

Analysis in Honoring The Power of Thought Using SOAG Game (Senang Otak Atik Gambar)

Anita Afrianingsih¹, Dina Amalia², Yushinta Eka Farida³

^{1,2,3} Universitas Islam Nahdlatul Ulama Jepara, Indonesia

DOI: 10.15294/ijeces.v12i1.67602

Submitted: 3/04/2023 Revised: 21/05/2023 Accepted: 3/06/2023

ABSTRACT

The purpose of the research to be carried out is to analyze the Android-based SOAG learning media, the planning process for making SOAG learning media and the use of SOAG media to hone children's thinking power. The research subjects were children aged 5-6 years of early childhood education Toddlers School, with a population sampling technique through non-probability sampling a total of 27 students. So that the sample is taken from the entire population. Data collection techniques from the implementation of this study used observation, interviews and documentation. The data analysis used is qualitative data analysis by referring to the concept of Miles and Huberman with an emphasis on data reduction, data presentation and drawing conclusions. The result of this research is that the process of implementing the SOAG game (Senang Otak Atik Gambar) can be carried out from planning, learning practice and evaluation. In the planning stage, the teacher must make the daily study plan more attractive. The learning practice stage uses the SOAG game (Senang Otak Atik Gambar), at this stage the teacher is able to convey the material in more detail, using different teaching styles and methods than usual. As the teacher explains with a visual learning style. The evaluation stage of the SOAG game (Senang Otak Atik Gambar) uses observations and interviews given to children and teachers in providing assessments. This evaluation is an important tool for teachers to determine the level of success of children in improving their cognitive abilities through the SOAG game (Senang Otak Atik Gambar). The conclusion of this study is that the SOAG game learning media (Senang Otak Atik Gambar) is very appropriate and effective to use to optimally hone children's high-level thinking power

Keywords: SOAG Game Application, Thinking, Early Childhood

Copyright (c) 2023 Anita Afrianingsih, et al

Corresponding Author:

Anita Afrianingsih

Universitas Islam Nahdlatul Ulama Jepara, Indonesia

Email: anita@unisnu.ac.id

1. INTRODUCTION

Electronic media at this time is very sophisticated and has spread widely in various circles of society, even from children, teenagers, and adults. Media commonly used such as smartphones based on android, ipad, tablet pc, and so on, the use of these media because it is light, fast, easier to use and also carried anywhere besides that there are various interesting application features and games that are not only as There are now many games or entertainment to hone thinking power and increase knowledge, especially for early childhood (Erri Wahyu Puspitarini, 2016). The current learning process must be able to see various opportunities for utilization digital technology, besides that early childhood also looks very familiar with use of technology, be it smartphones or computers (Roemintoyo, 2021). It can be said that someone is unknowingly introduced to technology by the surrounding environment. Thus, mobile media can be used to educate children by parents. This learning can be in the form of an introduction to literacy (Asmawati, 2021).

Educational game applications have succeeded in changing monotonous formal learning techniques into fun and more educative for early childhood, such as children can recognize and understand letters and numbers (Fithri, 2017). In general, according to (Sahriana, 2019), the use of gadgets has the following positive impacts: (1) expanding horizons and friendship networks, (2) facilitating the process of communicating with friends, and (3) training children's creativity.

Early childhood develops and grows through several stages, such as being interested in and curious about something called the "sensitive period" (Sujiono, 2012), in which children's interest is high in certain aspects of their environment. affect child development. With the development of Android-based games that are increasingly sophisticated and develop that can help improve aspects of growth and development in children, Android-based media are recognized as being able to create fun learning models for children. Learning media using games can actually be used wisely, such as games that function as edutainment media. namely media that combines elements of education with entertainment or commonly referred to as playing while learning (Dora, et al, 2015). Through cognitive android-based media children can develop from what children see and then children apply it in educational game-based media, cognitive ability is an important predictor of making a living (Lövdén, 2020).

According to the Regulation of the Minister of Education and Culture of the Republic of Indonesia number 20 of 2016, students must have an attitude of creativity, productivity, critical thinking, independence, cooperation, and communicativeness (Peremendikbud, 2016). In addition, according to (Lee, H., Parsons, D., Kwon, G., Kim, J., Petrova, K., Jeong, E., & Ryu, 2016) that critical thinking is one of the skills that children must have. Through cognitive android-based media, children can develop from what children see and then apply in educational game-based media, cognitive abilities are important predictors of life achievement (Lövdén et al., 2020) because cognitive change has very strong implications for everyday life. (American Psychiatric Association, 2013) through the intensity of cognitive learning in learning new things aims to develop children's knowledge (Afrianingsih, 2022).

