

# Engaging Play and Toys Foster the Development of Multiple Intelligence in Preschool Children

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To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v14-i2/21011>

DOI:10.6007/IJARBSS/v14-i2/21011

**Published Date:** 26 February 2024

## Abstract

Play and toys play a crucial role in the development of preschool children's multiple intelligence, encompassing linguistic, logical-mathematical, musical, bodily-kinesthetic, spatial-visual, interpersonal, intrapersonal, naturalist, and existentialist intelligence. However, there is a need to better understand how specific play activities and toys contribute to the enhancement of these intelligence in preschool children. This study aims to explore how various forms of play and toy interaction contribute to the development of multiple intelligence in preschool-aged children. Utilizing a library research approach, this study reviews existing literature to analyze the role of play and toys on the various dimensions of multiple intelligence. The results of the study demonstrate that diverse play experiences, including imaginative play, constructive play, and social play, can facilitate the development of different intelligence in children. Furthermore, the type of toys children interact with can significantly influence their cognitive and emotional growth across various domains of intelligence. In conclusion, this study emphasizes the importance of providing children with a rich and varied play environment, supplemented with appropriate toys, to support the holistic development of their multiple intelligence. Recommendations are provided for parents, educators, and policymakers to optimize play opportunities and toy selection, thereby fostering children's cognitive, emotional, and social growth.

**Keywords:** Play, Toys, Multiple Intelligence, Preschool Children

## Introduction

Engaging play and toys play a vital role in fostering the development of multiple intelligence in preschool children. Through various forms of play such as imaginative play, constructive play, and social play, children are provided with opportunities to explore, learn, and develop key cognitive skills. In this comprehensive exploration, we delve into the significance of play

and toys in nurturing different facets of intelligence in preschool-aged children. From linguistic and logical-mathematical intelligence to musical, bodily-kinesthetic, spatial-visual, interpersonal, intrapersonal, naturalist, and existentialist intelligence, we uncover the profound impact that play and toys have on the holistic development of young minds (Shirley, 2020; Suci, et al. 2020; Turkmen & Turkmen, 2021).

The main problem addressed in this study is the need to comprehensively understand the pivotal role of engaging play and toys in fostering the development of multiple intelligences in preschool children. While it is widely recognized that play contributes significantly to early childhood development, there is a lack of detailed research examining how various forms of play, including imaginative, constructive, and social play, specifically impact the development of different cognitive skills. Additionally, while the potential influence of play and toys on various types of intelligence, such as linguistic, logical-mathematical, musical, bodily-kinesthetic, spatial-visual, interpersonal, intrapersonal, naturalist, and existentialist intelligence, has been acknowledged, there is a gap in research that comprehensively explores these interactions in the context of preschool-aged children. Therefore, this study aims to address this gap by conducting an in-depth investigation into how play and toys contribute to the holistic development of young children across multiple dimensions of intelligence (Stephanie, 2022; Xiaoyang, et al., 2023).

This study aims to investigate the impact of different types of play and interactions with toys on the development of multiple intelligences in preschool children. Employing a library research methodology, existing literature is reviewed to examine how play and toys influence various facets of multiple intelligence.

### **Play and Preschool Children**

Play is a fundamental aspect of childhood development, offering children a platform to explore and learn about the world around them. In preschool-aged children, imaginative, constructive and social play takes on various forms, each contributing uniquely to their growth and development (Mustafa, 2018; Rajeev, 2022).

Imaginative play, or pretend play, allows children to use their imagination to create scenarios and stories. Through this type of play, children develop creativity, problem-solving skills, and emotional regulation as they navigate different roles and situations. Constructive play involves building and creating with toys such as blocks, puzzles, and building sets. This type of play enhances fine motor skills, spatial awareness, and critical thinking as children manipulate objects to construct and engineer various structures. Social play involves interactions with peers and adults, fostering communication, cooperation, and empathy. Through social play, children learn to navigate social dynamics, negotiate conflicts, and develop interpersonal skills essential for forming relationships and functioning in society. These different types of play provide preschool children with valuable opportunities for growth and learning, laying the foundation for their multiple intelligence development.

### **Toys for Preschool Children**

Toys designed for preschool children are essential tools for fostering their development across various domains includes imaginative, constructive and social toys (Artemova et al., 2023; Healey & Mendelsohn, 2019).

