



## THE EFFECTIVENESS OF APPLICATION OF COOPERATION PLAY PUZZLE GROUP EDUCATIONAL GAMES ON CHILDREN IN THE TIME OF THE COVID 19 PANDEMIC TOWARDS INCREASING SOCIAL INTERACTION TO CHILDREN IN KOTO TANGAH DISTRICT PADANG CITY

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### ABSTRACT

Early childhood is a group of children who are in the process of growth and development that is unique, meaning that it has a pattern of growth and physical development of gross and fine motor coordination, intelligence (thinking power, creativity), social emotional, language and communication. Various potentials are developed in early childhood, social skills are one of the most important potentials to be developed in order to have good social skills from an early age. One of the ways to improve children's social skills is by applying the puzzle-assisted play method. This study aims to determine the increase in the social skills of children under five years old after carrying out Cooperative Play Puzzle Play Group Activity Therapy for toddlers in Koto Tangah District, Padang City. The data collection in this study was carried out by the observation method and the data collection instrument used was the observation sheet. After the data is collected then it is analyzed with the Normality test and the Wilcoxon test. The results showed that there was an increase in the social skills of children under five aged 4-5 years after the Cooperative Play Puzzle Play Group Activity Therapy in Koto Tangah District, Padang City. This can be seen from the increase in the average social ability of children from 9.00 to 15.60 the average difference is 6.6 or in other words there is no decrease or reduction from the Pre Ob value to the Post Ob value. It is hoped that this research can be used by parents of children to improve their children's social skills through Puzzle games in pandemic covid 19.

**Keywords:** Play Therapy, Puzzle, Social Ability.

### INTRODUCTION

Early childhood (toddlers aged 4-5 years) is an individual figure who is undergoing a process of rapid and fundamental development. Children have certain characteristics that are unique and are not the same as adults. Early childhood education basically includes all the efforts and actions taken by educators and parents in the process of caring for, nurturing, and educating children by creating an environment where children can explore experiences that provide

opportunities for him to know and understand the learning experiences obtained from the environment, through observing, imitating, and experimenting which will take place repeatedly involving all the potential and intelligence of children (Sujiono, 2011).

Early childhood (toddlers aged 4-5 years) is a group of children who are in a unique process of growth and development, meaning that they have a pattern of physical growth and development (gross and fine motor



coordination), intelligence (thinking power, creativity), social emotions, language, and communication. Various potentials are developed in early childhood, social skills are one of the most important potentials to be developed (Mutiah, 2010).

Yusuf & Sugandhi (2013) stated that, "Social ability is the achievement of maturity in social relationships or interactions. It can also be interpreted as a learning process to conform to group norms, traditions, and religious norms. In the learning process at school, the maturity of this social ability can be utilized or interpreted by giving group tasks, both those that require physical energy, and tasks that require thought.

Based on these conditions to improve children's social skills, one of the things that must be done is to pay special attention towards improving children's social skills, one of which is to apply the Puzzle media-assisted play method. The method of playing with the help of Puzzle media was chosen because the playing method is a way that it is designed so that children can develop their social abilities, such as fostering relationships with other children, behaving in accordance with the demands of society, adjusting to peers, being able to understand their own behavior, and understanding that every action will have consequences (Moeslichatoen, 2014).

Then Puzzle that is designed to be played by children in groups but children can still try to do their own work by working together to arrange each puzzle piece with the correct arrangement. The method of playing with the help of Puzzle media will be

able to train children's cooperative nature, children are able to express emotions according to existing conditions (happy, sad, enthusiastic and so on), and train children to establish good relationships with people in their social environment. Based on the description above, the authors are interested in seeing how effective the application of cooperative play puzzle group educational games for children during the COVID-19 pandemic is to increasing social interaction in children in Koto Tengah District, Padang City.

## LITERATURE REVIEW

### Play Therapy

Play is an activity that a person does to get pleasure without final consideration. Supartini (2012) explains that playing is an activity that can be done for growth and development efforts. Play therapy is an approach that will be tested, this is because toddlers in general will easily understand a concept or ability if in a learning situation they use concrete types of material. The training provided for these toddlers is more towards games that train speech, simple skills in the scope of cognitive, psychomotor, and adaptive social aspects (Lisnawati, 2014).

### Play Class

One of them is Cooperative Play / Social Play. Social play is a game that involves social interaction with groups (peers) (Santrock 2010). The expert who popularized social play therapy is Mildret Parten (2011). The types of play according to parten or known as perten's classic study of play are parallel play, associative play and



cooperative play. Parten's idea of social play behavior is often a benchmark in assessing children's social abilities. This parten idea can also be used to help stimulate the development of children's language skills (Dhempie 2016).