The importance of using learning media for early childhood, based on the description above, the writing of the paper is interested in making an educational game to improve cognitive aspects in children through android-based applications. Referring to the circumstances in the surrounding environment that children are more interested and easy to grasp something of knowledge and understanding with what children find from using android, so that it is hoped that children will find it easier to improve cognitive aspects.

Early childhood education Toodies School is an early childhood education based on the establishment of the participation of the surrounding community which has increased the number of children aged 5-6 years, where they experience difficulties in terms of education, care and child care. However, with the persistence, patience, and creativity possessed by educators in carrying out learning with blended learning. Toodies School presents android-based learning media as a multiple choice teaching and learning support for its students.

The results of research from (Sinta Miftakhul Janah, 2021) stated that during the covid-19 pandemic, especially in this era of globalization, one way that can be used to introduce learning to children is through the media to recognize numbers for children by utilizing an Android-based educational game called Marbel Angka. He also expressed the opinion that Android educational games have advantages such as fostering curiosity and fostering children's creativity, as well as making the learning process interesting and fun. So that educators do not need extra energy to carry out learning activities, but educators here also have the same demands, namely being obliged to have four basic competencies as an educator. The four basic competencies include; pedagogical, professional, personal and social competencies. Therefore, educators do not just arbitrarily teach in regular classes.

Based on the description of the background and the study of research results, it shows that there is no similar research that reveals the analysis in sharpening early childhood's thinking power using the SOAG game. So that it can improve critical and creative thinking skills which will be able to give the best contribution to the development of cognitive development abilities for early childhood. The purpose of this research is to further analyze the implementation of the SOAG game itself so that it can become a medium to hone the thinking power of early childhood in the current era of globalization. It is hoped that the results of this study can be useful for all relevant parties such as being a reference or guide for ECE institutions around Jepara Regency and being able to become a reference in improving the thinking ability of early childhood to be more creative, critical and analytical.

2. METHOD

The type of research that the researcher uses in this research is field research. This study uses data sources obtained from the field (Antonius Bungaran Simanjuntak dan Soedjito Sosrodiharjo, 2014). The approach that researchers use in this study is a qualitative approach. The qualitative approach is a research procedure that produces descriptive data in the form of written or spoken words from the observed actors (Sugiyono, 2015). The data sources used in this study were 27 students at Toodies School PAUD aged 5-6 years. The sample was taken partly from a population of 15 students who implemented all their learning activities using android-based learning media through the SOAG game application (Senang Otak Atik Gambar) to hone the thinking power of early childhood at PAUD Toodies School Jepara. The data collection instrument in this study used a data collection tool or instrument in the form of coding or coding. Through this instrument, it is hoped that the respondent's response can be seen as a whole so that researchers can conduct an analysis in honing AUD's thinking power using the SOAG game (Senang Otak Atik Gambar). For more details, the steps in data analysis can be seen in Figure 1.

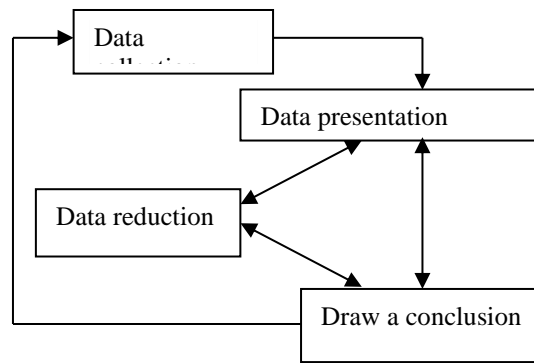


Figure 1. Steps in Data Analysis

Data collection techniques that will be used are observation, interviews, and documentation. The data analysis that will be used is qualitative data analysis by referring to the concept of Miles and Huberman with an emphasis on data reduction, data presentation, and drawing conclusions. Then an analysis was carried out by the author to draw conclusions as for the steps taken can be seen in Figure 2.