Imaginative toys. These toys spark creativity and encourage children to engage in pretend play, allowing them to explore different roles, scenarios, and worlds. Examples include dress-up costumes, playhouses, and dolls, which stimulate imaginative thinking and storytelling skills. Constructive toys promote hands-on exploration and problem-solving as children manipulate objects to build, create, and construct. Building blocks, puzzles, and construction sets are common examples that help develop fine motor skills, spatial awareness, and critical thinking abilities. Social toys facilitate social interactions and encourage cooperation, communication, and empathy among children. Board games, cooperative play sets, and toys that encourage group activities are examples that promote teamwork, negotiation, and social skills development. By providing a variety of imaginative, constructive, and social toys, preschool children are offered diverse opportunities for learning and development, laying the foundation for their growth in creativity, cognitive abilities, and social competence (Xiaoyang, et al., 2023; Mustafa, 2018).

### **Play and Toys Foster Preschool Children Multiple Intelligence Development**

For preschool children, playtime is more than just fun. Play activities is a crucial part of their development journey. Through play and interactions with toys, preschool children explore, learn, and develop important skills that set the foundation for their future learning. In this study, researchers delve into the fascinating world of preschool play and toys, aiming to uncover how these experiences foster the development of multiple intelligence in preschool children. From imaginative play to constructive activities and social interactions, researchers explore how each aspect of play contributes to the holistic growth of preschool-aged children (Kara & Cagiltay, 2020; Priyanka & Bhavana, 2022; Xiaoyang et al., 2023).

#### ***Play, Toys and Linguistic Intelligence***

In the realm of linguistic intelligence development in preschool children, play and toys play a pivotal role in nurturing language skills. Through imaginative play, such as role-playing scenarios or storytelling with dolls or action figures, children have the opportunity to expand their vocabulary, practice sentence structure, and improve their verbal communication skills (Xiaoyang et al., 2023; Shirley, 2020; Rajeev, 2022). For example, playing with a dollhouse can encourage children to engage in pretend conversations between the doll characters, allowing them to practice using different words and phrases in context. Additionally, board games that involve reading instructions or following verbal cues can enhance children's comprehension and listening skills. By engaging in these playful language-rich activities, preschoolers not only enjoy themselves but also lay the groundwork for strong linguistic abilities in the future.

#### ***Play, Toys and Logical-mathematical Intelligence***

Play and toys serve as powerful tools for fostering critical thinking and problem-solving skills. For example, building blocks or construction toys like LEGO sets provide children with opportunities to explore spatial relationships, experiment with different shapes, and develop basic mathematical concepts such as counting and sorting (Xiaoyang et al., 2023; Shirley, 2020; Rajeev, 2022). Through hands-on manipulation of these toys, preschool children learn to plan, organize, and strategize, all of which are essential skills for logical-mathematical reasoning. Similarly, puzzles and shape-sorting toys challenge children to identify patterns, make connections, and apply logical reasoning to solve problems. By engaging in such play activities, preschoolers not only enjoy themselves but also strengthen their logical-mathematical intelligence, laying a solid foundation for future mathematical learning.

***Play, Toys and Musical Intelligence***

Musical intelligence in preschool children can be nurtured through play and the use of appropriate toys that encourage exploration of sounds, rhythms, and melodies (Xiaoyang et al., 2023; Shirley, 2020; Rajeev, 2022). For instance, musical instruments designed for preschool children, such as xylophones, tambourines, or toy keyboards, provide hands-on experiences for exploring different sounds and creating simple tunes. Through play with these musical toys, children develop an understanding of rhythm, pitch, and tempo, as well as fine motor skills required for playing instruments. Additionally, interactive toys that produce musical sounds in response to touch or movement, such as electronic keyboards or toy guitars, engage children in playful exploration of musical concepts. By incorporating music into play activities, preschoolers not only express their creativity but also enhance their musical intelligence, laying the groundwork for future musical appreciation and skill development.

***Play, Toys and Bodily-kinesthetic Intelligence***

Bodily-kinesthetic intelligence refers to the ability to control body movements and handle objects skillfully. In preschool children, this intelligence can be fostered through play and interaction with toys that encourage physical activity and hands-on manipulation (Xiaoyang et al., 2023; Shirley, 2020; Rajeev, 2022). For example, toys such as building blocks, LEGO sets, and puzzles require children to use their hands and fingers to manipulate objects and assemble pieces, thus enhancing their fine motor skills and hand-eye coordination. Similarly, toys like balls, jump ropes, and hula hoops promote gross motor skills and physical coordination as children engage in activities such as throwing, catching, jumping, and balancing. Outdoor play equipment such as slides, swings, and climbing structures also provide opportunities for children to develop strength, agility, and spatial awareness through active play. By engaging in these types of play activities with appropriate toys, preschoolers can strengthen their bodily-kinesthetic intelligence while having fun and staying physically active.

