

Investigating Sensory Play Implementation with Loose Parts Media In Early Childhood Education

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Abstract: This research aims to investigate the implementation of sensory play with loose parts as a pedagogical approach in early childhood education, with a focus on a case study conducted at Daycare Baiturrahmah, Kota Bandung. The study employed a qualitative case study approach involving three educators and five toddlers as research participants. Data collection methods included observations, document study, and semi-structured interviews. Findings emerged regarding the factors supporting effective implementation, such as material selection and collaborative teacher efforts. Challenges were identified, including emotional management and combatting boredom, suggesting the need for ongoing adaptation and innovative strategies. The study also highlighted the positive feedback from parents, indicating high levels of child engagement and satisfaction. The research findings resonate with existing literature, underlining the value of sensory play in early childhood education. Implications for practice emphasize the significance of embracing sensory play as a pedagogical strategy. Future research directions include exploring long-term effects, innovative strategies for challenges, and enhanced parental involvement.

Keywords: early childhood education, loose parts media, sensory play.

INTRODUCTION

The early years of a child's life are of utmost importance in terms of their overall development, and significantly influence children's cognitive, emotional, and social abilities that will persist into the future. Within this setting, sensory play has been recognised as a highly advantageous educational instrument, facilitating comprehensive development among young individuals (Octaviana et al., 2022). Sensory play is crucial for development in early childhood. Children aged 0-3 years old learn through their senses, and sensory play supports development of speech, motor skills, cognition, and social skills (Kartinih et al., 2018; Marwati et al., 2020; Octaviana et al., 2022; Rachmah et al., 2021; Tasliyah et al., 2020). Sensory play involves touch, taste, smell, sight, hearing, balance and body awareness.

Sensory activities are essential for developing sensory processing skills in children (Zainal Abidin et al., 2022). Excessive screen time reduces opportunities for sensory experiences and hinders development (Rosita et al., 2020; Zainal Abidin et al., 2022). Sensory board games and other open-ended sensory toys can stimulate sensory skills and encourage social

interaction between toddlers (Octaviani et al., 2023; Yuliya et al., 2020; Zainal Abidin et al., 2022). The engagement in sensory play facilitates the development of creativity and imagination, establishing the fundamental basis for the acquisition of advanced knowledge and skills in subsequent stages of an individual's lifespan.

Loose parts refer to objects that lack a predetermined purpose and can be utilised in diverse ways (Habibah, N., & Mufarochah, 2021; Hadiyanti, S. M., Elan, E., & Rahman, 2021). Within the framework of sensory play, these objects play a pivotal role as fundamental components for children's investigation and expression of creativity. Loose part media, materials that can be freely manipulated, have been shown to greatly benefit early childhood development. Multiple studies found that loose parts improve fine motor skills in young children (Hadiyanti, S. M., Elan, E., & Rahman, 2021; Setianingsih & Handayani, 2022). Loose parts give children the freedom to explore and create, which boosts creativity (Salsabila et al., 2022; Veryawan & Tursina, 2022). This unstructured play helps children develop skills that will serve them well into the 21st century, such as critical thinking, communication, and collaboration (Veryawan & Tursina, 2022).

The use of loose parts is gaining popularity, as evidenced by the increasing number of publications on the topic (Karomah & Purnama, 2023). Loose parts are highly engaging for both students and teachers. Children find loose parts fun and entertaining, so they stay focused during lessons (Hadiyanti et al., 2021; Priyanti et al., 2021). Teachers also appreciate loose parts because they are easy to obtain, inexpensive, and versatile (Priyanti et al., 2021; St. Maria ulfah, 2023).

Notwithstanding the increasing attention towards sensory play and loose parts, it is evident that there are significant deficiencies within the current body of knowledge. Despite the benefits of sensory play, many childcare centers lack sensory play opportunities (Giler et al., 2019). Educators often lack knowledge about the importance of sensory play for development (Giler et al., 2019; Musa et al., 2020, 2022; Winarti et al., 2022). Sensory playful corners with activities for different senses can provide meaningful learning experiences for toddlers.

