# The Effect of the Educational Game Tools on Early Childhoods in the Kindergarten

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#### ABSTRACT

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Empirically, the educational game tools have significant benefits in stimulating interest in early childhoods' learning. It is because psychologically early childhoods tend to be in the age of playing. The present study aims to determine the effects of using the educational game tools on early childhoods' learning in kindergarten level. In the present study, the researchers set forth a research question: What are the effect of using the educational game tools on early childhood and teacher at Kober Sartika Asih located in Mekarmulya, Pamarican, Ciamis? To gain the answer, the researchers employ a qualitative method under a descriptive study at which they conduct series of observation towards the early childhoods' learning activities using the educational game tools during 4 meetings in June 2023. The results show that the educational game tools are the effective media to teach the early childhoods. Based on its usage, the educational game tools give the effects such as: increasing the early childhoods' curiosity and enthusiasm when they are participating the learning process, providing a stimulus for the early childhoods to understand the learning material given, stimulating the early childhoods' cognitive, physical-motor, language, social-emotional competencies, and increasing enthusiasm both for the teachers during teaching and the early childhoods during learning. In conclusion, there are some positive effects of using the educational game tools to teach to the early childhoods.

**Keywords:** the educational game tools; early childhood; cognitive; psychomotor; kindergarten

#### INTRODUCTION

Early childhood education is the first education for children to learn everything connected to their growth both physic and spiritual. This growth refers to the six basic competencies which based on Permendikbud Number 137 of 2014 cover (1) religious and moral values, (2) physical-motor, (3) cognitive, (4) language, (5) social-emotional, and (6) art. Meanwhile, based on Permendikbudristek Number 5 of 2022, the six basic competencies cover (1) religious and moral values, (2) Pancasila values, (3) physical-motor, (4) cognitive, (5) language, and (6) social-emotional (Hidayat & Nurlatifah, 2023).

To support the early childhood's six basic competencies, both parents and the teachers at school need to collaborate each other through giving various activities. However in the fact, not all early childhoods gain the supports from both parents and teachers through activities that are able to optimize their six basic competencies. This phenomenon occurs because their parents are too busy at workplace in order that they do not have enough time to give treatments for their early childhood at home (Amperawati et al., 2022; Lestari, 2020). In addition, at school teachers also focus on only how to develop the early childhoods' cognitive through giving various lessons. Whereas, during the golden age, 0-6 years, the early childhoods need to be assisted by teachers to develop not only cognitive, but also five other competencies, such as religious and moral values, physical-motor, language, social-emotional, and art competencies (Senowarsito & Musarokah, 2017, 2018).

In line with the aforementioned problems, the six basic competencies of early childhoods should be reached through playing during learning. Physiologically, early childhoods like playing very much in every condition including during learning process at school. Thus, teachers have to be creative to make learning condition comfortable, and also not easy to make early childhoods feel bored. One of the teachers' creativities is selecting the appropriate game. Then, one of appropriate games is using the educational game tools. Through using the educational game tools, the early childhoods learn more fun, increase the concentration, and feel comfortable during learning at the class (Senowarsito & Musarokah, 2017; Hidayat et al., 2022).

Dealing with the educational game tools, hence forwarded APE, meant as the kind of learning media which are highly recommended to be used in every learning session, especially for early childhoods learning. APE functions to provide stimulus for early childhoods during joining learning session in the classroom. In harmony with the experts' research, APE is the tool that can be seen by the eyes and heard by ears whose aim to assist teachers to conduct the teaching and learning process more effective and efficient (Safitri et al., 2020; Risman et al., 2022; Dwi Safitri et al., 2022). Thus, APE gives the complete benefits for early childhood during teaching and learning process notably for their cognitive and psychomotor developments. Besides, APE aids the teacher to ease the teaching and learning process to early childhood both inside and outside the classroom (Hidayat, Hidayat, et al., 2022).

In the implementation at school, APE can be designed and made by the teachers as the freedom for them to have a creation in producing teaching and learning media. It is because the teachers should be creative and innovative to provide teaching and learning media determined by the range of early childhoods' age as the students at school. Dealing with the range of age, the National Education System Law Number 20 of 2003, Article 1, Point 14 states that the range of early childhoods' age is from 0 - 6 years. Practically, early childhoods start from the age of 3 - 6 years (Hidayat, Herniawati, et al., 2022; Hidayat, Hidayat, et al., 2022).

The present research is supported by previous studies. The first previous study was carried out by Nurkhasyanah & Suyadi (2020). The results of the study showed that there is a significant increase in the ability of children's cooperation in the use of

cardboard as an educational game tool. The second previous study was conducted by Risman et al., (2022). The results of the study showed that there is a degree of success at which the kindergarten teachers obtained better understanding of producing educational game tool to stimulate the development of moral and religious values, besides to aid the learning process. The third previous study was done by Astini et al., (2023). The results of the study showed that there are 11 types of indoor scientific educational game tools that can be used to stimulate science learning in early childhood, and there are 3 types of outdoor scientific educational game tools that can be used to stimulate science learning in early childhood. The last previous study was conducted by Rahnang et al., (2023). The results of the study showed that West Kalimantan traditional games, Mimi and Kotaplus, are able to stimulate the development of early childhood language aged 6 to 6 years. Besides that, through the hand movements during using the game, it is able to stimulate the children's physical-motor and cognitive development.

