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Intelligence Factors In Early Children In Primary Schools (SD) 066 Soposorik Panyabungan Utara

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Abstract

Early childhood education is a very important initial stage in building a child's potential and character as a whole. At this age, intelligence development becomes the main factor that influences their success in the learning process and social interactions later in life. Therefore, understanding the factors that influence the intelligence of early childhood is very important so that the learning process can run optimally and in accordance with their development. This research aims to identify factors that influence the intelligence of early childhood at Elementary School (SD) 066 Soposorik Panyabungan Utara. The methodology used is a qualitative approach using observation, in-depth interviews and documentation studies of students, teachers and parents. The research results show that family environmental factors, the role of teachers, and access to learning facilities contribute significantly to the development of children's intelligence. These findings emphasize the importance of collaboration between families and schools in supporting the optimization of early childhood intelligence potential.

Key words: intelligence, early childhood, environment.

Abstrak

Pendidikan anak usia dini merupakan tahap awal yang sangat penting dalam membangun potensi dan karakter anak secara menyeluruh. Pada usia ini, perkembangan kecerdasan menjadi faktor utama yang mempengaruhi keberhasilan mereka dalam proses belajar dan interaksi sosial di kemudian hari. Oleh karena itu, memahami faktorfaktor yang mempengaruhi kecerdasan anak usia dini sangat penting agar proses pembelajaran dapat berjalan secara optimal dan sesuai dengan perkembangan mereka. Penelitian ini bertujuan untuk mengidentifikasi faktor-faktor yang mempengaruhi kecerdasan anak usia dini di Sekolah Dasar (SD) 066 Soposorik Panyabungan Utara. Metodologi yang digunakan adalah pendekatan kualitatif dengan observasi, wawancara mendalam, dan studi dokumentasi terhadap siswa, guru, serta orang tua. Hasil penelitian menunjukkan bahwa faktor lingkungan keluarga, peran guru, dan akses terhadap fasilitas belajar berkontribusi signifikan terhadap perkembangan kecerdasan anak. Temuan ini menegaskan pentingnya kolaborasi antara keluarga dan sekolah dalam mendukung optimalisasi potensi kecerdasan anak usia dini.

Kata kunci: kecerdasan, anak usia dini, lingkungan.

INTRODUCTION

A. Background

Early childhood education is a very important initial stage in building a child's potential and character as a whole. At this age, intelligence development becomes the main factor that influences their success in the learning process and social interactions later in life. Therefore, understanding the factors that influence the intelligence of early childhood is very important so that the learning process can run optimally and in accordance with their development.

Elementary School (SD) 066 Soposorik Panyabungan Utara is an educational institution that accommodates early childhood children in the area. This school acts as a place to stimulate and develop children's intellectual potential through innovative teaching and learning activities that are appropriate to their stage of development. The geographical and social conditions of the community around the school are factors that influence the intelligence development of the children who attend school there.

Children's intelligence is not only influenced by genetic factors, but also by the environment in which they grow and develop. A loving home environment, adequate stimulation, and support from parents and teachers can speed up the process of developing a child's intelligence. On the other hand, an environment that is less supportive or inadequate can become an obstacle to the child's optimal growth and development process.

Apart from environmental factors, economic factors also play an important role in determining a child's intelligence level. Children from families with poor economic conditions often face obstacles in accessing learning resources such as books, educational games and other learning facilities. These limitations can affect children's ability to develop optimally and stimulate their intelligence optimally.

The level of parental education is also an important factor that influences early childhood intelligence. Parents who have a higher level of education are generally better able to provide appropriate educational stimulation, as well as creating a conducive learning environment at home. On the other hand, parents' lack of knowledge about the importance of early education can hinder the development of children's abilities and potential.

THEORETICAL BASIS

A. Multiple Intelligence Theory (Howard Gardner)

Howard Gardner put forward the theory of multiple intelligence which states that intelligence is not single, but consists of various types that interact with each other and develop independently. According to Gardner, each individual has strengths and weaknesses in various areas of intelligence, so it cannot be measured only through one general

intelligence test (IQ). This theory opens the insight that children can show different intelligence according to their experiences and environment.

