

The Influence of Cooperative Game Towards Teamwork of 5th-grade Students of Elementary Schools in Surakarta

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Abstract

Purpose: School-age is a time when children get the basics of knowledge to successfully adjust to adult life and acquire certain skills. This study aimed to see whether there is an influence of cooperative play on the cooperation of 5th-grade students in elementary school.

Methodology: The method used was a pre-experimental design with pretest-posttest one group design. The sampling technique used in this study was purposive sampling with criteria of informants determined by the researchers, a total of 300 subjects are 5-th grade students in 8 elementary schools spread in Surakarta. Then for the method of data collection in this study used observation, collaboration scale, and documentation.

Results: The results of this study had no effect on cooperative play on the teamwork of 5th-grade elementary school children. However, when viewed from the results of children's observation data showed behaviors that included the aspect of teamwork when playing cooperation game. Quantitatively, this research was part of proving the influence of quantitative play on teamwork, however, the results of observations indicated behaviors which were consistent with indicators of teamwork.

Applications: The teachers might change the variants of cooperative games itself so it would help the students to improve their teamwork.

Keywords: teamwork, cooperative game, student of elementary school

INTRODUCTION SECTION

Primary school children are children aged 6-12 years, have stronger physical individual characteristics and are active and not dependent on parents. Many experts consider that in previous periods it will continue for the future (Gunarsa, in Nadia S, Indrani, and Mulyono, 2017). According to Wong (in Nadia S, Indrani, and Mulyono, 2017), school children are children at the age of 6-12 years old, which means school is the child's core experience. The period when children are responsible for their behaviors of their relationships with their parents, peers, and others. School-age is a time when children get the basics of knowledge to successfully adjust to adult life and acquire certain skills. In Article 1 Chapter I of General Provisions Permendikbud No. 137 of 2014 set the standard definition one of which is the Level of Achievement of Child Development (STPPA) is a criterion about the ability of children achieved in all aspects of development and (Article 1 (2) growth, including aspects of religious and moral values, physical-motor, cognitive, language social-emotional and arts.

Collaboration is a series of activities carried out by students in certain groups to achieve common goals. The principle of teamwork is that students can exchange ideas and help each other in learning activities, meaning that in an activity each student is more emphasized to cooperate (Fadlillah in Devi & Pusari, 2017). The more opportunities children have to do things together, the faster the children learn to do it by working together. The cooperative game was done together so that it required face to face between players, this can establish social interaction between players. From that interaction, children can develop social skills with peers or with the environment, train children's creativity, develop children's motor skills, train children's sportsmanship spirit, strengthen friendship, and train children to work together with groups.

Aspects of teamwork accords to Zhuang (in Nugraha, 2016) include:

1. Teamwork

Collaboration according to *KBBI (Kamus Besar Bahasa Indonesia)* or Official Indonesian Dictionary is interpreted as an effort carried out jointly.

2. Affect and support

Influence and support are influencing and supporting other team members with support and encouragement.

3. Resolve problems and negotiations

One way to eliminate tension and disagreement which occur between one member with another member.

The following factors which influence teamwork according to Setiyanti (in Wardani, 2018) and Hack (in Wardani, 2018) say that the factors which influence teamwork are mutual trust, openness, self-realization, interdependence, clear goals and direction, good leaders, and tasks which are following teamwork. Rosemary Rein and Ken Blanchard (Paterson in Eliasa, 2014) said that there are some ways to improve an effective team work:

1. To communicate clear expectations toward teamwork and collaboration which are expected
2. To respect and admit cooperation, so it isn't needed to work alone
3. To always review the group's result
4. To give opportunities by using interesting activities
5. To use ice breaker activities to refresh and motivate the group

Play is something that allowing children to develop optimally. Play can affect all aspects of development by allowing children to learn about themselves, family, peers, and the environment around the child. Through playing children can also develop social abilities, such as building relationships with other children, behave following the demands of society, adjust to peers, can understand their behaviors, and understand that every action has consequences. Cooperative play is a game that involves a group of children, where each child gets their respective roles and tasks that must be done to achieve a common goal (Nugraha in Wardany, 2017). In line with Kibtiyah's research (in Wardany, 2017) the effects of cooperative play show that children who grow up playing socially more actively, are more creative, have a richer vocabulary, are more fluent in speaking and are happier in doing tasks compared to children who grow up without playing. Also, in line with Kartika's research (in Wardany, 2017) cooperative play tends to improve cooperative behavior and help children not to behave aggressively. Cooperative play can also increase peer acceptance, self-respect, and social skills.

The aspects that exist in the cooperative game according to Browne (in Setiawan, 2017):

- a. Every child has a role
- b. Direct interaction between children
- c. Each group member is also responsible for his group friends
- d. Educators only interact with groups when children need help.