Based on the four previous studies aforementioned, Nurkhasyanah & Suyadi (2020), Risman et al., (2022), Astini et al., (2023), and Rahnang et al., (2023) have similarity and also dissimilarity to the present study. The similarity of previous studies are similarly focusing on the educational game tools. Meanwhile, the dissimilarity between previous studies and the present study is in the aspect of students and teachers during teaching and learning process in the classroom.

Referring to the aforementioned phenomenon, the researchers attempt to conduct the research focusing on the educational game tools for early childhoods as the students and teachers during joining the teaching and learning process. Afterwards, this present study sets forth a research question: "What are the effect of using the educational game tools on early childhoods and teachers at Kober Sartika Asih located in Mekarmulya, Pamarican, Ciamis?"

## **METHOD**

This present study employs qualitative methodology with a descriptive approach. According to Fraenkel, Wallen, Hyun (2012) qualitative descriptive is an approach that describes a statement on a problem as carefully as possible (Hidayat & Nurlatifah, 2023). In addition, according to Wragg (1999) as quoted in Hidayat & Herniawati (2023) descriptive study refers to a design at which researcher observes the series of activities carried out by students or students and teacher in the classroom.

In relation to the participants of the present study, they are the early childhood students in group B at Kober Sartika Asih located in Karangcingkrang RT. 13, RW. 04 Mekarmulya, Pamarican, Ciamis Regency. The total of the early childhood students is 31 students who consists of 13 male students and 18 female students. In addition, referring to the source of the data, the researchers involved as non-participant observers to observe the early childhood students' learning process using the educational game tools. The process of gathering the data were conducted during 2 weeks on June  $6^{th} - 15^{th}$ , 2023. Then, the data were written in the filed note to be analyzed qualitatively.

# FINDINGS AND DISCUSSION

The researchers observed the process of using the educational game tools carried out by 4 teachers towards 31 early childhoods during the teaching and learning process at Kober Sartika Asih located in Karangcingkrang RT. 13, RW. 04 Mekarmulya, Pamarican, Ciamis Regency. The process of using the educational game tools (APE) in the form of *Kotak Pintar* and puzzle was carried out twice in a week during four meetings in 6<sup>th</sup>, 8<sup>th</sup>, 13<sup>th</sup>, and 15<sup>th</sup> June 2023. From the whole meetings of teaching and learning process, the researchers noted the observation results in the field note. Then, the aforementioned results are presented in the following table.

| <b>D</b> -4-                  | Table 1. Observation results |  |  |  |  |
|-------------------------------|------------------------------|--|--|--|--|
| Date                          | Time                         | Observation results  |  |  |  |
| June 6 <sup>th</sup> , 2023   | 8 08.00-11.00<br>a.m.        | At the first meeting, the researchers find that the early childhoods' enthusiasm are high in participating the teaching and learning process involving the educational game tools, namely <i>Kotak Pintar</i> and puzzle. The researchers noted that the early childhoods' curiosity begins to increase.   |  |  |  |
| June 8 <sup>th</sup> , 2023   | 8 08.00-11.00<br>a.m.        | At the second meeting, the educational game tools, namely <i>Kotak Pintar</i> and puzzle begins to be explored. The early childhoods begin to play through the use of <i>Kotak Pintar</i> and puzzle in turn. The results show that the early childhoods are very enthusiast exploring that tool. The educational game tools provides a stimulus for the early childhoods to begin understanding the learning material given by the teachers.  |  |  |  |
| June 13 <sup>th</sup><br>2023 | a.m.                         | At the third meeting, the early childhoods begin to master<br>how to use <i>Kotak Pintar</i> and puzzle. The teaching and<br>learning material given by the teachers is different from the<br>previous meeting. Nevertheless, the teaching material given<br>can be understood by the early childhoods because they<br>enjoy learning while exploring <i>Kotak Pintar</i> and puzzle.  |  |  |  |
| June 15 <sup>th</sup><br>2023 | , 08.00-11.00<br>a.m.        | In the last meeting, the educational game tools, namely <i>Kotak Pintar</i> and puzzle are used as one of the games in the corner area of the classroom. The early childhoods are very enthusiast and do not feel bored, even though the educational game tools, namely <i>Kotak Pintar</i> and puzzle are used several times. In this meeting, teachers also evaluate teaching and learning process.  |  |  |  |
|                               |                              | The researchers find that the use of the educational game<br>tools have several features, and those are suitable for the<br>early childhoods' learning media. In addition, those seem<br>that the early childhoods' cognitive, physical-motor,<br>language, social-emotional competencies are increased.<br>Those are proved that they easily understand what is<br>explained by the teachers during teaching and learning<br>process. Besides, they can use <i>kotak pintar</i> and change the<br>form of puzzle easily. Then, they also tell what they have<br>experienced to other friends. In addition, they can also<br>cooperate each other during using <i>kotak pintar</i> and puzzle.<br>This phenomena assert that there are effects of the use of |  |  |  |

| Table 1. C | Observation | results |
|------------|-------------|---------|
|------------|-------------|---------|

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educational game tools (APE) on the early childhoods' cognitive, physical-motor, language, and social-emotional competencies.

