



## Development of Labyrinth Media to Stimulate Prosocial Behavior Skills of 5-6 years old Children in Purwakarta

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### ABSTRACT

This study aims to produce a valid labyrinth learning media to improve the ability of prosocial behavior in children aged 5-6 years. This research is a development research with the development model used by Sugiyono. In this study, researchers only used 7 (seven) stages, namely knowing problems and potential, data collection, product design, design validation, design revision, product trials and product manufacturing. The next stage was not carried out due to cost and time constraints. The data collection technique used is a questionnaire, where the questionnaire is validated by material experts, media experts and educators. The type of data generated is quantitative and qualitative data. The average percentage result of the pretest conducted on 3 children is 10.6%, proving that the child's condition is still in the undeveloped stage. Then the posttest was carried out, namely the condition after the child was given the labyrinth media, the average percentage result of this posttest was 14.6% which proved that the child experienced a change in condition to develop as expected. So it can be concluded that the Labyrinth media to improve the ability of prosocial behavior of children aged 5-6 years has met the criteria for validity.

**Keywords:** *Early Childhood, Prosocial Behavior, Maze*

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## INTRODUCTION

Early childhood is a child in the age range of 0-6 years. At this age children are often referred to as the golden age or golden age at this age is very decisive for children to develop all their potential (Vial, 2019). One of the social emotional child development (He dkk., 2019). Social emotional development is a change in behavior

accompanied by certain feelings that come from the heart, which covers social emotional development is a change in behavior accompanied by certain feelings that cover early childhood when dealing with others.

Social emotional development cannot be separated from one another because it is interconnected with interactions between individuals with individuals or individuals with social (Song dkk., 2020). Social emotional development is very important in a person because of its relationship with the child's ability to establish interactions with others. Especially when at school, children will have many direct interactions with teachers and friends, so that it will stimulate their social emotional development.

Social and emotional development is an important aspect of child development. One of the potentials that is very important to stimulate is the social-emotional development aspect of prosocial behavior (S. Wang dkk., 2019). Prosocial behaviors that can be developed by children include empathy, caring and cooperation behaviors. Empathy is the key to understanding the feelings of others so that children are able to show their tolerance, give affection, understand the needs of their friends, and want to help friends who are experiencing difficulties.

Children who are empathetic will be able to control their emotions by giving and receiving forgiveness and willing to play together and share with their friends (Penconek dkk., 2021). Children who are not trained to be empathetic from an early age will grow up to be insensitive to their immediate environment, as well as their surroundings. Children who do not have empathy will also become individuals who spontaneously help and help other people's problems.

Children aged 5-6 years also begin to have the ability to adapt from previously focusing on themselves to paying attention to others (Caniëls dkk., 2019). Children can be interested in the activities of their peers, and increase their desire to be accepted as members of the group, and feel unhappy if they are not accepted in their group (Pfattheicher dkk., 2022). This situation is often interpreted by teachers by utilizing group learning or cooperation (Peng dkk., 2020). The ability to work together is important to be trained from an early age, because in the process of working together, children can develop social-emotional abilities such as how children can share, responsibility, help each other, and interact in completing tasks together with their group.

Based on the Regulation of the Minister of Education and Culture of the Republic of Indonesia No. 137 of 2014 concerning Early Childhood Education Standards (STTPA) that the aspects of social emotional development in the scope of development of prosocial behavior in children aged 5-6 years consist of: 1) Playing with peers; 2) Knowing the feelings of friends and responding reasonably. Knowing his friend's feelings and responding reasonably (Salminen dkk., 2020); 3) Sharing with others; 4) Respecting the rights or opinions or work of others; 5) Using socially acceptable ways of solving problems (using thoughts to solve problems); 6) Being cooperative with friends; 7) Showing a tolerant attitude; 8) Using socially acceptable ways of solving problems; 8) Using socially acceptable ways of solving problems (using thoughts to

solve problems) (Hudak, 2019). Show a tolerant attitude; 8) Express emotions that are appropriate to the existing conditions (happy-sad-enthusiastic-and so on); and 9) Recognize manners and politeness in accordance with local socio-cultural values.

