

## Improving Kinesthetic Intelligence through Animated Films in Children Aged 5-6 Years

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### Abstract

This research aims to enhance the kinesthetic intelligence of 5-6-year-old children attending Aisyiyah Macanan Kindergarten in the Kebakkramat District through animated films tailored for their age group. Employing a descriptive qualitative approach, data were collected from 18 children in Group B through interviews, observations, and documentation. Data analysis was conducted using the triangulation technique. The findings indicate that teachers are well-versed in understanding children's kinesthetic intelligence, its characteristics, and the efficacy of using animated films for learning. Teachers have implemented varied learning media to prevent monotony and have ensured adequate facilities for presenting animated films. Children demonstrated proficiency in imitating movements depicted in the animated film "Nusa and Rara: Let's Exercise," contributing to gross motor skills such as hand-foot-eye coordination, body balance, strength, flexibility, and speed, all appropriate for their age group. Enhanced kinesthetic intelligence offers children increased opportunities for play, exploration, and social interaction with peers and their environment.

### Introduction Section

Education is crucial in shaping individuals and preparing them for various societal roles. It encompasses a range of educational experiences to equip individuals with the necessary skills and knowledge to contribute to their growth and that of their community and nation. Early childhood education, particularly for children aged 0-6 years, holds significant importance as it lays the foundation for their development and future learning. During these formative years, children are highly receptive to the environment around them, and the education they receive influences their lifelong experiences and memories. Early childhood education focuses on nurturing physical, cognitive, socio-emotional, and linguistic development, tailored to young children's unique needs and developmental stages.

The innate potential possessed by children, often referred to as natural potential, encompasses various aspects such as talent, intelligence, and inherent abilities. It is the responsibility of caregivers, including parents and educators, to provide appropriate stimulation and support to help children realize their full potential. This involves recognizing and nurturing children's social-emotional, linguistic, physical-motor, and moral development through targeted educational experiences. By providing the right stimulation and stimuli tailored to the child's developmental stage and individual needs, caregivers can optimize their development and ensure they progress according to age and capabilities.

Early childhood children are active creatures and adaptive explorers who try to control their environment. Moreover, this can be seen in the typical behavior of early childhood children, who are very active in their daily lives. Children prefer challenging things without realizing it can be a stimulus and stimulation so that the child can explore himself with his behavior and the surrounding environment both at and outside of school. Children tend to move actively and are adaptive explorers, which will develop a sense that they want to know about their environment. Childhood is the beginning of humans as humans, so early childhood is the forerunner to the formation of human beings with good morals and noble character, as well as a place for good and bad traits, which will slowly but become apparent as the child gets older to realize who he/she will be in the future. Good kinesthetic intelligence will give children more opportunities to play, explore, and interact with peers and the children's play environment inside and outside school. (Indar Rahman & Khadijah, 2023). Anak dengan kecerdasan kinestetik akan dapat mengungkapkan and position themselves well and appropriately. This can improve effective communication skills with children of the same age. Children who have high kinesthetic intelligence will prefer physical activity. Motor development is divided into two parts: fine motor and gross motor skills (Tadkiroatun Musfiroh, 2014). Gross motor development is the main capital because almost all of a child's time is spent moving using most of their body muscles. These movements include walking, running, climbing, jumping, throwing, kicking, and various other activities that use large muscles (Rahyubi, 2012)

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Kinesthetic intelligence encompasses the ability to express ideas and emotions through whole-body movements and the skillful manipulation of hands to create or modify objects. This form of intelligence encompasses a range of physical attributes, including coordination, balance, dexterity, strength, flexibility, speed, accuracy, and sensitivity to stimuli such as touch and texture (Utami, 2020).