Cooperative play is a kind of active game, which is a play activity that requires active participation in the game. This game is a kind of low in fact game, which is a type of semi-outbound game that is packaged in a challenging atmosphere with very little risk. Low in fact activities are useful in social skills, such as for building character, leadership traits, and the ability to work together in teams or groups. This is because related to activities require planning, setting strategies, time efficiency of delegation or division of tasks and honesty and social responsibility (Supendi, 2014).

The benefits of playing cooperative play according to Dhempie 2016 include:

- a. Practice language development and insight
- b. Recognize different colors and shapes
- c. Group cooperation
- d. Train concentration
- e. Practice social skills

### **Puzzle**

Puzzle is a toy to arrange pictures that are randomized first. Children will arrange them in a frame by connecting small pieces to form a complete picture. Puzzle picture pieces are generally made asymmetrical so that the picture pieces are unique and help players in making it easier to

arrange. The benefits of puzzle games include:

#### **1) Improve Cognitive Skills**

Cognitive abilities are related to the ability to learn and solve problems. Puzzle is an interesting game because it basically likes pictures and colors. Puzzle games played by children will provide opportunities to solve problems, namely arranging pictures. In the early stages of getting to know puzzles, children may try to arrange puzzle pictures by trying to arrange the parts of the puzzle without directions. The directions and examples will allow children to develop their cognitive abilities by trying to match shapes, colors or logic.

#### **2) Improve Social Skills**

Social skills are related to the ability to interact socially with other people. Puzzles can be played individually and can also be played in groups. Games played by children in groups will increase children's social interaction. In groups, children will respect each other, help each other, and discuss with each other.

#### **3) Improve Fine Motor Skills**

Fine motor skills are related to the child's ability to use small muscles, especially the hands and fingers. By playing puzzles, children will learn to actively use their fingers without realizing it. So that the puzzle can be arranged to form a picture, the parts of the puzzle must be arranged carefully.

#### **Social Skills**

Social ability is a child's ability to get along or socialize relate well to their environment, so that children can be accepted in environment / group, according to the rules contained therein. Something environment/group



will easily accept a child who has good social skills such as easy to get along with, respecting friends, and cheerful compared to quiet children (Astuti, 2014).

Social skills in children do not just appear. To develop social skills in children requires practice. For this reason, as an educator, it is necessary to provide social skills training to children from an early age. From an early age children need to be accustomed to socializing with their environment, such as self-control, communication, sympathy, empathy, sharing, and in terms of working together. Through good social skills, children will be able to adapt to situations / circumstances that occur in the environment / groups that children face well, such as in the family, home or school environment (Astuti, 2014).

One of the characteristics of social skills is being able to work together with a child who can work together according to the Center for Early Childhood Education Studies

1. Can join in group games.
2. Can be actively involved in group games.
3. Willing to share with his friends.
4. Encourage other children to help others.
5. Respond well when someone offers to help.
6. Join playing with friends during breaks.
7. Say thank you when friends help.

**David, et al (2013) in Slamet Suyanto (2015) argue that there are four basic elements in learning to work together, namely:**

1. The existence of mutually beneficial interdependence on children in doing business together,
2. There is direct interaction between the children in one group
3. Each child has a responsibility to be able to master the material being taught.
4. Appropriate use of each child's intrapersonal and small group abilities.

## RESEARCH METHODS

This study uses a pre-experimental design with a One Group Pre-test-post-test design. The instrument used in this study was a checklist filled out by the researcher by means of observation, while the research tools or materials included puzzle game tools. Toddlers were observed during social interaction through puzzle games, this observation was carried out before cooperative play puzzle play therapy and on the last day of puzzle playing therapy or interacting.

The stages of the research method from the initial survey of children are selected and grouped according to the characteristics selected as respondents who will be used as research samples. The research was conducted in Bungo Pasang Village, Koto Tengah Padang District, from June to August 2021.

### Data Processing Techniques

Data was collected through checking the contents of the observation sheet whether the observation sheet was complete, relevant and consistent. Editing is done manually, where the processing includes checking the observation sheet. After the data is collected, the



researcher performs coding, data entry, tabulation and cleaning.

The results of the study were analyzed using Univariate analysis, and Bivariate analysis.

**Data Analysis Techniques**

**RESULT**

**4.1 The average value of social skills before being given puzzle play therapy**

**Table 4.1**

**The Average Value of Respondents' Social Ability Before Conducted Puzzle Play Therapy for Children in Koto Tengah District, Padang City in 2021**

Variabel	Mean	Std. Deviasi	Std.error	N
Pre	9.00	2.449	0.775	10

From the results of the study, it was found that the average social ability of children before playing puzzle therapy was 9.00

with a standard deviation of 2.449 and a standard error of 0.775. The statistical test results obtained P 0.025 (p <0.05).