To develop prosocial behavior, it takes an appropriate method and looks at various aspects that can support children (F. Wang dkk., 2019). One method that can be done is to return to the principles of early childhood learning through play. Learning through play can hone and improve the intelligence that children have (Gao dkk., 2021). Children's experiences through play activities can provide a strong foundation for the achievement of various skills that are indispensable for solving problems in later life. Children who spend a lot of time playing tend to be better able to solve problems in later life.

The play method is important to apply in kindergarten because through play children will learn to interact with their friends, learn to cooperate, share, and be tolerant (Low dkk., 2019). One of the games that can be developed is the Labyrinth game (Chen dkk., 2019). Maze games are a type of game that requires players to find a way out through the twisting paths in the maze.

Labyrinth games are currently in great demand by people of various ages with difficulty levels that can be adjusted to their age. In children playing maze is very helpful in stimulating the development of prosocial behavior because in this game children are encouraged to cooperate in finding a way out (Albrecht & Chin, 2020). The maze media referred to in this study are 3-dimensional and can be played together, so that the development of prosocial behavior in children can be stimulated through this maze game. Based on the explanation above, the researcher feels the need to conduct action research to improve the prosocial behavior of children aged 5-6 years through the maze media in Purwakarta.

## **LITERATURE REVIEW**

### **Prosocial Behavior**

Prosocial behavior is behavior that reflects care or concern from one child to another (Vial, 2019). Preschool is a sensitive period for the development of prosocial skills, with relatively little known about the processes that promote and inhibit prosocial development during this period. In addition, children's adaptive adjustment abilities are believed to contribute significantly to the development of prosocial skills.

Socialization begins to be demonstrated by children even from infancy. The child first learns to socialize with his mother, then after that the child learns to build socialization with the closest family and even with his environment (Golden & Gajendran, 2019). argue that prosocial behavior involves voluntary actions to improve the welfare of others such as feeding a hungry child, reaching out to a stranger, or calming a distraught friend (Zhang & Jin, 2020). Defines that, "Prosocial behavior includes behaviors intended to benefit others, such as helping, calming, sharing, cooperating, reassuring, defending, giving, and showing concern."

In line with this, De Backer, Fisher, Poels, and Ponnet (2014: 54) define that prosocial behavior is an action to benefit others. Another opinion from (Baron and Byrne, 2003) states that prosocial action is one of the behaviors that has benefits for others but does not have clear benefits for the person doing it. Other terms such as helping behavior, charitable behavior, altruism, and volunteerism are also used to describe the good things people do to help others (Zhang & Jin, 2020). Argues that prosocial behavior is an action that benefits others without expecting direct rewards to the perpetrator.

Prosocial behavior is a form of behavior that tends to help, collaborate, share, and empathize with peers (Al-Thani and Semmar, 2017). In line with this, Scrimgeour, Davis, and Buss (2016: 102) prosocial is the ability to voluntarily engage in behavior that benefits others, such as helping, cooperating, sharing, and showing concern for others. Agreeing with this, Collie, et al, Martin, Roberts, and Nassar, 2018: 143 suggests that aspects of prosocial behavior include cooperative behavior, social responsibility and helping.

According to Mares (2017: 7) that prosocial behavior is intended to help or benefit other individuals or individuals. Based on the above opinion, it can be concluded that prosocial behavior is behavior that has benefits for others but does not have clear benefits for the person doing it (Zhang & Jin, 2020). Therefore, in this study, prosocial behaviors that are improved include helping, collaborating/cooperating, sharing, and empathy with peers without expecting rewards.

### **Maze Game**

A maze game is a game of finding a way out of a branching and twisting path. The maze game can also be interpreted as a game with a winding road that aims to determine the right path in achieving a predetermined goal. (Novita, et al, 2018). In the maze game in it there are paths that branch out, but not every branch of the maze is a way out because some are blocked by walls, so the children must search or find another way out.

Labyrinth game according to (Nurul Ikhsan, 2014) labyrinth game is a game of finding a way out of a branched and twisted path. Playing a maze can make children know the spaces in the maze, as well as the paths through the maze, so that it can increase children's creativity.

