

The Effects of One Touch Shooting and Target Area Training on Football Shooting Accuracy among Elementary School Extracurricular Students

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Abstract

Objectives: This study aimed to examine the effects of one touch shooting and target area training on football shooting accuracy among students participating in the football extracurricular program at SD Negeri Aik Kangkung.

Materials and Methods: This study used an experimental method with a two-group pretest-posttest design. The sample consisted of 20 students who were divided into two treatment groups: the one touch shooting group and the target area training group. The instrument used to measure shooting accuracy was the Bobby Charlton shooting test. Data were collected before and after the training intervention. The data were analyzed using prerequisite tests, including normality and homogeneity tests, followed by paired-sample t-tests to examine the effect of each training method and an independent-sample t-test to compare the effects between the two groups.

Results: The results showed that one touch shooting training significantly improved students' shooting accuracy. The mean score increased from 98.00 in the pretest to 134.00 in the posttest, with a mean difference of 36.00 and an improvement percentage of 36.73%. The paired-sample t-test showed that the effect was significant, with $t = 16.282$ and $p = 0.000$. Target area training also significantly improved shooting accuracy. The mean score increased from 98.00 to 133.00, with a mean difference of 35.00 and an improvement percentage of 35.71%. The paired-sample t-test showed a significant effect, with $t = 15.652$ and $p = 0.000$. However, the comparison between the posttest scores of the two groups showed no significant difference, with $t = 0.149$ and $p = 0.883$.

Conclusions: Both one touch shooting and target area training significantly improved football shooting accuracy among elementary school extracurricular students. However, there was no significant difference between the effects of the two training methods. Therefore, both methods can be used as effective alternatives for improving shooting accuracy in elementary school football training.

Keywords: one touch shooting; target area training; shooting accuracy; football; elementary school students

Introduction

Football is one of the most popular sports among children and adolescents (Kuswoyo, 2020). In the school environment, football is often introduced through physical education lessons and extracurricular programs. Besides improving physical fitness and motor skills, football also provides opportunities for students to develop discipline, cooperation, confidence, and sportsmanship. Football can be played both outdoors and indoors, making it accessible and attractive for students in various school settings (Popescu et al., 2023).

In football, shooting accuracy is one of the most important technical skills. Shooting is the act of



kicking the ball toward the goal with the aim of scoring. A player's ability to shoot accurately can determine the outcome of a match because successful shooting increases the chance of scoring goals. Therefore, shooting is not only related to kicking power, but also to precision, timing, decision-making, body position, and focus (Doewes, 2023).

At the elementary school level, football is often one of the most popular extracurricular activities. However, students' mastery of basic football techniques, especially shooting, is often still limited. Based on initial observations at SD Negeri Aik Kangkung, students' shooting accuracy was still low. Many students failed to direct the ball toward the goal even when they had opportunities to shoot. This condition indicates the need for a structured training method that can improve students' shooting accuracy.

One training method that can be used to improve shooting accuracy is one touch shooting. This training requires players to shoot the ball with only one touch after receiving a pass from a teammate. One touch shooting trains players to make quick decisions, adjust body position rapidly, and shoot efficiently in dynamic game situations (Hargreaves, 2009). Another method that can improve shooting accuracy is target area training. This method focuses on directing the ball to specific target areas in the goal. Through target area training, players are trained to concentrate, control the direction of the ball, and shoot with greater precision (Gudzbeler & Struniawski, 2017).

Based on this background, this study aimed to examine the effects of one touch shooting and target area training on shooting accuracy among students participating in the football extracurricular program at SD Negeri Aik Kangkung. This study is expected to provide useful information for physical education teachers and football coaches in selecting effective training methods for elementary school students.

Materials and Methods

Study Design

This study used an experimental method with a two-group pretest-posttest design. This design was used to compare students' shooting accuracy before and after receiving different training treatments. The two treatment groups were the one touch shooting group and the target area training group.

Study Participants

The sample consisted of 20 students participating in the football extracurricular program at SD Negeri Aik Kangkung. The students were divided into two groups. Group A received one touch shooting training, while Group B received target area training. Each group consisted of 10 students.



Study Organization

The instrument used in this study was the Bobby Charlton shooting test. This test was used to measure students' shooting accuracy before and after the training intervention. The test required students to shoot the ball toward scoring areas in the goal. The score was determined based on the area reached by the ball.