Play is a powerful tool for stimulating kinesthetic intelligence and nurturing children's talents and interests. Learning through play is emphasized in early childhood education, recognizing that play is integral to children's natural learning processes. It allows children to enjoy learning activities joyfully while teachers facilitate and guide their exploration (Utami, 2020). Sensory knowledge is intricately linked to various aspects of childhood development, including physical coordination, language development, socio-emotional skills, religious and moral values, and cognitive and creative abilities. In the context of children's sensory intelligence, it extends beyond gross motor skills, encompassing linguistic and social-emotional dimensions. However, the focus remains on enhancing children's gross motor skills through fundamental movements such as running, climbing, jumping, throwing, and catching (Rahayah et al., n.d.).

According to the Minister of Education and Culture of the Republic of Indonesia Regulation No. 137 of 2013, the prescribed standard of developmental achievement for children aged 5-6 encompasses various aspects of physical motor development. This includes the execution of coordinated body movements to enhance flexibility, balance, and agility, as well as the synchronization of hand-eye movements to replicate actions such as gymnastics and dancing, engagement in physical games adhering to set rules, proficiency in bilateral hand usage, and performance of personal hygiene tasks.

The term "animation" derives from the Latin word "anima," signifying soul, life, or spirit, and fundamentally denotes the process of imbuing life. It entails the animation of inert objects or a sequence of images arranged in succession, commonly called frames (Alfatra et al., 2019). Character animation operates within three dimensions, involving hierarchical movements encompassing the mouth, eyes, and face, alongside dynamic challenges that impart motion yet amalgamate to create a cohesive whole, often employing bitmap animation techniques (Alfatra et al., 2019). Various animation media exist, including cell animation, frame animation, sprite animation, track animation, morphing animation, and digital animation. In essence, animated films constitute a method within audio-visual production wherein the timing of sequential image movements imparts the illusion of life or motion to depicted characters (Miftania, 2011).

The animated film aims to enhance children's comprehension of the growth process. It is anticipated that educators can select innovative educational media for fostering sensory abilities in accordance with children's age and developmental stage (Puger & Jember, n.d.). Observations have identified certain issues regarding children's physical motor learning, particularly focusing on gross motor skills among 5 to 6-year-olds at Aisyiyah Macanan Kindergarten, located in the Kebakkramat District of Karanganyar Regency. These issues revolve around children's limited engagement in physical activities at the kindergarten and their struggle with hand-foot coordination to replicate gymnastic and dance movements (Amelia et al., n.d.; Febiharsa & Magister Pend Kejuruan PPs UNNES, n.d.; Komang Ayu & Surya Manuaba, 2021; Putri et al., 2021; Wardhani et al., 2020).

Such challenges stem from various internal and external factors to the child. Internally, factors may originate from the child's disposition, which tends towards passivity. Conversely, external factors emanating from the home or school environment also play a significant role. In the home environment, children may often be left to their own devices, with parents granting free rein to their activities, fostering a *laissez-faire* attitude. Conversely, educators may resort to conventional teaching methods using monotonous instructional media within the school environment, leading to boredom among children. Through engaging, dynamic, and accessible media, it is hoped that children will more readily absorb the emotional cues conveyed by educators.

The rapid advancement of science and technology has become a catalyst for profound and swift transformations in human life on a global scale. Technological progress has transcended national boundaries, erasing barriers between nations (Ardiana, 2023). Given the context above, it can be deduced that contemporary educators cannot overlook the potential of IT-based learning media, particularly animated films, as educational tools for young learners (Ardiana, 2023). As an alternative approach, this study aims to explore using animated films as learning media to enhance sensory intelligence among 5-6-year-old children at Aisyiyah Macanan Kindergarten, situated in the Kebakkramat District of Karanganyar Regency. It is anticipated that the findings of this research will offer valuable insights into the efficacy of utilizing animated films as educational resources to enhance sensory intelligence among children in this age group. Additionally, this study seeks to provide recommendations to educators regarding the importance of integrating diverse learning media into early childhood education programs.