***Play, Toys and Spatial-visual Intelligence***

Spatial-visual intelligence involves the ability to perceive visual information accurately and understand spatial relationships effectively. In preschool children, this intelligence can be nurtured through play and interaction with toys that stimulate spatial awareness and visual perception (Xiaoyang et al., 2023; Shirley, 2020; Rajeev, 2022). For example, building toys such as blocks, LEGO sets, and magnetic tiles encourage children to manipulate objects in three-dimensional space, allowing them to experiment with different arrangements and structures. Puzzles, shape sorters, and pattern recognition games also help develop spatial skills by challenging children to visualize and manipulate geometric shapes and spatial configurations. Additionally, arts and crafts activities such as drawing, coloring, and sculpting provide opportunities for children to express themselves visually and explore concepts like symmetry, perspective, and proportion. By engaging in these types of play activities with appropriate toys, preschoolers can enhance their spatial-visual intelligence while expressing their creativity and problem-solving abilities.

***Play, Toys and Interpersonal Intelligence***

Interpersonal intelligence refers to the ability to understand and interact effectively with others. In preschool children, this intelligence can be developed through play and interaction

with toys that encourage social engagement and cooperation (Xiaoyang et al., 2023; Shirley, 2020; Rajeev, 2022). For example, pretend play sets such as dollhouses, play kitchens, and dress-up costumes allow children to role-play social scenarios and interact with peers, siblings, or adults. Cooperative games and group activities such as board games, team sports, and building projects promote collaboration, communication, and teamwork skills. Additionally, toys that facilitate group play, such as musical instruments for ensemble performances or storytelling props for group storytelling sessions, foster shared experiences and mutual understanding among children. By engaging in these types of play activities with appropriate toys, preschoolers can strengthen their interpersonal intelligence while learning valuable social skills and building positive relationships with others.

### ***Play, Toys and Intrapersonal Intelligence***

Intrapersonal intelligence involves self-awareness, self-reflection, and understanding one's own emotions, thoughts, and motivations. Preschool children can develop intrapersonal intelligence through play and interaction with toys that encourage self-expression, introspection, and independent exploration (Xiaoyang et al., 2023; Shirley, 2020; Rajeev, 2022). For example, art supplies such as crayons, paints, and clay allow children to express themselves creatively and reflect on their feelings and experiences through drawing, painting, or sculpting. Puzzles and problem-solving toys challenge children to think critically and independently as they work through challenges and find solutions on their own. Journaling or diary kits provide opportunities for children to document their thoughts, experiences, and emotions in a private and personal space, fostering self-awareness and introspection. Additionally, mindfulness toys such as stress balls, sensory bottles, or meditation tools can help children learn to regulate their emotions, manage stress, and cultivate inner peace and resilience. Through play with these types of toys, preschoolers can strengthen their intrapersonal intelligence and develop a deeper understanding of themselves and their inner world.

### ***Play, Toys and Naturalist Intelligence***

Naturalist intelligence involves sensitivity and appreciation for the natural world, including plants, animals, and the environment. Preschool children can develop naturalist intelligence through play and interaction with toys that foster exploration, observation, and appreciation of nature (Xiaoyang et al., 2023; Shirley, 2020; Rajeev, 2022). For example, outdoor exploration kits equipped with magnifying glasses, bug catchers, and binoculars allow children to observe and study insects, birds, and plants in their natural habitat. Nature-themed puzzles, board games, and storybooks provide opportunities for children to learn about different species, ecosystems, and environmental concepts in an engaging and interactive way. Gardening kits with child-friendly tools, seeds, and soil enable children to plant, nurture, and care for their own garden, fostering a sense of responsibility and connection to the natural world. Additionally, wildlife figurines, habitat dioramas, and animal-themed toys encourage imaginative play and storytelling centered around wildlife and nature conservation. Through play with these types of toys, preschoolers can develop a deeper understanding and appreciation of the natural world while honing their naturalist intelligence.