Numerous scholarly investigations have concentrated on the theoretical foundations and possible advantages of engaging in sensory play with loose parts. However, these studies have not offered thorough understandings regarding the practical execution of such activities within distinct early childhood education environments. Moreover, a dearth of scholarly inquiry exists about the comprehensive examination of the viewpoints held by educators and children engaged in sensory play utilising loose parts. It is imperative to acknowledge and bridge these gaps to have a comprehensive understanding of how these activities might be successfully integrated into early childhood education, especially for children age 2-3 years in day care, as well as to identify any potential obstacles or impediments that may impede their implementation.

The objective of this study is to address the gaps in knowledge by examining the practical implementation of sensory play using loose components in Daycare Baiturrahmah, located in Kota Bandung. This research aims to provide significant contributions to the current body of literature. Moreover, exploring the complexities of sensory play including loose parts within a particular setting, such as Daycare Baiturrahmah, presents significant educational insights for educators and carers globally. This allows them to effectively modify and introduce novel

approaches within their own distinct environments.

METHODS

In this study, a qualitative approach utilizing the case study method was used. This method was chosen to facilitate a deep and comprehensive exploration of the implementation of sensory play with loose parts within the specific context of Daycare Baiturrahmah in Kota Bandung.

Data collection was carried out through two primary methods: observations and interviews. Observations were conducted over a predetermined timeframe with the objective of capturing natural interactions and activities involving both educators and toddlers during sensory play sessions. These observations were unobtrusive, focusing on documenting the implementation of sensory play with loose parts in its authentic context. Detailed field notes were taken, emphasizing the types of loose parts utilized, the engagement levels of the children, collaborative interactions among the toddlers, and any noteworthy teacher-child engagements. Semi-structured interviews were conducted with the three educators employed at Daycare Baiturrahmah. These interviews delved into their perspectives regarding the advantages and challenges associated with sensory play involving loose parts.

Data resulting from observations and interviews underwent qualitative data analysis. This entailed a multi-step process, beginning with data coding, wherein transcripts from interviews and field notes from observations were meticulously coded to pinpoint recurring themes, patterns, and key concepts relating to sensory play with loose parts. These codes were then used to develop overarching themes, providing a structured comprehension of the factors influencing the implementation of sensory play at Daycare Baiturrahmah. Finally, a cross-analysis was performed to discern commonalities and disparities in perspectives between teacher and toddler interviews.

FINDINGS AND DISCUSSION

Findings

From the interview and observation results it can be inferred that the primary goals of sensory play with loose parts are to enhance

sensory functions, encourage creativity, and promote the development of children's sensory perceptions.

The preparation for sensory play with loose parts involves selecting safe and age-appropriate materials that are readily available to the children. These materials can include items like stones, straws, plastic, sand, fabric, sticks, wood, paper, leaves, flowers, strings, fruit or vegetable peels, shells, and seeds. It's crucial to start with simple materials to avoid messiness and to ensure safety. Constant supervision is necessary to maintain a safe environment during play.

The selection of loose parts focuses on choosing materials that are both safe and age appropriate. The chosen items should be easy for children to use and not pose any hazards. Examples of appropriate loose parts include stones, straws, plastic, sand, fabric, sticks, wood, paper, leaves, flowers, strings, fruit or vegetable peels, shells, and seeds. Children should have the freedom to explore and use these materials as they see fit. To introduce sensory play, teachers typically demonstrate how to use the materials, and then they encourage children to explore independently. While initial guidance is provided, the emphasis is on hands-on exploration to allow children to learn through their own experiences. Children are encouraged to explore freely during sensory play, with teachers supervising their activities. While children have the freedom to explore independently, teachers provide some guidance and instructions as needed.

Children exhibit various reactions during sensory play, including enjoyment, excitement, and, in some cases, fear. Teachers promote collaboration by encouraging children to share materials, work together, and exchange ideas during sensory play. Success in sensory play is gauged by observing whether children engage all their senses during the activity. Children who feel hesitant to participate in sensory play are encouraged and welcomed to join the activities. Teachers provide support and motivation for the children to engage in the activities. Teachers adapt their approach by providing different levels of play to accommodate individual preferences among children.