## Methodology

Qualitative research methodology, rooted in the postpositivist philosophy, is employed to investigate the characteristics of natural phenomena, diverging from experimental approaches. In this methodology, the researcher is the primary instrument, employing purposive and snowball sampling techniques to select data sources. Triangulation, a combination of data collection methods, is often utilised. Data analysis is predominantly inductive and qualitative, focusing on deriving meaning rather than seeking generalizations. Descriptive, in essence, qualitative research does not aim to validate or invalidate hypotheses; instead, it presents observations in narrative form, which may not always be quantifiable or

expressed in numerical terms (Subana, 2011). This approach underscores the researcher's role as a tool within the research process and entails a blend of quantitative and qualitative data collection techniques (Bab10\_Penelitian Kualitatif\_3, n.d.).

This study employs a distinct qualitative approach, conducted at Aisyiyah Macanan Kindergarten, located in the Kebakkramat District of Karanganyar Regency, focusing on children aged 5-6 years. The research methodology involves interviews, observation, and documentation as data collection techniques. Information will be gathered through interviews with educators, as well as through documentation and observations of children in the 5-6 age group, as this pivotal developmental stage necessitates the enhancement of sensory intelligence to facilitate a smooth transition to higher levels of education, ensuring readiness and capability to engage with advanced curriculum content. Data analysis will be conducted using a triangulation approach, synthesizing insights from multiple data sources. The study aims to assess the efficacy of animated films to enhance children's sensory intelligence, as evidenced by their achievement in meeting the standard developmental milestones for children aged 5-6 years.

**Table 1.** Title of the table above the table.

No	Child's name	Development indicators			
		Perform body movements in a coordinated manner to train flexibility, balance and agility	Coordinating the movements of the eyes, hands, feet, and head in imitating dancing or gymnastics	Skills in using the right and left hand	Practice personal hygiene
1	El	BSH	BSH	BSH	BSB
2	Kenan	BSH	BSH	BSH	BSH
3	Clara	BSH	BSH	BSH	BSH
4	Abigail	BSH	BSH	BSH	BSH
5	Panji	BSH	BSH	BSH	BSH
6	Bagas	BSH	BSH	BSH	BSH
7	Ama	BSH	BSH	BSH	BSB
8	Kenan	BSH	BSH	BSH	BSH
9	Azka	BSH	BSH	BSH	BSH
10	adipati	BSH	BSH	BSH	BSH

Remarks:

BB : undeveloped

BSH : developing according to expectations

BSB : Developing very well

## Results and Discussion

From the perspective of sensory intelligence, children demonstrate coordinated body movements, eye-hand coordination, dexterity in using both hands and maintaining personal hygiene. It can be inferred that children aged 5-6 years at Aisyiyah Macanan Kindergarten can imitate various movements depicted in the animated film "Nusa and Rara: Let's Game." This indicates a positive outcome in enhancing their sensory intelligence. While each child's sensory intelligence manifests differently, certain common traits may be observed among those with heightened sensory intelligence. These may include a propensity for physical activity, exceptional motor skills, proficiency in sports and dance, heightened awareness of body movements, and quick boredom with static activities.

In this section, the research outcomes conducted at Aisyiyah Macanan Kindergarten in the Kebakkramat District, Karanganyar Regency, on the kinesthetic intelligence of children aged 5-6 years through the utilization of the animated film "Nusa and Rara: Let's Game," will be discussed. The findings indicate that teachers comprehensively understand children's kinesthetic intelligence, including its defining characteristics and the efficacy of animated films as a learning tool. Teachers have implemented varied and engaging instructional media, such as laptops, LCD projectors, and speakers, to present the animated film "Nusa and Rara: Let's Game." Additionally, teachers have observed children's ability to imitate movements depicted in the film, thereby facilitating the development of kinesthetic intelligence encompassing hand-eye coordination, body balance, strength, flexibility, and speed.

