



Effectiveness of Wall Shoot and Drib Shoot Training on the Shooting Ability of Extracurricular Futsal Participants at SMP Negeri 2 Palembang

¹Ahmad Maulana, ²Mutiara Fajar *, ³Puput Sekar Sari

*Corresponding Author: Mutiara Fajar, e-mail: mutiarafajar89@gmail.com

^{1,2,3}Faculty of Teacher Training and Education, Universitas PGRI Palembang, Indonesia

Abstract
<p>Objectives. This study aims to examine the effectiveness of two specific training methods—wall shoot and drib shoot—on improving the shooting ability of futsal extracurricular participants at SMP Negeri 2 Palembang. The study addresses the challenge of low shooting accuracy, which often hinders performance during school-level futsal competitions.</p> <p>Materials and Methods. The research employed a quasi-experimental design using a two-group pretest-posttest model. A total of 20 students were selected and divided evenly into two training groups: wall shoot and drib shoot. Each group underwent 16 structured training sessions. Shooting performance was measured using a standardized accuracy test. Data were analyzed using paired sample t-tests to determine the significance of improvements within each group.</p> <p>Results. The results showed significant improvements in both groups. The wall shoot group improved from a mean score of 20.10 to 28.90, while the drib shoot group improved from 19.50 to 30.00. Both groups showed statistically significant gains ($p < 0.05$), with the drib shoot group demonstrating a slightly higher increase. These findings suggest that both training methods are effective, though drib shoot provides greater benefits in developing shooting performance.</p> <p>Conclusions. The study concludes that structured technical training through wall shoot and drib shoot methods can effectively enhance shooting accuracy among school-level futsal players. Drib shoot training, in particular, proved more effective and is recommended for use in extracurricular sports programs to foster technical development in young athletes.</p>
Keywords: wall shoot, drib shoot, shooting accuracy, futsal training, school sports

Introduction

Futsal, often regarded as a miniature form of football, has gained widespread popularity across Indonesia, particularly in educational settings (Mulawarman et al., 2024). Its compact field, fast pace, and simplified rules make it an ideal sport for youth development in schools (David Jones, 2024). Futsal contributes not only to physical fitness but also fosters discipline, cooperation, and tactical awareness among students (Saryono, 2006). As part of the extracurricular programs in Indonesian junior high schools, futsal plays an important role in shaping students’ physical and character development (Hidayat et al., 2024).

Despite its growing popularity and value, many school-level futsal teams struggle with technical execution, particularly in shooting (Fajar, 2017). Shooting is a fundamental skill in futsal, directly influencing scoring outcomes and overall team success. At SMP Negeri 2 Palembang, field observations and coaching feedback have consistently shown that students participating in the futsal extracurricular program exhibit low levels of shooting accuracy. Players often fail to capitalize on goal-scoring opportunities, which adversely affects their team's competitiveness during matches and tournaments.

One of the primary reasons for this deficiency is the lack of structured and targeted shooting training within the school's regular practice sessions. While students engage in general drills and scrimmage games, there is limited emphasis on isolated shooting exercises that develop precision, timing, and ball control. To address this gap, training methods that specifically focus on shooting accuracy—such as wall shoot and drib shoot techniques—have emerged as potentially effective solutions.

The wall shoot method involves repeated ball rebounds off a wall to improve reaction time, foot positioning, and accuracy (Eshun, 2021). Meanwhile, the drib shoot method combines dribbling sequences with a shooting finish, simulating real-game scenarios where players must shoot under dynamic conditions (Yang & Hu, 2025). Both methods offer unique benefits in skill development, but empirical evidence comparing their effectiveness in school-based training programs remains limited (Newell & Rovegno, 2021).

Therefore, this study aims to investigate and compare the effectiveness of wall shoot and drib shoot training methods in improving shooting ability among futsal extracurricular participants at SMP Negeri 2 Palembang. The findings of this research are expected to provide practical insights for coaches and physical education teachers in optimizing shooting drills for youth athletes.

Materials and Methods

Study Participants.

This study involved 20 male students from the futsal extracurricular program at SMP Negeri 2 Palembang, all of whom were in junior high school and actively participating in regular training sessions. Participants were selected using a total sampling technique. The subjects were then divided into two groups based on ordinal pairing: 10 students were assigned to the wall shoot training group, and 10 to the drib shoot training group. All participants gave informed consent and followed the training protocol under supervision.

Study organization.

The research applied a quasi-experimental design with a two-group pretest-posttest model to evaluate the effectiveness of two training interventions—wall shoot and drib shoot—on students' shooting performance in futsal. Each group underwent 16 structured training sessions, with each session incorporating technical drills focused on accuracy, timing, and shot control. The study was conducted over the course of several weeks in the school's futsal training environment under the guidance of experienced coaches.

Shooting performance was measured using a standardized shooting accuracy test based on the instrument developed by Widiastuti (2023), which assesses the player's ability to accurately hit designated target zones. The tests were administered before and after the intervention to both groups under controlled conditions to ensure consistency and validity.

