

## Parents' Perception of the Development of Cognitive Aspects of Children Aged 5-6 Years in the Context of Activity-Based Stimulation at Home

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### ABSTRACT

This study aims to describe parents' perception of the development of cognitive aspects of children aged 5–6 years and to describe the forms of activity-based stimulation applied in the home environment. This research method uses a descriptive qualitative approach, with the research subjects of parents who have children aged 5–6 years in Beiposo State Kindergarten. Data collection was carried out through in-depth interviews and documentation, then analyzed using thematic analysis techniques to find patterns of perception and stimulation practices carried out by parents. The results of the study show that in general, parents have a positive view of children's cognitive development. Children have shown the ability to recognize letters and numbers, follow simple directions, and show good curiosity, despite differences in developmental levels between children. The forms of stimulation provided by parents include educational play activities, literacy and numeracy activities, and children's

involvement in daily activities. However, the implementation of the stimulation has not been fully carried out consistently because it is influenced by limited time and the level of understanding of parents.

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### Introduction

Early childhood development is the main foundation in the formation of children's basic abilities that will affect their entire lives. The 0–6 year age period is often referred to as the *golden age* because it is a critical period in brain development and various other aspects. According to (Santrock, 2018), early childhood development includes physical, cognitive, language, social-emotional, and moral aspects. At the age of 5-6 years, children are at a crucial stage to prepare themselves to enter elementary school, so optimal stimulation from the environment, especially from parents, is needed. This is in line with the findings of (Zaslow et al., 2016) which affirm that the role of parents in providing appropriate stimulation at home has a significant impact on the development of cognitive function, logical thinking skills, and academic readiness of preschoolers.

The cognitive aspect is related to the ability to think, remember, understand, and solve problems. Piaget in (Woolfolk, 2019) states that children aged 5–6 years are in the preoperational stage, which is the stage where the ability to think symbolically begins to develop, although it is still limited to concrete things. On the other hand, (Diammod, 2016) also emphasizes that executive functions such as working memory, self-control, and attention begin to develop rapidly at an early age and are greatly

influenced by the quality of interaction with the environment. In the context of early childhood education, parental perception plays a central role.

Perception is the process of how a person interprets the stimulus received based on experience, motivation, and environment (Robbins & Judge, 2017). Parents' perception of children's development affects the way they give attention, guidance, and make educational decisions. Positive perceptions will encourage parents to be more actively involved in stimulating children's development, including in cognitive aspects through activities such as reading stories, playing educatively, and accompanying children's learning activities at home. (Epstein, n.d.) states that parental involvement in early childhood education greatly affects the achievement of child development. This involvement can be in the form of academic support, communication with teachers, and participation in school activities.

Stimulation provided by parents through daily activities such as reading together, playing educationally, or talking to children interactively has been proven to improve early childhood thinking, memory, and language skills. According to (Britto et al, 2018a) consistent early stimulation at home contributes significantly to the development of children's executive function and problem-solving abilities. Similar findings are also explained by (González et al., 2022) that the quality of parental interaction and stimulative support at home, such as the provision of activities that stimulate exploration and reasoning, are directly related to the improvement of preschoolers' cognitive abilities and academic

readiness. Thus, the context of stimulation at home is an important factor in forming the foundation of cognitive development of children aged 5–6 years.

The results of observations at Beiposo State Kindergarten show that many parents do not understand what cognitive development means and how to stimulate thinking skills, solving problems, or recognizing basic concepts (numbers, letters, shapes, patterns). Some parents only assess their child's development from learning outcomes at school, not from the thought process or exploration ability at home. Researchers can conduct interviews to assess the extent of parents' perceptions of children's cognitive development at home.

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### **Methods**

This study uses a descriptive qualitative approach. This approach was chosen because it aims to deeply understand social phenomena in the form of parents' perceptions of the development of cognitive aspects of children aged 5–6 years in the context of stimulation at home. According to (Creswell, 2018), qualitative research is used to dig into the meaning and deep understanding of participants' experiences in their natural context. Through this approach, the researcher seeks to obtain a holistic picture of how parents interpret children's cognitive development and how these perceptions are manifested in the form of stimulation activities at home. The data produced is in the form of narrative descriptions, not numbers, so it emphasizes more on meaning than generalizations (Sugiyono, 2019).

This research was carried out at Beiposo State Kindergarten, Bajawa District. This location was chosen purposively because based on initial observations, it was found that there were quite striking

variations in children's cognitive development. Some children show the ability to recognize letters, numbers, and basic concepts well, while others still have difficulties. Research activities carried out during September 2025 include the preparation stage, data collection, data analysis, and preparation of research results reports.

The subjects of this study are parents of children who attend Beiposo State Kindergarten. Parents of children aged 5-6 years at Beiposo Kindergarten. Criteria for research subjects:

- 1) Parents who have children of the same age 5–6 years in Kindergarten Negeri Beiposo.
- 2) Be willing to be a research participant.
- 3) Actively involved in children's activities at home.

