ISSE
International Journal of Service Science, Management, Engineering, and Technology
pISSN 2964-7118, eISSN 2830-604X

DYNAMICS OF INTELLECTUAL AND CREATIVE DEVELOPMENT IN ELEMENTARY SCHOOL CHILDREN: THE ROLES OF ENVIRONMENT, PARENTS, TEACHERS, AND LEARNING MEDIA

[1]Mila Hariani, [2]Eli Masnawati, [3]Nelud Darajaatul Aliyah, [4]Rahayu Mardikaningsih, [5]Muhammad Sukron Djazilan, [6]Didit Darmawan, [7]Yulius Kurniawan

[1]Universitas Mayjen Sungkono, [2]STKIP PGRI Bangkalan, [3]Universitas Islam Negeri Sunan Ampel Surabaya, [4]Universitas Nahdlatul Ulama Surabaya, [4,6]Universitas Sunan Giri Surabaya, [7]Universitas Widya Kartika Surabaya

correspondence: dr.diditdarmawan@gmail.com

Abstract - *The intellectual development and creativity of primary school-age children involves a complex interaction between the environment, the role of parents, teachers and learning media. A stimulating environment supports the development of children's cognitive and creative capacities, while the role of parents in creating a learning environment that supports children's curiosity is crucial. Teachers, with their creative role and stimulating learning, play a vital role in children's development. Learning media, both print and digital, can enhance children's interest and creativity. Overall, positive interactions between children, parents, teachers and learning media are key to supporting children's optimal potential. These factors influence the intellectual development and creativity of elementary-aged children, with the environment as the central element.*

Keywords: intellectual development, creativity, primary school children, environment, role of parents, teachers, learning media.

INTRODUCTION

Children's intellectual and creative development at the primary education level, including Elementary School (SD), involves a number of factors that play an important role in shaping thought patterns, learning abilities and creative expression. Intellectual development is basically related to the concepts a person has, while the development of creativity is closely related to the level of imagination a person has (Ferrari et al., 2009). Strong intellectual abilities can provide a solid foundation for creative expression, while creativity can enrich the way children understand and apply intellectual concepts.

Hurlock (1978) states that a 10-year-old child's intellectual development is no better than that of a 7 or 8-year-old child. A child's intellectual development is influenced by the child's interaction with the environment and from this interaction a learning process occurs. Children's interaction with their environment has an impact on their intellectual development. Children construct, explore and rediscover their knowledge as a result of their interactions with their environment. Children's intellectual development increases proportionally to how well they connect with their environment. Through environmental interactions children's knowledge is built and discovered and rediscovered. The better the interaction with the environment that occurs in children, the better the intellectual development of the child. Environmental factors greatly influence a child's intellectual development.

Creativity is the ability to create something new, either a completely new thing or a new idea obtained by connecting several existing things and making them into something new (Sawyer, 2011). Creativity in elementary school children is related to art or music, and includes the ability to generate new and original ideas in various fields. One of the latest theories on creativity in primary school children is the Creative Product Analysis (CPA) theory, which suggests that creativity can be seen from the quality of creative products produced (Kim, 2019). Creativity is the ability to think about something in a new and unusual way and produce a unique solution to a problem (Runco & Jaeger, 2012). The development of creativity in elementary school children can also be developed through the teaching and learning process by using learning media.

Maker et al. (2008) state that the environment is an important factor that greatly influences the intellectual development and creativity of primary school-age children. Through these environmental interactions, children's intellectual development and creativity occur. Other factors that can also support the intellectual development and creativity of elementary school-age children include: parents, teachers and learning media. The environment plays a central role in shaping and influencing the intellectual development and creativity of primary school-age children.

In general, the concept of intellectual development and creativity in elementary school children shows that every child has unique potential and needs to receive the right support and environment to develop his abilities and talents. By understanding the positive influence of the environment, the role of parents, teachers and learning media, we can create a strong foundation for the intellectual and creative development of elementary school children. This study will review the influence of the environment, the role of parents, teachers and learning media on the intellectual development and creativity of elementary school age children?