Educators at Aisyiyah Macanan Kindergarten possess a deep understanding of the sensory intelligence of children aged 5-6 years, exemplified by Mrs. Widayanti, the Class B3 teacher. According to Mrs. Widayanti, sensation intelligence encompasses physical and mental aspects, facilitating controlled movements to achieve desired outcomes. The teacher is well-versed in the characteristics of sensory intelligence, such as children's ability to execute coordinated body movements to enhance flexibility, balance, strength, and speed. Moreover, Mrs. Widayanti adeptly utilizes animated film media, particularly the episodes of "Nusa and Rara: Let's Sports," as a captivating learning resource for children, fostering an environment that is engaging, dynamic, and creative.

Learning media is a crucial tool for conveying messages and stimulating students' thoughts, feelings, attention, and will (Guslinda et al., 2018). In this context, Mrs. Widayanti employs non-repetitive learning media, including computers

and speakers, to showcase animated films, facilitating children's comprehension and engagement with the content. As children imitate movements depicted in animated films, they concurrently develop various aspects of sensory intelligence, including hand-eye coordination, body balance, strength, flexibility, and speed. This active involvement in movement following the actions portrayed in animated films underscores the effectiveness of such media in enhancing children's sensory intelligence. Research conducted on the enhancement of sensory intelligence among Class B children indicates significant improvement across nearly all participants. It is important to note that intelligence is not confined to a singular dimension measurable by standardized tests; rather, it comprises diverse forms of intelligence, each individual possessing unique strengths (Dosen et al., n.d.). Gifted individuals exhibit pronounced abilities in specific areas of intelligence (Ardiana, 2022). Integrating diverse learning media is indispensable to stimulating early childhood development comprehensively. Early childhood learning predominantly occurs through play and involves using various learning media, including tangible, auditory, visual, environmental, and audio-visual mediums, ensuring effective learning experiences for children (Dewi et al., n.d.).

## Conclusions and Recommendations

From the preceding discussion, it can be inferred that sensory intelligence involves utilizing body movements and physical actions to comprehend and engage with our surroundings. Children with heightened sensory intelligence typically exhibit well-coordinated movements, excellent dexterity, and a heightened sensitivity to movement and touch. Educators comprehensively understand the concept of sensory intelligence and the associated traits commonly observed in children aged 5-6 years. Moreover, educators have demonstrated their commitment to fostering an engaging learning environment at Aisyiyah Macanan Kindergarten by incorporating innovative learning media and appropriate infrastructure, thus ensuring that children remain actively engaged in the learning process and are not subjected to monotonous instructional materials. The roles and responsibilities of educators encompass various functions, including serving as observers, facilitators, organizers, responders, and role models. Consequently, the pivotal role of educators is indispensable in the holistic development of young learners, particularly those aged 5-6 years, given the rapid pace of cognitive development during this crucial stage (Rochayadi, 2014).

