The effectiveness of krwanjang game implementation on sepak sila's skills in sepak takraw game at Surabaya sepak takraw academy

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Abstract

Krwanjang game is a game designed to develop basic skills of playing sepak takraw from an early age. The purpose of the study was to determine the game's effectiveness in improving the skills of sepak takraw players at the sepak takraw academy in Surabaya. The research method uses quantitative research. The population is all academy students and a sample of 11 students from the Surabaya Sepak Takraw Academy. The research design used a randomized pre-test post-test design, the type of design carried out by giving pre-test before treatment and post-test after treatment in the experimental group. The research data collection used several tests, including left-footed and right-footed sepak sila during pre-test and post-test. The data analysis technique is the analysis of variance (ANOVA) to determine the effectiveness level. The results showed that after the left and right-footed pre-test was conducted, they were treated with the krwanjang game and ended with the post-test of the sepak sila. From the data obtained and analyzed by ANOVA the results had a significant effect from the pre-test of 0.08 to 0.12 in the post-test. The research concludes that the sepak kwranjang game effectively improves the sepak sila skills of the students of the Surabaya Sepak Takraw Academy. The research implication is that sports coaches or academics can apply sepak kwranjang to improve their sepak sila.

Keywords : Sepak sila, Krwanjang, Games, Sepak Takraw.

INTRODUCTION

Sepak takraw is one of the games on the list of sports that are competed using foot media. This game has its way of turning off opponents, namely by serving, smashing using foot, where sepak takraw is very rare and even not yet taught by physical education teachers to students (Mas Setiaanda Artyhadewa, 2017). There are many ways to teach the ability to play sepak takraw through games, including floating ball games, tame ball games, boomerang ball games, bomes games, wave ball games, ball games, bolarus games, bosi games, bolvis and vokra ball games.(Nur Moh Kusuma Atmaja & Kurnia Dyah Anggorowati, 2019). The results of the description of the various kinds of games show that the design of teaching the game of sepak takraw cannot be separated from an interesting type of game to deliver someone to master the skills of sepak takraw in a fun way.

To play sepak takraw individually or as a team, you must master the basic playing techniques (Sukmana et al., 2021). Various basic techniques need to be mastered in the sepak takraw game, including kicking (sepak sila, sepak kura, sepak cukil, treading, and sepak badek), playing head,

hammering, smashing, and blocking (Rohman Hidayat, 2018, Adrian Sya'ban & Heru Syarli Lesmana, 2020). In order to be able to play sepak takraw skillfully, each player must master basic technical skills, namely, kicking (sepak sila, sepak kura, sepak cukil, treading, and badek soccer), playing head, chest, thigh, shoulder to shoulder, and special techniques, namely, service (starting soccer), reservice (receive the ball), pass, smash and block (Heriansyah, Adelian & Suhartiwi, 2017).

For this reason, several skills must be mastered individually in playing sepak takraw. These skills include sepak sila, sepak kuda, sepak petik, sepak badik, and sepak cangkuk (Zulkifli et al., 2020). The game of sepak takraw has several basic techniques from the previous description, where the focus in this paper is directed at one of the basic skills, namely sepak sila. Based on the data analysis, it can be concluded that the variation of the practice of sepak sila (X) has a significant effect on the accuracy of the pass (Y) in the male sepak takraw players of SMP Negeri 17 Sijunjung. Based on statistical data analysis, there is an average pre-test of 0.50 and a post-test average of 4.25 (Indra and Adnan, 2020).

The most important and strategic basic technique in sepak takraw is sepak sila (Patrice Alfiandi et al., 2018). It shows that there are 24 kinds of items from various types of sepak sila practice in sepak takraw. Sepak sila is a fairly basic part of being mastered to become a takraw player. The application of the training model is considered suitable for use in the training process, especially in the practice of sepak sila techniques. This sepak sila training model is easy and attractive for athletes and students and contributes to the training process (Patrice & Nur Ali, 2018).