While the factors in playing cooperatively according to Setiawan (2017) are:

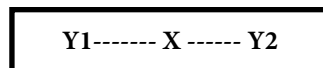
- a. The need for children to socialize with peers
- b. Practicing children's creativity
- c. Developing children's motor skills

- d. Train the soul of sportsmanship of children
- e. Strengthen friendship
- f. Train children to work with groups

There was a study conducted by Niam and Ferianto in 2017 on the Effect of Giving Traditional Games to Student Teamwork in Physical Education, Sports, and Health Learning where the result was a significant influence between traditional games on student cooperation in physical education, sports learning and health in class X MIPA Senior High School 2 Ponorogo students. According to aspects of teamwork of Zhuang's theory (in Nugraha, 2016) one of them is to influence and support which means to influence and support other team members with support and encouragement. Meanwhile, the aspects that exist in the cooperative game according to Browne (in Setiawan, 2017) one of which is that each group member is also responsible for his group friends. From the aspects of the two variables above gives the researcher a hypothesis that there is a possible influence of cooperative play on teamwork.

RESEARCH METHODS

The research method that we use was Pre-experimental with the research design that was one group pre-test-post test, simply, the research design used can be described as follows:



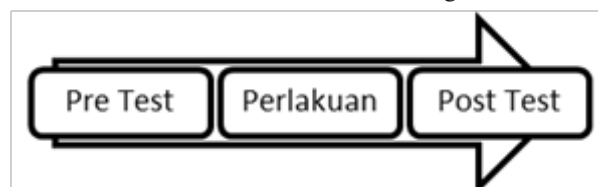
Explanation :

- Y1: Pre-Test, using a scale of teamwork totaling 30 items
- X : Treatments, cooperative games
- Y2: Post-Test, using a scale of teamwork totaling 30 items

The population in this study were all grade 5 elementary school students in the city of Surakarta. The sample in this study was determined by a purposive sampling method of 300 people. The sample collection method used was purposive sampling, which is a sampling technique by determining certain criteria (Sugiyono in Mukhsin, Mappigau, and Tenriawaru, 2017).

The design of this research is Pre-experimental with Pre-Posttest One Group Design. The research flow used is as follows:

Picture 1. Research Design



Explanation :

- 1. Pre Test
Measurement using a scale of teamwork for ± 10 minutes.

2. Treatment

In the form of a cooperative game in the form of parsing hands on the experimental group for ± 25 minutes.

3. Post Test

Measurement using a scale of teamwork for ± 10 minutes

This data collection is a very important step in a study. So it needs the right tools or methods so that the data obtained is accurate. In addition to the pre-experimental method, researchers also use the method of observation, scale, and documentation. The measurement scale used for this study is the scale of collaboration which in its preparation uses a scaling model of five answer options. Also, researchers adopted the scale of a thesis by Faris Andzar Nugraha in 2016 with title, *The Effect of Teamwork, Patience, and Discipline in Performing Compulsory Prayers Against Job Stress*. This research could be influential if Ha is accepted and Ho is rejected, and otherwise if this study has no effect then Ho is accepted and Ha is rejected.

RESULTS AND DISCUSSION

Data Analysis Results

Based on the results of data analysis using SPSS 16, normality is seen from the Test of Normality table in the Kolmogorov-Smirnov column and the Test of Homogeneity of Variance table.

Table 1. Result of Normality Test

PREPOST		Kolmogorov-Smirnov	Shapiro-Wilk
		Sig.	Sig.
Teamwork	Pre-test	0.000	0.000
	Post-test	0.000	0.000

Table 2. Result of Homogeneity Test

		Sig.
Teamwork	Based on Mean	0.498

From the significant results (Sig.) Of 0,000 ($p > 0.05$) so that the abnormal data can be seen that the homogeneity test that is not homogeneous can be seen from the significant results (Sig.) In the Based on Mean column of 0.498 ($p > 0, 05$). because the data are not normal and homogeneous, so significance testing uses Non-Parametric.

Table 3.. Result of Mann Whitney U

		Mean Rank
Teamwrok	Pre-test	190.14
	Post-test	186.86
	Asymp Sig. (2-tailed)	0.766

Hypothesis testing using Mann-Whitney U can be seen that the Asymp significance level. Sig (2-Tailed) of 0.766 ($p < 0.05$) showed that cooperative play did not affect increasing teamwork in 5th-grade elementary school children.

The process of analyzing data descriptively starts from the categorization of teamwork scores divided into five categorizations with various ranges of scores. The first categorization is teamwork which is very poor with a score range of 5.0 - 8.0. Next is the second categorization, i.e. lacking teamwork. In this categorization, the range of scores is between 8.00-11. The third is the categorization of sufficient teamwork with a range of scores from 11.0-14.

