher invites the children to share what they have made and how they used the objects symbolically. The teacher provides feedback and reflections on the importance of creativity and symbolic thinking, summarizing the day's lesson and encouraging the children to apply the concept of symbolic thinking in their daily lives.

After implementing the loose part-based Busy Jar media, the symbolic abilities of the children were measured, as shown in Table 1:

Table 1: Student Ability Data Using Loose Part-Based Busy Jar Media

Criteria	Not Yet Developed (BB)	Starting to Develop (MB)	Developing as Expected (BSH)	Developing Very Well (BSB)
Recognizing number symbols			19	4
Mentioning number symbols			18	5
Recognizing vowel and consonant symbols			11	12
Representing various objects in pictures and writing			15	8

The implementation of loose part-based Busy Jar media has shown a significant impact on developing early childhood creativity and imagination. This is evident from the children's ability to combine various types of loose parts to create different and innovative forms. Beyond assembling objects, children have become bolder in experimenting by combining different elements to create unique representations, reflecting their understanding of the world around them. This process helps them recognize objects that are not physically present (Priyono et al., 2021). The activity also encourages them to be more active in communication, where they eagerly explain their creations to their peers and teachers, even adding more complex details to their work, showing an improvement in critical thinking and their ability to construct more complex concepts. This stimulation needs to be continuously provided to ensure children develop optimally (Anida & Eliza, 2020).

With these abilities, young children explore their environment, building a foundation of knowledge about the world, which eventually evolves into more complex skills. Knowledge for early childhood is generally relative, and development occurs effectively when based on facts as the child grows older (Istiqomah & Maemonah, 2021). Cognitive development in children requires an understanding of how children learn, master tasks, and the connection between stimuli and responses. Cognitive development is essential for early childhood as a competency and learning outcome (Handayani et al., 2023). Early childhood, defined up to the age of 6 years, is

a stage of rapid development, making it crucial to foster all aspects of their abilities, including cognitive skills (Putri et al., 2021).

The results of this study affirm that loose part-based Busy Jar media has significant potential in enhancing early childhood symbolic thinking abilities. The flexibility of loose parts allows children to manipulate them in various ways, giving them the freedom to express their ideas and imagination uniquely. Children do not just see objects as physical items but also as tools to represent more abstract concepts and ideas. This aligns with cognitive development theories that emphasize learning through play, where children use symbols to represent and understand the world around them. Therefore, teachers must consider children's developmental characteristics and understand their natural traits (Novitasari & Fauziddin, 2020).

Symbolic abilities need to be introduced, even without the presence of real objects, as a foundation for future education (Nurlaela & Nuraeni, 2021). The introduction of letters for reading activities is crucial, as it will be a skill practiced at higher educational levels. Children aged 5-6 years show achievements in symbolic thinking development with the following indicators (Collins & Laski, 2019): (1) Identifying letter symbols and sounds: Children begin to associate their names with writing letter symbols, and at this stage, they can name 26 letters one by one, which is a basic skill in reading. (2) Recognizing rhymes by matching words with the same rhyme, such as "cat" and "bat." (3) Identifying number symbols from 1 to 15. (4) Understanding number quantities corresponding to the displayed number symbols. (5) Comparing larger or smaller numbers. (6) Solving addition and subtraction problems using object pictures.

Furthermore, Busy Jar-based learning encourages children to think abstractly, an essential skill for the development of language and logic in the future. Children are encouraged to see the relationships between the objects they create and larger concepts, such as seeing buttons as wheels or twigs as tree trunks, which in turn trains them to think conceptually. Additionally, this activity positively impacts children's social skills development. Through group interactions, they learn to collaborate, share ideas, and build projects together, all of which are important for developing communication and teamwork skills. This implementation not only enhances symbolic and abstract thinking skills but also prepares children to participate in broader social environments. Busy jar-based play media engages children, encouraging them to complete each activity and thus influencing their skill development (Umiyati & Isnaningsih, 2024).

CONCLUSION

Busy Jar based on loose parts significantly enhances the symbolic thinking abilities of early childhood students at KB Paud Aisyiah 02 Tambakromo. Through the use of simple and manipulable objects in the Busy Jar, children are able to develop creativity, imagination, and fine motor skills. The research results indicate a clear improvement in children's ability to recognize and mention number symbols, identify vocal and consonant letter symbols, as well as represent various objects in the form of drawings and writings. The use of loose parts gives children the freedom to explore and create personally, supporting cognitive development theories that emphasize the importance of play in children's learning. In addition, this implementation also has a

positive impact on the social aspect, where children learn to collaborate and communicate with their peers in group activities. Thus, the Busy Jar medium is not only effective in developing symbolic and abstract thinking abilities but also prepares children to face future learning challenges and interact in a broader social environment. This demonstrates that loose parts-based learning media can serve as an effective and enjoyable alternative in supporting the cognitive and social development of early childhood students.

