



Stimulating Self-Help Skills in Early Childhood through Natural Materials Center-Based Learning: A Qualitative Case Study

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ABSTRACT

The development of self-help skills is a fundamental aspect of early childhood education, as it supports children's self-help skill, responsibility, and readiness for daily life activities. However, many early childhood learners still demonstrate limited self-help skill, indicating the need for effective and developmentally appropriate learning approaches. One promising approach is center-based learning utilizing natural materials, which provides meaningful, hands-on experiences and encourages active engagement. This study aims to explore the formation of self-help skills in children aged 4–5 years through the implementation of a natural materials center-based learning model. The study employed a qualitative case study design involving nine children as participants. Data were collected through observations, interviews, and documentation, and analyzed using pattern matching techniques to identify consistent themes and behavioral patterns. The findings revealed that children demonstrated increased self-help skills, including the ability to complete tasks independently, initiate simple problem-solving, maintain personal hygiene, and interact confidently with peers. These improvements were supported by structured and consistent scaffolding provided during center-based learning activities, which facilitated active participation and strengthened children's confidence. In conclusion, the natural materials center-based learning model effectively promotes the development of self-help skills in early childhood by positioning teachers as facilitators who provide appropriate guidance based on children's developmental needs. It is recommended that educators integrate natural materials and structured scaffolding strategies into center-based learning environments to optimize the development of children's self-help skill.

Keywords: *Child Self-Help Skill, Early Childhood, Natural Materials, Scaffolding*

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INTRODUCTION

Self-help skills are a fundamental component of early childhood development, reflecting a child's ability to perform daily tasks independently without excessive reliance on others (Zhu et al., 2022). These skills encompass the capacity to make decisions and carry out actions autonomously while taking responsibility for the outcomes (Huong et al., 2025). In early childhood education settings, self-help skills can be observed when children choose their own activities, select play materials, and interact freely with peers. Such behaviors indicate not

only autonomy but also the development of responsibility and self-regulation (Hautakangas et al., 2022).

From a psychological perspective, self-help skills are closely related to self-directed learning and intrinsic motivation. Nurani & Pratiwi, (2020) defines self-help skills as an individual's ability to act without external assistance, while Montroy et al., (2016) emphasizes that self-directed learning is driven by internal awareness and personal goals. However, in practice, the development of self-help skills is often constrained by overprotective parenting styles that limit children's opportunities for exploration and risk-taking. As a result, children may become overly dependent on adults, highlighting the importance of consistent and structured efforts to foster self-help skills from an early age.

The development of self-help skills is also strongly influenced by children's social-emotional growth (J. Montroy et al., 2016; Suryana et al., 2022). Children with well-developed social-emotional competencies tend to demonstrate higher levels of independence, as they are better able to manage challenges and seek solutions autonomously (Chen, 2024). Early childhood experiences shaped by sensory input and environmental interactions play a crucial role in forming these competencies (Čoh, 2021; Ferrier et al., 2014). Therefore, both family and educational environments must provide meaningful stimulation to support the development of self-help skills.

Parents play a vital role in fostering self-help skills by providing opportunities for children to take responsibility and make decisions (Desmita et al., 2023). Simple activities, such as tidying up toys or choosing their own clothing, can significantly contribute to the development of these skills (Schoppmann et al., 2023; Yilmaz, 2016). Parenting styles characterized by warmth, consistency, and open communication tend to produce more confident and independent children (Aslan, 2019; Lee & Kim, 2021). In contrast, authoritarian parenting may hinder the development of self-help skills by limiting children's autonomy and reducing their self-confidence. In addition to the family environment, schools also play a crucial role in shaping children's self-help skills by providing structured learning experiences and social interaction opportunities (Hikmawati & Salama, 2025).

One approach that supports the development of self-help skills is the Beyond Centers and Circle Time (BCCT) model, a child-centered learning framework that emphasizes play-based activities. This model incorporates various forms of scaffolding, including environmental, pre-play, during-play, and post-play support, to facilitate children's learning processes (Hijriati, 2017). In this approach, teachers act as facilitators who guide children's exploration rather than direct their actions (Widiastuti et al., 2019), thereby creating a learning environment that encourages active participation and self-initiated learning.