### ***Play, Toys and Existentialist Intelligence***

Existentialist intelligence involves questioning fundamental aspects of existence, such as the meaning of life, purpose, and identity. While preschool children may not explicitly grapple with existential questions, they can develop aspects of existentialist intelligence through play and interaction with toys that encourage exploration, creativity, and self-expression (Xiaoyang et al., 2023; Shirley, 2020; Rajeev, 2022). For example, open-ended toys like building blocks, clay, and art supplies allow children to express themselves freely and create unique works of art or structures that reflect their inner thoughts and emotions. Storytelling toys, such as puppets, dolls, and miniature figures, provide children with a platform to invent imaginative narratives and explore themes of identity, relationships, and the human experience. Additionally, toys that simulate role-playing scenarios, such as pretend play sets or dress-up costumes, enable children to experiment with different roles, perspectives, and identities, fostering a deeper understanding of themselves and others. Through play with these types of toys, preschoolers can begin to explore existential concepts in a developmentally appropriate and engaging manner, laying the foundation for future philosophical inquiry and self-reflection.

### **Contribution of Play and Toys**

Play and toys make significant contributions to early childhood curriculum, care and pedagogy:

#### *i. Early Childhood Curriculum*

Play and toys play an essential role in enriching early childhood curriculum by providing hands-on, experiential learning opportunities. Incorporating play-based activities into the curriculum allows children to explore concepts in a meaningful context, making learning more engaging and memorable. Toys such as puzzles, building blocks, and educational games can be strategically used to support learning objectives across various subject areas, fostering the development of key skills and knowledge.

#### *ii. Care and Pedagogy*

In early childhood settings, play and toys are integral components of caregiving practices and pedagogical approaches. Educators and caregivers recognize the importance of play in supporting children's holistic development and well-being. By providing a nurturing environment that values play, caregivers can promote positive social interactions, emotional regulation, and self-expression among children. Additionally, pedagogical strategies that incorporate play-based learning help educators tailor instruction to individual children's interests, strengths, and developmental needs, fostering a supportive and inclusive learning environment.

### **Conclusion and Recommendation**

This section underscores the significance of integrating play and toy interaction into early childhood education, emphasizing its pivotal role in fostering multiple intelligence development in preschool children. Additionally, recommendations are provided for educators, administrators, and curriculum developers to effectively implement play-based approaches in educational settings.

### **Conclusion**

In conclusion, the role of play and toys in early childhood education cannot be overstated. Through various forms of play such as imaginative play, constructive play, and social play, children are provided with valuable opportunities to explore, learn, and develop essential skills across multiple domains. From fostering cognitive development to promoting social-emotional skills and nurturing creativity, play and toys contribute significantly to the holistic development of preschool children. It is imperative for educators, caregivers, and policymakers to recognize the importance of play in early education and prioritize its integration into curricula and caregiving practices. By embracing play-based approaches, we can create enriching learning environments that support the diverse needs and interests of all children, laying a strong foundation for their lifelong learning journey.

### **Recommendations for Educators, Administrators and Curriculum Developers**

Moving forward, it is imperative for educators to embrace play-based approaches, administrators to allocate resources for play-focused environments, and curriculum developers to integrate play and toy interaction into early childhood curricula, ensuring comprehensive and holistic development opportunities for preschool children.

For educators, embrace a play-based approach in teaching by integrating various forms of play into the curriculum. Encourage open-ended play opportunities that allow children to explore and learn at their own pace. Provide support and guidance to facilitate meaningful play experiences that promote the development of multiple intelligence. For administrators, Allocate resources and create environments that prioritize play and toy exploration. Ensure that classrooms and play areas are well-equipped with a variety of toys and materials that cater to different interests and developmental needs. Support educators in implementing play-based practices through professional development and ongoing training. For curriculum developers, design curricula that explicitly incorporate play and toy interaction as essential components of early childhood education. Develop learning objectives and activities that align with the diverse dimensions of multiple intelligence and encourage the integration of play across various subject areas. Provide educators with curriculum frameworks and resources that highlight the importance of play in promoting holistic child development.

Fostering the development of multiple intelligence in preschool children through play and toy interaction is essential for their holistic growth. Educators should embrace play-based approaches, administrators need to allocate resources for play-focused environments, and curriculum developers must integrate play into early childhood curricula. By doing so, educators can provide meaningful learning experiences that cater to the diverse needs of young learners, promoting their overall development and well-being.

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