

ANALYSIS OF THE EFFECT OF CONGKLAK PLAY ON EARLY CHILDHOOD COGNITIVE DEVELOPMENT

Yayu Bondan Pujiniarti
{bondanpujiniarti@gmail.com}

UIN Prof. K.H. Saifuddin Zuhri Purwokerto, Indonesia.

Abstract. Cognitive development is the stages of Changes that occur in the span of human life to understand, process information, solve problems, and know something. The purpose of the study was to determine the effect of congklak games on early childhood cognitive development. The hypothesis proposed is the influence of congklak games on early childhood cognitive development. The data collection method uses primary and secondary methods with qualitative and quantitative data analysis. The object of study of 27 children, based on statistical tests of regression analysis, obtained the influence of congklak games on children's cognitive development. Based on qualitative analysis shows the cognitive development of children by direct observation. The results of this study are important as a new study to determine the cognitive development of early childhood.

Keywords: congklak game, early childhood cognitive development.

INTRODUCTION

Early childhood, namely children aged 0-6 years, is the right time to maximize all the potential of children from various aspects of development. in the age range of 0-6 years, development occurs by 40%, therefore we as adults can understand and facilitate all children's developmental needs, one of which is through play (Khaironi, 2018). according to Piaget's Cognitive theory, the role of play is to practice and apply various skills he already has (Fauziddin & Mufarizuddin, 2018). The main text should be written using Times New Roman, 10pt, fully justified. Italics can be used for emphasis and bold typeset should be avoided.

Cognitive development is the stages of change that occur in the span of human life to understand, process information, solve problems and know something. Child development is related to cognitive actions that have been done, cognitive is behavior that results in people acquiring knowledge, games play very important role in development, this is because children are part of humans who are always growing and developing. The quality of children's development in the future is greatly influenced by stimulation obtained from an early age, one of the stimulations that can be seen is the type of children's play.

The game of congklak is one type of traditional game that was popular in ancient times. Conngklak games are important for early childhood, congklak games have various benefits in improving child development, including (1) Development of religious and moral values: In congklak games, children can show honest behavior when inserting congklak seeds one by one into the congklak hole (Armi Harbiyah, 2022). (2) Cognitive development: Concave games can help develop aspects of early childhood cognitive development. Although this game is used for fun only, it has special benefits in developing aspects of cognitive development (Dina Fydarliani, et al, 2021). (3) Development of counting skills: Children need counting skills to play congklak, so this game can hone children's ability to recognize numbers. (4) Motor development: Children's motor skills can also be trained while playing congklak. With grasping congklak seeds, trying to drop one seed in each hole, and avoiding the opponent's hole, are activities that help children's development (Putri Indi Safarina, 2023). (5) Social-emotional development: Concave games can help develop children's social-emotional abilities in playing with peers without distinguishing friends from themselves, being patient, and others (Nurjani, Santi Sopiarti, 2022).

Based on the Regulation of the Minister of Education and Culture No. 11 of 2020 concerning operational guidelines for physical special allocation funds in the field of Education, teachers must

be wise in choosing educational game tools that are by security and safety standards. With various benefits, security and safety standards owned, congklak games can be a good choice to optimize various aspects of child development, especially cognitive development, namely 1) numerical skills, 2) counting and adding skills, 3) honing strategies and 4) memory skills 5) problem solving 6) recognizing many-little comparisons.

RESEARCH METHOD

This type of research seeks to explain the solution of existing problems based on data, propose data, analyze data, and interpret data better known as descriptive analysis research types.

The location taken in this study was RA Diponegoro Gandasuli which was addressed at Jalan Kenanga RT 3 / RW3 Gandasuli, while the object of research was class B students of RA Diponegoro Gandasuli.

Population is a collection of all elements that are similar but can be distinguished from each other (J. Supranto, 1994: 15). The population in this case is all class B students of RA Diponegoro Gandasuli which amounts to 27 students, while the sample is part of the population (J. Supranto, 1994: 15) this sample is taken to meet the eligibility criteria, 100 percent of the total class B students of RA Diponegoro Gandasuli which amounts to 27 students. The sampling was 100 percent due to the total population of less than 100 students.

There are two sources of data for this study, namely primary data sources and secondary data sources. Primary data sources are data sources directly obtained from RA Diponegoro Gandasuli or the object being studied, namely students, while secondary data sources are data sources obtained from books and other literature.

Data collection method, a study let alone research that is said to be scientific there must be certain techniques to be able to collect data, in this case, the data collection technique uses two ways, namely: primary data and secondary data. Primary data is data obtained directly from a sample, namely RA Diponegoro Gandasuli students by observing children's cognitive development from day to day. The secondary data were obtained from the library study and from RA diponegoro Gandasuli about the history of child development.

The data analysis methods used are qualitative and quantitative. The qualitative method is a method where the data in this case requires an explanation because the data is obtained through observation, while the quantitative method is a method that later the data is processed using statistics where at this stage can later be known the influence between variables in the study.