The concept of learning centers within the BCCT model provides structured environments where children can explore and develop multiple intelligences through play (Mustajab et al., 2020). These centers are designed to stimulate creativity, curiosity, and hands-on learning experiences. Montessori's concept of the absorbent mind highlights that children at an early age have a remarkable capacity to absorb information from their environment (Noor & Sari, 2022). Therefore, providing rich and meaningful learning environments is essential for optimizing children's development.

Among various types of learning centers, the natural materials center offers unique opportunities for experiential learning. By interacting with natural elements such as sand, water, leaves, and stones, children engage in sensory exploration that supports both cognitive and motor development (Erma & Yaswinda, 2023; Kurniawati & Madani, 2024; Priyanti & Warmansyah, 2021). These activities not only enhance creativity but also foster self-help skills, as children learn to manipulate materials, solve problems, and complete tasks independently.

Recent studies have further emphasized the effectiveness of center-based learning in promoting children's self-help skills. Watini, (2019) found that children engaged in center-based activities demonstrated higher levels of autonomy and responsibility compared to those in traditional teacher-centered classrooms. Similarly, Kusumaningsih & Sun, (2025) reported that structured play environments supported by scaffolding significantly improve children's ability to complete tasks independently and make decisions with confidence.

In addition, studies focusing on the use of natural materials in early childhood education have shown promising results. Andriana et al., (2017) found that natural material-based learning enhances children's engagement and encourages active exploration, which contributes to the development of self-help skills. Furthermore, (Miftahurrahmi & Nari, (2022) highlighted that sensory-rich environments using natural materials support children's problem-solving abilities and self-regulation, both of which are essential components of self-help skills.

Despite these findings, there is still limited research that specifically examines the integration of natural materials centers within the BCCT framework in developing children's self-help skills through a qualitative case study approach. Most previous studies have focused on general aspects of independence or broad learning models without deeply exploring the processes through which self-help skills are formed in specific learning contexts. Therefore, this study seeks to fill this gap by providing an in-depth analysis of how natural materials center-based learning contributes to the development of self-help skills in early childhood.

This study aims to explore and analyze the development of self-help skills in children aged 4–5 years through the implementation of a natural materials center-based learning model. The findings are expected to contribute to the development of effective, child-centered learning strategies that support the formation of self-help skills in early childhood education.

RESEARCH METHODOLOGY

Research Design

This study employed a qualitative research design using a case study approach to obtain an in-depth and comprehensive understanding of the phenomenon under investigation. The case study method allows researchers to explore real-life contexts without manipulation or intervention, focusing on natural conditions as they occur. This study specifically aims to describe and analyze the development of self-help skills in children aged 4–5 years through natural materials center-based learning.

Research Participants and Context

The participants of this study consisted of nine children aged 4–5 years enrolled in a kindergarten implementing a center-based learning approach. The selection of participants was based on purposive sampling to capture rich and relevant data regarding the development of children’s self-help skill. The research context was chosen due to its consistent implementation of the natural materials center, which provides opportunities for children to engage in experiential and hands-on learning activities.

Data Collection Techniques

Data were collected through multiple techniques to ensure depth and richness of information. Interviews were conducted with teachers to explore learning objectives, instructional planning, as well as challenges and solutions in implementing the natural materials center model. Observations were carried out to systematically record children’s behaviors, particularly those reflecting self-help skills during learning activities. Documentation, including photographs and field notes, was used to support and validate observational data by providing tangible evidence of children’s developmental progress.

Data Analysis Techniques

The data were analyzed using a pattern matching technique to systematically compare empirical findings with expected patterns based on the research framework. This approach aims to identify the extent to which observed behaviors align with the indicators of children’s self-help skills developed in the study.

The analysis process was conducted through several stages. First, data reduction was carried out by selecting, simplifying, and organizing raw data obtained from observations, interviews, and documentation. Second, data display was performed by presenting the data in a structured and organized form, allowing patterns and relationships to be clearly identified. Third, conclusion drawing was conducted by interpreting the data to identify consistent themes, behavioral tendencies, and changes in children’s self-help skill.

Through this process, recurring patterns in children’s behavior were identified and compared with the expected developmental indicators. The degree of alignment between observed behaviors and the predefined indicators was used to determine the effectiveness of the natural materials center-based learning model in fostering children’s self-help skills.

Trustworthiness of Data

To ensure the credibility and trustworthiness of the findings, this study applied triangulation techniques. Method triangulation was conducted by comparing data obtained from interviews, observations, and documentation. In addition, prolonged engagement and persistent observation were employed to enhance the accuracy of data interpretation. These strategies help to minimize bias and ensure that the findings accurately reflect the actual conditions in the field.

