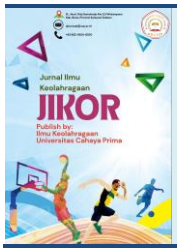

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The Effect of Four Goal Football Drill on Passing Stopping Ability at Lubuk Bendahara Football Academy

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ABSTRACT

This study aimed to analyze the effect of the four-goal football drill on improving the passing stopping ability of athletes at the Lubuk Bendahara Football Academy. The research method used was quantitative comparative with a pre-test and post-test design. The research sample consisted of 20 athletes (N=20) at the Lubuk Bendahara Football Academy. Data was collected through measuring passing stopping ability and analyzed using a dependent t-test after fulfilling the prerequisite tests for normality (Sig. Shapiro-Wilk pre-test 0.064; post-test 0.057) and homogeneity (Sig. Levene Statistic 0.768). The results showed a significant improvement in the athletes' ability after the training intervention; the average ability score surged from 4.85 in the pre-test to 6.70 in the post-test. A clear shift in categories was also observed: in the pre-test, the majority of athletes (95%) were in the Poor and Adequate categories; however, in the post-test, no athletes remained in the Poor category, and the majority were distributed into the Good (55%) and Adequate (45%) categories. The t-test result obtained a significance value of 0.000 ($p<0.05$), indicating that the null hypothesis was rejected and a significant effect exists. This study concludes that the four-goal football drill has a significant and positive effect on improving passing stopping ability, making it an effective and recommended method as it integrates technical, tactical, and cognitive aspects.

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INTRODUCTION

Football is one of the most popular sports in the world and is played by people from various backgrounds (Li & Mateos, 2022). This sport not only serves as a means of physical activity but also as a platform for athletic development through the enhancement of players' physical, technical, and tactical abilities (Ramírez Lucas et al., 2025; Xia et al., 2025). Football is played by two teams, each consisting of eleven players, whose objective is to score as many goals as possible against the opponent while defending their own goal (Agustina, 2020). In football, a team's success is greatly influenced by players' mastery of basic techniques, physical condition, tactical understanding, and teamwork.

Basic techniques are essential components that every football player must master (Irfan et al., 2020). Proper technical skills assist players in controlling the game and executing team strategies effectively, as technical performance such as passing accuracy, ball control, and

coordination has a strong correlation with a team's success in matches (Andrzejewski et al., 2022). Studies on Pencak Silat athletes have shown that lower limb explosive power and balance significantly contribute to kicking speed (Ahmad et al., 2026), illustrating the importance of developing physical attributes to support technical skills in sports, including passing and stopping in football.

Several basic techniques in football include kicking, stopping, dribbling, heading, and tackling (Zakaria, 2021). Among these, passing and stopping are fundamental techniques frequently used in football, as passing is the most commonly performed action by players during matches to maintain ball possession and build attacks (Hunter et al., 2025).

Passing is the technique of delivering or transferring the ball to a teammate with the aim of maintaining possession and constructing attacks during the game (Liu et al., 2015). Stopping, on the other hand, is the technique of halting or controlling the ball so that it can be effectively managed before performing the next action, such as dribbling, passing, or shooting at the goal (Liu et al., 2026). These two techniques are closely related, as the success of a pass also depends on a player's ability to perform stopping accurately and under control.

To enhance players' basic technical skills, appropriate and effective training methods are required (Ahmad et al., 2024). One training method that can improve passing and stopping skills is four-goal training (Sidik et al., 2021). Four-goal training is a modified game that uses four small goals placed at various sides of the field, requiring players to engage in active movement, teamwork, and fast, accurate passing. According to Yundarwati & Marzuki (2025), four-goal training can improve players' passing abilities because it emphasizes continuous ball movement and player interactions within game situations.

Previous studies have also shown that four-goal training can positively influence the development of basic football skills. Mahatmasari & Suryobroto (2018), reported that four-goal training improved passing and stopping abilities in junior high school football players. Similarly, Sidik et al. (2021) found that four-goal training significantly enhanced players' passing and stopping skills.

However, most previous studies have focused on junior-level players and have not analyzed the distribution of skill categories or examined the applicability of four-goal drills for academy-level athletes with more advanced training. This gap limits understanding of the method's effectiveness in higher-level players.

