Musamus Journal of Physical Education and Sport (MJPES)
http://ejournal.unmus.ac.id/index.php/physical
Volume 8, No. 1, January 2026, Pg 530-537
DOI: 10.35724/mjpes.v8i1.7478
Received: December 20, 2025, Accepted: January 20, 2026

The Effect of Target Game Training on the Shooting Accuracy of Perseco Samahani Club Players

[1]Septi Hariansyah, [2] Bungsu Amelia Sofya*

*Corresponding Author: (**Septi Hariansyah**) Email: septihariansyah12@gmail.com

[1,2]Universitas Serambi Mekkah, Indonesia

Abstract

Objectives. This study aimed to examine the effect of target game training on the shooting accuracy of Perseco Samahani Club players.

Materials and Methods. This study employed a quantitative experimental approach using a one-group pretest-posttest design. The population consisted of all 16 players of Perseco Samahani Club, and because the number was limited, total sampling was applied, resulting in 16 participants. The treatment was carried out in 16 training sessions. Data were collected using a shooting accuracy test based on Winarno (2016: 55). The collected data were analyzed using descriptive statistics, including mean and standard deviation, as well as an inferential analysis using the t-test to determine the significance of the training effect.

Results. The findings showed that target game training had a significant effect on the shooting accuracy of Perseco Samahani Club players. The t-test result revealed a t-value of 6.74, which was higher than the t-table value of 1.76 at a significance level of 0.05 with 14 degrees of freedom. These results indicate that the training program significantly improved players' shooting accuracy after the intervention.

Conclusions. In conclusion, target game training was effective in improving the shooting accuracy of Perseco Samahani Club players. The study confirms that structured target-based training can be used as an effective method to enhance shooting performance in football players.

Keywords: Target Game Training; Shooting Accuracy; Football Players; Training Intervention; Sport Performance

Introduction

Football is a team sport played by two teams of 11 players, with the main objective of scoring more goals than the opponent. To achieve optimal performance, players need to master physical, technical, tactical, and mental aspects, as these components are closely interconnected in determining success during a match (Abarghoueinejad et al., 2021; Adewale et al., 2024). Among these aspects, technical ability plays a central role because it directly supports the execution of tactics and the effectiveness of play on the field.

One of the most important basic techniques in football is shooting. Shooting is the technique of kicking the ball toward the opponent's goal in order to score, and its effectiveness depends on both power and accuracy(Arifin et al., 2022; Dickson et al., 2010; Purnomo & Yendrizal, 2020). Players with good shooting ability have a greater chance of

converting opportunities into goals, making shooting accuracy an essential skill that must be improved through systematic training.

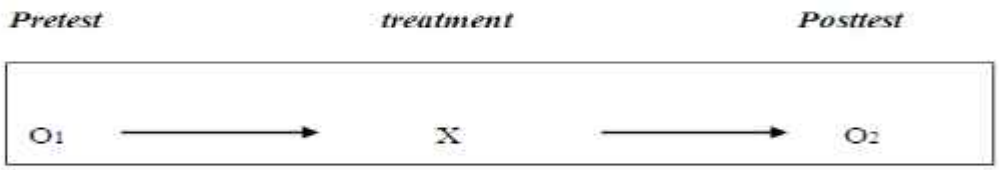
Football is widely developed in Indonesia, including in Aceh Besar, where local clubs play an important role in nurturing young players (Artanayasa et al., 2023; Kuswoyo et al., 2020; Kuswoyo & Betaubun, 2019). One of these clubs is Perseco Samahani. Improving the shooting accuracy of its players is necessary to support better match performance(Artanayasa et al., 2023; Baiget et al., 2014; Booth & Orr, 2016). Therefore, this study was conducted to examine the effect of target game training on the shooting accuracy of Perseco Samahani Club players.

Materials and Methods

Study Participants.

The method used in this research is the experimental method. According to (Sugiyono, 2012). experimental research is a method Research used to determine the effect of certain treatments on others under controlled conditions. The research design used in this study was *a one-group pretest-posttest design* , namely a research design that provides *a pretest* to determine the initial situation before being given treatment and *a posttest* to determine the situation after being given treatment. This way, more accurate results can be obtained because it can be compared with the situation before being given treatment (Sugiyono, 2017: 74).

