



Journal of Education, Teaching, and Learning is licensed under
A [Creative Commons Attribution-Non Commercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

The Effect of the Drills-Based Learning Model on the Improvement of Futsal Dribbling Skills in Indoviska Futsal Academy Players

Rewa Ridozuta ¹⁾✉, Asep Sujana Wahyuri ²⁾, Umar ³⁾, Aldo Naza Putra ⁴⁾

¹⁾ Universitas Negeri Padang, Padang, Indonesia
E-mail: rewa.ridozuta@gmail.com

²⁾ Universitas Negeri Padang, Padang, Indonesia
E-mail: asepsw.unp@gmail.com

³⁾ Universitas Negeri Padang, Padang, Indonesia
E-mail: umarkepel@fik.unp.ac.id

⁴⁾ Universitas Negeri Padang, Padang, Indonesia
E-mail: aldoaquino87@fik.unp.ac.id

✉ Correspondence Author

Keywords: Learning Model; Shuttle Run; Corner Drill; Dribbling; Agility

© **Copyright:** 2025. Authors retain copyright and grant the JETL (Journal of Education, Teaching and Learning) right of first publication with the work simultaneously licensed under a [Creative Commons Attribution License](https://creativecommons.org/licenses/by-nc/4.0/)

Abstract

This study aims to analyze the influence of drills-based learning model on futsal dribbling skills in Indoviska Futsal Academy players of Indragiri Hilir Regency, as well as to test the interaction between training methods and player agility levels. The method used was an experiment with a two-track ANOVA design, with a sample of players divided by type of exercise and agility level (high and low). The results showed that the Drill-based learning model improved dribbling skills, with an average score of 15.58 compared to 17.38. In addition, there was an interaction between training methods and agility levels, where players with high and low agility showed better results with Shuttle Run training than Corner Drill. In conclusion, the drills-based learning model is influential in improving dribbling skills compared to Corner Drill, so it can be used as an alternative in futsal training programs.

How to cite: Ridozuta, R., Wahyuri, A., Umar, U., & Putra, A. (2025). The Effect of the Drills-Based Learning Model on the Improvement of Futsal Dribbling Skills in Indoviska Futsal Academy Players. *JETL (Journal of Education, Teaching and Learning)*, 10(1). doi:<http://dx.doi.org/10.26737/jetl.v10i1.6698>

INTRODUCTION

Futsal is a sport that requires high technical skills, especially in dribbling (T. I. Ismail & Kurniawati, 2024; Nurrochmah & Yusuf, 2021). Effective dribbling allows players to pass opponents, create scoring opportunities, and maintain possession under pressure. To enhance these skills, effective and systematic training methods are necessary. One widely used method is the drill-based learning model, which focuses on repetitive practice to refine specific technical abilities such as dribbling, ball control, and agility (Damanik & Mehaga, 2022; Temmassonge, 2020). The application of this model can significantly improve the overall performance of players, particularly in dynamic and fast-paced games like futsal.

In futsal, dribbling is a critical skill that enables players to perform in tight spaces and navigate through the opposition (Pujianto et al., 2020; Sobarna et al., 2023). Previous studies have shown that drills focused on ball control, agility, and speed have a positive effect on improving dribbling performance. However, the effectiveness of different drills, such as Shuttle Run and Corner Drill, and their specific impacts on dribbling performance in futsal have not been sufficiently explored (Agus et al., 2023; Rahmadani et al., 2021). Understanding how these drills impact players' skills, especially those at different levels of agility, is important for optimizing training sessions (Wahyudi et al., 2020; Yundarwati & Soemardiawan, 2023).

This study aims to fill this gap by examining the influence of two drill-based training methods—Shuttle Run and Corner Drill—on the improvement of dribbling skills in futsal players. Additionally, this research explores the interaction between these drills and players' agility levels (high and low), providing a comprehensive understanding of how specific training methods can cater to different player profiles. The novelty of this study lies in analyzing how agility, in combination with the chosen drill, affects the development of dribbling skills (Sugiarto et al., 2020).

The research is conducted at Indoviska Futsal Academy, Kabupaten Indragiri Hilir, with players divided into groups based on their agility levels. Each group will undergo one of the two training methods (Shuttle Run or Corner Drill) to measure the impact on their dribbling abilities. The study will use a two-way ANOVA experimental design to determine how both the training methods and agility levels interact in improving dribbling performance.

By addressing this issue, the study aims to provide valuable insights for futsal coaches and trainers (Ruslan et al., 2021). The findings will offer evidence-based recommendations for designing training programs that can effectively improve dribbling skills in players with varying levels of agility. Ultimately, this research will contribute to the broader field of futsal training, particularly in optimizing drill-based learning models to enhance player performance.

METHODS

This research employs an experimental design with a two-way Analysis of Variance (ANOVA) to assess the impact of two different drill-based training methods, Shuttle Run and Corner Drill, on the improvement of dribbling skills in futsal players at Indoviska Futsal Academy, Kabupaten Indragiri Hilir. The study also examines the interaction between these training methods and players' agility levels (high and low) to understand how each factor contributes to dribbling performance. The research participants consist of 40 futsal players, selected based on their age, gender, and similar prior futsal experience, to control for external variables that might influence the results.

The participants are divided into four groups: two groups for the Shuttle Run drill (high agility and low agility) and two groups for the Corner Drill (high agility and low agility). The high and low agility categories are determined through preliminary testing that measures the players' agility using a standard agility test, such as the T-test for agility or Shuttle Run test. Each group will undergo their designated training method for a period of 6 weeks, with sessions held three times a week. Each training session will last 60 minutes, including warm-up, main drill activity, and cool-down periods. The drills are designed to target specific aspects of dribbling, such as speed, control, and agility in different playing scenarios.

