The Effect of Role Play Method Towards Cooperation Capability of Kids Age 5-6 Years Old

R. Sihadi Darmo Wihardjo, Yuliani Nurani, Syahrul Ramadhan

ABSTRACT—This research was conducted with the aim to determine the effect of the method of playing role on the ability of cooperation in children aged 5-6 years at TK Ros Ros Regency of Bima. This research is a quasi-experimental study with a pretest-posttest control group research design. The population in this study were 79 children with the sample used were 61 children. The sample is then divided into 2 groups. The technique of determining the sample is to use random sampling techniques. The validity of the contents of the instrument used in this study was calculated using the Gregory formula. Meanwhile for instrument reliability, it is estimated by using Cronbach's alpha formula. Data collection techniques in this study were observation and interview techniques. Furthermore, for data analysis techniques, the Anova test was used and analyzed using the SPSS 22 program. The results showed that the role playing method had a significant influence on the ability of cooperation. This is indicated by the value of $p < \text{sig}(0.05)$ which means that there is an influence between the method of playing role on the ability of cooperation in children aged 5-6 years at Bunga Ros Kindergarten, Regency of Bima.

Keyword—Role playing, cooperation, early childhood education

I. INTRODUCTION

The development of children's abilities is influenced by several factors where one of them is the learning method used by educators to teach them. There are various learning methods that can be applied to early childhood education, such as question and answer, demonstrations, field trips, story telling, division of tasks, projects, and role playing. Role playing methods can be used to train children's cooperation, when they form a team and play a scenario. Children who are at school age in this case will participate in role playing as a constructive stage.

Role playing has benefits for children. One of the benefits of role playing is training them to be able to build social relationships with peers [1]. Building social relations is considered very important considering that at the age of children, they need social relationships with peers to be able to develop social ability and social relationships. [2] Explains that five-year-old children can work together and be responsible. This can be reflected when children play roles where they can start the activity by organizing their play, assigning roles and responsibilities that demand negotiation and compromise. Role playing for children aged 5-6 years also has other functions including helping the child's adjustment. In addition, role playing involves intense group interaction where each group member must

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take a role to complete the role in the group. This makes the role playing method can be used to train and develop the ability of cooperation and responsibility in children [3].

Cooperation is a social ability possessed by children. The ability of cooperation is expressed in feelings of pleasure, enthusiasm and enjoy when learning together [4]. The ability to work together is the ability to carry out tasks to achieve the desired goals together [5]. Collaborative learning has been taught when children are in early childhood through tertiary educational institutions [6]. In line with this opinion [7], explained that in education, it must be integrated with life and should also provide a life of cooperation. The ability of cooperation is a socially useful ability that requires children to sometimes need to yield and further reduce selfishness and prioritize group welfare or success.

The objectives of developing cooperation skill based on the Ministry of National Education [8] include, (a) improving academic results, with this goal the performance of children in their academic tasks can also be improved. Children who are more capable in a partnership will be a resource for children who are less capable who have the same orientation and language, (b) provide opportunities for children to accept their friends who have different backgrounds where differences such as differences in ethnicity, religion, ability academic, and social level, (c) develop children's social ability. Practicing children's cooperation ability will help them to engage in social activities and gain an attitude of social acceptance when they are able to adapt and cooperate with their friends.

Ability development can be obtained in various ways. One way to develop abilities is by the learning methods used by the teacher in the classroom. Using the role playing method is expected to be able to help and facilitate teachers in developing children's cooperation and responsibility abilities. Based on this background, the role playing method is expected to be able to influence the ability of children aged 5-6 years at Bunga Ros Kindergarten, Bima.

II. RESEARCH METHOD

This research is a quasi-experimental study with a pretest-posttest control group research design. The population in this study were 79 children where the sample used was 61 children divided into 2 groups. Determination of the sample is done using the random sampling method. The validity of the contents of the instrument used in this study was calculated using the Gregory formula. Meanwhile for instrument reliability, it is estimated by using Cronbach's alpha formula. Data collection techniques in this study include observation and interview techniques while for data analysis techniques, this study uses the Anova test which is then analyzed using the SPSS 22 program.