From the various training models and existing forms of the games described previously, this paper leads to a study exploring the effect of games that have been developed to improve the ability of sepak sila in the game of sepak takraw, while the game in question is the krwanjang game. Although there have been many studies on sepak takraw, no research has been conducted on variations of the krwanjang game to improve sepak sila. On this basis, the problem in this study is how effective the krwanjang game

is to improve the sepak sila skills of the sepak takraw players at the Surabaya Sepak Takraw Academy.

METHOD

This type of research is a quasi-experimental quantitative experimental research that aims to determine the effectiveness of the kwranjang game in order to improve the skills of sepak sila in the game of sepak takraw. The research design was chosen to strengthen the research with a quasi-experimental type of research in its implementation in the field using a pre-test post-test design group randomized group design. (Suharsimi Arikunto, 2016). Through the research design model begins with a pre-test, namely a test of right and left-footed sepak sila skills, then treatment is given in the form of kwranjang game, which is carried out for four weeks, wherein one week practicing the kwranjang game three times, once the practice of the kwranjang game is carried out with a duration of 10 -15 minutes, after being given treatment for the post-test using the right and left-footed. The Krwanjang game is a game that leads to the the takraw ball management with the feet, and the ball is rocked with the feet to be put into the kwarajang. (Sukmana et al., 2021).

Table 1. Research design

Pre Test	Treatment	Post Test
Pre-Test (11 Students of Sepak Takraw Academy Surabaya)	Treatment (Playing Krwanjang Game 3 times a week, once per activity 10-15 minutes, for 4 weeks)	Post-Test (11 Students of Sepak Takraw Academy Surabaya)

Population and Sample Research, sepak takraw players who are members of the Surabaya Sepak Takraw Academy located in Surabaya, where the children who practice are the sample used as many as 11 sepak takraw male players who were trained at the Surabaya Sepak Takraw Academy (ASS). The sampling technique used is random or random sampling at the Surabaya Sepak Takraw Academy. Research Locations for the implementation of research and data collection were carried out at the Surabaya Sepak Takraw Academy in Surabaya. The research instrument used was through a type of test, in which the object tried to practice the

sepak sila test before and after treatment.

This study uses a standardized instrument, namely a 1-minute diving skills test for beginners. The sepak sila test aims to measure the basic techniques of sepak sila (Moh. Hanafi et al., 2020) with the sepak sila test. It is hoped that it will improve the ability of the sepak sila technique in the sepak takraw game. In conducting the sepak sila test, several tools are used to record the process until the results of the practice of sepak sila from each student of the Surabaya Sepak Takraw Academy. Some of the tools used include (1) a sepak takraw ball, (2) a timer with a stopwatch, (3) a field for practicing soccer, (4) a meter, (5) chalk, (6) a sheet of paper a note to record the number of soccer kicks.

The way to do the sepak sila test is (1) Players who are samples and students of the Surabaya Sepak Takraw Academy, standing in a prepared circle (2 meters in diameter), after hearing the signal, the athlete begins to perform Silat. (2) A ball that falls on the floor can be played again, and the count is resumed on the second touch. (3) The height of the shot is calculated when it exceeds the head of the tester. (4) The shooting time is limited to 1 minute or 3 minutes.

Table 2. Normative soccer test guidelines

normative	Category	Score
> 40	Very well	90
30 – 39	Well	80
20 -29	Enough	70
10 – 19	Not enough	60
< 10	Not much	50

(Sukmana et al., 2021)

The data analysis technique used in the study of the effectiveness of sepak sila through the kwranjang game is the analysis of variance (ANOVA) with a significance level of 0.05. As a prerequisite for analysis with ANOVA, it is started by testing the normality of the data and its homogeneity.

RESULTS

Having seen the test results of sepak sila practice through the krwanjang game, it was found that several stages can be described; the first

is the analysis prerequisite for the test by preparing a basic statistical description as shown in table 3.