The daycare teachers described a collaborative approach to selecting and organizing loose parts for sensory play. Loose parts were chosen and organized based on their

components, ensuring they were safe and stimulating for children. This approach involved teamwork, where staff members discussed and decided which materials to use. This collaborative effort ensured that the loose parts were appropriate for various age groups and developmental stages.

Teachers also explained the significant benefits of sensory play with loose parts for children's development at the daycare. They emphasized that sensory play greatly stimulates and enhances children's sensory and motor skills. This kind of play encourages exploration and problem-solving, helping children develop their creativity. Moreover, it enables children to express their own ideas and share them with peers, fostering social interaction and communication skills.

Teachers also reported positive interactions among children during sensory play. They noted that children played happily and orderly during these sessions. For them, it was clear that sensory play with loose parts promoted cooperative and constructive interactions among the children. The teachers detailed how sensory play with loose parts was seamlessly integrated into the daily schedule. This integration was based on the children's interests and was not subject to strict time constraints. If a play session was incomplete, it could be continued the following day, allowing flexibility to accommodate the children's pace.

The teachers observed positive impacts on children's creativity and expression resulting from sensory play with loose parts. They noted that children became more creative and expressive. This suggests that sensory play allowed children to explore their imaginations and translate their ideas into tangible creations. The physical environment also had impact on the implementation of sensory play. They mentioned that limited play space was a significant factor. This limitation suggested that providing a more spacious environment might enhance the sensory play experience.

The teachers reported very positive feedback from parents regarding sensory play with loose parts. Parents expressed that their children were happy and engaged in these activities. There was clear communication between the daycare and parents through sharing photos and videos of the children's activities, fostering transparency and involvement.

Challenges faced in implementing sensory play with 2-3-year-olds include managing children's emotional stability, dealing with egocentric behaviors, and addressing boredom. Strategies for overcoming these challenges include using ice-breaking activities and transitioning to new games when necessary. Another challenge was the need to continually find engaging play ideas to prevent children from becoming bored. To address this, teachers mentioned seeking inspiration from social media platforms, demonstrating their adaptability and resourcefulness in overcoming challenges.

Changes and adjustments have been made since the initial implementation of sensory play with loose parts. The teachers mentioned continuously evaluating the results and making improvements to enhance the experience. This included adding new loose parts and diversifying the materials used to keep children engaged and prevent boredom.

Teachers proposed several steps to further enhance and expand the implementation of sensory play with loose parts. These included increasing the availability of resources and facilities, maintaining a variety of sensory play options to prevent children from becoming bored, and emphasizing patience and perseverance in facilitating these activities. Additionally, they emphasized the importance of involving parents in the process and maintaining open lines of communication with them.

The teachers at the daycare identified several key factors contributing to the successful implementation of sensory play with loose parts. They emphasized the importance of offering a diverse range of activities and loose parts. This diversity allows children to explore and imagine freely according to their interests, promoting engagement. Additionally, there was a special emphasis on teamwork within the educators, with loose parts being carefully selected and organized collaboratively, ensuring that they were suitable for children's play.

Overall, the teachers' insights provide a comprehensive understanding of the successful implementation of sensory play with loose parts at the daycare, highlighting its benefits and offering practical solutions to overcome challenges. Their commitment to continuous improvement and engagement with both children and parents reflects a holistic approach to early childhood education.

Discussion

The findings stemming from observations and interviews at Daycare Baiturrahmah in Kota Bandung provide a rich understanding of the implementation of sensory play with loose parts for 2-3-year-old children. The findings are in line with previous researches that the careful selection and setup of age-appropriate loose parts, including materials like stones, straws, plastic, sand, fabric, sticks, wood, paper, leaves, flowers, strings, fruit or vegetable peels, shells, and seeds, form the foundation for successful sensory play (Rahardjo, 2019; Zainal Abidin et al., 2022). This meticulous preparation ensures that the children have access to safe and stimulating materials.