Initial observations at the Lubuk Bendahara Football Academy indicated that some athletes still struggle with accurate passing and effective stopping, which can lead to loss of possession and hinder team performance. Therefore, this study aims to examine the effect of four-goal drills on passing and stopping abilities of academy level football players at the Lubuk Bendahara Football Academy, addressing the gap in knowledge regarding its effectiveness for more advanced players.

METHOD

Research Design

This study employed an experimental method with a one-group pretest-posttest design (Sugiyono, 2020). This design involves measuring participants' abilities before (pre-test) and after (post-test) receiving the treatment, which in this study was four-goal training. The purpose of this design was to determine the effect of the training on football players' passing

and stopping skills.

Population and Sample

The population of this study consisted of all 20 players at the Lubuk Bendahara Football Academy. The sampling technique used was total sampling, where the entire population was included as the sample because the number of participants was limited and considered representative for the study's objectives (Sugiyono, 2017).

Time and Place of Research

The pre-test was conducted on August 1, 2025, and the post-test on September 23, 2025, at the Lubuk Bendahara Football Academy.

Data Collection Techniques

Data were collected through observation, to directly assess the implementation of training; tests and measurements, including pre-test and post-test of passing and stopping skills using the four-goal method; and literature study, to obtain theoretical foundations related to football training, passing, and stopping.

Research Instruments

The research instruments included tests of passing and stopping skills using four goals, along with equipment such as a football field, balls, small goals, cones, stopwatches, and test forms. These instruments were used to measure the variables under study (Sugiyono, 2020). The testing procedure included a pre-test preceded by a warm-up to prepare players' muscles and mental readiness, six weeks of training (three times per week), and a post-test conducted using the same procedure as the pre-test to assess improvement in skills.

Test Procedure

Before the test, players performed a warm-up consisting of stretching and light movements to prepare their muscles and prevent injury. During the test, players worked in pairs, with Player 1 passing the ball to Player 2, who then controlled and returned it accurately. After three passes, the ball was directed toward one of the four small goals placed around the field, and players alternated using their left and right foot for 30 seconds per drill. Each successful pass and stop was counted as a point, while balls that missed the target or were improperly controlled were considered failed attempts but still recorded. Each player had two attempts per drill, and total scores reflected their overall passing and stopping performance. Following the test, players performed cool-down exercises to gradually reduce heart rate and muscle tension.

Training Method

The training program lasted six weeks, with three sessions per week. Each session consisted of a warm-up to prepare muscles and mental readiness, four-goal passing and stopping drills to improve accuracy, control, speed, and teamwork, and a cool-down to return the body to normal conditions and reduce injury risk. After completing the training, the post-test was conducted using the same procedure as the pre-test to evaluate improvement.

Data Analysis

Data were analyzed using a paired-sample t-test in SPSS with a significance level of $\alpha = 0.05$. Prior to hypothesis testing, normality was tested using the One-Sample Shapiro-Wilk

test to ensure normal data distribution, and homogeneity was tested using Levene's test to ensure homogeneous variance (Ghozali, 2021). The hypothesis was accepted if $p < 0.05$, indicating a significant difference in players' abilities before and after the training.

RESULT AND DISCUSSION

Results

Data Description

The research data were obtained from the pre-test and post-test measurements of passing and stopping abilities of athletes at the Lubuk Bendahara Football Academy after being given the intervention of four-goal football training. Four-goal football training (X) served as the independent variable, while passing and stopping abilities (Y) were the dependent variables. The pre-test was conducted on August 1, 2025, and the post-test on September 23, 2025.

Based on descriptive statistics, the pre-test had a mean score of 4.85 with a standard deviation of 0.988, a minimum value of 3, and a maximum value of 7. After the training, the post-test showed a significant increase, with a mean score of 6.70, a standard deviation of 0.979, a minimum value of 5, and a maximum value of 8. This increase indicates a positive effect of the training on athletes' passing and stopping skills (Table 1).

Table 1. Descriptive Statistics

Variable	N	Min	Max	Mean	Std. Deviation
Pre-test Passing & Stopping	20	3	7	4,85	0,988
Post-test Passing & Stopping	20	5	8	6,70	0,979

The frequency distribution of the pre-test indicated that most athletes were in the Poor (40%) and Fair (55%) categories, with only 5% in the Good category. No athletes were in the Very Poor or Very Good categories (Table 2).