REFERENCES

- Andriani, W. (2022). Penggunaan Metode Sistematik Literatur Review dalam Penelitian Ilmu Sosiologi. *Jurnal PTK Dan Pendidikan*, 7(2). https://doi.org/10.18592/ptk.v7i2.5632
- Anida, A., & Eliza, D. (2020). Pengembangan Model Pembelajaran Saintifik Berbasis Kearifan Lokal untuk Perkembangan Kognitif Anak Usia 5-6 Tahun. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 5(2), 1556–1565. https://doi.org/10.31004/obsesi.v5i2.898
- Bodedarsyah, A., & Yulianti, R. (2019). MENINGKATKAN KEMAMPUAN BERPIKIR SIMBOLIK ANAK USIA DINI KELOMPOK A (USIA 4-5 TAHUN) DENGAN MEDIA PEMBELAJARAN LESUNG ANGKA. *Jurnal Ceria*, 2(6), 354–358. https://www.paud.id/2015/09/t//ingkat-
- Collins, M. A., & Laski, E. V. (2019). Digging deeper: shared deep structures of early literacy and mathematics involve symbolic mapping and relational reasoning. *Early Childhood Research Quartely*, 46, 201–212.
- Firman, W., & Anhusadar, L. (2022). Peran Guru dalam Menstimulasi Kemampuan Kognitif Anak Usia Dini. *Kiddo: Jurnal Pendidikan Islam Anak Usia Dini*, 3(2), 28–37. https://doi.org/10.19105/kiddo.v3i2.6721
- Handayani, W., Kuswandi, D., Akbar, S., & Arifin, I. (2023). Pembelajaran Berbasis STEAM untuk Perkembangan Kognitif pada Anak. *Murhum: Jurnal Pendidikan Anak Usia Dini*, 4(2), 770–778. https://doi.org/10.37985/murhum.v4i2.390
- Istiqomah, N., & Maemonah, M. (2021). KONSEP DASAR TEORI PERKEMBANGAN KOGNITIF PADA ANAK USIA DINI MENURUT JEAN PIAGET. *Khazanah Pendidikan*, 15(2), 151–158. https://doi.org/10.30595/jkp.v15i2.10974
- Khasanah, E. R., Muhtarom, Dewi, K., Febriyanti, & Atika, N. (2023). Pengaruh Penggunaan Media Loose Part Terhadap Kemampuan Mengenal Bilangan Pada Anak Usia 4-5 Tahun Di Tk Putra Bangsa Srijaya Baru. *INNOVATIVE: Journal Of Social Science Research*, 3(2), 9167–9178.
- Novitasari, Y., & Fauziddin, M. (2020). Perkembangan Kognitif Bidang Auditori pada Anak Usia Dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 5(1), 805. https://doi.org/10.31004/obsesi.v5i1.640
- Nurlaela, E., & Nuraeni, L. (2021). JURNAL CERIA (CERDAS ENERGIK RESPONSIF INOVATIF ADAPTIF) PENGARUH PERMAINAN MAZE DALAM MENINGKATKAN KEMAMPUAN BERPIKIR SIMBOLIK PADA ANAK USIA 5-6 TAHUN. Jurnal Ceria (Cerdas Energik Responsif Inovatif Dan Adaptif), 4(2), 144–150.
- Priyono, F. H., Rahmawati, A., & Pudyaningtyas, A. R. (2021). KEMAMPUAN BERPIKIR SIMBOLIK PADA ANAK USIA 5-6 TAHUN. *Jurnal Kumara Cendekia*, 9(4), 212–218. https://jurnal.uns.ac.id/kumara
- Putri, V. L., Wijayanti, A., Kusumastuti, N. D., Stkip, P.-P., & Ngawi, M. (2021). Pengembangan Media Frueelin Untuk Meningkatkan Perkembangan Kognitif Anak Usia Dini. *Jurnal Golden Age*, *5*(2), 155–163. https://doi.org/10.29408/jga.v5i01.3385
- Ramlah, F., Mukminin, A., & Raudhatul Jannah, S. (2023). Pengaruh Penggunaan Media Flash Card terhadap Kemampuan Berpikir Simbolik dan Kecerdasan Linguistik Anak Usia 5-

- 6 Tahun. *Murhum*: *Jurnal Pendidikan Anak Usia Dini*, 4(1), 259–271. https://doi.org/10.37985/murhum.v4i1.202
- Umaroh, Kania, G., & Novianti Yusuf, R. (2023). UPAYA MENINGKATKAN KEMAMPUAN BERPIKIR SIMBOLIK DENGAN MENGGUNAKAN MEDIA PAPAN HUBUNG PADA ANAK USIA 5-6 TAHUN. *Jurnal Tahsinia*, 4(1), 71–81.
- Umiyati, W., & Isnaningsih, A. (2024). Stimulasi Peningkatan Kemampuan Problem Solving pada Anak Usia 4-5 Tahun melaui Media Busy Jar. *Journal of Education Research*, 5(3), 3409–3415.
- Wardani, E. K., & Suryana, D. (2021). Permainan Edukatif Setatak Angka dalam Menstimulasi Kemampuan Berfikir Simbolik Anak Usia Dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(3), 1790–1798. https://doi.org/10.31004/obsesi.v6i3.1857
- Wicaksono, A. W., Nafi'ah, A., Winona, A. F. S., & Muhid, A. (2022). Meningkatkan Kemampuan Kognitif melalui Metode Bernyanyi pada Anak Usia Dini: Literature Review. *Indonesian Journal of Early Childhood: Jurnal Dunia Anak Usia Dini*, 4(2), 408–420. https://doi.org/10.35473/ijec.v4i2.1635