As for design this research is as following:



Picture 3.1 Design Study One-Groups Pretest-Posttest Design
Source: (Sugiyono, 2017)

Population and Sample

Population

Population is all objects or individuals that are the focus in a study. This This in accordance with Arikunto's opinion (Arikunto, 2010) which states that the population includes all research subjects, both humans and objects, which function as data sources with certain characteristics. Meanwhile, Sugiyono (2017: 115) explains that a population is a generalized area consisting of objects or subjects that have certain qualities and characteristics, which are determined by the researcher to be studied and conclusions drawn.

Based on the opinions above, the population is In this study, all 16 Perseco Samahani Club players were involved .

Sample

The sample in this study consisted of all 16 players of Perseco Samahani Club. The sampling technique used was total sampling, in which the entire population is taken as the research sample (Sugiyono, 2017). This technique was selected because the population size was relatively small, allowing all players to be involved in the study.**Variables Study**.

Study organization.

Data collection techniques are methods or ways used to collect the information or data needed in a study. in accordance with Sugiyono's opinion (2017: 224) collection techniques data is the most strategic step in research, because the main objective of The purpose of research is to obtain data. Without understanding data collection techniques, researchers will not obtain data that meets established data standards.

Collection techniques data in this study is by using a test, the test used in this study is a test of shooting a ball at a target (*shooting)* according tob(Widiastuti, 2015). The steps in this research consist of several stages, namely:

Test Beginning (*Pretest*)

To obtain initial test data (*pretest*), a shooting test was carried out. ball to target (*shooting)* .

Giving Treat (*Treatment*)

After initial test (*pretest*) finished After the test was conducted, the testee *was* given the implementation of target game training. Training is a systematic and planned process that is carried out repeatedly to improve physical quality, functional abilities, and psychological aspects. (Abarghoueinejad et al., 2021; Birrer & Morgan, 2010) explains that this training takes place for 4-5 weeks with physical activity 3 x a week. Based on this, the training time in this study was 16 (sixteen) meetings. The researcher provided treatment to the subjects to be studied and in principle the training in this study was to improve *shooting accuracy* .

Test End (*Posttest*)

After the athlete or child (*testee*) has completed 16 training sessions, a final test (*posttest*) is then conducted. The implementation of this final test (*posttest*) is the same as The initial test (*pretest) is a shooting* accuracy test . This test aims to obtain final data as a result of the research, so that it can be known difference results achieved after doing the exercise over 16 sessions. The results of the final test (*posttest*) show an improvement in *the testee's shooting accuracy skills* after implementing target game training.

Statistical analysis.

Count Mark Average (Mean)

To determine the average value of *shooting accuracy results* , the author uses the average formula proposed by Budiwanto (2017: 27) as follows:

$$X = \frac{\sum X}{n}$$

Information: X = Mark Average Which counted

$\sum X$ = Amount score X

n = Amount sample study.

Calculation Standard Deviation

Standard deviation is calculated using the formula

$$SD = \sqrt{\frac{n\left(\sum X^2 - \sum X\right)^2}{n(n-1)}}$$

Description: SD = Standard Deviation

$\sum X^2$ = Amount X score times X

$\sum X$ = Amount score X

n = Amount sample study.

T -test

After all the test results are collected, the data is analyzed or processed using the t-test statistical method according to the formula proposed by Sudjana (2001: 239), namely:

$$= \frac{X_2 - X_1}{\sqrt{\frac{S_1(-1) + S_2(-1)}{+-2} + \_\_\_}}$$

Description: t = Different average Which counted

X_1 = Average sample before given exercise X_2

= Average sample after being given exercise S

1 = Initial test result

S_2 = Results final test

N = Amount sample.