The treatment consisted of two different training methods. The first method was one touch shooting training. In this exercise, students received a pass and immediately performed a shot using only one touch. This training was designed to improve quick decision-making, timing, coordination, and shooting accuracy in game-like situations. The second method was target area training. In this exercise, students were asked to shoot the ball toward specific target areas in the goal. This training was designed to improve concentration, directional control, and shooting precision. Data were collected through pretest and posttest measurements. The pretest was conducted before the training intervention to determine students' initial shooting accuracy. The posttest was conducted after the intervention to determine changes in shooting accuracy.

Statistical Analysis

The data were analyzed using prerequisite tests and hypothesis testing. The normality test was conducted using the Kolmogorov-Smirnov test, while the homogeneity test was used to determine whether the variances between groups were equal. After the assumptions were met, paired-sample t-tests were used to examine the effect of each training method. An independent-sample t-test was used to compare the posttest results between the one touch shooting and target area groups. The significance level was set at 0.05.

Results

Normality Test

The normality test was conducted to determine whether the data were normally distributed. The results are presented in Table 1. The results showed that all pretest and posttest data in both groups had p-values of 0.050. Since the p-values were equal to or greater than 0.05, the data were considered normally distributed.

Table 1. Results of the Normality Test

Group	D (KS)	p-value	Description
Pretest – Group A	0.200	0.050	Normal
Posttest – Group A	0.200	0.050	Normal



Pretest – Group B	0.200	0.050	Normal
Posttest – Group B	0.200	0.050	Normal

Homogeneity Test

The homogeneity test was conducted to determine whether the two groups had equal variances. The results are presented in Table 2. The results showed that the significance value for the pretest was 1.000 and the significance value for the posttest was 0.849. Since both values were greater than 0.05, the variances of the two groups were homogeneous. Therefore, parametric statistical analysis could be continued.

Table 2. Students' Active Participation and Learning Outcomes in Cycle I

Test	df1	df2	Sig.	Variance
Pretest	1	18	1.000	Homogeneous
Posttest	1	18	0.849	Homogeneous
Test	df1	df2	Sig.	Variance
Pretest	1	18	1.000	Homogeneous
Posttest	1	18	0.849	Homogeneous

Comparison between Pre-Cycle and Cycle I

The paired-sample t-test was used to determine the effect of one touch shooting training on students' shooting accuracy. The results are presented in Table 3. The results showed that the mean score increased from 98.00 in the pretest to 134.00 in the posttest. The mean difference was 36.00, with an improvement percentage of 36.73%. The t-count value was 16.282, which was higher than the t-table value of 2.262, and the significance value was 0.000, which was lower than 0.05. Therefore, one touch shooting training had a significant effect on students' shooting accuracy.

Table 3. Comparison of Students' Active Participation and Learning Outcomes

Test	Mean	t-count	t-table	Sig.	Mean Difference	Improvement
Pretest	98.00	16.282	2.262	0.000	36.00	36.73%
Posttest	134.00					

Comparison between Pre-Cycle and Cycle I

The paired-sample t-test was used to determine the effect of target area training on students' shooting accuracy. The results are presented in Table 4. The results showed that the mean score increased

from 98.00 in the pretest to 133.00 in the posttest. The mean difference was 35.00, with an improvement percentage of 35.71%. The t-count value was 15.652, which was higher than the t-table value of 2.262, and the significance value was 0.000, which was lower than 0.05. Therefore, target area training had a significant effect on students' shooting accuracy.

Table 4. Paired-Sample t-Test Results for Target Area Training

Test	Mean	t-count	t-table	Sig.	Mean Difference	Improvement
Pretest	98.00	15.652	2.262	0.000	35.00	35.71%
Posttest	133.00					

Comparison between One Touch Shooting and Target Area Training

An independent-sample t-test was conducted to determine whether there was a significant difference between the effects of one touch shooting and target area training. The results are presented in Table 5. The results showed that the mean posttest score of the one touch shooting group was 134.00, while the mean posttest score of the target area group was 133.00. The mean difference between the two groups was only 1.00 point. The t-count value was 0.149, which was lower than the t-table value of 2.101, and the significance value was 0.883, which was greater than 0.05. Therefore, there was no significant difference between the effects of one touch shooting and target area training on students' shooting accuracy.