Table 2. Pre-Test Frequency Distribution of Passing and Stopping

No	Passing & Stopping Score	Category	Frequency	Percentage
1	1 – 2	Very Poor	0	0%
2	3 – 4	Poor	8	40%
3	5 – 6	Fair	11	55%
4	7 – 8	Good	1	5%
5	9 – 10	Very Good	0	0%
Total			**20**	**100%**

After the training, the post-test frequency distribution showed a significant improvement, with most athletes categorized as Fair (45%) and Good (55%). No athletes were in the Poor or Very Poor categories, and none reached the Very Good category (Table 3).

Table 3. Post-Test Frequency Distribution of Passing and Stopping

No	Passing & Stopping Score	Category	Frequency	Percentage
1	1 – 2	Very Poor	0	0%
2	3 – 4	Poor	0	0%
3	5 – 6	Fair	9	45%
4	7 – 8	Good	11	55%
5	9 – 10	Very Good	0	0%
Total			**20**	**100%**

Assumption Testing

Before hypothesis testing, assumption tests were conducted, including normality and homogeneity tests. The Shapiro-Wilk test indicated a significance value > 0.05, showing that the data were normally distributed (Table 4).

Table 4. Normality Test

Variable	Test	Statistic	df	Sig.
Pre-test Passing & Stopping	Shapiro-Wilk	0,910	20	0,064
Post-test Passing & Stopping	Shapiro-Wilk	0,879	20	0,057

The Levene's test for homogeneity yielded a significance value of 0.768 (> 0.05), indicating that the data variance was homogeneous (Table 5).

Table 5. Homogeneity Test

Test Levene	df1	df2	Sig.
Based on Median	1	38	0,768

Hypothesis Testing

Hypothesis testing in this study used a paired-sample t-test to determine the difference in athletes' passing and stopping abilities before and after receiving four-goal football training (Table 6).

Table 6. Paired-Sample t-Test Results

Variable	N	Mean Pre-Test	Mean Post-Test	Mean Difference	t	df	p-value
Passing and Stopping	20	4,85	6,70	-1,850	-12,333	19	0,000

Based on Table 6, the analysis showed that the mean pre-test score was 4.85, while the mean post-test score was 6.70, representing an increase of 1.85 points after the intervention. The paired-sample t-test yielded t = -12.333, df = 19, and a significance value of 0.000 ($p < 0.05$). The significance value being less than 0.05 indicates a significant difference between pre-test and post-test results. Therefore, the null hypothesis (Ho) was rejected, and the alternative hypothesis (Ha) was accepted, concluding that four-goal football training significantly improved the passing and stopping abilities of athletes at the Lubuk Bendahara Football Academy.

Discussion

The results of this study indicate that four-goal football training has a significant effect on improving the passing and stopping abilities of athletes at the Lubuk Bendahara Football Academy. The mean score of athletes' abilities increased from 4.85 in the pre-test to 6.70 in the post-test, with a difference of 1.85 points. The paired-sample t-test showed a significance value of 0.000 ($p < 0.05$), indicating a significant difference before and after the training intervention. Game-based training, such as four-goal exercises, enhances both technical and cognitive skills of players; however, it is also important to consider participant safety and the risk of injury, as analyzed by Hadi et al. (2025) regarding injury trends across various sports.

The distribution of ability categories further supports these findings. Initially, most athletes were in the Poor and Fair categories, whereas after the training, the majority were classified as Fair and Good. This demonstrates that four-goal training can improve passing

and stopping skills consistently across participants.

The increase in mean scores from 4.85 to 6.70 indicates that the four-goal training not only improved technical execution but also enhanced players' ability to make quick decisions under dynamic conditions. This supports the concept of game-based learning, where practicing skills in realistic, multi-directional scenarios helps athletes transfer training effects to match situations (Ramírez Lucas et al., 2025). The observed improvements are consistent with Mahatmasari & Suryobroto (2018) and Sidik et al. (2021), yet this study extends their findings by applying the method to academy-level players, who have higher baseline skills and training intensity.

The effectiveness of four-goal training is influenced by a game-based learning approach, which simulates real-match conditions. In this training, players are required to perform passing and stopping quickly, accurately, and in multiple directions while maintaining ball possession and team coordination. This approach not only enhances technical skills but also develops tactical awareness and decision-making in game situations, aligning with the concept of situational training in football proposed by Ramírez Lucas et al. (2025).