Linguistic intelligence, for example, is related to language and communication skills, while logical-mathematical intelligence focuses on the ability to reason and solve problems analytically. Kinesthetic intelligence concerns the ability to move and coordinate the body, while musical intelligence relates to the ability to understand and create music. There is also interpersonal intelligence which plays a role in the ability to interact socially, as well as intrapersonal intelligence which is related to self-understanding.

In the context of early childhood, this theory is very relevant because it shows that each child has unique potential that needs to be supported individually. The family and school environment play an important role in stimulating various types of intelligence so that children can develop optimally according to their potential. Therefore, a diverse educational approach that adapts to the needs of each child is highly recommended.

In addition, Gardner's theory emphasizes the importance of recognizing and developing children's primary intelligence from an early age so that they are able to achieve their best potential. By understanding the various types of intelligence, parents and teachers can organize learning activities that are varied and appropriate to the child's strengths. This will increase motivation to learn and help children feel appreciated for their uniqueness.

In practical terms, the theory of multiple intelligences provides the basis for the development of more inclusive and diverse educational programs. In the context of research on early childhood intelligence factors at SD 066 Soposorik, this theory emphasizes the need to understand and identify various aspects of intelligence that develop in children, as well as the environmental factors that support it. Thus, appropriate interventions can be designed to optimally increase the potential of each child.

B. Cognitive Development Theory (Jean Piaget)

Jean Piaget is one of the main figures in developmental psychology who argued that children's cognitive development goes through a series of structured stages. According to Piaget, this development is the result of the child's interaction with his environment and is supported by appropriate learning experiences. He emphasized that children actively build their knowledge through the process of assimilation and accommodation to the information they receive.

Piaget identified four main stages of cognitive development, namely the sensorimotor stage, the preoperational stage, the concrete operational stage, and the formal operational stage. At an early age, children are in the sensorimotor and preoperational stages, which shows that

their thinking abilities are still developing and depend on direct experience and the use of the senses. Environmental factors play a major role in providing appropriate stimuli to support this development.

The family and school environment provides experiences that influence the child's knowledge construction process. Stimulation in the form of games, social interactions and learning activities will help children understand the world around them better. If the environment provides sufficient and appropriate experiences, then the child's cognitive development can proceed optimally according to the stages determined by Piaget.

In addition, Piaget's theory emphasizes that cognitive development cannot be accelerated by force, but must follow a natural process and according to stages. Teachers and parents must understand these stages in order to be able to organize learning activities that suit the child's abilities. This is important so that children do not feel frustrated and remain motivated to learn.

In the context of research on early childhood intelligence factors, Piaget's theory highlights the importance of a stimulus-rich environment and learning experiences that support cognitive development. External factors such as educational stimulation and social interaction will accelerate and enrich the process of building children's knowledge. Therefore, a conducive environment is the main key in supporting the intelligence development of early childhood

C. Theory of Environmental Influence on Child Development (Bronfenbrenner)

Urie Bronfenbrenner developed the theory of human ecology which emphasizes that child development is influenced by various layers of the environment. According to him, factors such as family, school, society and culture do not stand alone, but interact with each other and influence the child's development process holistically. Each layer of this environment has a significant influence on the development of children's intelligence.

The family environment is the first layer and closest to the child. The emotional support, intellectual stimulation and parenting style provided by the family will determine how the child develops cognitively and socially. Apart from the family, the school environment also plays a big role in providing learning experiences that stimulate and support the development of children's intelligence.

The society and culture around children also influence the mindset and values they adhere to. For example, a society that values education and innovation will encourage

children to learn and work more actively. Economic factors are also included in this layer, because families with limited resources may face obstacles in providing optimal educational facilities and stimulation.

Bronfenbrenner emphasized that the interaction between these various layers of the environment is very important. If one layer does not support it, the child's development can be hampered. Therefore, there needs to be synergy between families, schools and communities to create an environment that is conducive to the development of intelligence in early childhood.