In addition, the researchers also write that the teachers' activeness also increased during teaching by using APE. This phenomenon asserts that the effect of using APE is effective to increase enthusiasm, both for teachers during teaching and the early childhoods during learning. In other words, teaching and learning process becomes more active and enjoyable.

(Data, 2023)

Based on the data obtained from the observation results, the use of APE namely *Kotak Pintar* and puzzle have proven to be effective and give the effect for both early childhoods and teachers. The effects of using APE for the early childhoods cover: (1) cognitive, (2) physical-motor, (3) language, (4) social-emotional competencies, and (5) increasing enthusiasm both for teachers during teaching and the early childhoods during learning. To gain detail understanding, see the following diagram.

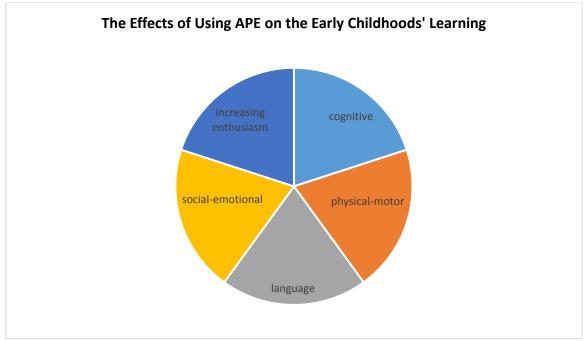


Figure 1. The Effects of Using APE on the Early Childhoods' Learning

Based on the diagram above, the researchers conclude that APE gives the balanced effects on the early childhoods' basic competencies. Those are cognitive, physical-motor, language, social-emotional, and also increasing enthusiasm during teaching and learning process.

Based on the data gathered and written in the field note, using APE namely *Kotak Pintar* and puzzle give various benefits both for early childhoods and teachers. Referring to the data recorded from observations, the effects of using APE are as follow.

- 1. APE increases the early childhoods' curiosity and enthusiasm when they are participating the learning process;
- 2. APE provides a stimulus for the early childhood to understand the learning material given;
- 3. APE stimulates the early childhoods' cognitive, physical-motor, language, socialemotional competencies; and
- 4. APE increases enthusiasm, both for the teachers during teaching and the early childhoods during learning.

After presenting the findings in detail, further the researchers need to answer the research question proposed in the introduction section. The research problem is: "What are the effect of using the educational game tools on early childhoods and teachers at Kober Sartika Asih located in Mekarmulya, Pamarican, Ciamis?" Based on data gathered from the observation and written in the field note, the data lead the researchers to answer the research question that using APE gives the effects: (1) increasing the early childhoods' curiosity and enthusiasm when they are participating the learning process, (2) providing a stimulus for the early childhoods to understand the learning material given, (3) stimulating the early childhoods' cognitive, physicalmotor, language, social-emotional competencies, and (4) increasing enthusiasm, both for the teachers during teaching and the early childhoods during learning. In other words, the teaching and learning process becomes more enjoyable.

The results of the present study aforementioned are in harmony with the results of previous studies conducted by Nurkhasyanah & Suyadi (2020), Risman et al., (2022), Astini et al., (2023), and Rahnang et al., (2023) which also focus on the use of APE in teaching early childhood. In contrast, the difference among the results of the present study and the previous studies is in another effect on the use of APE to the teachers. Through using APE, teachers' enthusiasm is increased when they are teaching the early childhoods. Thus, the teacher's creativity and innovation are needed so that learning at early childhood level is more enjoyable. Besides, it is able to improve the quality of teaching and learning process both inside and outside in the classroom (Rohmah & Waluyo, 2014; Senowarsito & Musarokah, 2018; Satriawan, 2019; Sarip & Hidayat, 2019).

# CONCLUSION

Based on the results of the present study, those are able to be concluded that the use of APE is an effective media to teach the early childhoods. Based on its usage, APE gives the effects such as: (1) increasing the early childhoods' curiosity and enthusiasm when they are participating the learning process, (2) providing a stimulus for the early childhoods to understand the learning material given, (3) stimulating the early childhoods' cognitive, physical-motor, language, social-emotional competencies, and (4) increasing enthusiasm, both for the teachers during teaching and the early childhoods during learning. Thus, the teaching and learning process becomes more enjoyable.

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