



Digital-Based Islamic Religious Education Learning in Enhancing Cognitive Development on Children

Mutiara Salsabila¹, Mavianti²

Department of Islamic Education, Universitas Muhammadiyah Sumatera Utara
e-mail: mutiarasalsabila2804@gmail.com, mavianti@umsu.ac.id

Abstrak

Penelitian ini dilaksanakan bertujuan untuk mengetahui peran pembelajaran berbasis digital dalam meningkatkan perkembangan kognitif anak di Daycare Tadika Permata Al-farabi, Selangor, Malaysia setelah menggunakan pembelajaran berbasis digital. Metode yang digunakan dalam penelitian ini adalah metode kualitatif yang bersifat deskriptif dengan subjek penelitian siswa umur 5-6 tahun di Daycare Tadika Permata Al-farabi, Selangor, Malaysia sebanyak 25 siswa. Teknik pengumpulan data dalam penelitian ini adalah teknik observasi, wawancara, dan dokumentasi. Hasil penelitian ini menunjukkan bahwa terdapat 18 siswa dari 25 siswa yang sulit mengingat materi Pendidikan agama islam khususnya hafalan surah pendek, bacaan sholat fardhu dan cerita nabi. Faktor yang menyebabkan anak sulit mengingat dikarenakan model pembelajaran yang masih menggunakan cara tradisional. Maka peneliti menawarkan pembelajaran berbasis digital seperti media audiovisual dan animasi untuk menstimulus siswa dalam berfikir kreatif, imajinatif, serta meningkatkan kemampuan mengingat siswa, dengan ini kemampuan kognitif anak meningkat berdasarkan yang ia pelajari dari yang ia lihat dan ia dengar.

Kata Kunci: *Pendidikan Agama Islam, Pembelajaran Digital, Perkembangan Kognitif.*

Abstract

The research was carried out aimed for knowing the role of digital-based learning in improving a child's cognitive development at Daycare Tadika Permata Al-farabi, Selangor, Malaysia after used digital-based learning. The method used in this research is descriptive qualitative with the research subject of 5-6 years old students at Daycare Tadika Permata Al-farabi, Selangor, Malaysia with 25 students. The techniques in this study were observation, interviews, and documentation. The results of this research showed that there are 18 students of 25 who have difficulty remembering Islamic religious subject especially memorized surah, prayer, and the prophet's stories. The factor that cause children remember being difficult because still using traditional learning model. So the researcher proffer digital-based learning as audiovisual and animation for stimulus students in creative thinking, imaginative, and enhanced ability to remember students, with these children's cognitive abilities increasing based on what they learn form what they see and hear.

Keywords: *Islamic Education, Digital-based Learning, Cognitive Development.*

INTRODUCTION

Islamic education is one of the most important components of science to educating and making good character to the next moeslim generation. Learning Islamic education is not just about hearing and watching teachers explain the learning materials but students must have role in learning so it could be a good study experience for them. At this time technology has advanced, and people was often used technology for daily activity, studying, working and so on. Even today technology is one of the new learning models that is digital-based learning. Digital-based learning could be increase the quality of education because it is so technologically relevant. Using educational technology people could exposing knowledge and providing quality of education.

Islahuddin in his research claims that when teachers explain about the materials Islamic education, teachers still using method of speech with help the whiteboard and a simple picture. The average value of elementary school Islamic education subjects in 70% below KKM. In the field of Islamic religious education the teachers still forbidden to use technology as a learning media. In the research did by Mahfudz, K, and Tanjung (2018) claims that it was viewed as less attractive that it caused a problem in student's understanding because they rarely used the media. This certainly is the urgency of the current Islamic religious education, and impact to cognitive development on children (Panjaitan et al., 2020).

The basic framework of children's early education curriculum provides that children are distinct, unique, and self-styled individuals. The golden age of a child stimulates all aspects of development. Early childhood development had a profound impact on a child's life. During this time brain growth is experiencing considerable growth. Therefore, promoting Islamic values on this time would be an excellent way to develop the ever-religious mind-set of children.

Maintaining cognitive development on children is very important because it is relate to the child's mindset. In dictionary of psychology, development is the progressive change that occur within the human and other organism. Subsequently, definition of cognition according dictionary of psychology is introduction, awareness, and understanding. In article with the title Jeans Piegat's Cognitive Development Theory the writer conclude that cognitive development is stages of change that occur within the human life to understand, process information, solve problems, and know somethings. With knowing how much important this cognitive development then giving good teaching to students is also very important, both in terms of learning methods, learning media, and learning models (Zambrano Leal, 2012).