III. RESEARCH RESULTS

Data collected in this study include the results of observations on the ability of cooperation and responsibility in children aged 5-6 years at Bunga Ros Kindergarten, Bima Regency. Scoring on cooperation abilities and responsibilities is based on scoring guidelines, with the highest score is 2 and the lowest is 0. All of the data was analyzed using the help of the JASP and Microsoft Excel 2010 programs.
The experimental group was given learning by using the role playing method while for the control group was using conventional learning. Based on the implementation, the results of the pretest and posttest observations obtained the ability of cooperation and responsibility. All experimental and control group data were recapitulated in data analysis based on the two classes.

1. **Description of the cooperation ability data of the pretest and posttest**

The data description of the ability of the cooperation is taken from the observations in the field. The data is the result data from the pretest and posttest scores which are then described in tabular form. The following is a description of the results of observations of children's cooperation.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Control</th>
<th>Experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>1</td>
<td>Average</td>
<td>14,13</td>
<td>14,23</td>
</tr>
<tr>
<td>2</td>
<td>Standard Deviation</td>
<td>2,20</td>
<td>2,28</td>
</tr>
<tr>
<td>3</td>
<td>The Highest Score</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>4</td>
<td>The Lowest Score</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 1 is a description table of the results of observations of children's cooperation. Based on table 1 above it can be concluded that the mean score of pretest in the experimental group was 17.22 while at the posttest it increased to 29.84. In the control group, the average pretest score was 14.13 and in the posttest the average increased slightly to 14.23. The highest score obtained in the experimental class during the pretest was 24 while the lowest score was 13. In the control class the highest score in the pretest was 18 and the lowest was 10. Then in the stage after giving treatment or posttest the score in the experimental class was 36 and the lowest score was 22 whereas the control group did not experience an increase or decrease in scores.

2. **Normality Test Assumption**

The first prerequisite test in this study uses the normality test. Normality test in this study uses the Shapiro-Wilk test, this is because the number of samples to be studied is less than 40 in each class. The prerequisite test was analyzed using the JASP program. The data distribution is said to be normally distributed if the value of \( p > \text{sig} \) or \( p > 0.05 \). Following are the results of the prerequisite test analysis using the JASP program.

<table>
<thead>
<tr>
<th></th>
<th>W</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre_Experiment</td>
<td>0.945</td>
<td>0.115</td>
</tr>
<tr>
<td>Pre_Control</td>
<td>0.957</td>
<td>0.261</td>
</tr>
</tbody>
</table>

*Note.* Significant results suggest a deviation from normality.
Based on the analysis results in table 2 above, the pre-experiment group showed a p value of 0.115, whereas in the pre-Control group showed a p value of 0.261. Both groups in the analysis showed a value of p> 0.05 or p> sig or it can be said that the distribution of data in each class sample studied in this study had fulfilled the normal distribution prerequisites.

3. Homogeneity test

The second prerequisite test in this study was carried out using the homogeneity test. The normality test used in this study is to use the Levene's Test. The prerequisite test was analyzed using the JASP program. Data is said to be homogeneous if the value of p> sig or (p> 0.05). Following are the results of the analysis of the prerequisite tests using the JASP program.

| Table 3: Test for Equality of Variances (Levene's) |
|-----------------|--------|--------|--------|
| F               | df1    | df2    | p      |
| 0.694           | 1.000  | 59.000 | 0.408  |

Based on the results of the analysis in table 3 above, it is known that the p value is 0.985. These results indicate the value of p> sig or p> 0.05, or in other words the data meets the homogeneous prerequisite test.

4. Hypothesis Test

After testing the assumptions of normality and homogeneity, the next step is to test the hypothesis. Hypothesis testing in this study was conducted using Paired Sample T-Test which was then analyzed using the JASP program.