Furthermore, insights gathered from interviews with educators at Daycare Baiturrahmah have provided valuable perspectives on the benefits and challenges associated with sensory play with loose parts. Educators consistently highlighted the positive impacts of these activities on the children's development. They noted improvements in sensory functions, heightened creativity, and the enhancement of various aspects of child growth. These insights corroborate the observations of enthusiastic and engaged children during play sessions. The study fits with the growing recognition of creativity in early childhood education. Creative thinking is seen as a crucial skill for the 21st century, and physical play is the best way for children to explore their imaginations (Adhani et al., 2017; Ganesha. dkk, 2020; Marwati et al., 2020; Sadiyah et al., 2021; Salsabila et al., 2022). Sensory play is a part of a well-rounded education because it encourages imagination and imaginative expression.

Conversely, the findings also shed light on the challenges educators face in implementing sensory play with loose parts. Managing emotional stability, addressing egocentric behaviors, and mitigating moments of boredom were mentioned as practical hurdles. These challenges underscore the complexity of facilitating sensory play but also reveal the importance of educators' adaptability and problem-solving skills in managing such situations (Musa et al., 2022; Sum, 2019).

The study also shows how important it is for teachers to be able to change and think on their work. These methods are in line with what the research says about how important it is for educators to do reflective practice. Reflective practitioners always think about how they teach

and make changes based on what they see, which is important for good education (Marsegi et al., 2023; Nurhayati, 2018; Winarti et al., 2022). Additionally, the challenges faced by educators underscore the need for professional development and support mechanisms. Training programs can equip educators with strategies to effectively manage emotions, address egocentric behaviors, and keep children engaged during play (Nurhayati, 2018). Daycare Baiturrahmah can consider implementing ongoing training and mentorship programs to enhance the skills of their educators in facilitating sensory play with loose parts.

The research findings align closely with the established research objectives, reinforcing the significance of sensory play with loose parts in early childhood education. The observations and educator insights collectively affirm the following key points:

- a) Sensory play with age-appropriate loose parts significantly engages 2-3-year-old children, enhancing their sensory perception and creativity (Hadiyanti, S. M., Elan, E., & Rahman, 2021).
- b) Collaborative interactions among children during play sessions foster social development and cooperation (Nurhayati & Rumsari, 2020; Rosita et al., 2020).

The findings strengthened the previous researches which recognize the myriad benefits of sensory play, including improvements in sensory functions, creativity, and overall child development (Karomah & Purnama, 2023; Rahma et al., 2023). The study also underscore the pivotal role of parental engagement and effective communication in the realm of early childhood education (Juhana & Nurhayati, 2023; Latif et al., 2023; Nurhayati, 2021; Nurhayati et al., 2022, 2023; Rumsari & Nurhayati, 2020; Suharyat et al., 2023). Parents' awareness and comprehension of the advantages associated with sensory play contribute significantly to the holistic development of their children, both within the educational environment and in the home setting.

CONCLUSION

In summary, this study effectively explored the successful implementation of sensory play with loose parts in early childhood

education, aligning with its research objectives. The findings underscored the importance of careful material selection and teacher-guided exploration to stimulate children's senses and foster creativity. Significant benefits were observed, including improved sensory and motor skills, enhanced creativity, and positive social interactions. However, challenges like emotional management and combating boredom require ongoing adaptation and innovative strategies. Educator perspectives highlighted the collaborative nature of material selection and the need for adaptability and parental engagement. Parents' feedback indicated high satisfaction with the positive impact on children's happiness and engagement. These findings resonate with established educational theories and the broader literature, emphasizing the value of sensory play in holistic child development. The implications for early childhood education underscore the importance of embracing sensory play as a pedagogical strategy for sensory, cognitive, social, and creative development. Future research should explore long-term effects, innovative strategies for challenges, and enhanced parental involvement. Overall, this study reinforces the significance of sensory play with loose parts in providing holistic, creative, and engaging learning experiences for young children.

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