The number of participants was planned to be 1–8 parents, consisting of a variety of social, educational, and occupational backgrounds to obtain a richer variety of data. The object of the study was parents' perception of the development of cognitive aspects of children aged 5–6 years in the context of activity-based stimulation at home.

Data collection is carried out using the following techniques, the interview is conducted in a semi-structured manner with open-ended question guidelines. This technique allows researchers to explore parents' perceptions, understanding, and practices in stimulating children's cognitive development.

**a. Documentation**

Documentation is used to complete the data of interview results and documentation

### **Result and Discussions**

Based on the results of the interviews, parents generally have a positive perception of the development of children's thinking skills aged 5-6 years. Most parents view that their child has shown progress in the ability to recognize letters and numbers, follow simple instructions, and express curiosity through questions and daily interactions. Parents of children who show better cognitive development, such as A.E, W, N.N, and M, believe that this progress is inseparable from their involvement in providing direct stimulation at home through meaningful play and interaction.

The results of the interviews also show that parents are aware of differences in thinking skills in each child. Parents of children who still need more intensive assistance, such as children R, J, and J.M, revealed that their children sometimes have difficulty understanding more complex instructions, lose focus easily, and require repetition in the learning process. Nevertheless, parents still view this condition as part of a reasonable developmental process and express the need for support and patience in accompanying their children. In addition, parents think that the development of children's thinking skills is not only influenced by learning at school, but also highly determined by the home environment and daily interaction patterns. Parents see themselves as parties who have an important role in providing the basis for cognitive

stimulation, while teachers are perceived as educators who strengthen and develop children's abilities through more structured learning in school. This perception encourages some parents to be actively involved in children's learning activities at home, even though the implementation is not always carried out on a scheduled basis.

Based on the results of interviews with parents of A.E, W, N.N, M, R, A, J, and J.M, it was obtained that the development of thinking skills of children aged 5-6 years was generally in the category of quite good, although there were variations in the level of achievement between children. Children A.E, W, N.N, and M show fairly good development of thinking skills. The children have been able to recognize letters and numbers, follow simple directions, and show a high curiosity about the surrounding environment. Child W in particular showed good ability in remembering simple instructions, answering questions, and following the rules in play. Children N.N and M are also able to group objects and complete simple games independently. The parents of the children actively provide stimulation through reading storybooks, playing puzzles, stacking blocks, and playing numbers and letters at home. Meanwhile, child A shows a fairly good development of thinking skills but still needs assistance in several activities. The child has been able to recognize letters and numbers and follow simple directions, but still needs help in understanding the gradual instructions. Parents provide stimulation by involving children in simple household activities and daily learning activities.

In contrast to these children, the results of the interviews showed that R and J children still had difficulty understanding more complex instructions, easily felt bored, and needed more intensive assistance from their parents. Cognitive stimulation has been given, but it has not been done consistently due to limited time from parents to children. Similar things were also found in J.M.'s children, who despite being able to answer simple questions and follow the rules of play, still showed variations in concentration and learning resilience.

Home-based stimulation carried out by parents includes three main categories, namely educational play activities, literacy and numeracy activities, and daily life-based activities. Educational play activities include arranging blocks, playing puzzles, table games such as simple chess or mini monopoly, as well as creative games such as playing sand or candles that train the ability to recognize shapes and imagination. Parents report that this game is often done when the child feels happy and willing to interact, so the stimulation effect is more optimal. Literacy and numeracy activities are carried out through reading storybooks before bed, inviting children to get to know letters and numbers through toys or everyday objects such as dinner plates or car toys, and practicing counting fruits or toys. Some parents also make simple flashcards to make it easier for children to recognize these symbols. Activities based on daily life include engaging children in tidying up toys (which train classification and organization skills), helping prepare meals (such as washing vegetables or arranging

groceries that train gradual thinking skills), and shopping together at a market or convenience store (where children are taught to recognize prices, choose items, and count the number of items).

In addition, some parents also use digital media on a limited basis as a form of stimulation, such as watching short educational videos or playing educational games on tablets with direct supervision. However, most parents prefer activities that involve direct interaction and the use of concrete objects, as they are considered more effective in improving children's thinking skills.

Based on the results of the interviews, parents related the development of thinking skills of children aged 5–6 years with several specific cognitive aspects as follows:

1. Symbol Recognition and Concepts Basics

Parents see the ability to recognize letters, numbers, shapes, colors, and sizes as the main indicators of cognitive development. A well-developed child such as A.E, W, N.N, and M has been able to identify these symbols, even grouping objects by shape or color. For example, child N.N can group toys according to their shape, while child M is able to arrange simple patterns from blocks.

2. Ability to Follow Instructions and Remember Information

This aspect includes the ability to understand and follow simple to gradual directions, as well as remember the details of the story or game. Child W in particular showed good ability to remember game instructions and answer questions related to the story being read. On

the other hand, children R, J, and J.M have difficulty understanding more complex instructions and easily forget the steps given.

### 3. Curiosity and Exploration

Parents observe that children who have good cognitive development often ask questions about the surrounding environment, such as why the sky is blue or how plants grow. A.E. and M's children often ask new questions and show interest in exploring objects around the house.