Ethical Considerations

This study adhered to ethical standards in research involving young children. Permission was obtained from the school prior to data collection. Informed consent was secured from parents or guardians of the participating children. The confidentiality and anonymity of participants were maintained throughout the research process. All activities were conducted in a safe and child-friendly manner, ensuring that children’s well-being remained the primary concern.

RESULTS AND DISCUSSION

Results

The findings of this study were analyzed using a thematic approach to identify patterns related to the development of children’s self-help skills through natural materials center-based learning. The analysis resulted in several key themes supported by data from observations, interviews, and documentation.

Table 1. Thematic Findings on Children’s Self-Help Skills

No	Theme	Description	Evidence (Interview & Observation)
1	Task Self-help skill	Children are able to complete tasks without direct assistance	<i>T1:</i> “At first, children needed help, but now they can finish activities independently.” <i>O1:</i> Children completed pouring and transferring activities without teacher intervention
2	Responsibility Behavior	Children demonstrate responsibility by tidying up materials after use	<i>T2:</i> “Children are getting used to cleaning up without being reminded.” <i>O2:</i> Several children returned materials and arranged tools independently
3	Personal Care Awareness	Children show awareness of hygiene and self-care routines	<i>T1:</i> “Children wash their hands before and after activities on their own.” <i>O3:</i> Children independently washed hands and managed personal belongings
4	Initiative and Problem-Solving	Children initiate actions and attempt to solve problems independently	<i>T2:</i> “We guide them with questions, so they try to find their own solutions.” <i>O4:</i> Children experimented with different ways to complete tasks without asking for help
5	Confidence in Social Interaction	Children interact confidently and express ideas during activities	<i>T1:</i> “Children are now more confident in speaking and sharing ideas.” <i>O5:</i> Children actively communicated and collaborated with peers

The results indicate that children’s self-help skills developed progressively through repeated engagement in structured learning activities. The theme of task self-help skill shows a clear transition from dependency to autonomy. At the beginning of the learning process,

children relied heavily on teacher assistance; however, over time, they demonstrated the ability to complete tasks independently. This shift suggests that self-help skill emerges through consistent exposure and practice rather than immediate instruction.

The emergence of responsibility behavior further reinforces this development. Children not only completed tasks but also showed awareness of their responsibilities, such as tidying up materials after use. Observation data confirmed that this behavior became habitual over time, indicating internalization of routines. The consistency of this behavior suggests that structured learning environments play a significant role in shaping responsible actions.

In terms of personal care awareness, children exhibited increasing self-help skill in maintaining hygiene and managing personal belongings. These behaviors reflect the development of self-regulation and awareness of daily routines. The findings show that self-help skill is not limited to academic or task-based activities but extends to everyday life skills that are essential for early childhood development.

The theme of initiative and problem-solving highlights children's growing ability to think independently. Rather than waiting for instructions, children began to explore and experiment with different approaches to complete tasks. This indicates the development of higher-order thinking skills, where children actively engage in decision-making processes. The use of open-ended questioning by teachers played a crucial role in stimulating this behavior.

Finally, confidence in social interaction emerged as an important aspect of self-help skill. Children demonstrated increased confidence in communicating, collaborating, and expressing ideas. This finding suggests that self-help skill is closely linked to social competence, as children who are confident in social settings are more likely to act autonomously.

Overall, the findings reveal that the development of self-help skills is a gradual and multidimensional process. The integration of natural materials in center-based learning provides meaningful experiences that encourage children to explore, act independently, and take responsibility. The consistency between interview data and observational findings strengthens the validity of these results, indicating that self-help skill is effectively fostered through structured, experiential, and child-centered learning environments.

Discussion

The findings of this study confirm that self-help skills in early childhood develop through structured, consistent, and meaningful learning experiences. The observed improvement in children's self-help skill aligns with the concept that autonomy is not an innate trait but a developmental outcome shaped by environmental stimulation and guided practice. The gradual shift from dependence to self-help skill observed in this study reflects the importance of scaffolding in supporting children's learning processes.