**4.2 The average value of social skills after being given puzzle play therapy**

**Table 4.2**

**The Average Value of Respondents' Social Ability After Conducted Puzzle Play Therapy for Children in Koto Tengah District, Padang City in 2021**

Variabel	Mean	Std. Deviasi	Std.error	N
Post	15.60	1.578	0.499	10

From the results of the study, it was found that the average social ability of toddlers aged 4-6 years after playing puzzle therapy was 15.60 with a

standard deviation of 1.578 and a standard error of 0.499. Statistical test results obtained P 0.025 (p <0.05).



### 4.3 The Effect of Cooperative Play Puzzle Play Group Activity Therapy Towards Improve Children's Social Skills Before And After Given Therapy.

Table 4.3

Wilcoxon Test Results About The Effect Of Cooperative Play Puzzle Play Group Activity Therapy Towards Improve Children's Social Ability Before And After Given Therapy In Koto Tengah District Padang City in 2021

	N	Mean Rank	Sum of rank	Asym.sig.(2-tailed)
TOTAL POS - Negative Ranks	0 <sup>a</sup>	.00	.00	
TOTAL PRE Positive ranks	10 <sup>b</sup>	5.50	55.00	.005
Ties	0 <sup>c</sup>			
Total	10			

From the positive rank results, it was found that the value of social skills increased from pre ob to post ob scores. The mean rank or average increase is 5.50 while the number of positive ranks or sum of ranks is 55.00. The negative rank result for pre ob and post ob is 0 both on the value of N, Mean Rank and sum of rank. This 0 value indicates that from the negative rank result there is no decrease or reduction from the pre ob value to the post ob value, Asym.sig. (2 - tailed) is  $0.005 < 0.05$  it can be

## DISCUSSION

### Children's Social Ability in Koto Tengah District, Padang City in 2021 before Puzzle Playing Therapy

Based on the data from research on 10 respondents in Bungo Pasang Village, Koto Tengah District, before the Puzzle playing therapy was carried out, the average value of the respondents' social skills was 9.00 which was assessed using an observation sheet.

In line with the results of Dewi's 2015 research conducted at Kumara

concluded that there is an average difference between pre ob and post ob.

From the results of this study, there is an effect of Puzzle playing therapy to improve children's social skills with a difference in the average value of pre ob and post ob 6.6 with the meaning of the word social ability post ob is higher than pre ob, that is, there is a significant difference between the level of social ability respondents before and after receiving therapy or the absence of a decrease or reduction in the value of pre ob to post ob.

Jaya Kindergarten in Denpasar, before doing Puzzle play therapy, the percentage level of social ability in group B children at Kumara Jaya Kindergarten Denpasar was low.

According to Moeslichatoen (2004) through playing children will be able to develop their social abilities, such as fostering good relations with other children, behaving according to the demands of society, adjusting to their peers, being able to understand their own behavior, and understanding that every action has consequences.



Based on observations from the observation sheet before playing Puzzle therapy, there was only 1 person (10%) who was included in the capable category, 6 people (60%) were quite capable and 3 people (30%) were poor. Based on the 6 items assessed from the observation sheet, only assessment number 1 is one person who gets a score of 3 (capable) the other gets a score of 2 (quite capable) and 1 (poor). From the results of the study, it was found that the mean pre-ob rating was 9.00. So from the analysis of these observations, it can be seen that most of the respondents have poor social skills and only one person has good social skills. Researchers assume that the social skills of children under five will increase after playing Puzzle therapy.

#### **Children's Social Ability in Koto Tengah District, Padang City in 2021 after Puzzle Playing Therapy**

Based on the data from research on 10 respondents in Simpang Duku, Dua Koto District, before the Puzzle playing therapy was carried out, the average value of the respondents' social abilities increased from 9.00 to 15.60 increasing social skills because they had been given Puzzle playing therapy for 5 meetings by researchers who were assessed using observation sheet.

In line with research conducted by Serli (2014), that through fruit puzzle games can improve children's social skills in cooperating with peers. The percentage in this aspect, the initial aspect before the game, 27% rose to 87%, so it can be concluded that the ability of children's social

attitudes can increase optimally through cooperation in arranging puzzle pieces.

Puzzle learning media has a function, namely with Puzzle media, children will be able to foster a sense of solidarity with fellow friends, children can foster a sense of kinship between their peers, foster a sense of togetherness, can foster mutual respect and mutual respect between peers, foster a sense of belonging among peers, children will be able to obey the rules when playing and Puzzle media will be able to entertain the children (Lisnwati 2014).