In children's cognitive growth and development, Islamic education should play a major part in that. Islamic mindset who embedded early on would forming the personalities of the good and intelligent moeslim generation. Based on problems the writer has found that difficulty children on remembering the materials Islamic education subjects, and the use of learning models has not yet been using technology so disrupt the child's cognitive development.

We know that method and strategy can not escape from education learning. Therefore, technology comes in as a medium that helps the learning process adjust to the methods and strategies used. According to elsa fara in her research, there are four types of technology in education whether digital or not, other: 1. Visual technology which that media include picture and table. 2. Technology used audio such as radio, voice recorder, and so on. 3. Display screen view such as slide power point, and film. 4. Digital devices that include all elements, such as television (Meida, 2022).

Digital-based learning is the solution of the problem. Digital-based learning is a new learning models in the 21st century of learning that uses technology with learning media such as audiovisual and animation. Digital learning media displays greatly support active, creative, effective and fun learning that can enhancing cognitive development on children.

METHODOLOGY

The method of this research uses qualitative descriptive research method. Qualitative research is descriptive because researchers want to monitor directly facts field conditions and as it gets it through writing this research. According to sugiyono in his book that the theory used in the qualitative research of theory that must be owned by qualitative researchers is much more because it should be adapted to the growing phenomenon of the field (Sugiyono, 2021). So researchers use jean piaget's theory on the cognitive development of children and the theories derived from old research as research guides in writing this study.

The research was conducted at Daycare, Tadika Permata Al-farabi, Selangor, Malaysia. The object of this research is a child's cognitive development such as memory, creative, and imaginative ability by using digital based learning especially memorized surah, prayer, and the prophet's story. The informant in this research is a teacher at Daycare, Tadika Permata Al-farabi, Selangor, Malaysia.

Data collection techniques in this research use interviews, observation, and documentation. First researcher surveying location, then interviewing teacher at Daycare Tadika Permata Al-farabi to find out the problems with the object research. Researcher also use documentation to strengthen the study.

RESULT AND DISCUSSION

The researcher was carry out a descriptive qualitative data analysis with students of 5-6 years old at Daycare Tadika Permata Al-farabi, Selangor, Malaysia. The purpose of this research for knowing the role of digital-based learning in improving a child's cognitive development at Daycare Tadika Permata Al-farabi, Selangor, Malaysia especially for student's memory in subjects memorized surah, prayer, and the prophet's story. The data obtained in the study came from observation and interview with the teachers at Daycare Tadika Permata Al-farabi, Selangor, Malaysia, and reinforced by documentation. Data

the results of this study were analyzed based on qualitative research was descriptive.

Data analysis in this study using data analysis of observation, interview, and documentation by using data collection steps, data reduction, and conclusion. Further discussions of data analysis results, as follows :

1. Children's Cognitive Development

In children of an age early age, brain development can be fully achieved if it is supported by an environment that can properly stimulate all the elements of development. The cognitive development, competence and learning aspects that are expected in children are children capable and have the ability to think logically, to think critically, to give reasons, to solve problems and to find causal link in solving the problems at hand (Yamin & Sanan, 2010). The cognitive meanings is as a vast knowledge of the reason, the creativity, or power of the capacity, language skills and memory. However, with the different characteristics of children so the core-efficiency of each child is also different.

In Piaget's theory, more and more information do not make children's mind more advanced, the quality of its progress is different. The cognitive development stages are based on the sensory motor stages at 0-12 years of age, pre-operational stages at 2-7 years of age, concrete operations at 7-11 years of ages, and formal operational stages at 11-15 years of age. According to Jean Piaget's theory, the research object of researcher at a 5-6 years old that at the age of the child entering the pre-operational stage. This stage of more simbiolis thinking is egocentric and intuitive. The development of expending language and the appearance of play are examples of simbiolis function. Animism is also a characteristic of pre-operasional thought, which the child has the belief the the ingredient object can move (Mu'min, 2013). Based on the abilities of the child in this stage, teachers should be able to adjust appropite models and learning media to the child.

In research analysis of the problem of early childhood cognitive development children written by Yesi Novitasari that an estimated 39% of 4-6 years old children have cognitive development children. Then, 37% of children are at huge criteria, 17% of children have small problems with cognitive development, and only 7% of children have not cognitive development problems (Novitasari, 2018).