Scaffolding plays a crucial role in facilitating self-help skill by providing temporary support that is gradually reduced as children gain competence. As emphasized by Nurtaniawati, (2019), effective scaffolding must be tailored to children's developmental levels and implemented systematically. The findings of this study demonstrate that when teachers provide clear guidance, model expected behaviors, and gradually withdraw assistance, children become more capable of completing tasks independently. This process highlights the

transition from guided participation to autonomous functioning, which is essential in early childhood development.

Furthermore, the results support the principles of center-based learning, particularly the concepts of learning by doing, learning by stimulating, and learning by modeling (Aulia, 2024; Fitri et al., 2022; Rafidiyah & Normuliati, 2020). The hands-on activities in the natural materials center allowed children to engage directly with their environment, thereby strengthening their problem-solving skills and self-efficacy. This is consistent with Dewey's experiential learning theory, which emphasizes that knowledge is constructed through direct experience and active engagement (Boggs et al., 2007). Through repeated interaction with real objects, children develop confidence in their ability to perform tasks independently.

The use of natural materials also plays a significant role in enhancing children's self-help skill. Natural materials provide open-ended learning opportunities that encourage exploration, creativity, and decision-making. As noted by Patimah & Nurhayati, (2023), sensory-rich environments stimulate children's curiosity and support the development of both cognitive and motor skills. In this study, children's interaction with materials such as water, sand, and stones enabled them to experiment, make decisions, and solve problems independently, thereby strengthening their self-help skills.

In addition, the findings are consistent with previous studies highlighting the effectiveness of center-based learning in promoting self-help skill. Mustajab et al.,(2020) found that center-based learning environments foster responsibility, discipline, and self-confidence in children. Similarly, Rafidiyah & Normuliati, (2020) reported that such learning models not only enhance individual self-help skill but also improve social interaction skills, as children learn to collaborate, communicate, and express their ideas. This study reinforces these findings by demonstrating that self-help skill is closely linked to social engagement and active participation in learning activities.

Moreover, self-help skill is closely associated with self-confidence and intrinsic motivation. Warmansyah & Nirwana, (2023) argues that repeated engagement in structured activities builds children's confidence, which in turn encourages independent behavior. This is evident in this study, where children who initially relied on teacher assistance gradually developed the confidence to complete tasks independently. The ability to make decisions and take responsibility for actions reflects the internalization of independent behavior.

Finally, the findings of this study support the argument that center-based learning significantly contributes to character development in early childhood. Nurani & Pratiwi, (2020) demonstrated that such learning models have a measurable impact on the development of self-help skill, particularly in decision-making and task completion. The present study extends this understanding by providing qualitative evidence of how self-help skill is formed through daily routines, structured scaffolding, and meaningful interaction with learning materials.

Overall, this study highlights that the development of self-help skills in early childhood is a dynamic and continuous process that requires intentional instructional design. The integration of natural materials within a center-based learning framework provides an effective approach to fostering self-help skill by combining experiential learning, structured support, and opportunities for autonomous exploration.

CONCLUSION

This study concludes that natural materials center-based learning effectively enhances self-help skills in early childhood. Children demonstrated increased self-help skill in completing tasks, taking responsibility, maintaining personal hygiene, initiating problem-solving, and interacting confidently with peers. These developments occur through consistent practice supported by structured scaffolding that is gradually reduced as children gain competence. The findings highlight that experiential learning using natural materials not only promotes autonomy but also strengthens social interaction and confidence. This study contributes to early childhood education by emphasizing the importance of integrating center-based learning and scaffolding strategies to foster children's self-help skill. Future implementations are encouraged to adopt similar approaches to support developmentally appropriate and meaningful learning experiences.

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REFERENCES

- Andriana, E., Syachruroji, A., Alamsyah, T. P., & Sumirat, F. (2017). Natural science Big Book with Baduy local wisdom base media development for elementary school. *Jurnal Pendidikan IPA Indonesia*, 6(1), 76–80. <https://doi.org/10.15294/jpii.v6i1.8674>
- Aslan, A. (2019). Peran Pola Asuh Orangtua di Era Digital. *Jurnal Studia Insania*, 7(1), 20. <https://doi.org/10.18592/jsi.v7i1.2269>
- Aulia, R. (2024). The Implementation of the BCCT Block Center Learning Model to Enhance Early Childhood Cognitive Development : A Case Study at TKIT 1 Qurrota A 'yun Ponorogo to children ' s independence and creativity . Dau and Santosa (2023) stated that. *Heutagogia: Journal of Islamic Education*, 4(1), 123–133. <https://doi.org/10.14421/hjie.2024.41-09>
- Boggs, J. G., Mickel, A. E., & Holtom, B. C. (2007). Experiential Learning Through Interactive Drama: An Alternative To Student Role Plays. *Journal of Management Education*, 31(6), 832–858. <https://doi.org/10.1177/1052562906294952>
- Chen, J. J. (2024). An Integrated Approach to Social and Emotional Teaching (SET): A Qualitative Study of the Beliefs and Practices of Preschool Teachers in the United States. *Early Childhood Education Journal*. <https://doi.org/10.1007/s10643-024-01803-9>
- Čoh, M. (2021). Motor And Intellectual Development In Children: A Review. *Facta*
-