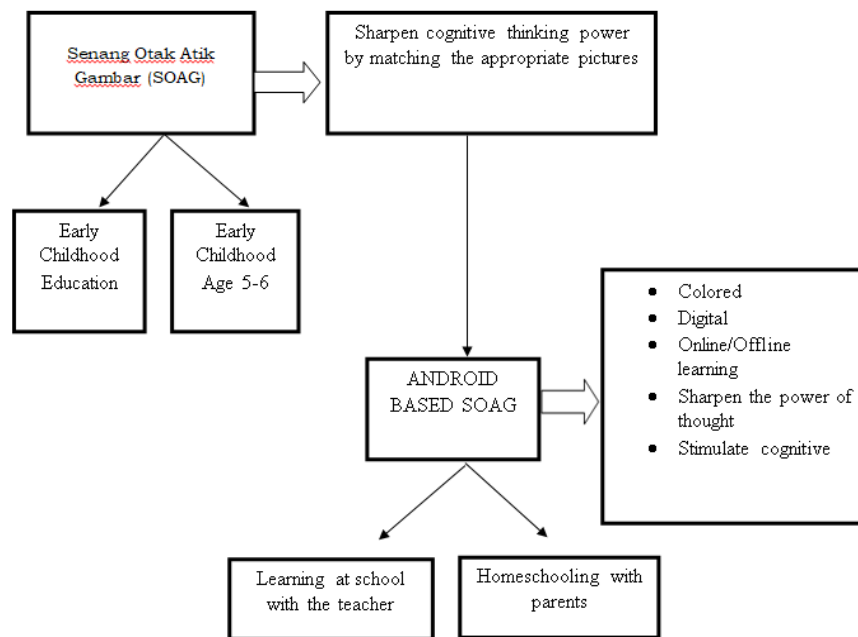


Figure 2. Steps of Analysis in Sharpening the Thinking Power of Early Childhood Using SOAG Games

Validity of data from informants, researchers use tools or data collection instruments in the form of coding or coding. The code that shows the informants in this study is as follows: 1) Table 1. Coding of observation techniques, 2) Table 2. Coding of interview techniques, 3) Table 3. Coding of documentation techniques.

Table 1. Observation Technique Subject Code

Focus	Sub. Focus	Process/ Activity/ Object	Code
Children's thinking ability on SOAG media	SOAG media implementation planning	• Teacher meeting	O KS 1
		• Teacher coaching	O KS 2
		• School vision, mission, and goals	O KS 3
		• School excellence and achievements	O KS 4
	SOAG media implementation	• List of students who use SOAG media	O KS 5
	SOAG media rating	• Administration	O KS 6
		• SOAG media learning	O KS 7

Table 2. Interview Technique Subject Code

Focus	Sub. Focus	Informan	Code
Children's thinking ability on SOAG media	SOAG media implementation planning	Principal teacher	W KS
		Teacher	W Gr
		Teacher A	W Gr Wkr
	SOAG media implementation literacy movement assessment school	Teacher B	WGrWKs
		Teacher C	W Gr WSP
		Teacher D	W Gr WH
		Student A	W S 1
	SOAG media rating	Student B	W S 2
		Student C	W S 3
		Student D	W S 4
		Student E	W S 5
		Student F	W S 6

Table 3. Documentation Engineering Subject Code

Focus	Sub. Focus	Document Type	Code
Ability to install images according to their partner	SOAG media implementation planning	• Minutes of meetings	Dok 1
		• Teacher Coaching Book	Dok 2
		• Photos and videos of SOAG activities	Dok 3
		• Photos and videos of school excellence and achievements	Dok 4
	SOAG media implementation	• Photos, videos SOAG	Dok 5
			Dok 6
	SOAG media rating	• Teacher administration	Dok 7
		• Photos, videos of online and offline SOAG activities	Dok 8
		• Supervision photos or videos learning	Dok 9
		• School Profile	Dok 10

3. RESULTS AND DISCUSSION

The result of this research is that the process of implementing the SOAG game (Senang Otak Atik Gambar) can be carried out from planning, learning practice, and evaluation. 1) In the planning stage, the teacher must make the daily study plan more attractive. 2) The learning practice stage, using the SOAG game (Senang Otak Atik Gambar), at this stage the teacher is able to convey the material in more detail, using different teaching styles and methods than usual, such as the teacher explaining with a visual learning style. 3) In the evaluation stage, the SOAG game (Senang Otak Atik Gambar) uses observations and interviews given to children and teachers in providing assessments. This evaluation is an important tool for teachers to determine the level of success of children in improving their cognitive abilities through the SOAG game (Senang Otak Atik Gambar).

The planning stage is carried out by the teacher through developing learning themes, then determining core competencies and basic competencies which include: 1) spiritual attitudes (KI-1), 2) social attitudes (KI-2), knowledge (KI-3), and 4) skills (KI-4) so that indicators of developmental achievement can be achieved through children being able to solve problems of everyday life by matching the appropriate images accordingly and children being able to think logically by recognizing various differences and classifying images according to their groups.