The understanding of child cognitive development should be crucial as a guide in educating and teaching. Teaching learning activities will certainly be maximum if the material they teach can be understood by students. It can happen when the level of material hardship measures up to the level of students' abilities. So that the learning goal can be accomplished. An understanding of child's cognitive development has also been a guideline for teachers in determining the appropite model, method, and learning media. Cognitive domains are domains related to thought-oriented learning goals (Bujuri, 2018). So that children can easily understand the material being taught using appropite media and learning models.

The facts that occur in the field are still many teachers who use old methods and not supported by the learning models followed by the current development of the present. Still very rare teachers use digital-based learning models as well as learning media that can support digital learning.

2. Student's Difficulties On Islamic Education Subjects

The difficulties students experience in Islamic religious education subjects especially in memorizing short surah materials, prayers, and the prophet's story are the student's inability to understand the material explanations given by a teachers. Student of Daycare Tadika Permata Al-farabi which 5-6 years old have 25 students, there are 18 students who having trouble remembering the material of Islamic education. It is known through the results of interviews with teachers at Daycare Tadika Permata Al-farabi, Selangor Malaysia. As for some difficult materials followed by students, as follows :

Based on research students have difficulty remembering short surah memorized. It is because of the learning method used only the talaqqi method without other supporting media or models learning. The talaqqi method is the method of learning the Qur'an that is face-to-face or directly between teachers and students. Larning method of Talaqqi in practice is face to face directly with his own professionals and some diciples, so that when someone make a mistake in the teaching of tahfidz, teacher directly configuratively and correct their mistake (Alanshari et al., 2022). Talaqqi's method is good enough to teach tahfidz to children, but it would be better to have an interesting use of media and learnings models, such as digitally based learning models with audiovisual and animated media. So it can trigger a child's cognitive development in remembering something and imaginative.

The same problem with student's difficulty in remembering prayer reading materials, and the prophet's story. Due to the limited method used by teacher. Teachers only use the discourse method in teaching the materials. The use of digital-based learning models with audiovisual media and animation is very helpful in 3 materials in the subjects of Islamic education.

3. Digital-Based Learning as a solution

Educators play an important role in effective basic learning planning by using digital media to support learning and to achieve the learning goal of helping to optimize the growth and development of young children, so that young children can fulfill future development assignments. As the planning director, the educator will need to determine digital media that will be used according to the student's needs. The learning media selected by teachers either to assist the interaction between student and teacher, or digital media as a learning facilitator for students. Like gaming apps, video shows, youtube, and so on. Digital technologies like digital media production can certainly help children's creativity skills (Nurjanah & Mukarromah, 2021).

Based on the problems that the researchers have exposed, then the researcher offers digital-based learning as a solution from the problem. Digital-based learning can increase cognitive development in children. As supporters of

this research, researcher also describe the results of previous studies. According to Anis Khaminah and Normah in their research that the deployment of digital-based learning media can be planned and developed by teachers in developing cognitive mining on children. In their research calims that audiovisual learning media such as digital book pop-up get 98% qualifying is a very valid from media members, and obtaining 87,5% of the material member (Khamidah & Sholichah, 2022).

According to Iva Nur, Shellya, and Achmad Baharudin in their research about Peran Media Youtube Sebagai Media Optimalisasi Perkembangan Kognitif Pada Anak Usia dini youtube video stimulation can be used as a means of optimizing children's cognitive development. In that studies, children from all three subjects showed areas of cognitive development to imagination, language, curiosity and concentration. The most outstanding according to the results of that study is in language and imagination. The study also agreed with previous studies that audio-visual stimulation of videos can provide optimizing the development of colors knowledge more effectively in children's early years (Kiftiyah et al., 2017).

Based on previous research has become enough supporting in writing this study. Digital-based learning is the solution of the problems found based on the results of observations and interviews conducted by researchers at Daycare, Tadika Permata Al-farabi Selangor, Malaysia with subjects students 5-6 years old. The digital based learning models used by researcher in this study prefer audiovisual and animation media.

The digital based learning application of memorized surah through audiovisual media from youtube rico the series. Researcher use talaqqi's method of teaching disciple memorization, and it is supported by digital learning. Through these application, researcher can note the development on students. Students are much faster remembered with memorized audiovisual media from rico the series on youtube.

This learning model is quite effective in improving child's mind. The audiovisual and animation learning media found in youtube 'rico the series' is enough to provide stimulus to a child's development. They are more remember of the surah Al-qur'an which are also bounced in youtube rico the seires, adding more with animation from the video. In this lessons of prayer and the prophet's stories. Students are also much more understanding by audiovisual and animation media. Their imagination is much more able to catch each event in the prophet's story and better understand the prayer movement throught the video presented.