Universitatis, Series: Physical Education and Sport, 515.
<https://doi.org/10.22190/FUPES200918049C>

- Desmita, D., Rahmadani, S., Kharisma Diyenti, A., Warmansyah, J., Silvianetri, S., & Binti Fakaruddin, N. A. A. (2023). The Relationship of Parent-Child Interaction in Developing Effective Communication in Early Childhood. *Indonesian Journal of Early Childhood Educational Research (IJECEER)*, 2(2), 47. <https://doi.org/10.31958/ijecer.v2i2.11524>
- Erma, E., & Yaswinda, Y. (2023). Meningkatkan Kreativitas Anak Usia 5-6 Tahun melalui Kegiatan Menganyam Menggunakan Bahan Alam. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(6), 8009–8018. <https://doi.org/10.31004/obsesi.v7i6.2667>
- Ferrier, D. E., Bassett, H. H., & Denham, S. A. (2014). Relations between executive function and emotionality in preschoolers: Exploring a transitive cognition-emotion linkage. *Frontiers in Psychology*, 5(MAY), 1–13. <https://doi.org/10.3389/fpsyg.2014.00487>
- Fitri, A. N., Hutasoit, C. S., & Afifah, S. (2022). Mengenal model paud beyond centre and circle time (bcct) untuk pembelajaran anak usia dini. *Jurnal AUDHI*, 4(2), 72–78.
- Hautakangas, M., Kumpulainen, K., & Uusitalo, L. (2022). Children developing self-regulation skills in a Kids' Skills intervention programme in Finnish Early Childhood Education and Care. *Early Child Development and Care*, 192(10). <https://doi.org/10.1080/03004430.2021.1918125>
- Hijriati. (2017). Pengembangan Model Pembelajaran Pendidikan Anak Usia Dini. *Jurnal Ar Raniry*, 3(1), 74–92.
- Huong, N. T., Hue, T. T., & Thao, P. T. (2025). Managing self-help skill development activities in early childhood institutions. *Tennessee Research International of Social Sciences*, 7(2), 185–195. <https://triss.org/index.php/journal/article/view/116>
- Kurniawati, H., & Madani, I. H. (2024). Implementation of Learning Methods Based on Natural Materials and Science for Group B Kindergarten. *Journal of Islamic Education Students (JIES)*, 4(1), 130. <https://doi.org/10.31958/jies.v4i1.12310>
- Kusumaningsih, S., & Sun, J. (2025). Promoting children's social-emotional skills in classrooms: Exploring the role of collaborative learning and teacher scaffolding. *Learning, Culture and Social Interaction*, 54(october).
- Lee, E. J., & Kim, H. S. (2021). Effect of maternal factors on problematic smartphone use among elementary school children. *International Journal of Environmental Research and Public Health*, 18(17). <https://doi.org/10.3390/ijerph18179182>
- Miftahurrahmi, M., & Nari, N. (2022). Development of Inquiry-Based E-Poster Media on Natural Science Learning Digestive System Material in Elementary Schools. *Journal of Islamic Education Students (JIES)*, 2(2), 76–90. <https://doi.org/10.31958/jies.v2i2.5609>
- Montroy, J., Bowles, R., & Skibbe, L. E. (2016). The effect of peers' self-regulation on preschooler's self-regulation and literacy growth. *Journal of Applied Developmental Psychology*, 46, 73–83. <https://doi.org/10.1016/j.appdev.2016.09.001>
-