The learning practice stage is carried out by the teacher by greeting and greeting students, praying and singing together



Figure 3. Introducing and demonstrating SOAG learning media to students

Students observe the SOAG learning media well so that students can recognize and mention the pictures shown with SOAG learning media, the final result of students can practice SOAG learning media and match the pictures correctly



Figure 4. Students observe the SOAG learning media

The evaluation stage is carried out by the teacher using an observation format that is carried out in learning activities from the initial activity to the final activity using learning outcomes assessment instruments with observation and performance.

The results of data analysis show that the development of the Android-based SOAG (Senang Otak Atik Gambar) game which is increasingly sophisticated and developing can help to improve aspects of children's growth and development, because android-based media are considered to be able to provide fun learning for children, through SOAG (Senang Otak) educational games. Atik Gambar) improves cognitive aspects in children. Referring to the circumstances in the surrounding environment that children are more interested and easy to grasp something of knowledge and understanding with what children find from using android, so that it is hoped that children will find it easier to improve cognitive aspects.

The results of this study are supported by the results of previous studies such as (Ayuningrum, D., & Afif, 2021), with research results stating that android-based application media in the form of educational games can be used as a means to optimize cognitive development in children early age. In addition, the use of learning media through applications has proven successful in increasing children's abilities so that educators need to understand forms of learning technology, operating procedures, and how to interact with students during the learning process (Barovih, 2020). This research is also supported by the results of research by (Irsa, 2015) concluded that educational games for early childhood are proven to be able to increase children's learning interest with response results reaching 78.33% which are very good.

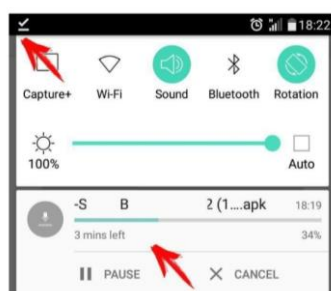
Based on the results of this study, research findings were presented and discussed which showed that analysis in sharpening AUD's thinking power using the SOAG game (Senang Otak Atik Gambar) was able to improve cognitive aspects in children. Supported by the results of previous relevant research according to (Putri, 2019) that the use of android-based learning multimedia can improve students' cognitive learning outcomes.

Based on the description above, the analysis of the novelty of this research is how to get education in playing games. Based on this, researchers have conducted research through educational games SOAG (Senang Otak Atik Gambar). This is to reveal the analysis in honing AUD's thinking power using the SOAG game (Senang Otak Atik Gambar), with this SOAG educational game (Senang Otak Atik Gambar) which is very appropriate and effective to use to hone children's high-level thinking power optimally so that children's cognitive abilities can be improved increase.

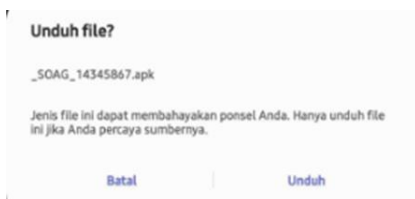
How to use SOAG learning media, namely:

- a. download the application via android at the link
https://files.appsgeyser.com/SOAG_14345867.apk?src=page
- b. Click the link above, then you will be directed to the appsgeyser.io link page

Download started...



- c. Next, you will be directed to a page like the one below, then click download



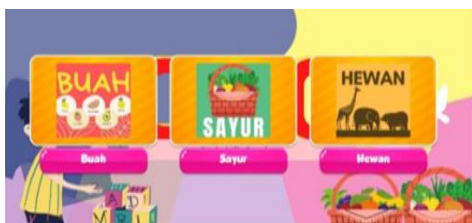
- d. Wait for the download to finish, after that the application is ready to use



- e. The first menu appears when opening the SOAG application



- f. Click play menu, then you will be directed to next menu with the following display



4. CONCLUSION

The SOAG game is proven to be very precise and effective to use to optimally hone high-level thinking skills for children aged 5-6 years at Toodies School Jepara ECE. Android-based learning media is always evolving from time to time. The development of the Android-based SOAG game which is increasingly sophisticated and developed can help to improve aspects of children's growth and development, because Android-based media is considered to be able to provide fun learning for children, through the SOAG educational game. appropriate and effectively used to hone children's high-level thinking power optimally. Referring to the circumstances in the surrounding environment that children are more interested and easy to grasp something of knowledge and understanding with what children find from using android, so that children's cognitive abilities can increase through SOAG games.