Furthermore, the four-goal drills likely stimulated players' cognitive functions, including concentration, anticipation, and tactical awareness, which are crucial for successful passing and stopping during matches. Although these psychological variables were not directly measured, the consistent improvements suggest that combining technical and cognitive demands in training can enhance overall performance (Yundarwati & Marzuki, 2025).

This study aligns with the findings of Mahatmasari & Suryobroto (2018) and Sidik et al. (2021), which reported improvements in passing and stopping skills through four-goal training. However, previous studies were generally conducted on junior high school players, whereas this study involved academy-level athletes with higher training intensity and longer duration. This indicates that the four-goal training method is effective not only for beginner players but can also be applied to athletes who already possess basic football skills.

Previous research has shown that although the four-goal training method is effective, most prior studies did not evaluate its impact at the academy level, did not include categorical distribution analysis, and rarely considered psychological factors of athletes. This study contributes by not only quantitatively assessing both technical variables but also presenting the distribution of ability categories, providing a more detailed understanding of how the training benefits different skill levels within a team. This aspect strengthens the evidence for the method's effectiveness.

Furthermore, Yundarwati & Marzuki (2025), emphasized that four-goal training improves passing ability but did not explicitly measure stopping skills quantitatively. This study provides an additional contribution by measuring both aspects directly and demonstrating that four-goal training not only hones passing skills but also enhances ball control (stopping), which is a critical component of game mastery.

Nonetheless, this study has limitations, including a small sample size (N = 20) and the absence of a control group. These factors limit the generalizability of the results to a broader population. Additionally, psychological variables such as motivation and concentration during training were not measured, though they may influence passing and stopping performance. Future research is recommended to use an experimental design with a larger

control group and consider psychological factors as well as other physical aspects, such as endurance and reaction speed, to examine the holistic effect of four-goal training on player performance.

Considering these findings, four-goal training can be recommended as an effective training method for developing football academy athletes, as it integrates technical, tactical, and cognitive aspects simultaneously and has been proven to improve fundamental skills frequently used in matches.

CONCLUSION

Based on the results of this study, it can be concluded that four-goal football training has a significant and positive effect on improving the passing and stopping abilities of athletes at the Lubuk Bendahara Football Academy. The intervention led to a substantial increase in the mean scores from 4.85 in the pre-test to 6.70 in the post-test, and the paired-sample t-test revealed a significance value of 0.000 ($p < 0.05$), indicating a statistically significant improvement. The frequency distribution of post-test scores also showed that most athletes moved from the Poor and Fair categories to Fair and Good, demonstrating consistent improvement across participants.

The effectiveness of the four-goal training is attributed to its game-based learning approach, which simulates real match conditions, requiring players to perform passing and stopping quickly, accurately, and under pressure while maintaining teamwork and tactical awareness. This method not only develops technical skills but also enhances cognitive aspects such as decision-making and situational awareness, making it a comprehensive training model for academy-level players.

Therefore, four-goal football training is recommended as an effective and practical method for improving basic technical skills, particularly passing and stopping, in football training programs. Coaches are encouraged to integrate it into structured and continuous practice sessions, athletes should actively engage in the drills with focus and consistency, and academy management should provide adequate facilities and trained personnel to ensure optimal implementation. For future research, it is suggested to include a larger sample size, control groups, and consider psychological factors, endurance, and reaction speed to further validate and explore the holistic effects of this training method on player performance.

REFERENCES

Agustina, R. S. (2020). *Buku jago sepak bola*. Ilmu Cemerlang Group.

Ahmad, A., Prasetyo, Y., Sumaryanti, S., Nugroho, S., Widiyanto, W., & Amiruddin, A. (2024). The Effect of Plyometric Training on Pencak Silat Kicks: Literature Review. *Retos: Nuevas Tendencias En Educación Física, Deporte y Recreación*, (61), 185–192. https://doi.org/10.47197/retos.v61.107665

Ahmad, A., Sulfa, M., Prasetyo, Y., & Muhammad, F. (2026). Contribution of Leg Muscle Explosive Power and Balance to Sickle Kick Speed in Pencak Silat Athletes. *Indonesian Journal of Sport Science and Coaching*, *8*(1), 21–33.