In the context of research on children's intelligence factors at SD 066 Soposorik, Bronfenbrenner's theory emphasizes that success in increasing children's intelligence does not only depend on internal factors, but also on support from the surrounding environment. Intervention programs that involve all these layers will be more effective in supporting children's overall development

D. Parental and Family Role Theory (Bowlby and Vygotsky)

Bowlby emphasized the importance of healthy emotional bonds between children and parents, which serve as the primary foundation in a child's social and emotional development. This bond will influence the child's ability to interact, feel safe and confident in exploring their environment. If this bond is strong, children are better able to deal with stress and learn optimally, including in terms of intelligence.

Meanwhile, Lev Vygotsky argued that children's cognitive development is greatly influenced by social interactions and the cultural environment. He introduced the concept of the zone of proximal development (ZPD), namely the distance between a child's current abilities and the abilities that can be achieved through the help of other people, especially adults or peers. Support from parents and the family environment plays a very important role in facilitating this process.

The role of parents in providing adequate stimulation, education and attention will increase the child's intelligence potential. Providing rich learning experiences, such as reading stories, educational play, and guiding children in solving problems, has a great influence on their cognitive development. Apart from that, a supportive family environment will foster self-confidence and motivation to learn in children.

The family also functions as protection and the main source of motivation. Parental support in the child's learning and development process will have a positive effect on the child's academic achievement and intelligence. Therefore, parental involvement is very important in building the foundation of children's intelligence from an early age.

In the context of research, this theory emphasizes that family factors and the role of parents greatly influence the level of intelligence of early childhood. Interventions and educational programs that involve families will be more effective in increasing children's intelligence potential, because they are the main environment where children learn and develop.

E. Theory of Influence of Education and Schools (Dewey)

John Dewey argued that education should be a direct and active experience, where children learn through interaction with the environment and real activities. According to him, a fun and meaningful learning process will significantly increase children's intelligence and motivation to learn. Schools must be places that develop children's natural potential through innovative and participatory approaches.

Dewey emphasized the importance of adequate facilities, varied learning methods, and the role of teachers who are capable of being facilitators and motivators. Teachers must be able to create a fun and challenging learning atmosphere so that children feel interested and motivated to learn. In this way, children's intelligence will develop optimally through active learning experiences.

In addition, the school environment must be able to provide various activities that stimulate various aspects of children's intelligence, such as artistic activities, sports and educational games. This holistic approach will help children develop their cognitive, social and emotional aspects in a balanced way. Positive learning experiences will leave a deep impression and improve children's memory and critical thinking abilities.

Dewey also emphasized the importance of parental and community involvement in the child's education process. Harmonious collaboration will create a more effective and enjoyable learning environment. Schools not only function as places for academic learning, but also as vehicles for developing children's character and intelligence as a whole.

In the context of research on children's intelligence factors at SD **066** Soposorik, Dewey's theory emphasizes that an innovative and supportive educational environment will play a major role in increasing children's intelligence. Educational programs based on experience and active interaction will help children achieve their intelligence potential optimally.

RESEARCH METHODS

A. Research Approach and Type

This research uses a qualitative approach with the aim of understanding in depth the factors that influence the intelligence of early childhood at SD 066 Soposorik Panyabungan Utara. This approach was chosen because researchers wanted to obtain a complete picture of experiences, perceptions and environmental factors that play a role in the development of children's intelligence. This type of research includes case studies, considering the main focus on one particular educational institution and its specific context.

B. Research Location and Informants

The location of the research was SD 066 Soposorik Panyabungan Utara. The research informants consisted of several related parties, namely class teachers, parents and children who were research subjects. The selection of informants was carried out purposively with the consideration that they had direct and relevant experience regarding the factors that influence children's intelligence.

C. Data Collection Techniques

Data collection was carried out through several techniques, such as in-depth interviews, participant observation, and documentation.

- 1. In-depth interviews: conducted with teachers and parents to explore their views regarding the factors that influence children's intelligence, including the family environment, school and social factors.
- 2. Observation: carried out during the teaching and learning process and activities at school to see directly the child's interactions with the surrounding environment, as well as environmental conditions that support or hinder the development of intelligence.
- 3. Documentation: collect data related to learning activities, child development reports, and other relevant documents.