RESEARCH METHODS

This research is an analysis of various literatures related to Intellectual Development, Creativity and Talent in Elementary School-Age Children. Through a thorough literature review of relevant journals, this research aims to understand and identify the key factors that influence intellectual development, creativity and giftedness in primary school-aged children.

By detailing findings and concepts drawn from the literature, this study seeks to provide a solid theoretical foundation for understanding the intellectual development, creativity and giftedness of primary school-aged children. The findings of this study are expected to make significant contributions to the development of education and parenting, as well as provide direction for practitioners, educators and parents in supporting children's growth at this critical stage.

RESULTS AND DISCUSSIONS

Interaction with the surrounding environment is the main driver for children's intellectual development and creativity at this stage. The intellectual development and creativity of primary school-age children are influenced by several factors, including the environment, the role of parents, teachers and learning media. A stimulating and supportive environment provides opportunities for children to explore and develop their understanding of the world. Children's interactions with their surroundings, whether through family, school or learning media, are critical factors in shaping their intellectual development and creativity during the primary school years. Here are the influences of each of these factors.

The environment plays a significant role in shaping children's development, especially in intellectual and creative aspects. A supportive and stimulating environment contributes to the development of children's thinking, imagining and creative abilities. A stimulating and supportive environment provides important stimuli for children to explore, learn and hone their intellectual and creative skills (Yanti & Darmawan, 2016). Daily interactions with peers, objects and activities around them can stimulate children's minds and develop their creative potential. For example, an environment enriched with reading materials, creative toys and opportunities to interact with peers can positively spur children's intellectual development and creativity. Through active interaction with an adequate environment, children can better hone their intellectual potential and explore their creativity (Lembong et al., 2015).

There are factors that can hinder children's intellectual development and creativity, such as lack of encouragement to explore, prohibition of imagination, authoritarian discipline, provision of structured play tools, restrictive environment, and peer influence. When children do not get the opportunity to explore or explore their environment, this can prevent children's creative thinking from developing. Prohibiting children from imagining can hinder the development of children's imagination and extinguish their creativity. Authoritarian discipline that requires children to obey all rules or parental decisions can inhibit children's creativity (Pugsley & Acar, 2020). Children may lack the initiative to do things due to a lack of freedom and initiative, which can hinder their creativity. An environment that restricts or does not give children the freedom to explore and create can inhibit their creativity (Sutarjo et al., 2007). The behavior displayed by peers can also affect children's creativity. Hostile attitudes from peers can inhibit children's creativity, while friendly attitudes can provide a sense of security and initiate creative activities. It is important for parents and teachers and the surrounding environment to create an environment that stimulates and supports children's creativity.

The school environment can limit children's creativity through factors such as an overly structured curriculum, high academic pressure, lack of time and space for creativity, lack of support and appreciation for creativity, and limited resources and facilities. An overly structured curriculum that focuses on mastering academic material can reduce the space for children to think creatively and explore. When children are only taught to follow strict rules and procedures, they may lose the freedom to explore new ideas and develop their creativity. A school environment that emphasizes high academic achievement and competition can make children feel overwhelmed and tend to focus on quantifiable achievements. This may hinder their creativity as they may focus more on the outcome rather than the creative process (Macpherson et al., 2016). If the school environment does not provide enough time and space for children to be creative, for example through art activities, experiments or creative projects, then their creativity may be limited. Children need to have opportunities to experiment, try new things and develop their own ideas. In addition, if the school environment does not provide enough support and appreciation for children's creativity, they may not feel motivated to explore and develop their creativity. It is important for schools to provide appreciation and recognition of children's creative efforts (Akmal et al., 2015). It is important for schools to create an environment that stimulates and supports children's creativity by providing sufficient time, space and support.