REFERENCES

- Afrianingsih, A. (2022). Pengaruh Evaluasi Dan Pembinaan Terhadap Perkembangan Kognitif Anak Usia Dini. *JURNAL TILA (Tarbiyah Islamiyah Lil Athfaal)*, 2(1), 154–161. <https://doi.org/10.56874/tila.v2i1.857>
- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorder Edition (DSM-V)*. American Psychiatric Publishing.
- Antonius Bungaran Simanjuntak dan Soedjito Sosrodiharjo. (2014). *Metode Penelitian Sosial*. Pustaka Obor.
- Asmawati, L. (2021). Peran Orang Tua dalam pemanfaatan teknologi digital pada anak usia dini. *Jurnal Obsesi*, 1(6), 82–96.
- Ayuningrum, D., & Afif, N. (2021). Aplikasi Berbasis Android dalam Meningkatkan Kognitif Anak Usia Dini. *Journal of Islamic Education*, 3(2), 169–184.
- Barovich, G. , S. E. P. A. , & N. (2020). Pemanfaatan Aplikasi Sebagai Media Bantu Edukasi Agama Islam Untuk Anak Usia Dini. *Jurnal Pengabdian Kepada Masyarakat*, 150–158.
- Dora et.al. (2015). Perancangan Aplikasi Game Edukasi Pembelajaran Anak Usia Dini Menggunakan Linear Congruent Method (Lcm) Berbasis Android. *Jurnal Informatika Global*, 6(1), 7–14.
- Erri Wahyu Puspitarini, D. W. P. A. P. N. (2016). Game Edukasi Berbasis Android Sebagai Media Pembelajaran Untuk Anak Usia Dini. *J I M P - Jurnal Informatika Merdeka Pasuruan*, 1(1), 46–58. <https://doi.org/10.37438/jimp.v1i1.7>
- Fithri, D. L. , & S. D. A. (2017). Analisa Dan Perancangan Game Edukasi Sebagai Motivasi Belajar Untuk Anak Usia Dini. *Jurnal Teknik Mesin, Elektro Dan Ilmu Komputer*, 1(8), 225–230.
- Irsa, D. , W. R. , & P. S. (2015). Perancangan Aplikasi Game Edukasi Pembelajaran Anak Usia Dini Menggunakan Linear Congruent Method (LCM) Berbasis Android. *Jurnal Informatika Global*, 7–14.
- Lee, H., Parsons, D., Kwon, G., Kim, J., Petrova, K., Jeong, E., & Ryu, H. (2016). Computers & Education Cooperation begins : Encouraging critical thinking skills through cooperative reciprocity using a mobile learning game. *Computer & Education*, 97–115.
- Lövdén, M., Fratiglioni, L., Glymour, M. M., Lindenberger, U., & Tucker-Drob, E. M. (2020). Education and cognitive functioning across the life span. *Psychological Science in the Public Interest*, 21(1), 6-41.
- Lövdén, M., Fratiglioni, L., Glymour, M. M., Lindenberger, U., & Tucker-Drob, E. M. (2020). Education and Cognitive Functioning Across the Life Span. *Psychological Science in the Public Interest*, 21(1), 6–41. <https://doi.org/10.1177/1529100620920576>
- Peremendikbud. (2016). Permendikbud RI No. 20. In *Permendikbud*.
- Putri, D. P. E. (2019). Penggunaan Media Pembelajaran Berbasis Android untuk Meningkatkan Hasil Belajar Kognitif Siswa. *Edugama: Jurnal Kependidikan Dan Sosial Keagamaan*, 5(2), 104–111. <https://doi.org/10.32923/edugama.v5i2.972>
- Roemintoyo, & B. M. K. (2021). Flipbook as Innovation of Digital Learning Media : Preparing Education for Facing and Facilitating 21st Century Learning. *Journal of Education Technology*, 5, 8–13.
- Sahriana, N. (2019). Pentingnya Peran Orang Tua dalam Penggunaan Gadget pada Anak Usia Dini. *JURNAL Smart PAUD*, 1(4), 60–66.
- Sinta Miftakhul Janah. (2021). Pemanfaatan Game Edukasi Marbel Angka Berbasis Android Sebagai Media Pengenalan. *Skripsi*.
- Sugiyono. (2015). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, kualitatif, dan R&d*. Alfabeta.
- Sujiono, Y. N. (2012). Konsep Dasar Pendidikan Anak Usia Dini. In *Kurikulum Pendidikan Anak Usia Dini*. Indeks.