According to (Laily Rosidah, 2014) the labyrinth is a puzzle-type educational game in the form of intricately branched lanes to train eye and hand coordination in order to find the right route to reach the destination. Maze games can develop all aspects and potential possessed by children because maze games can be modified according to the objectives to be achieved.

Based on some of the above opinions, it can be concluded that the maze game is a game of finding a trail or a way out in solving problems. This game can improve prosocial behavior, children's creativity and also help children to practice concentration.

## Thinking Framework

Learning strategies taught by educators with the help of learning media can reduce monotonous learning. With the use of good media, children do not feel bored and the learning atmosphere is more interesting if it can arouse a sense of pleasure and joy in students (Arsyad, 2012). Games are expected to stimulate children's imagination (Widyastuti, 2017) so that educators create play activities directly play a role in various cognitive development efforts of children (Khadijah, 2016).

To be able to see and understand more deeply about whether a game media can be categorized as educational game media for children after early or not, there are several characteristics that must be fulfilled, namely:

1. The playground equipment is intended for early childhood
2. It is used to develop various developmental milestones in young children
3. Can be used in various ways, forms, and for various developmental purposes or is multipurpose.
4. Safe or not harmful to children
5. Designed to encourage children's activities and creativity
6. Constructive or something is produced
7. Contains educational value

In this case the author is interested in reviewing some literature related to labyrinth games. As a reference in developing the ability of children's prosocial behavior so that educators can apply it in the teaching and learning process. Labyrinth is a game with a network of winding or twisting roads that have obstacles. so that this game can hone the level of children's prosocial behavior skills.

Labyrinth can be interpreted as a game with a winding road that aims to find the right path in achieving a predetermined goal. The maze game is an educational game that has the benefit of developing the ability of prosocial behavior of early childhood. The maze game contains activities to find a way out by passing through various obstacles. The maze game to be used is made of cardboard. The steps to make a maze game can be done as follows:



Based on the research to be conducted, researchers combine the values in the maze game, 3 aspects in prosocial behavior, including empathy, caring and cooperation. To improve the ability of prosocial behavior.

## **RESEARCH METHODOLOGY**

The methodology used in this research is research and development (R&D) The method used in this research is R&D/Research and Development. The research and development method or in English Research and Development is a research method used to produce certain products, and test the effectiveness of these products. Development or Research and Development (R&D) is a process of developing educational devices carried out through a series of research using various methods in a cycle that goes through various stages. The definition of development according to Amile and Reesnes, R&D is a process of developing educational devices carried out through a series of research using various methods in a cycle that passes through various stages (Sugitono, 2013).

The development used in this study is to use the RnD development procedure according to Borg and Gall which consists of 10 stages of research. The stages put forward by Borg and Gall are as follows:

Potential and problems, this research and development is motivated by potential and problems. The potential in this research and development is the rapid development of early childhood learning media, especially labirint media. This development can be implemented in the world of education so that it becomes its own potential. Based on the results of research conducted at one of the RA. Al Mujahidin regarding learning media that focuses on prosocial behavior using the same media such as only using storybooks, so that children feel bored in these learning activities.

Data Collection, namely after the researcher finds the problem and the potential of the problem, the researcher starts to collect data and information. This research seeks information by analyzing what will be studied and to find information about the conditions and situation of learning activities. At this stage of the research, researchers collect data and information gradually in developing products including by looking for material studies related to the development aspects of prosocial behavior for children aged 5-6 years, looking for reference books related to the development of labyrinth media to stimulate prosocial behavior of children aged 5-6 years.

Initial Product Design, planning the material from the development of labyrinth media, designing designs on labyrinth media related to size, structure, color and shape, making steps in making labyrinth media, attaching cardboard that has been shaped into the media and providing balls, making steps in playing the maze.

Design Validation, at this stage after the initial product is completed, then validation to a team of experts consisting of material experts and media experts as follows; Material experts examine aspects of material studies in the form of material feasibility and media experts examine elements of suitability and ease of use of the media.

Design Revision, this step is an improvement of the labyrinth media design based on the inputs provided by material experts and media experts. This improvement is very likely to be done more than once so that a main smart pocket can be obtained that is ready for wider testing.