The role of parents is crucial in the intellectual development and creativity of primary school-age children. Parents who are actively involved in their children's education have a huge positive impact on their children's development. They realize the importance of providing the best education to their children from an early age. Parental involvement in children's education has been shown to have many positive impacts on children, including in their intellectual development (Ma et al., 2016). Parents who are involved in elementary school will reap positive effects that will last for the child's lifetime. In addition to the role of teachers and the environment, the role of parents is also very important in

children's learning achievement. Parents can provide support, encouragement and opportunities for children to learn, think creatively and develop their intellectual abilities. They can read books with their children, provide opportunities for play and exploration, and give praise and encouragement for their children's efforts and achievements. Parents can help children develop their thinking, imagination and creative skills through interaction and support. Support, cognitive stimulation, and recognition of children's achievements can motivate and shape a creative mindset. In addition, parents also play a role in creating a learning environment at home that supports children's curiosity and exploration (Hutomo et al., 2012). For example, parents can read books with their children, provide opportunities for play and exploration, and provide encouragement and praise for children's efforts and achievements. In addition, the emotional bond formed by parents can also affect children's intellectual development (Karina et al., 2012). Thus, the role of parents is very important in children's intellectual development as they provide support, encouragement, and opportunities for children to develop their intellectual potential.

A lack of parental role in a child's intellectual development can have negative impacts, including lack of support and motivation, lack of guidance and direction, lack of intellectual stimulation, lack of supervision over technology use, and lack of communication and discussion. When parents are not actively involved in their child's education, the child may feel less supported and less motivated to learn. Support and motivation from parents are crucial in helping children develop an interest and love for learning (Burchinal & Vernon-Feagans, 2021). Parents have an important role in providing guidance and direction to children in developing intellectual skills. Lack of parental guidance can make it difficult for children to overcome academic challenges and develop their cognitive abilities. Parents who are not actively involved in their child's education may not provide sufficient intellectual stimulation (Wijaya, 2017). Intellectual stimulation through reading, thought-provoking games and discussions can help children develop critical thinking, creativity and abstract thinking skills. The lack of parental role in supervising and controlling children's use of technology can have a negative impact on children's intellectual development. Too much time spent on social media or digital games can inhibit time that should be spent learning and developing intellectual skills. Parents who do not actively engage in communication and discussion with their children may miss opportunities to stimulate critical thinking and reflection. Discussions with parents can help children develop logical, analytical and argumentative thinking skills. Therefore, it is important for parents to be actively involved in their child's education and provide the necessary support for optimal intellectual development.

Teachers also have an important role in the intellectual development and creativity of elementary school-age children because most of the time elementary school children spend at school with teachers as a substitute for parents. Teachers have the responsibility to provide education and instruction to children. They help children understand academic concepts and develop intellectual skills such as reading, writing and counting. Therefore, a teacher is expected to make efforts that can help develop children's creativity. Teachers can help build children's interest and motivation in learning. They can create a stimulating and interesting environment, use creative teaching methods, and provide challenges that are appropriate to the child's developmental level. Teachers provide support and guidance to children in facing academic challenges. They provide constructive feedback, help children overcome difficulties, and provide clear direction in the learning process (Wahyudi et al., 2018). Teachers can create a learning environment that stimulates and supports children's intellectual development and creativity. Teachers can use interactive and creative learning methods, provide challenges that match children's abilities, and provide constructive feedback. Teachers can encourage children to think critically and analytically. They teach children to ask questions, consider different points of view and make decisions based on rational thinking. Teachers can help develop children's creativity by providing opportunities to imagine, experiment and create (Darmanto et al., 2014). They encourage children to think outside the box, explore new ideas, and develop art and design skills. In addition, teachers can also provide opportunities for children to collaborate with peers in learning activities. Teachers help build positive emotional relationships with children. A good relationship between teachers and children can create a safe and comfortable environment where children feel supported and motivated to learn and create. The role of the teacher in the school environment is also crucial (Mardikaningsih et al., 2022). Experienced teachers can design stimulating learning, identify children's potential, and provide challenges according to their developmental level (Darmawan et al., 2021). Thus, teachers have a very important role in the intellectual development and creativity of primary school-age children. They educate, teach, build interest and motivation, encourage critical thinking, develop creativity, provide support and guidance, and build emotional relationships with children. Effective teacher roles can help children develop their intellectual potential and creativity well.