Table 5. Independent-Sample t-Test Results for Posttest Scores between Groups

Group	Mean	Improvement	t-count	t-table	Sig.	Mean Difference
One Touch Shooting	134.00	36.73%	0.149	2.101	0.883	1.00
Target Area	133.00	35.71%				

Discussion

The findings of this study indicate that both one touch shooting and target area training significantly improved shooting accuracy among students participating in the football extracurricular program at SD Negeri Aik Kangkung. The results also showed that there was no significant difference between the effects of the two training methods. This means that both methods can be considered effective alternatives for improving shooting accuracy among elementary school students.

The one touch shooting group showed a significant improvement from pretest to posttest. The mean score increased from 98.00 to 134.00, with an improvement of 36.73%. This result indicates that one touch shooting training helped students improve their ability to shoot quickly and accurately after receiving the ball. One touch shooting requires players to make quick decisions, adjust their body



position, and strike the ball immediately. This training is useful because football players often need to shoot under pressure and with limited time during real game situations.

This finding is supported by (Borysiuk & Waskiewicz, 2008), who stated that one touch shooting trains quick decision-making and accuracy in fast game situations. (Dina, 2024) also emphasized that one touch shooting develops efficient finishing ability because players have only one opportunity to touch the ball before shooting. Therefore, this type of training can improve timing, focus, reaction, and shooting precision.

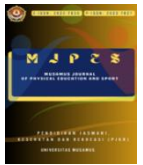
The target area group also showed a significant improvement from pretest to posttest. The mean score increased from 98.00 to 133.00, with an improvement of 35.71%. This finding indicates that target area training helped students improve concentration and directional control when shooting. By aiming at specific areas in the goal, students learned to focus their attention and control the direction of the ball more accurately.

This result is in line with (Saputra, 2024) who explained that target-based training requires concentration, focus, and accuracy. These elements are essential in shooting because players need to direct the ball to areas that are difficult for the goalkeeper to reach. (Anderson et al., 2018) also stated that the ability to identify the right target and shoot accurately is an important factor in successful finishing.

Although both methods significantly improved shooting accuracy, the comparison between the two groups showed no significant difference. The one touch shooting group had a slightly higher posttest mean score than the target area group, with a difference of only 1.00 point. However, the t-test result showed that this difference was not statistically significant. This means that neither method was significantly superior to the other.

This finding suggests that both one touch shooting and target area training have similar effectiveness in improving shooting accuracy. The small difference between the two methods may be caused by the fact that both training forms focus on important components of shooting performance. One touch shooting emphasizes quick execution, timing, and decision-making, while target area training emphasizes concentration, aiming, and ball placement. Both components are closely related to shooting accuracy.

The results also support (Kraemer & Ratamess, 2004) view that the effectiveness of a training program is not only determined by the type of exercise, but also by consistency, intensity, training structure, and individual adaptation. Therefore, both methods can produce positive results when applied systematically and with balanced training duration. (Farley et al., 2020) also emphasized that structured training that matches the characteristics of participants can improve motor skills, including technical skills such as shooting.



For elementary school students, the use of varied shooting exercises is important. Students may become bored if training is repetitive and monotonous. Therefore, coaches and physical education teachers can combine one touch shooting and target area training to maintain motivation and improve shooting accuracy more comprehensively. One touch shooting can be used to develop speed and quick finishing, while target area training can be used to strengthen accuracy and target awareness.

Overall, this study shows that both training methods are useful for improving shooting accuracy among young football learners. Since there was no significant difference between the two methods, coaches may select either method depending on training objectives, student ability, available facilities, and learning conditions.

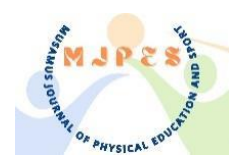
Conclusions

Based on the results of the study, it can be concluded that one touch shooting training significantly improved the football shooting accuracy of students participating in the extracurricular program at SD Negeri Aik Kangkung. The mean score increased from 98.00 to 134.00, with an improvement of 36.73%. Target area training also significantly improved students' shooting accuracy. The mean score increased from 98.00 to 133.00, with an improvement of 35.71%.

However, there was no significant difference between the effects of one touch shooting and target area training on shooting accuracy. The posttest mean difference between the two groups was only 1.00 point, and the statistical test showed no significant difference. Therefore, both training methods can be used as effective alternatives to improve football shooting accuracy among elementary school extracurricular students.

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