Table 3. Description of Statistics

Descriptive Statistics

	N	Minimum	Maximum	mean	Std. Deviation
Pre_Test_right	11	23.00	51.00	35.9091	9.11542
Post_Test_right	11	6.00	41.00	27.3636	9.51076
Pre_test_left	11	33.00	60.00	43.7273	7.73422
Post_Test_left	11	15.00	355.00	63.3636	97.27412
Valid N (listwise)	11				

From the data results in table 3 (three) above, there is an average right of the experimental right pre-test 35.9091 while the right-hand post test is 27.3636 after being given treatment. In the left pre-test, 43.7273, while the left post-test was 63.3636. With the results of the initial analysis, it can be continued to the next analysis stage, namely the data normality test, which aims to determine whether the data is normal or not if it is normal, data is continued to the next stage.

Table 4. Data Normality Test

ONE-SAMPLE KOLMOGOROV-SMIRNOV TEST

	Pre_Test_Right	Pre_Test_Left	Post_test_Right	Post_Test_Left
N	11	11	11	11
KOLMOGOROV-SMIRNOV Z	.481	.842	.839	1,605
ASYMP. SIG. (2-TAILED)	.975	.477	.483	.089

Based on the data in table 4 (four) above, it can be concluded that the normality test results obtained all significant values greater than p-value 0.05, then the data is normally distributed, which is read as sig 2 tailed. After the normality test stage is complete, it is continued with the data homogeneity stage, which explains that the data other than normal is also homogeneous.

Table 5. Data Homogeneity Test

Test of Homogeneity of Variances

	Levene Statistics	df1	df2	Sig.
Pre_Test_Right	5.160	1	9	.049
Pre_Test_Left	.709	1	9	.422
Post_test_Rigt	3.015	1	9	.116

Post_Test_Left	7.438	1	9	.023

Based on the data in table 5 (five) above, it can be concluded that the results of the homogeneity test obtained that all significant values were greater than p-value 0.05, so the data were homogeneously distributed. Based on the three basic prerequisites passed, it can be continued by conducting data analysis, namely the Analysis of Variance (ANOVA), which can be described in table 6 (six).

Table 6. ANOVA Analysis Results

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Pre_Test_Right	Between Groups	4.609	1	4.609	.050	.008
	Within Groups	826,300	9	91.811		
	Total	830,909	10			
Post_test_Right	Between Groups	21.382	1	21.382	.334	.012
	Within Groups	576,800	9	64,089		
	Total	598,182	10			

Table 6 (six) above shows that the data from the pre and post-test experimental groups have differences, or there is an influence between the data for each variable. Based on the analysis results, a final summary can be drawn that the Krwanjang games improve students' sepak sila skills at the Surabaya Sepak Takraw Academy (ASS).

DISCUSSION

Based on the results of field data analysis with ANOVA, it was found that there was an effect of the krwanjang game on improving the ASS student's sepak sila, it is hoped that improving the skills of sepak sila through the game media is also important by being able to sort out which game is the right one. Indeed, other research shows that many games can improve the skills of playing sepak takraw, including floating ball games, tame ball games, boomerang games., bomes game, wave ball game, ball game, stream ball game, bosi game, bolvis and vokra ball game (Nur Moh Kusuma Atmaja & Kurnia Dyah Anggorowati, 2019). However, the context of the results of this study leads to a specific game, namely the krwanjang game, which focuses on one skill in playing sepak takraw, namely sepak sila. In sepak takraw games, some of the skills related to kicking are sepak mula (servicing), sepak sila, kickball, sepak kuda, and sepak kedeng (Eriec

Cahya Suprobo & Muhammad Soleh Fudin, 2021). (Haris Munandar, 2018) On that basis, improving the ability of sepak sila will certainly improve the skills of playing sepak takraw by practising the game of kwranjang soccer.