Print and digital learning media can also influence the intellectual development and creativity of elementary school-age children. Varied, interactive, and interesting learning materials can help children understand the concepts taught, stimulate children's imagination and creativity, and increase interest in learning (Arsyad, 2013). Interesting learning media can make children more interested and enthusiastic in learning (Purwanti et al., 2014). Interesting media such as pictures, videos or games can help children understand concepts better. Interactive and creative learning media can encourage children to think critically and develop their creativity. For example, learning media involving games or creative tasks can help children develop divergent thinking skills and generate new ideas (Pribadi, 2017). The use of smart and developmentally appropriate learning media can be an effective tool in broadening their horizons and understanding.

For example, the use of technology-based learning media such as videos, images and educational games can make learning more interesting and interactive for children (Al Hakim et al., 2014). Learning media can provide a richer learning experience (Mardikaningsih, 2014). Learning media can help children understand difficult concepts in a more visual and concrete way (Gunawan et al., 2016). For example, by using pictures or diagrams, children can more easily understand abstract concepts such as math or science. For example, by using media such as videos or simulations, children can experience situations or events that are difficult to access directly. This can help them understand concepts better and develop a better understanding. Interesting and interactive learning media can increase children's motivation to learn. Children will be more motivated to learn when they feel engaged and challenged by the learning media used.

Thus, the environment, the role of parents, teachers, and learning media have a significant influence on the intellectual development and creativity of primary school-age children. A stimulating environment, supportive parents, creative teachers, and interesting learning media can help children develop their intellectual potential and creativity.

CONCLUSIONS

In the development of cognitive capacity and creativity of elementary school children, the environment, the role of parents, teachers and learning media play a crucial role. A stimulating environment supports the development of children's cognitive and creative capacities. Parents play a big role in providing support and creating a learning environment that supports children's curiosity. Teachers, with their creative role and stimulating learning process, play a vital role in the child's development. Learning media, both printed and digital, can enhance children's interest and creativity. Overall, this developmental concept highlights the importance of positive interactions between children, parents, teachers and learning media to support children's optimal potential.

The intellectual ability of elementary school children can grow through good parenting and readiness to learn from the children themselves. Meanwhile, the creativity of elementary school children can develop through games, because games can help the development of children's motor skills effectively. The intellectual capacity and creativity of primary school children can also be expanded through extracurricular activities at school. In the development of the intellectual capacity and creativity of primary school-age children, certain factors play an important role. Therefore, parents and teachers are expected to explore and develop the potential possessed by primary school-age children. Engaging children in fun, supportive and stimulating learning experiences, and providing support for the development of their intellectual capacity and creativity are key factors in shaping smart and creative individuals in the future.

REFERENCES

Akmal, D. Kurniawan, D. Darmawan & A. Wardani. (2015). Manajemen Pendidikan, IntiPresindo Pustaka, Bandung.

Al Hakim, Y.R., M. Hariani, D. Darmawan, R. Mardikaningsih, & Moch. Irfan. (2014). Pembelajaran Mahasiswa melalui Media Jejaring Sosial, Jurnal Ilmiah Manajemen Pendidikan Indonesia, 1(2), 109-124.

Arsyad, A. (2013). Media Pembelajaran. PT Raja Grafindo Persada, Jakarta.

Burchinal, M. & L. Vernon-Feagans. (2021). Family Life and Early Developmental Outcomes. Developmental Psychology, 57(3), 373-384.

Darmanto, D., A.R. Putra & R. Mardikaningsih. (2014). Evaluasi Hasil Belajar. Pustaka Belajar, Yogyakarta.

Darmawan, D., F. Issalillah., E. Retnowati., & D. R. Mataputun. (2021). Peranan Lingkungan Sekolah dan Kemampuan Berkomunikasi Guru terhadap Motivasi Belajar Siswa. Jurnal Simki Pedagogia, 4(1), 11-23.

Darmawan, D., R. Mardikaningsih., S. Arifin., E. A. Sinambela., A. R. Putra. (2021). Studi tentang Peranan Variabel Kompetensi, Penilaian Kinerja, dan Kondisi Kerja terhadap Perwujudan Kepuasan Kerja Guru. Jurnal Pendidikan dan Kewirausahaan, 9(2), 516-530.