Furthermore, categorization with high teamwork with a score range of 14.0-17. While the last categorization of teamwork is very high teamwork which has a range between 17.0-20. Based on the categorization of the pretest scale, 8 subjects out of 196 subjects were dropped because the subjects were in the very high category before treatment was given.

Table 4. Categorization of Pretest to Posttest of Teamwork Scale

Pre-Post Test Categorization	Amount	Percentage
Very Low	1	33%
Very Low to Low	1	33%
Very Low to Moderate	1	33%
Low	7	47%
Low to Moderate	8	53%
Moderate	82	73%
Moderate to Low	2	2%
Moderate to High	27	24%
Moderate to Very High	1	1%
High	32	55%
High to Low	5	9%
High to Moderate	18	31%
High to Very High	3	5%
Very High	1	13%
Very High to Moderate	1	13%
Very High to High	6	75%

The researcher also analyzed the results of the comparison of pre-post test categorization as in Table 4. which shows that this cooperative arrangement can increase teamwork among children who have a sufficiently high category of teamwork by 27 children or 24% and enough to very high category as much as 1 child or 1% of 112 pretest children is in the sufficient category. Then the category of less than enough for 1 child or 7% of 15 children who at the time of the pretest were in the lacking category. Then, the category is very less to as many as 1 children or 33% and the category is very less to less as much as 1 child or 33% of the 3 pretest children are in the very less category. Whereas in the high to very high category as many as 2 children or 3% of the 58 children who at the pretest were in the high category. Based on the results of descriptive analysis of this research data, cooperative play can increase teamwork among children who are in the very low category by 66%, as low as 7%, quite as much as 25%, and as high as 3%.

Table 5. Categorization of Scores for Teamwork Scales

Comparison Rate	Amount	Percentage
Upgrade	41	21%
Decrease	32	16%
No effect	123	63%

Table 5. Explain the percentage change in the results of scaling scales on the post-test after being treated with a percentage of 63% which has no effect, 41% increase teamwork, while the other 32% decrease teamwork.

Table 6. Observation of Teamwork Behavior When Playing Cooperation Game

Behavior	Subject
Actively giving opinions	15% or 14 subjects; NDK, AVPA, ABW, RQH, SACN, ESR, SAW, RM, NLA, BCV, JZA, IM, HNA, and ENA
Give other people a chance to talk	22% or 21 students; NDK, A, AAM, DAP, LS, SAW, ANH, RM, RGS, NAP, RNS, JDRNP, FEZ, NLA, RC, APCF, ASA, JZA, DWA, HMS, and HSI
Have a solution / give a solution	9% or 9 subjects; MWS, RRRPR, PCD, KNW, EPP, A, RM, DWA, and ENA.
Attempts to accept opinions	35% or 33 subjects; CVA, GHS, NCG, CTCI, A, AAM, NKD, DAP, LS, ADM, SAW, ANH, RM, RGS, NLA, RC, SVL, MYA, APCF, ANR, ONS, ASA, RNA, JZA, RMI, AHMI, SAN, IM, BIK, AAK, GAW, DWA, D, and HNA.
Encourage the team	32% or 23 students; NDK, DAA, SSP, JHS, ARDP, NS, SMAA, NLA, ADA, MNA, CATA, MHS, KNW, SAW, ANH, RGS, NLA, RC, SVL, MYA, ASA, JZA, IM, and NA
Direct the team	34% or 18 students; NS, IKS, DGS, AEP, ABW, GHS, MRRAD, EEP, RQH, A, FTLD, RGS, NLA, RC, AHMI, AAK, DWA, and HNA

Based on Table 6 there were 15% of subjects who actively gave opinions. Then, there are 22% of subjects allowing other people to talk. Furthermore, there are 9% of subjects who have or provide solutions to their friends during the treatment. There are 35% of subjects who try to accept opinions There are 32% of subjects who encourage their team or friends. And, there are 34% of subjects who direct the team. That is, the subject raises behavior following the statement of aspects of teamwork or teamwork according to Zhuang (in Nugraha, 2016), among others, cooperation as an effort to be carried out jointly, influencing and supporting, namely influencing and supporting other team members with support and encouragement. And resolving problems and negotiations is one way to eliminate tensions and disagreements that occur between one member and another.

CONCLUSION

This study statistically using SPSS 16 analysis cannot prove the influence of cooperative play in increasing significant teamwork. However, based on the results of observations during the study behaviors that indicate teamwork among elementary school students appear. Also, based on a

descriptive analysis of the measurement results, the level of teamwork of elementary school students in Surakarta can be increased through cooperative play with the category of teamwork of children who are in the very low, low and sufficient categories.

In subsequent studies, researchers are expected to be more selective in the selection of subjects with consideration of categorization of variables, in this case, include low, sufficient and high categories of self-confidence. Then, the researcher must pay more attention to the subject randomization and include the control group as a comparison.

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