D. Data Analysis Techniques

The data obtained was analyzed qualitatively using thematic analysis techniques. The steps include:

- 1. Simultaneous data collection with a data reduction process, namely sorting out relevant and important data.
- 2. Presentation of data narratively and descriptively to identify the main themes that emerge from the data.
- 3. Drawing conclusions based on patterns and relationships between the data that has been analyzed.

E. Data Validity and Validity

To ensure the validity of the data, source triangulation and technical triangulation techniques were used. Source triangulation was carried out by comparing data from various informants, while technical triangulation was carried out by comparing data from interviews, observation and documentation. In addition, the member check process is carried out by confirming the findings with informants to ensure that the researcher's interpretation is in accordance with their experience and views.

F. Research Ethics

Researchers ensure that the data collection process follows the principles of research ethics, such as obtaining permission from the school principal and parents, maintaining the confidentiality of informants' identities, and obtaining written consent from all relevant parties.

RESULTS AND DISCUSSION

A. Factors that influence the development of early childhood intelligence at SD 066 Soposorik Panyabungan Utara

The development of early childhood intelligence is influenced by various interrelated factors, both from the family environment, school and surrounding community. At SD 066 Soposorik Panyabungan Utara, family factors are one of the main influencing aspects. Based on field observations, the majority of children come from families that are quite harmonious and active in supporting their learning process. For example, the parents of several children routinely read story books and invite discussions about the things they learn at school. They also provide motivation and praise for children's achievements, which indirectly increases children's self-confidence and interest in learning. However, there are also parents who lack attention due to limited time due to busy work, so they do not provide direct stimulation at home.

A part from family factors, the school environment also plays an important role in spurring the development of children's intelligence. Observation results show that school facilities are adequate, with clean classrooms, a comfortable atmosphere, and equipped with attractive and age-appropriate teaching aids. The teachers at this school show high dedication in implementing varied learning methods, such as educational games and small group discussions. The children looked enthusiastic about participating in learning activities and seemed able to interact with each other well. For example, during shared reading activities,

children appear to actively point and repeat the words they read, showing the development of their language skills.

Socio-cultural factors and the community environment also influence the development of children's intelligence. From the results of observations, it is known that the majority of people around the school really support children's education and learning activities. They often hold mutual cooperation activities, including helping parents and teachers in facilitating learning activities at school and at home. Some parents also take part in training on how to support early childhood growth and development held by schools or local communities. This creates a conducive and motivational atmosphere for children to learn and develop optimally.

Apart from external factors, children's health and nutritional conditions also play an important role. From observations, the majority of children receive adequate and nutritious food, although there are some children who show signs of mild malnutrition, such as dull skin and less active bodies. Children who are physically healthy tend to be more active and able to take part in all activities at school. On the other hand, children who experience health problems often appear to lack focus and are lazy to participate in learning activities. For example, one of the children who looked unwell during the observation that day, seemed to yawn frequently and was less enthusiastic when attending lessons.

A conducive learning environment at school really supports the development of children's intelligence. Observations show that a pleasant and caring classroom atmosphere from teachers can create a sense of security and comfort for children. Teachers actively provide praise and encouragement, and create a pleasant learning atmosphere. For example, when a child successfully completes a task, the teacher immediately gives appreciation with applause and motivational speech. This increases children's self-confidence and motivates them to be more enthusiastic about learning.

The role of parents in supporting the learning process at home is also very influential. From the results of observations, it is known that most parents actively interact with their children at home, such as inviting them to play while studying or reading story books. They also take part in activities held by the school and try to involve themselves in the child's development process. However, there are some parents who do not understand the importance of early stimulation and are not very active in supporting their children's learning activities at home. As a result, children of parents who are less involved tend to experience less than optimal intelligence development.

Overall, the results of observations show that the factors that influence the development of children's intelligence at SD 066 Soposorik Panyabungan Utara are quite diverse and

interrelated. An active and caring family environment, complete and attractive school facilities, a supportive community, and attention to children's health and nutrition are the main factors for success in developing children's intellectual potential. To improve the overall quality of children's development, harmonious cooperation is needed between families, schools and the surrounding community so that all of these factors can work synergistically and support the optimal growth and development of early childhood.