Ferrari, A., R. Cachia., & Y. Punie. (2009). Innovation and Creativity in Education and Training in the EU Member States: Fostering Creative Learning and Supporting Innovative Teaching. JRC Technical Note, 52374, 64.

Gunawan, A., R. Mardikaningsih & Yuliana. (2016). Evaluasi Pembelajaran, Revka Prima Media, Surabaya.

Hurlock, B.E. (1978). Perkembangan Anak, Jilid 1 Edisi ke-6 (terjemahan Med Meitasari Tjandrasa dan Muslichah Zarkasih). DallasThe McGraw-Hill Companies.

Hutomo, S., D. Akhmal, D. Darmawan & Yuliana. (2012). Dasar-Dasar Evaluasi Pendidikan, Addar Press, Jakarta.

Karina, A., T. Baskoro K. & D. Darmawan. (2012). Pengantar Psikologi. Addar Press, Jakarta.

Kim, K. H. (2019). Creative Product Analysis: A comprehensive framework for assessing creativity. Creativity Research Journal, 31(1), 1-13.

Lembong, D., S. Hutomo & D. Darmawan. (2015). Komunikasi Pendidikan, IntiPresindo Pustaka, Bandung.

Ma, X., J. Shen., H. Y. Krenn., S. Hu., & J. Yuan, J. (2016). A Meta-Analysis of the Relationship Between Learning Outcomes and Parental Involvement During Early Childhood Education and Early Elementary Education. Educational Psychology Review, 28, 771-801.

Macpherson, H., A. Hart., & B. Heaver. (2016). Building Resilience Through Group Visual Arts Activities: Findings from a Scoping Study with Young People Who Experience Mental Health Complexities and/or Learning Difficulties. Journal of Social Work, 16(5), 541-560.

Maker, C. J., S. Jo., & O. M. Muammar. (2008). Development of Creativity: The Influence of Varying Levels of Implementation of the Discover Curriculum Model, a Non-Traditional Pedagogical Approach. Learning and Individual Differences, 18(4), 402-417.

Mardikaningsih, R. (2014). Metode Pembelajaran dan Variasi Penerapannya, Jurnal Ilmiah Manajemen Pendidikan Indonesia, 1(1), 43-54.

Mardikaningsih, R., E.A. Sinambela & V. Mendrika. (2022). Peran Motivasi Kerja, Kompetensi, dan Profesionalisme Terhadap Kinerja Guru. Ekonomi, Keuangan, Investasi dan Syariah (EKUITAS) 4 (1), 250-255.

Pribadi, B. (2017). Media Dan Teknologi Dalam Pembelajaran. Kencana, Jakarta.

Pugsley, L. & S. Acar. (2020). Supporting Creativity or Conformity? Influence of Home Environment and Parental Factors on the Value of Children's Creativity Characteristics. The Journal of Creative Behavior, 54(3), 598-609.

Purwanti, S., T. Palambeta, D. Darmawan, S. Arifin. (2014). Hubungan Metode Pembelajaran dan Motivasi Belajar Siswa, Jurnal Ilmu Pendidikan, 8(1), 37-46.

Runco, M. A., & G. J. Jaeger. (2012). The Standard Definition of Creativity. Creativity Research Journal, 24(1), 92-96.
Sawyer, R. K. (2011). Explaining Creativity: The Science of Human Innovation. Oxford University Press.
Sutarjo, M., D. Darmawan & Y. I. Sari. (2007). Evaluasi Pendidikan. Spektrum Nusa Press, Jakarta.
Wahyudi, I., D. Darmawan & R. Mardikaningsih. (2018). Model Pembelajaran di Sekolah, IntiPresindo Pustaka, Bandung.
Wijaya, A. (2017). Psikologi Perkembangan Anak dan Remaja. PT. Remaja Rosdakarya, Bandung.
Yanti, Y., & D. Darmawan. (2016). Pengaruh Kompetensi Guru dan Lingkungan Belajar terhadap Hasil Belajar melalui Motivasi Belajar Sebagai Variabel Intervening, Jurnal Ilmiah Manajemen Pendidikan Indonesia, 2(4), 269-286.