Andrzejewski, M., Oliva-Lozano, J. M., Chmura, P., Chmura, J., Czarniecki, S., Kowalczuk, E., Rokita, A., Muyor, J. M., & Konefał, M. (2022). Analysis of Team Success Based on Match Technical and Running Performance in a Professional Soccer League. *BMC Sports Science, Medicine and Rehabilitation*, *14*(1), 82. https://doi.org/10.1186/s13102-022-00473-7

Ghozali, I. (2021). *Aplikasi analisis mulltivariatel dengan program IBM SPSS 26 (10th eld.).* Badan Pelnelrbit Univelrsitas Diponegoro.

Hadi, A. J., Septianto, I., Muhammad, F., Ciptadi, Z. D. P., & Anwar, A. M. R. (2025). Sports Safety: Analysis of Injury Trends and Sports Injury Prevention Strategies. *Jurnal Ilmu Keolahragaan*, *1*(1), 1–9. https://doi.org/10.65943/8k0jp596

Hunter, A. H., Smith, N., Santiago, P. R. P., & Wilson, R. S. (2025). Visual Scanning and Technique Improve Performance in a Standardized Soccer Passing Task. *Applied Sciences*, *15*(20), 11045. https://doi.org/10.3390/app152011045

Irfan, M., Yenes, R., Irawan, R., & Oktavianus, I. (2020). Kemampuan Teknik Dasar Sepakbola. *Jurnal Patriot*, *2*(3), 720–731.

Li, Y., & Mateos, G. (2022). Networks of International Football: Communities, Evolution and Globalization of The Game. *Applied Network Science*, *7*(1), 59. https://doi.org/10.1007/s41109-022-00498-4

Liu, H., Gomez, M.-Á., Lago-Peñas, C., & Sampaio, J. (2015). Match Statistics Related to Winning in The Group Stage of 2014 Brazil FIFA World Cup. *Journal of Sports Sciences*, *33*(12), 1205–1213. https://doi.org/10.1080/02640414.2015.1022578

Liu, R., Takayanagi, K., Tai, K., Hakata, H., Nakayama, M., & Asai, T. (2026). Motion Characteristics of Directional Ball-Trapping Techniques in Soccer: A Comparative Study Of Advanced and Intermediate Players. *International Journal of Sports Science & Coaching*, *21*(1), 216–226. https://doi.org/10.1177/17479541251350820

Mahatmasari, P. Y., & Suryobroto, A. S. (2018). Pengaruh Latihan Sepakbola Empat Gawang Terhadap Kemampuan Gerak Dasar Passing-Stopping Bermain Sepakbola. *Pendidikan Jasmani Kesehatan Dan Rekreasi Fakultas Ilmu Keolahragaan Universitas Negeri Yogyakarta*.

Ramírez Lucas, J. M., Párraga Montilla, J. A., Cabrera Linares, J. C., & Latorre Román, P. Á. (2025). Enhancing Physical and Cognitive Performance in Youth Football: The Role of Specific Dual-Task Training. *Journal of Functional Morphology and Kinesiology*, *10*(4), 404. https://doi.org/10.3390/jfmk10040404

Sidik, N. M., Kurniawan, F., & Effendi, R. (2021). Pengaruh Latihan Sepakbola Empat Gawang Terhadap Kemampuan Passing Stopping Sepakbola Ekstrakurikuler di SMP Islam Karawang. *Jurnal Literasi Olahraga*, *2*(1), 60–67. https://doi.org/10.35706/jlo.v2i1.4434

Sugiyono. (2017). *Statistika untuk Penelitian*. Alfabeta.

Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif dan Kombinasi (Mixed Methods)* (Sutopo, Ed.; Edisi Revisi). Alfabeta.

Xia, Y., Pyun, D. Y., & Tak, M. (2025). Nurturing Football Talent: a Conceptual Framework for Talent Development Environment. *Quest*, *77*(1), 20–37. https://doi.org/10.1080/00336297.2024.2387229

Yundarwati, S., & Marzuki, I. (2025). Pengaruh Latihan Sepak Bola Empat Gawang terhadap Keterampilan Passing Stopping pada SSB Taruna Potu Dompu. *Jurnal Ilmiah Mandalika Education (MADU)*, *3*(1), 69–76.

Zakaria, A. (2021). Tingkat Keterampilan Teknik Dasar Bermain Sepakbola di Tinjau dari Antropometri pada Pemain Sekolah Sepakbola (SSB) Syech Yusuf. *Jurnal Ilara*, *12*(3), 1–7.

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