Based on observations from the observation sheet after playing Puzzle therapy for 5 meetings, there were 9 people (90%) who were included in the capable category, 1 person (10%) was quite capable and 0 people (0%) was less able. Of the 6 assessment items in the assessment observation sheet, 8 people got a score of 3 which means they are able and 2 people get a value of 2 which means they are quite capable, assessment number 2 is 7 people who get a value of 3 (capable) 3 people get a value of 2 (quite capable) assessment no 3 7 people get a value of 3 (able) and 3 people get a value of 2 (quite capable), assessment number 4 as many as 5 people get a value of 3 (able) and 5 people get a value of 2 (quite capable), assessment no 5 as many as 5 people get a value of 3 (able) and 5 people get a value of 2 (quite capable) assessment number 6 as many as 5 people get a value of 3 (capable) and 5 people get a value of 2 (quite capable), meaning that from the assessment of the 6 items it has a value of 3 (able) 2 (quite capable) just not there value 1 (poor).



From the results of the study, it was found that the mean rank post ob was 15.60. So from the analysis of these observations, it can be seen that most of the respondents have good social skills and only one person who has sufficient social skills.

The researcher assumes that the social skills of toddlers have increased because they have done 5 meetings of Puzzle playing therapy. In addition, the effectiveness of Puzzle play therapy which is carried out is supported by the role of researchers in conducting play therapy with the method of demonstrating the respondent's trust in the researcher and the skills and appearance of a good researcher will make respondents believe in the researcher accompanied by an attitude of affection.

### **The Effect of Cooperative Play Puzzle Play Group Activity Therapy Towards Improve Children's Social Skills in Koto Tengah District, Padang City in 2021**

Based on the results of the study, it was found that there was an increase in the average value of the respondents' social skills after being given puzzle playing therapy. The average value before the Puzzle playing therapy was  $9.00 \pm 2,449$  and after the Puzzle playing therapy was given, the average respondent's knowledge was  $15.60 \pm 1,578$  and the P value was 0.025 ( $P < 0.05$ ). ob is higher than pre ob.

From the results of the non-parametric test using the Wilcoxon Test, this research shows the effect of Puzzle playing therapy to improve toddlers' social skills with a difference in the average pre-ob and post-ob

scores of 6.6, meaning that post-ob social skills are higher than pre-ob. a significant difference between the level of social ability of respondents before and after receiving therapy or the absence of a decrease or reduction from pre ob to post ob scores. In this study, it can be concluded that puzzle play therapy can improve children's social skills, which is carried out by researchers.

The results of Astuti's research (2012) show that group puzzle games have an effect on improving social skills (cooperation) in group A children in Rhaudhatul Athfal Masyithoh Kantongan, this can be proven from the results of pre-action social skills (cooperation) by 18% to 53% ( increased by 35%) in cycle 1 and 88% in cycle II (increased by 35%).

From the observations of the results of the comparison of the mean range between pre ob and post ob that have been carried out, the researcher believes that the increase in respondents' social abilities occurs because the therapy is carried out in a structured manner and uses demonstration techniques by fostering a trusting relationship between respondents and researchers. Before doing therapy, the researcher first made a guide for the implementation of puzzle play therapy, in this guide the researcher developed the objectives, materials, and timing of the implementation of play therapy.

In addition, seen from the results of the analysis of the difference in the comparison of the average pre-ob and post-ob values, the difference in comparison is 6.6, this social ability



improvement should be even more significant with the presence of various kinds of games at home such as playing therapy in the available playroom. However, when conducting research, the provision of Puzzle playing therapy to respondents was only in a large room because there was no play room at home. Based on the research above, the researcher assumes that puzzle playing therapy will be even more improved if the puzzle playing therapy is given in the play room.

### CONCLUSION

Based on the results of research conducted in Bungo Pasang Village, Koto Tangah Subdistrict, Padang City in 2021 regarding "the effectiveness of implementing cooperative play puzzle group educational games for children during the COVID-19 pandemic towards increasing social interaction in children in Koto Tangah Subdistrict, Padang City in 2021, conclusions can be drawn. There is :

The average value of toddler's social ability before Cooperative Play Puzzle Play Therapy is (9.00). The average value of toddlers' social skills after Cooperative Play Puzzle Play Therapy is (15.60).

There is an effect of group activity therapy playing Cooperative Play Puzzle to improve children's social skills in Bungo Pasang Village, Koto Tangah Subdistrict in 2021. From the positive rank results, the score has increased from pre-ob to post ob scores. The mean rank or average increase is 5.50 while the number of positive ranks or sum of ranks is 55.00. the negative rank result for pre ob and post-ob is 0 both in the value of

N, Mean Rank and sum of rank. This 0 value indicates that from the negative rank results there is no decrease or reduction from the pre ob value to the post ob value. with the mean difference between pre-ob and post-ob is 6.6 with P value of 0.025 ( $p < 0.05$ ) .

### SUGGESTION

#### For Parents of Children in Bungo Village, Pasang Koto Tangah District

This research is expected could be usefull by parents to improve their children's social skills through puzzle games during the Covid 19 pandemic.

#### For Next Researcher

The research that the author had done could be usefull as supporting data for further researchers and can conduct further research by developing research variables that have not been studied in this study.

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