Results

Table 1. Pretest and Posttest Mean Scores of Shooting Accuracy

Variable	N	Pretest Mean	Posttest Mean	Mean Difference
Shooting Accuracy	16	24.50	31.12	6.62

Table 2. Results of t-Test on Shooting Accuracy

Variable	t-count	t-table	df	Sig. Level	Decision
Shooting Accuracy	6.74	1.76	14	0.05	Significant

Based on **Table 1**, the mean score of players' shooting accuracy increased from **24.50** in the pretest to **31.12** in the posttest, resulting in a mean difference of **6.62**. This improvement indicates that the players demonstrated better shooting performance after participating in the target game training program. The increase in the posttest mean suggests that the training sessions helped the players develop greater precision and control when directing the ball toward the target.

Furthermore, **Table 2** shows that the calculated **t-value (6.74)** was higher than the **t-table value (1.76)** at a significance level of **0.05** with **14 degrees of freedom**. This result means that the null hypothesis was rejected and the alternative hypothesis was accepted. In other words, there was a statistically significant effect of target game training on the shooting accuracy of Perseco Samahani Club players.

These findings confirm that target game training was effective in improving shooting accuracy. The improvement may be attributed to the repetitive and focused nature of the training, which allowed players to practice aiming, concentration, and ball control in a more structured way. In addition, the game-based format likely made the training more engaging, which may have increased players' motivation and participation during the sessions. Therefore, target game training can be considered an effective training method for improving shooting accuracy in football players.

Discussion

One method that can be used to overcome increasing *shooting accuracy* is

target game practice, which helps players practice concentration and improve the accuracy of kicks towards the target. Furthermore, target games are fun, allowing players to enthusiastically participate in training without getting bored, while also overcoming the difficulty of shooting *accurately* . Kurniawan (2023: 60) states that "game-based training not only improves technical skills but also creates high motivation to practice."

Based on the results of the calculation of the average *shooting accuracy value,* there was an increase from the initial test (*pretest)* with an average of 24.5 before being given treatment , namely target game practice for 16 meetings. then increased in the final test (*posttest*) to 31.12. This increase occurred because target game practice was able to train players' focus, concentration, and accuracy in shooting at targets repeatedly and in a targeted manner. In addition, the practice game target Also stimulate coordination movement And decision -making in situation game, so that player used to do *shooting*
with more techniques Correct. The results of the hypothesis test analysis obtained a t-table value with 16-2 degrees of freedom (df = 14) at a significance level of $\alpha = 0.05$ of 1.76. This means that the calculated t-value = 6.74 > t- table = 1.76. Thus, it can be stated that the hypothesis proposed by the author, namely "There is an effect of target game training on *shooting accuracy* in Perseco Samahani Club players", is accepted as true. This means that the target game training treatment applied by the author at the Perseco Samahani Club can significantly improve the *shooting accuracy* of players. This training is effective because it trains focus, accuracy and *shooting techniques* in a targeted manner, so it is worthy of being part of a routine training program. Kurniawan (2023) in the Indonesian Sports Journal stated that there was an increase in accuracy of 22% from 65% to 79%, where U-16 group athletes through small format games and twelve target shooting sessions with a t-value of 5.82, similar in the application of game-based methods that are able to boost enthusiasm and focus, although the approach is more directed at teamwork while this emphasizes pure shooting. Pratama et al. (2022) in the Journal of Physical Education noted a 28% improvement from 28.2 to 36.1 through a circuit training and target-directed training program in a non-professional team over eight weeks, which is consistent with its effect on movement synchronization and pace determination, but differs in that it offers a wider variety of physical activities.

Conclusions

Based on the results Based on the research that has been obtained through processing and analyzing data from the research entitled the influence of target game training on *shooting accuracy* in Perseco Samahani Club players, the following conclusion can be drawn: "There is an influence of target game training on *shooting accuracy* in Perseco Samahani Club players." This is reinforced by the results of the

t-value calculation . The effect of target game training on *shooting accuracy* was 6.74 and the t- table value obtained with 16-2 degrees of freedom (df = 14) at a significance level of $\alpha = 0.05$ was 1.76. This means that the calculated t-value = 6.74 > t- table = 1.76.

Acknowledgment

The acknowledgement statement should detail all parties who assisted in conducting the research but are not acknowledged as contributors. It may also include personal expressions of gratitude.

Conflict of interest

If the author has a conflict of interest to declare.