Product testing, in the field of education product design can be tested immediately after validation and revision. Testing is carried out with the aim of obtaining information on whether the product is effective and feasible to use. The steps taken to test the labyrinth product are: 1) directing how to play the labyrinth to children aged 5-6 years, 2) children listen, 3) Researchers do recalling to children about the maze.

The final product, this step is a refinement of the labyrinth media being developed. Refinement of the labyrinth media is very necessary for more accurate media developed based on input or feasibility test results on a small scale. At this stage, a maze media has been obtained whose effectiveness can be accounted for. The results of the final labyrinth media refinement have a reliable gerenalization value.

## RESULT AND DISCUSSION

Labyrinth media is a media used to improve students' prosocial behavior. making this media through several stages and materials that can be found around the environment. Materials and tools for making this media include:

1. cardboard
2. glue
3. ball
4. scissors
5. ruler

The process of making media with the above materials is done in several stages. First, prepare the cardboard, form a maze pattern and then cut out the cardboard by forming a circle. Next, cut out the cardboard by forming a semicircle to make the maze wall adjusted to the needs. Then the next step is to attach the cardboard half a circle that has been cut out in the form of a semicircle that is based on cardboard that has been formed with a pattern. How to play is only by inserting a small plastic ball and then shaking the maze so that the ball can enter by finding the exit at each corner of the maze.

This research test was conducted on 3 children aged 5-6 years in Sukajaya Village. The first test was conducted at the beginning before the child was given the Labyrinth media. The results of the pretest on these 3 children are as follows:

Table 1. Pretest Results

No	Name	Value
1.	AH	8
2.	DAP	11
3.	WA	13

$$Me = \frac{\sum xi}{n}$$

$$Me = \frac{8+11+13}{3}$$

### Description:

Me = Average Value

$\sum xi$  = Number of values of each aspect component

$Me = 10,6\%$

Table 1 shows the value of each child who has been tested using a questionnaire that has been prepared which is certainly related to the symbolic thinking indicators of children aged 5-6 years. The score obtained by AH is 8, DAP is 11 and WA's score is 13. The average result of the pretest conducted on AH, DAP, and WA is 10.6%. With these results it can show that these 3 children are still in the undeveloped stage in the ability of Prosocial Behavior.

Table 2. Posttest results

No	Name	Value
1.	AH	13
2.	DAP	15
3.	APA	16

**Description:**

$Me$  = Average Value

$\sum xi$  = Number of values of each aspect component

$n$  = Number of Students

$$Me = \frac{\sum xi}{n}$$

$$Me = \frac{13+15+16}{3}$$

$Me = 14,6\%$

Table 2 above shows the results of the posttest conducted on 3 children aged 5-6 years. This posttest is the situation after the child is given the Labyrinth media. Table 2 explains that AH got a result of 13, DAP got a score of 15 and WA got a score of 16. For the average result of AH, DAP, and WA this child's score is 14.6%. These results can explain that the condition of the 3 children after being given the maze media changed to begin to develop. That way this maze media has very valid criteria to be given to children aged 5-6 years in developing the ability of prosocial behavior. From the results of the trials conducted, it can be concluded that the use of maze media in learning makes children enthusiastic and feel happy. This labyrinth media is very influential to improve the ability of prosocial behavior for children, which by using an interesting educational game tool can generate enthusiasm for learning in children.



Labyrinth Game Picture

In developing the ability to behave prosocially, children can be given various stimulations, one of which is by providing media. In line with Febriyani's research, it is stated that in the teaching and learning process the presence of media has an important meaning. Because in these activities the vagueness of the material conveyed can be helped by presenting the media as an intermediary. Students' learning activities with the help of the media will produce better learning processes and results than without media assistance (Febriyani, 2014). By using a game tool, it is expected to use media that is interesting, creative and fun for children so that the learning process is easy for children to accept by using maze media. One of the media that can improve the ability of prosocial behavior in children is Labyrinth media.

## CONCLUSION

Labyrinth media is categorized as effective to be used as an interesting media in the ability of prosocial behavior. Thus it can be concluded that the maze media is a feasible and effective learning media used to improve prosocial behavior in children aged 5-6 years.

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