The hypothesis in this study is as follow.

\[ H_0 \] = There is an influence of the method of playing role on the cooperation ability in children aged 5

\[ H_a \] = There is no influence of the method of playing role on the cooperation ability in children aged 5

Criteria test:

\[ P < \text{sig} (0.05) \] = \[ H_0 \] is accepted and dan \[ H_a \] is rejected

\[ P > \text{sig} (0.05) \] = \[ H_0 \] is rejected and dan \[ H_a \] is accepted

| Table 4: Paired Samples T-Test |
|-----------------|--------|--------|
| t               | df     | p      |
| Pre_Experiment - Post_Experiment | -15.159 | 30 | < .001 |
| Pre_Control - Post_Control       | -1.795 | 29 | 0.083 |

Table 4 is the hypothesis test results table. The table shows the p value in the experimental group is <0.001 while in the control group, the p value is 0.083. These results indicate that the value of p < sig (0.05) in the
experimental class and in the control class shows the value of $P > \text{Sig (0.05)}$. Based on these results, it can be concluded that $H_0$ is accepted and $H_a$ is rejected, which means that there is an influence on the role playing method on the cooperation ability in children aged 5-6 years at Bunga Ros Kindergarten, Regency of Bima.

IV. DISCUSSION

Learning by the role playing method used by teachers in teaching and educating children aged 5-6 years has a profound effect on their cooperation ability. In this case role playing is used as a method that is able to stimulate and enhance the cooperation ability of children. Train and stimulate the ability to cooperate with children is one important thing because with these activities can stimulate the ability of cooperation in children so that they train in socializing. In addition to developing children's ability, it also means participating in realizing the goals of international education, namely building children who are independent and have good cooperative ability [9].

Role playing can include the imagination of children and their social abilities, namely through cooperation and interaction with their peers [10]. In the role playing learning process, children are invited to develop their cooperation ability by doing activities together, running a scenario that must be done together so that the scenario runs well and smoothly. In the process of playing roles, children play together and help one another with difficulties, such as wearing costumes. In addition, in playing roles, communication between children will also occur. The children also hold each other's shoulders and also clap together happily when role playing learning is finished. Through learning with the role playing method, it can be seen that the cooperation ability will naturally emerge during the process of learning by playing the role taking place.

The application of the role playing method for children aged 5-6 years has a significant influence on ability of children's cooperation. This is evidenced by the results of hypothesis testing where the results obtained are $P < \text{sig (0.05)}$. The results of the study are also supported by expert opinion which explains that role playing is a challenge for the game, because there are straight rules to open imagination, new movements and details. Players may want to end and control the game, but at the same time they must also work with friends or other players [11].

Other opinions also say that children aged 5 years can work together and be responsible. In that case, when children play roles, they can begin to organize their games and assign roles and responsibilities that demand an agreement [2]. The difference in the cooperation ability is also evidenced by the increased ability of children in the experimental group before and after treatment was given. The following is a graph of analysis related to the experimental class before and after the treatment.

![Figure 1: Comparison of scores in the experimental class before and after treatment](image)
The picture above is a comparison chart of scores in the experimental class before and after the treatment is based on indicators. The figure shows that there was an increase in the score of cooperation ability after giving treatment based on 6 indicators of cooperation ability. This can be seen in all indicators of cooperation that have increased scores. This explains that treatment in the form of role playing gives an influence on children's cooperation.

The thing that makes the difference between the pre-test and the post-test is that the children are invited to do activities together and sequentially which makes them then have to work together in doing role playing activities alternately according to the scenario. In playing these roles, children learn to take responsibility for carrying out their roles so that the role playing role remains consistent with the initial planning. Therefore, with the provision of role playing methods, the ability of children's cooperation will increase significantly. Thus, it responds to statements from context socialization that give them the opportunity to symbolically create and then modify emotional events that are very encouraging, as well as negotiate rules and agreement on the direction of play with social partners [1].

V. CONCLUSION

Based on the results and discussion, it can be concluded that the role playing method significantly influences the ability of cooperation. This is indicated by the value of $p < \text{sig} (0.05)$, which means that there is an influence between the role playing method on the cooperation ability in children aged 5-6 years at Bunga Ros Kindergarten, Bima Regency.

REFERENCES