The results of other studies also show that improving the ability of sepak sila can be done through learning the modification of the ball model in sepak takraw games (Parlan, 2020). The ball modification model can improve the ability of sepak sila; if you see that modifications to the ball have had an impact, then in the game, kwranjang has used ball modifications and modifications in how to play, entering the ball, not over the net but inserting it into the kwranjang, meaning that modification of the ball itself can provide improvement. In contrast, the game of sepak kwranjang, played cheerfully by students, has also been a modification of the ball and the target passing through the upper lip of the kwranjang. Additionally, the ball must enter the kwranjang.

The results of other studies provide a way that is directed at learning, namely to improve the basic movement skills of sepak sila using the STAD (student teams achievement division) learning model, which is carried out on upper-grade elementary school students. (Fauzi Firdaus et al., 2017). The STAD method is one of the cooperative-based learning models, where the results can improve students' abilities. Suppose you look at the characteristics of the STAD model where students are grouped with 4-5 students, where students' abilities are heterogeneous (Muslim Ibrahim & et al., 2000). In that case, sepak kwranjang games already have almost the same characteristics, namely a small group in a krwanjang game of 4 students. The krwanjang soccer ability is also different, meaning that the similarity in design makes it possible to use the STAD learning model to support and strengthen each other through the kwranjang soccer game to strengthen ASS student football.

The results showed that there was a strong relationship between eye-foot coordination and sepak sila skills (Jufrianis, 2017) of course, the results of this study, when associated with the kwranjang game, are quite relevant where the game is dominantly playing on foot and eye coordination so that

the takraw ball can be put into the intended basket. Not only is there a relationship, but there are also other studies revealing below that there is a significant contribution of balance to the ability of silage in the game of sepak takraw in class VIII students of SMP Negeri 1 Palolo (Andref Novrianto, 2013).

After the mastery of sepak sila can be improved on the mastery of other skills, itt was explained that developing sepak takraw performance is expected to train muscle strength, balance, and core flexibility regularly to perform the sepak takraw service well. (Saharuddin Ita, 2019) meaning that the sepak sila mastered is not only technical but also physical support needs to be considered to play sepak takraw to gain the significant achievement. Furthermore, it is always good to explore other ways to master the skills of playing sepak takraw, including the sepak sila itself, where to improve sepak sila with suspended sepak sila serve practice can improve the ability to serve soccer in the game of sepak takraw (Elda Agung Darmawan, 2019). On the other way, the results of this study indicate that the use of variations of paired exercises can improve the quality of soccer learning and foster excitement and motivate students in learning (Barep Sucipto et al., 2017). Likewise, research conducted that the variation of the exercise provided can meet the reference of the sepak takraw coach in training his athletes, especially the practice of sepak sila techniques so that athletes do not get a monotonous training model from the coach (Dimas Bakti Saputro & Supriyadi, 2017).

Various ways to improve the ability of sepak sila is part of creativity that must be appreciated, so that it can be a reference in improving the ability of sepak sila in various contexts, whether coaches or teachers. However, you must remember that if the basic movement is wrong, it will be difficult to develop the next movement (Dadang Budi Hermawan, 2020). For this reason, the teaching style of practice also needs to be considered; even though sepak kwranjang is a game, it never hurts to pay attention to how to teach. The study results recommend a reciprocal teaching style and an exercise teaching style to help improve sepak sila learning outcomes in the

game sepak takraw (Suprayitno, 2018). Thus, the game of sepak takraw can lead the students of Surabaya Sepak Takraw Academy to improve their sepak sila skills, which impacts mastering the basic skills of playing sepak takraw that need to be played and supported by mastering the way how to teach it. The achievement from an early age is not easy, and it needs to be supported by a variety of interesting games such as sepak kwranjang, playing to hone the quality of precepts.

CONCLUSION

Based on the results of the explanation on the results of the research and discussion described previously, a conclusion can be drawn that the game of kwranjang soccer can improve the soccer skills of the Surabaya Sepak Takraw Academy students. The game of kwranjang football can support the mastery of basic skills in sepak takraw, especially sepak sila. The Surabaya Sepak Takraw Academy students can develop their ability to play in sepak takraw, especially in sepak sila, through the sepak krwanjang game.

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