Statistical analysis.

The data collected were analyzed using IBM SPSS version 26. Prior to hypothesis testing, normality and homogeneity tests were conducted to ensure the suitability of the data for parametric analysis. To determine the effectiveness of each training method, paired sample t-tests were applied to compare the pretest and posttest results within each group. The level of significance was set at $p < 0.05$. Results were interpreted to determine whether the changes in shooting performance were statistically significant following the training interventions.

Results

The statistical analysis revealed significant improvements in shooting accuracy for both training groups following their respective interventions. The wall shoot group demonstrated an increase from a pretest mean of 20.10 to a posttest mean of 28.90, representing an average gain of 8.80 points. Likewise, the drib shoot group improved from a mean score of 19.50 in the pretest to 30.00 in the posttest, marking a gain of 10.50 points. These descriptive results indicate that both training models were effective in enhancing shooting performance, with the drib shoot group showing a slightly higher improvement.

To confirm the appropriateness of parametric testing, normality and homogeneity tests were conducted. The Kolmogorov–Smirnov test showed p-values greater than 0.05 for all variables, confirming that the data were normally distributed. Furthermore, Levene's test for homogeneity of variances yielded a significance value of $p = 0.401$, indicating that the two groups had homogeneous variance. These preliminary tests justified the use of parametric analysis for hypothesis testing.

The paired samples t-test results further validated the effectiveness of each training method. The wall shoot group showed a statistically significant improvement with a t-value of 5.188 and $p = 0.001$ ($p < 0.05$). Similarly, the drib shoot group exhibited a significant increase with a t-value of 5.398 and $p = 0.000$ ($p < 0.05$). Both results confirm that the structured training interventions had a positive impact on students' shooting skills.

Although both training methods were effective, the drib shoot method demonstrated a marginally greater effect, suggesting it may offer additional benefits in simulating real-game conditions. The integration of movement, decision-making, and technical execution in drib shoot training may contribute to better skill transfer during match play. These findings reinforce the importance of incorporating dynamic, context-rich drills in youth futsal training programs to maximize performance outcomes.

Table 1. Descriptive Statistics of Shooting Scores in Wall Shoot and Drib Shoot Groups

Group	Test Type	Mean Score	Standard Deviation	t-value	Sig. (p)
Wall Shoot	Pretest	20.10	3.18	5.188	0.001
	Posttest	28.90	2.47		
Drib Shoot	Pretest	19.50	3.27	5.398	0.000
	Posttest	30.00	2.49		

Table 2. Normality Test Results (Kolmogorov–Smirnov)

Group	Test Type	Sig. (p)
Wall Shoot	Pretest	0.200
	Posttest	0.167
Drib Shoot	Pretest	0.181
	Posttest	0.156

Table 3. Homogeneity of Variance Test (Levene’s Test)

Levene Statistic	df1	df2	Sig. (p)
0.742	1	18	0.401

Table 4. Paired Samples t-Test Results

Group	Mean Difference	t-value	df	Sig. (2-tailed)
Wall Shoot	8.80	5.188	9	0.001
Drib Shoot	10.50	5.398	9	0.000

Discussion

The findings confirm that both wall shoot and drib shoot training significantly enhance shooting accuracy among futsal participants. The wall shoot group increased by 8.80 points ($t = 5.188$, $p = 0.001$), and the drib shoot group by 10.50 points ($t = 5.398$, $p = 0.000$). This aligns with prior research indicating that wall pass-type drills—similar in principle to wall shoot exercises—effectively improve technical skills. (Fazari et al., 2024) found that wall-pass training significantly improved passing accuracy in MAN 10 Jakarta ($p < 0.05$), and (Julriansyah et al., 2024) reported that wall-pass drills significantly enhanced passing

accuracy in U-12 football players ($p < 0.05$). These studies, though focused on passing, underscore the benefits of wall-based repetitive drills for improving ball-striking technique.

The superior improvement in the drib shoot group supports evidence that adding dribbling elements to shooting drills enhances skill transfer in game-like conditions. (Defliyanto et al., 2022) reported that dribbling training significantly increased shooting ability in football drills (correlation $r = 0.98$, ~96% explained variance). Similarly, (Andibowo et al., 2022) demonstrated that dribble shoot training yielded greater gains in shooting accuracy than through-pass shooting ($t = 6.35$, $p < 0.05$). These findings parallel our results, where drib shoot drills produced a slightly higher mean gain (10.50 vs. 8.80), supporting the idea that combining movement and finishing in drills enhances ecological validity and skill transfer.

Both prior research and current results highlight two critical factors: (1) repetition-based drills enhance technical consistency (e.g., wall-based drills), and (2) contextual, dynamic drills better simulate match conditions, promoting cognitive and motor integration. While the study ensured statistical assumptions of normality and homogeneity, limitations include scheduling constraints and the lack of assessment under actual game pressure.

In conclusion, both wall shoot and drib shoot methods are effective; however, drib shoot training is recommended for its superior performance boost and real-game applicability. Future research should explore long-term retention, incorporate game-based scenarios, and possibly combine both types of drills for optimal skill development.