- Montroy, J. J., Bowles, R. P., Skibbe, L. E., & McClelland, Megan M. Morrison, F. J. (2016). The development of self-regulation across early childhood. *Developmental Psychology*, 52(11). <https://doi.org/10.1037/dev0000159>
- Mustajab, M., Baharun, H., & Iltiqoiyah, L. (2020). Manajemen Pembelajaran melalui Pendekatan BCCT dalam Meningkatkan Multiple intelligences Anak. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 5(2), 1368–1381. <https://doi.org/10.31004/obsesi.v5i2.781>
- Noor, F. A., & Sari, A. R. (2022). Impact of Practical Life on Montessori Method on the Concentration of Children in TK PKK Bhakti Tamanan. *Cakrawala Dini: Jurnal Pendidikan Anak Usia Dini*, 13(2), 91–98. <https://ejournal.upi.edu/index.php/cakrawaladini/article/view/47032>
- Nurani, Y., & Pratiwi, N. (2020). Digital Media for the Stimulation of Early Childhood Self Help Skills. *Proceedings of the 2nd Early Childhood and Primary Childhood Education (ECPE 2020)*. <https://doi.org/10.2991/assehr.k.201112.042>
- Nurtaniawati. (2019). Peran guru dan media pembelajaran dalam menstimulasi perkembangan kognitif pada anak usia dini. *Tunas Siliwangi*, 3(1), 15.
- Patimah, R. T., & Nurhayati, S. (2023). Investigating Sensory Play Implementation with Loose Parts Media In Early Childhood Education. *Jurnal Ilmiah Profesi Pendidikan*, 8(4), 2042–2049. <https://doi.org/10.29303/jipp.v8i4.1635>
- Priyanti, N., & Warmansyah, J. (2021). The Effect of Loose Parts Media on Early Childhood Naturalist Intelligence. *JPUUD - Jurnal Pendidikan Usia Dini*, 15(2), 239–257. <https://doi.org/10.21009/jpud.152.03>
- Rafidiyah, D., & Normuliati, S. (2020). Indonesian Journal of Early Childhood Obstacles and Solution of Beyond Centers and Circle Time (BCCT) Implementation. *Indonesian Journal of Early Childhood Education Studies*, 9(1), 13–18. <https://doi.org/10.15294/ijeces.v9i1.38559>
- Schoppmann, J., Severin, F., Schneider, S., & Seehagen, S. (2023). The effect of picture book reading on young children's use of an emotion regulation strategy. *PLOS ONE*, 18(8), e0289403. <https://doi.org/10.1371/journal.pone.0289403>
- Suryana, E., Sopiiah, M., Agustiawan, & Harto, S. (2022). Early Childhood Development (Physical, Intellectual, Emotional, Social, Moral, and Religious Tasks) Implications For Education. *Indonesian Journal of Early Childhood: Jurnal Dunia Anak Usia Dini*, 4(2), 361–374. <https://doi.org/10.35473/ijec.v4i2.1674>
- Warmansyah, J., & Nirwana, E. S. (2023). The Effect of Storytelling Methods and Self-Confidence Children's Expressive Language Skills. *Ta'dib*, 26(1), 29–41. <https://doi.org/10.31958/jt.v26i1.5927>
- Watini, S. (2019). Implementasi Model Pembelajaran Sentra pada TK Labschool STAI Bani Saleh Bekasi. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 4(1), 110. <https://doi.org/10.31004/obsesi.v4i1.190>
-

- Widiastuti, A., Pusari, R. W., & Diyah H, D. P. (2019). Analisis Metode Pembelajaran Beyond Center and Circle Time (BCCT) Terhadap Perkembangan Sosial Anak Usia 3-4 Tahun. *PAUDLA: Jurnal Penelitian Dalam Bidang Pendidikan Anak Usia Dini*, 8(1). <https://doi.org/10.26877/paudia.v8i1.3886>
- Yilmaz, R. M. (2016). Educational magic toys developed with augmented reality technology for early childhood education. *Computers in Human Behavior*, 54, 240–248. <https://doi.org/10.1016/j.chb.2015.07.040>
- Zhu, Z., Tanaka, E., Tomisaki, E., Watanabe, T., Sawada, Y., Li, X., Jiao, D., Ajmal, A., Matsumoto, M., Zhu, Y., & Anme, T. (2022). Do it yourself: The role of early self-care ability in social skills in Japanese preschool settings. *School Psychology International*, 43(1), 71–87. <https://doi.org/10.1177/01430343211063211>
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