B. The role of the family environment, school environment, and socio-economic factors in influencing the level of intelligence of early childhood at SD 066 Soposorik Panyabungan Utara

The role of the family environment is the main factor that influences the intelligence level of early childhood. From the results of observations in the field, it appears that families who are active and care about children's development tend to have children with better cognitive and language abilities. For example, parents of some children routinely read story books, invite discussions about their experiences, and provide stimulation that supports children's brain development. On the other hand, families who are less involved due to limited time, economics, or knowledge about how to support their children, experience obstacles in the process of developing their children's intelligence. Some parents who do not understand the importance of early stimulation seem to be doing less learning activities at home, so that their children tend not to develop optimally.

The school environment plays an important role in shaping the intelligence level of young children. Based on observations, the school facilities are quite complete and conducive to learning. The teachers at this school show high dedication in implementing innovative and fun methods, such as educational games and group activities.

They also provide individual attention to children as needed. Children who have fun and well-structured learning experiences show rapidly developing critical thinking and language skills. Apart from that, a comfortable and safe classroom atmosphere helps children feel confident to explore and ask questions, which has a positive effect on the development of their intelligence.

Socioeconomic factors also greatly influence children's intelligence levels. From the results of observations, it is known that the majority of children come from families with lower-middle economic backgrounds. They often experience limitations in terms of access to learning resources such as books, educational games and learning facilities at home. These economic conditions affect the quality of children's nutrition and health, which directly

affects their learning ability and brain development. Children from families with fairly good economic conditions tend to have easier access to learning resources and optimal health, so that their intelligence level is more developed than children from less well-off families.

Apart from economic factors, socio-cultural factors also play a role in shaping children's intelligence levels. From the results of observations, the community around the school is very supportive of learning activities and appreciates education. They actively hold mutual cooperation activities, parent training, and other informal education programs. This creates a social environment that supports and provides motivation for children to learn. For example, parents who take part in training on early stimulation are able to better understand their role in supporting children's growth and development, so that children experience improvements in cognitive and social aspects. This social support is very helpful in accelerating the process of children's intelligence development.

The role of the family and school environment cannot be separated in shaping a child's level of intelligence. Observations show that children who receive stimulation at home and at school show better development compared to those who receive less attention in both environments. For example, children who are routinely read to stories and taught educational games at home, and have enjoyable learning experiences at school, are able to demonstrate good language skills and a critical mindset. On the other hand, children from disadvantaged families who receive less stimulation at home tend to experience obstacles in the development of their intelligence.

Socioeconomic factors also influence access and quality of education that children receive. Economic insufficiency often prevents parents from meeting their children's learning and health needs. From observations, it was found that children from underprivileged families often experience lack of nutrition and access to books and educational toys. This condition has implications for reducing the level of cognitive and language development. Therefore, the role of the government or social institutions is very important to provide educational and health assistance programs so that children from underprivileged families continue to have equal opportunities to develop their intelligence.

Overall, the results of observations and analysis show that the family environment, school and socio-economic factors interact with each other and greatly influence the level of intelligence of early childhood at SD 066 Soposorik Panyabungan Utara. Support from active families, complete and innovative school facilities, and the availability of adequate economic and social resources will create an environment conducive to children's optimal growth and development. Therefore, collaborative efforts between parents, schools and the government

are urgently needed to improve the quality of life and education of children in this environment.

CONCLUSION

Based on an analysis of the factors that influence the development of early childhood intelligence at SD 066 Soposorik Panyabungan Utara, it can be concluded that:

- 1. Factors that influence the development of early childhood intelligence at SD 066 Soposorik Panyabungan Utara include the family environment, school environment, and socioeconomic factors. The three interact with each other and contribute significantly to the child's intelligence level, where a supportive environment and adequate resources are able to increase the child's cognitive potential and development optimally.
- 2. The role of the family environment, school environment, and socio-economic factors are very influential in influencing the level of intelligence of early childhood at SD 066 Soposorik Panyabungan Utara. An active and caring family, quality schools, and adequate socio-economic conditions are the main factors that support the overall growth and development of children's intelligence.

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