## References

- Alfatra, F. F., Suminto, M., & Pareanom, P. (2019). Penciptaan Film Animasi “Chase!” Dengan Teknik “Digital Drawing.” *Journal of Animation & Games Studies*, 5(1).
- Amelia, L., Hayati, F., & STKIP Bina Bangsa Getsempena Banda Aceh, P. (n.d.). 2018 | Seminar Nasional Pendidikan Dasar 256.
- Ardiana, R. (2022). Pembelajaran Berbasis Kecerdasan Majemuk dalam Pendidikan Anak Usia Dini. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 1–12. <https://doi.org/10.37985/murhum.v3i1.65>
- Ardiana, R. (2023). Implementasi Media Berbasis TIK untuk Pembelajaran Anak Usia Dini. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 4(1), 103–111. <https://doi.org/10.37985/murhum.v4i1.117>
- Arifudin, O. (Opan ), Hasbi, I. (Imanuddin ), Setiawati, E. (Eka ), Ma’sumah, M. (Ma’sumah), Supeningsih, S. (Supeningsih), Lestarinigrum, A. (Anik ), Suyatno, A. (Agus ), Umiyati, U. (Umiyati), Fitriana, F. (Fitriana ), Puspita, Y. (Yenda ), Catur, S. A. N. (Agung ), Ma’arif, M. (Minhatul ), Harianti, R. (Rini ), & Hardoyo, S. N. A. (Nur ). (2021). *Konsep Pendidikan Anak Usia Dini*. Widina Bhakti Persada Bandung.
- BAB II LANDASAN TEORI 2.1 Film Animasi. (n.d.).
- Bab10 Penelitian Kualitatif 3. (n.d.).
- Dewi, K., Studi, P., Islam, P., Usia, A., Fakultas, D., Tarbiyah, I., Keguruan, D., Raden, U., & Palembang, F. (n.d.). *PENTINGNYA MEDIA PEMBELAJARAN UNTUK ANAK USIA DINI*.
- Dosen, A., Stain, J. T., & Palu, D. (n.d.). *POTENSI DAN KEKUATAN KECERDASAN PADA MANUSIA (IQ, EQ, SQ) DAN KAITANNYA DENGAN WAHYU*.
- Febiharsa, D., & Magister Pend Kejuruan PPs UNNES, M. (n.d.). *Pengembangan Media Pembelajaran Interaktif 3 Dimensi untuk Pembelajaran Materi Pengenalan Lingkungan Pada Anak Usia Dini di Indonesia*.
- Guslinda, S., Pd, M., Pd, R., & Kurnia, M. E. (2018). *MEDIA PEMBELAJARAN ANAK USIA DINI*.
- Indar Rahman, K., & Khadjjah, K. (2023). Optimalisasi Perkembangan Fisik Motorik Kasar pada Anak Usia Dini. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 4(1), 429–437. <https://doi.org/10.37985/murhum.v4i1.238>
- Komang Ayu, N., & Surya Manuaba, I. B. (2021). Media Pembelajaran Zoofabeth Menggunakan Multimedia Interaktif untuk Perkembangan Kognitif Anak Usia Dini. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 9(2), 194–201. <https://ejournal.undiksha.ac.id/index.php/JJPAUD/index>
- Pe, A. R., & Di Kan, N. (n.d.). *A N A K*.
- Puger, K., & Jember, K. (n.d.). *PENGARUH PENGGUNAAN MEDIA SOSIAL TIK TOK TERHADAP KECERDASAN KINESTETIK ANAK USIA 5-6 TAHUN DI TK DEWI MASYITHOH 67 DIGITAL REPOSITORY UNIVERSITAS JEMBER DIGITAL REPOSITORY UNIVERSITAS JEMBER*.

- Putri, R., Murtono, M., & Ulya, H. (2021). Nilai-Nilai Pendidikan Karakter Film Animasi Upin dan Ipin. *Jurnal Educatio FKIP UNMA*, 7(3), 1253–1263. <https://doi.org/10.31949/educatio.v7i3.1401>
- Rahayah, S., Roseni, A., Arbaiyah, A., Noralhuda, N., & Mohamed, N. (n.d.). Faktor Kecerdasan Pelbagai dalam Pembentukan Profil Remaja. <http://mjli.uum.edu.my>
- Sofia dan Nia Fatmawati FKIP Universitas Lampung, A., & Soemantri Brojonegoro No, J. (n.d.). PEMBELAJARAN MOTORIK KASAR MELALUI PERMAINAN SIRKUIT WARNA.
- Utami, F. (2020). Pengaruh Metode Pembelajaran Outing Class terhadap Kecerdasan Naturalis Anak Usia 5-6 Tahun. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 4(2), 551. <https://doi.org/10.31004/obsesi.v4i2.314>
- Wardhani, D. K., Susilorini, M. R., Angghita, L. J., & Ismail, A. (2020). Edukasi Pencegahan Penularan COVID-19 Pada Anak Usia Dini Melalui Media Pembelajaran Audio Visual. *Jurnal Abdidas*, 1(3), 131–136. <https://doi.org/10.31004/abdidas.v1i3.33>