References

Abarghoueinejad, M., Barreira, D., Dias, C., Guimarães, E., Baxter-Jones, A. D. G., & Maia, J. (2021). Body Physique, Body Composition, Physical Performance, Technical and Tactical Skills, Psychological Development, and Club Characteristics of Young Male Portuguese Soccer Players: The INEX Study. *International Journal of Environmental Research and Public Health*, *18*(7), 3560. https://doi.org/10.3390/ijerph18073560

Adewale, M. D., Azeta, A., Abayomi-Alli, A., & Sambo-Magaji, A. (2024). Impact of artificial intelligence adoption on students' academic performance in open and distance learning: A systematic literature review. *Heliyon*, *10*(22), e40025. https://doi.org/10.1016/j.heliyon.2024.e40025

Arifin, Z., Prija, D. D. D., Endra, W., Rachmanto, R. A., Brillianto, C. H., Doewes, R. I., Arifin, R. R. N., Auliansyah, S., & Prasetyo, S. D. (2022). *Pembuatan Accuracy And Safety Helmet untuk Atlet Boccia National Paralympic Committe Surakarta*. *20*.

Arikunto, S. (2010). *Arikunto, S. (2010). Prosedur Penelitian: Suatu Pendekatan Praktik (Edisi Revi). PT. Rineka Cipta.Prosedur Penelitian: Suatu Pendekatan Praktik* (Edisi Revi). PT. Rineka Cipta.

Artanayasa, I. W., Kusuma, K. C. A., Satyawan, I. M., & Mashuri, H. (2023). The android-based instrument for performance assessment of football. *Jurnal Cakrawala Pendidikan*, *42*(1), 110–119. https://doi.org/10.21831/cp.v42i1.52483

Baiget, E., Fernández-Fernández, J., Iglesias, X., Vallejo, L., & Rodríguez, F. A. (2014). On-Court Endurance and Performance Testing in Competitive Male Tennis Players. *Journal of Strength and Conditioning Research*, *28*(1), 256–264. https://doi.org/10.1519/JSC.0b013e3182955dad

Birrer, D., & Morgan, G. (2010). Psychological skills training as a way to enhance an athlete's performance in high-intensity sports. *Scandinavian Journal of Medicine & Science in Sports*, *20*(s2), 78–87. https://doi.org/10.1111/j.1600-0838.2010.01188.x

Booth, M. A., & Orr, R. (2016). Effects of Plyometric Training on Sports Performance. *Strength & Conditioning Journal*, *38*(1), 30–37. https://doi.org/10.1519/SSC.0000000000000183

Dickson, M. J., Fuss, F. K., & Wong, K. G. (2010). Benchmarking of boccia balls: Roll distance, accuracy, stiffness, rolling friction, and coefficient of restitution. *Sports Technology*, *3*(2), 131–140. https://doi.org/10.1080/19346182.2010.540474

Kuswoyo, D. D., & Betaubun, P. (2019). Relationship between speed with dribbling skills on the students of physical education department in playing football at Universitas Musamus. *International Journal of Advanced Research in Engineering and Technology*, *10*(6). https://doi.org/10.34218/IJARET.10.6.2019.006

Kuswoyo, D. D., Wasa, C., & Dongoran, M. F. (2020). Back-up training effects to the students' ability in heading the ball. *Edu Sportivo Indonesian Journal of Physical Education*, *1*(1), 25–32. https://doi.org/10.25299/es:ijope.2020.vol1(1).5190%0AHow

Purnomo, A. & Yendrizal. (2020). Effect of Hand-Eye Coordination, Concentration and Believe in the Accuracy of Shooting in Petanque. *Proceedings of the 1st International Conference of Physical Education (ICPE 2019)*. 1st International Conference of Physical Education (ICPE 2019), Padang, Indonesia. https://doi.org/10.2991/assehr.k.200805.027

Sugiyono. (2012). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. CV. Alfabeta.

Sugiyono. (2017). Penelitian Kuantitatif. *Pemaparan Metodenpenelitian Kuantitatif*, *2*, 16.

Widiastuti. (2015). *Tes dan Pengukuran Olahraga*. Rajawali Pers.