Digital learning especially the audiovisual and animated media provided by the researcher, making students more creative and imaginative. This can be researcher conclude based on research directly to leaners during the implementation of digital-based learning model. As evidenced by the activity of students in questioning the subject matter, and the understanding of students to the material taught is increasing enough after the use of digital-based learning.

The results of this study are consistent with previous studies. That a digital-based learning model is capable of developing children's cognitive development especially memory, creativity, and imaginative.

CONCLUSION

Cognitive development in children determines the degree of maturity in their children until they become adults. It is only right for teachers to give good learning experiences through appropriate learning models and learning media. In the present digitalization era, digital-based learning is very effective in improving cognitive development with those studied by researchers in the study, using audiovisual and animation media that can provide stimulus to a child's cognitive development. Children learn and remember materials more quickly through the pictures and sounds presented through the digital based learning video. The digital based learning models is helpful in improving cognitive development on children.

REFERENCE

- Alanshari, M. Z., Ikmal, H., Muflich, M. F., & Khasanah, S. U. (2022). Implementasi Metode Talaqqi Dalam Pembelajaran Tahfidzul Qur'an. *Jurnal Agama Sosiasl Dan Budaya*, 5 (3), 2599–2473. <http://ejournal.ikhac.ac.id/index.php/almada/index>
- Bujuri, D. A. (2018). Analisis perkembangan kognitif anak usia dasar dan implikasinya dalam kegiatan belajar mengajar. *LITERASI (Jurnal Ilmu Pendidikan)*. <https://ejournal.almaata.ac.id/index.php/LITERASI/article/view/720>
- Khamidah, A., & Sholichah, N. I. (2022). Digital Pop Up Learning Media for Early Childhood Cognitive Development. *Print) Indonesian Journal of Early Childhood Education Research*, 1(1), 11. <https://doi.org/10.31958/ijecer.v1i1.5833>
- Kiftiyah, I. N., Sagita, S., & Ashar, A. B. (2017). *Peran media youtube sebagai sarana optimalisasi perkembangan kognitif pada anak usia dini*. publikasiilmiah.ums.ac.id. <https://publikasiilmiah.ums.ac.id/xmlui/handle/11617/9276>
- Meida, E. F. (2022). Pendidikan Agama Islam Dalam Kerangka Kemajuan Teknologi Digital. *Jurnal Teknologi Pendidikan: Jurnal Penelitian Dan Pengembangan Pembelajaran*, 7(1), 95. <https://doi.org/10.33394/jtp.v7i1.4759>
- Mu'min, S. A. (2013). Teori Pengembangan Kognitif Jian Piaget. *Jurnal AL-Ta'dib*, 6(1), 89–99. <https://ejournal.iainkendari.ac.id>
- Novitasari, Y. (2018). Analisis Permasalahan "Perkembangan Kognitif Anak Usia Dini". *PAUD Lectura: Jurnal Pendidikan Anak Usia Dini*, 2(01), 82–90. <https://doi.org/10.31849/paudlectura.v2i01.2007>
- Nurjanah, N. E., & Mukarromah, T. T. (2021). Pembelajaran Berbasis Media Digital pada Anak Usia Dini di Era Revolusi Industri 4.0 : Studi Literatur. *Jurnal Ilmiah Potensia*, 6(1), 66–77.
- Panjaitan, N. Q., Yetti, E., & Nurani, Y. (2020). Pengaruh Media Pembelajaran Digital Animasi dan Kepercayaan Diri terhadap Hasil Belajar Pendidikan Agama Islam Anak. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 4(2), 588. <https://doi.org/10.31004/obsesi.v4i2.404>

- Sugiyono, P. D. (2021). *metode penelitian kuantitatif, kualitatif dan R&D* (M. Dr. Ir. Sutopo. S.Pd (ed.); kedua). penerbit ALFABETA.
- Yamin, H. M., & Sanan, J. S. (2010). *Panduan Pendidikan Anak Usia Dini. Jakarta: Gaung Persada (GP) Press Jakarta.*
- Zambrano Leal, A. (2012). Sociedad de control y profesión docente. Las imposturas de un discurso y la exigencia de una nueva realidad. *Antimicrobial Agents and Chemotherapy*, 95, 45–52. <https://doi.org/10.1017/CBO9781107415324.004>