Conclusions

This study concludes that both wall shoot and drib shoot training methods are effective in improving the shooting accuracy of futsal extracurricular participants at SMP Negeri 2 Palembang. The statistical analysis showed significant improvements in both groups, with the drib shoot method yielding a slightly higher mean gain (10.50 points) compared to the wall shoot method (8.80 points). These findings highlight the importance of structured technical training in school-level futsal programs.

The wall shoot method proved effective in reinforcing shooting technique through repetition and muscle memory, while the drib shoot method offered greater benefits by combining dribbling and finishing, simulating realistic in-game scenarios. This supports the use of dynamic, context-rich drills to enhance skill transfer and game performance.

Based on these results, futsal coaches and physical education instructors are encouraged to integrate drib shoot exercises into regular training sessions, particularly when

aiming to improve shooting skills under movement and pressure. Nonetheless, both training methods can be strategically combined to address different aspects of technical development.

Future research is recommended to assess long-term skill retention, incorporate game-play assessments, and expand the sample size to enhance generalizability. Additional exploration of psychological and tactical variables may also provide a more holistic understanding of shooting performance in youth futsal.

References

- Andibowo, T., Sholeh, M., Prakoso, E. T., Adityatama, F., & Budiyo, K. (2022). Pengaruh Metode Latihan Dribble Shoot Dan Through Pass Shoot Terhadap Kemampuan Shooting Dalam Sepakbola (Study Eksperimen pada SSB Safo Jomblo Slogohimo Usia 14-16 Tahun 2022). *Jurnal Ilmiah Spirit*, 22(2), Article 2.
<https://doi.org/10.36728/jis.v22i2.2139>
- David Jones. (2024). Impact of Team Sports Participation on Social Skills Development in Youth. *American Journal of Recreation and Sports*, 3(2), 24–34.
<https://doi.org/10.47672/ajrs.2400>
- Defliyanto, D., Pujiyanto, D., Insanisty, B., Sugihartono, T., Syafrial, S., Ilahi, B. R., & Kurniawan, W. (2022). Effect of Dribbling Training Method on Shooting Ability Football Games for Extracurricular Students at SMAN 03 Bengkulu City. *Kinestetik : Jurnal Ilmiah Pendidikan Jasmani*, 6(2), Article 2.
<https://doi.org/10.33369/jk.v6i2.22082>
- Eshun, A. K. (2021). *Effect of twelve week skill related fitness intervention on shooting accuracy among high school basketball players in the Cape Coast Metropolis, Ghana* [Thesis, University of Cape Coast]. <http://ir.ucc.edu.gh/jspui/handle/123456789/6456>
- Fajar, M. (2017). *Perbedaan Pengaruh Latihan Dribbling Zigzag Dan Latihan Dribbling Bolak-Balik Terhadap Kemampuan Dribbling Pemain Sepakbola Ssb Persimura Musi Rawas*. 15.

- Fazari, N., Sumarsono, R. N., & Sumanro, A. (2024). Pengaruh Latihan Wall-Pass Terhadap Keterampilan Passing Pada Ekstarkurikuler Futsal Di Man 10 Jakarta. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, 9(3), Article 3.
<https://doi.org/10.23969/jp.v9i3.18348>
- Hidayat, Ma'mun, A., Fitri, M., & Mahendra, A. (2024). Implementation of the Futsal Sports Program as a Media for Leadership Development in Elementary School Age Children. *Elementary School Forum (Mimbar Sekolah Dasar)*, 11(4), 630–641.
- Julriansyah, A., Syamsuramel, S., & Bayu, W. I. (2024). The effect of wallpass training on Persitara U-12 Indralaya's passing accuracy ability. *Altius: Jurnal Ilmu Olahraga Dan Kesehatan*, 12(2), 427–434. <https://doi.org/10.36706/altius.v12i2.24>
- Mulawarman, A., Ihsan, A., Mustafa, M., Mappaompo, M. A., & Aprilo, I. (2024). Innovative football training: Android-based team games tournament model. *Jurnal SPORTIF : Jurnal Penelitian Pembelajaran*, 10(3), Article 3.
https://doi.org/10.29407/js_unpgri.v10i3.24166
- Newell, K. M., & Rovegno, I. (2021). Teaching Children's Motor Skills for Team Games Through Guided Discovery: How Constraints Enhance Learning. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.724848>
- Saryono, -. (2006). Futsal Sebagai Salah Satu Permainan Alternatif Untuk Pembelajaran sepakbola Dalam Pendidikan jasmani. *Jurnal Pendidikan Jasmani Indonesia*, 3(3), Article 3. <https://doi.org/10.21831/jpji.v3i3.6249>
- Yang, J., & Hu, J. (2025). 3D simulation training and tracking prediction of football players based on V/AR technology. *Proceedings of the 2024 International Conference on Sports Technology and Performance Analysis*, 458–464.
<https://doi.org/10.1145/3723936.3724008>