### 4. Problem-Solving and Classifiable Thinking Skills

This aspect can be seen in the child's ability to complete simple games such as puzzles, arrange toys regularly, or find ways to complete tasks. For example, children N.N can solve a 20-piece puzzle independently, while children involved in tidying up toys learn to classify items by type or size.

### 5. Gradual Thinking Ability

Parents realize that some children still need help completing tasks that have a step-by-step sequence, such as helping to prepare food (sorting vegetables, arranging ingredients in order). Child A, for example, still needs guidance to follow the steps in these activities, while children who receive consistent stimulation begin to be able to follow the workflow independently.

The stimulation provided by parents at home is also adjusted to these cognitive aspects: literacy and numeracy activities for symbol recognition, educational games for problem solving, and daily activities for gradual and classifiable thinking.

## DISCUSSION

This study shows that parents in Beiposo State Kindergarten generally have a very positive view of the development of children's thinking skills aged 5-6 years. Parents realize that this age range is an important phase in a child's development, characterized by significant advances in the way children understand and respond to the surrounding environment. Children's cognitive abilities are perceived through basic but essential indicators, such as the recognition of letters and numbers, as well as the child's ability to follow directions from adults.

Based on the results of the interviews, parents believe that children's cognitive development does not occur naturally without support, but is greatly influenced by the active involvement of parents in providing direct stimulation at home. They also understand that each child has different characteristics and learning speeds. These differences are seen as normal, so children who need more intensive repetition and mentoring are considered to need greater emotional support and patience from their families. Most parents argue that the family environment and daily interaction patterns play an important role in supporting the success of children's thinking development, and are not entirely dependent on the role of the school. In this case, parents place themselves as the first educator who builds the initial foundation of

children's development, while teachers are perceived to play a role in developing and organizing these abilities in a more structured way in schools. This positive outlook encourages parents to spend time accompanying their children in learning activities at home, even though the implementation is often informal.

The home-based stimulation carried out by parents in this study is in line with several theories of child development. According to the Social Learning theory from (Bandura, 2018), children learn through observation and imitation of parental behavior. When parents are actively involved in stimulating activities such as reading or educational play, children will see and imitate these behaviors, thus forming positive learning habits. In addition, Vygotsky's Proximal Development Zone (ZPD) theory (Berk, 2018), explains that children can develop abilities that they have not yet mastered through the help of more competent adults. Activities such as helping prepare meals or solving puzzles with parental guidance are examples of how scaffolding can help children reach a higher level of development.

Piaget's Theory of Cognitive Development (Woolfolk, 2023), is also relevant here, as children aged 5–6 years are in a preoperational stage where they need concrete experience to develop conceptual understanding. Home-based activities that use real objects such as fruits, toys, or household tools provide the concrete experience children need to build concepts of numbers, shapes, and cause-and-effect relationships. In addition, Bronfenbrenner's theory of Ecology 1979;

Reinforced by (Tudge, J., Mokrova, I., Hatfield, B., & Karnik, 2019) shows that the microsystem environment (family) is a place where direct interaction occurs and has a significant impact on child development. Home-based stimulation carried out in a warm and supportive family context creates an environment conducive to cognitive development, as children feel safe and motivated to learn.

From the results of the study, it was found that home-based stimulation that blends with daily activities is more effective than stimulation that is carried out separately and formally. This is in accordance with the findings of the study (Kaya, M., & Akyol, 2021), which states that household activities involving children provide contextual learning experiences that are easier for children to understand and remember. Research (Li, H., & Xie, 2024), also shows that responsive interactions in household activities improve children's problem-solving abilities. However, the main obstacles parents face are work-related time constraints and lack of knowledge about the variety of stimulation methods. Some parents also admitted that it was difficult to adjust the difficulty level of activities to the child's ability, so that sometimes the activities provided were too easy or too difficult, as also found in research (Solichah, N., Solehah, H. Y., & Hikam, 2022). explained that parents and teachers have realized that the provision of literacy stimulation is very important for the needs of early childhood development so that children can have the ability to skills to master advanced development, but there is an inappropriate perception of the

purpose of providing literacy stimulation for early childhood, namely the hope that children can read soon, so that in carrying out their roles there are still parents and teachers who provide stimulation that lacks active parental involvement, and the support of the school is needed to ensure that early childhood cognitive development is achieved optimally according to their age stage.

### **Conclusion**

Based on the results of research and discussion, it can be concluded that parents in Beiposo State Kindergarten generally have a positive perception of the development of cognitive aspects of children aged 5-6 years. Parents understand that children's cognitive development can be seen through the ability to recognize letters and numbers, follow simple instructions, and show curiosity about the surrounding environment. Nonetheless, the level of children's cognitive development shows variation between individuals. The stimulation provided by parents at home is carried out through various activities, such as educational play, literacy and numeracy activities, and children's involvement in daily life activities. However, the implementation of the stimulation has not been completely consistent because it is influenced by time constraints and differences in parents' understanding of the importance of continuous cognitive stimulation. Therefore, it is necessary to increase understanding and cooperation between parents and the school so that the stimulation of children's cognitive development can be carried out optimally and continuously.

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