RESULT AND ANALYSIS

After conducting this research, that congklak game can develop cognitive aspects including:

1.1 Improve counting and counting skills

Numeracy and counting are important mathematical skills, especially in the early childhood stages of development. Numeracy is an ability that every child has that is related to addition, subtraction, multiplication, and division which is indispensable in everyday life (Suryana (2016: 108) and Suyanto (2008: 48)). While counting is the ability of intellect to add up. Numeracy in early childhood should begin with counting with objects, and children's numeracy skills can be developed starting from rote calculations (Ahmad Susanto (2011: 98). This ability to count is very necessary and useful in the life of a human being.

The method of teaching numeracy in early childhood can be done through various stages of mastery of counting, such as counting games that are given gradually starting with counting objects or experiences of concrete events experienced through observation of the environment. In addition, teaching numeracy can also be done by using tools as an auxiliary medium in counting to bring back abstract forms to real forms.

From the understanding of counting above, it can be concluded that counting is an ability possessed by every child in terms of mathematics such as addition, subtraction, multiplication, and division activities Susaanto (2011: 98). While counting is the ability of intellect to add up.

The game of congklak involves counting the seeds that are in the hole. This can help children develop counting and counting skills in a fun way (Rahayu Kurniasih. 2021).

1.2 Practice logical and strategic thinking skills.

Logical thinking is the ability to draw correct conclusions based on logic and can be proven these conclusions according to knowledge or knowledge that Nursalam (2008) already knows. Logical thinking can also be interpreted as the ability to think correctly, rationally, and systematically (Aristotle). The characteristics of people who think logically include thinking about the future, asking for reasons first, easy to achieve targets, and prioritizing logic over feelings.

Meanwhile, strategic thinking is the ability to plan everything, ascertain in advance about cause and effect, easily get information, not overthink, prepare plans, and prioritize logic over feelings. Thus, strategic thinking involves careful planning and decision-making to achieve certain goals.

In the context of education, improving logical thinking skills can be done through a learning process that can train students to find knowledge concepts independently, such as through investigation activities. In addition, strengthening logical thinking skills is also important for teachers in compiling logical and comprehensive scientific writings (Laudia Tysara. 2021).

In congklak games, children need to plan the right moves to win the game. This can train a child's logical and strategic thinking skills. (Dina Fydarliani, 2021: 214 – 2923).

experiences, data, and information that have been obtained in the past for the future by considering their situations and conditions. Memory is also an element of cognitive development that contains all situations in which the individual retains the information received all the time (James Patrick Caplian, p. 295).

Thus, concentration is closely related to concentration in the learning process, while memory is the ability of individuals to store, process, and resurface information that has been obtained in the past.

Children need to focus and remember the steps that have been done in the congklak game. This can help improve a child's concentration and memory.

1.3 Develop social skills

Social skills are an individual's ability to communicate and interact with others effectively, both verbally and nonverbally, according to existing social situations and roles. Social skills include the ability to initiate, build, and support friendships, build healthy interpersonal relationships with others, create and maintain mutually beneficial intimate relationships, be empathetic, and be altruistic. Social skills also include the ability to express and receive compliments, raise and receive complaints, Refuse unwarranted requests, assert individual rights, ask for help, propose changes in the behavior of others, solve problems, associate with friends of the opposite sex, and associate with more mature people. Social skills are not abilities that are carried from the moment the individual is born, but are acquired through the learning process, both from parents, peers, and the community environment. Social skills become increasingly important and crucial when a person has reached adolescence (Indra Dermawan (2008: 29).

1.4 Encourage creativity and imagination

Creativity is a person's ability to create new and extraordinary things that have never existed before. Creativity is inseparable from imagination, which is the ability to imagine things that do not yet exist or will exist. Creative imagination is more than just active imagination, because in order to be able to actively imagine things, one must see and hear something in his mind. Imagination and creativity are potentials that need to be developed from an early age, because creativity is one of the foundations for children to be able to solve problems and think. Creativity and imagination can be increased in various ways, such as giving children the freedom to explore their imagination, paying attention to creativity and the environment that encourages creativity, and matching and connecting various knowledge possessed (Agus Hendri 2020). The child can use congklak seeds to make a p-pattern.

CONCLUSION

Based on the results of research congklak games can improve children's cognitive abilities in aspects of counting and counting skills, logical and strategic thinking skills, concentration and memory, social skills, creativity and imagination. In developing early childhood cognitive abilities, the role of teachers and parents is also very important. They can help children understand the rules of the game, provide guidance, and give praise for the achievements achieved by children in congklak games.

References

- Dina Fydarliani, Heri Yusuf Muslihin, Sima Mulyadi. 2021. Games Congklak in stimulating early childhood cognitive development. *Journal of Childhood Education* Vol, 5 No, 1, 214 – 223.
- Vera Heryanti. 2014. Improving Children's Cognitive Development Through Traditional Game (Congklak). Thesis. Bengkulu. Faculty of Teacher Training and Education, University of Bengkulu.
- Rahayu Kurniasih. 2021. Implementation of Congklak Traditional Games in Cognitive Development in Tiara Persada Kindergarten North Metro District. Thesis. Metro: Faculty of Tarbiyah and Teacher Training at the State Islamic Institute.
- Umayah Nurul Khotimah. 2000. Improvement of Children's Cognitive Abilities through Congklak game in group A. Faculty of Education, Surabaya State University.
- Ahmad Susanto, Early Childhood Development, (Jakarta: Kencana, 2011), 98.
- 21st Century Learning Skills Towards Superior and Resilient Human Resources (2023)