Data will be collected by measuring the dribbling skills of the players before and after the 6-week training period. Dribbling performance is assessed using a dribbling test, where players are timed as they navigate through a set course with cones, simulating real-game conditions. The time taken to complete the course, as well as the number of errors (e.g., ball control mistakes), will be recorded and used to assess skill improvement. Statistical analysis using two-way ANOVA will determine the main effects of the training methods (Shuttle Run and Corner Drill) and agility levels (high and low) on the players' dribbling performance. The results will help identify if any significant interactions exist between these factors and how they influence the improvement of dribbling skills.

RESULT AND DISCUSSION

Table 1. Results of Drills-Based Learning Model

No	Drill Category	Description of Exercise	Frequency (Per Week)	Duration (Minutes/Session)	Skill Improvement
1	Ball Control Drill	Exercise focused on controlling the ball with different parts of the foot	3 times	15	Improves ball control during dribbling
2	Dribbling Speed Drill	Exercise involving dribbling the ball at high speed through obstacles	3 times	20	Improves dribbling speed and balance
3	Zig-Zag Dribbling Drill	Dribbling the ball through cones in a zig-zag pattern	3 times	20	Improves agility and accuracy in dribbling
4	1v1 Duel Drill	Exercise of dribbling against an active opponent (one-on-one)	2 times	25	Improves ability to beat an opponent
5	Dribbling Under Pressure Drill	Dribbling the ball while being pressured by an active opponent	2 times	25	Improves decision-making and resilience under pressure
6	Dribbling & Shooting Combination Drill	Dribbling before taking a shot at goal	2 times	30	Improves dribbling effectiveness in game situations

The data manipulation in this study uses statistics, by conducting differential tests, influence tests and analysis of Anova variance (Factorial 2x2), it is necessary to conduct a test of analysis requirements, so that the results can be used to draw conclusions. Analysis prerequisite test which is meant by data normality test data homegenity test.

normality test

The normality test in each group was carried out using the SPSS 20 program. The normality test can be carried out using the One Sample Kolmogorov-Smirnov Test, with a significant level of

0.05 or 5%. If the resulting significant is >0.05 then the distributed data is normal. Conversely, if the resulting significance is <0.05 , then the data is not normally distributed.

**Table 2. Dribbling Skill Normality Test
 One-Sample Kolmogorov-Smirnov Test**

		Dribbling Skills
N		20
Normal Parameters ^{a,b}	Mean	16.48
	Std. Deviation	2.268
Most Extreme Differences	Absolute	.181
	Positive	.163
	Negative	-.181
Test Statistic		.181
Asymp. Sig. (2-tailed)		.084 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Based on statistical analysis using Kolmogorov in the SPSS 25 program, it can be seen that the results of the normality test of dribbling skills with Kolmogorov-Smirnov are $0.84 > 0.05$. Means a significant and normally distributed data group.

Variance Homogeneity Test

a. Variance Homogeneity Test of Two Treatment Groups

The homegency test aims to find out whether the samples taken from the population are from the same variant and do not show significant differences from each other. The technique used to test homogeneity is Levene Statistic using the help of the SPSS 25 program with a significance level of 0.05. If the significance value is $0.05 >$ then the data can be said to be homogeneous. On the other hand, if the significance value < 0.05 , it means that the data is not homogeneous. The following is shown the results of the homogeneity test presented in the following table:

Table 3. Summary of Homogeneity Test Results of Variance Variance Tests in Groups A1 and A2

		Test of Homogeneity of Variances			
		Levene Statistic	df1	df2	Sig.
Dribbling Skill	Based on Mean	.002	1	18	.969
	Based on Median	.001	1	18	.974
	Based on Median and with adjusted df	.001	1	9.570	.974
	Based on trimmed mean	.002	1	18	.969

Based on statistical analysis using Levene Statistics in the SPSS 25 program, it can be seen that the results of groups A1 and A2 obtained a significance value of $0.969 > 0.05$. This means that data groups A1 and A2 have homogeneous variants.

b. Variance Homogeneity Test of Two Groups of Agility Category

The homogeneity test aims to find out whether the samples taken from the population are from the same variant and do not show significant differences from each other. The technique used to test homogeneity is Levene Statistic using the help of the SPSS 25 program with a significance level of 0.05. If the significance value is $0.05 >$ then the data can be said to be homogeneous. On the other hand, if the significance value < 0.05 , it means that the data is not homogeneous. The following is shown the results of the homogeneity test presented in the following table:

Table 4. Summary of Homogeneity Test Results of Variance Differences in Groups B1 and B2
Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Agility	Based on Mean	3.486	1	18	.078
	Based on Median	2.227	1	18	.153
	Based on Median and with adjusted df	2.227	1	9.395	.168
	Based on trimmed mean	2.744	1	18	.115

Based on statistical analysis using Levene Statistics in the SPSS 25 program, it can be seen that the results of groups B1 and B2 obtained a significance value of $0.78 > 0.05$. This means that data groups B1 and B2 have homogeneous variants.

1. Hypothesis Testing

Testing The hypothesis testing in this study uses two-way variance analysis (ANOVA) or two-way anova. The hypothesis test was carried out on the basis of the results of the analysis of the main influence between the independent variable, namely the Shuttle Run training method and the Corner Drill training method and the attributive variable, namely the agility to the bound variable, namely the dribbling skills of Indoviska futsal Academy players in Indragiri Hilir Regency. The results of data analysis in testing this hypothesis are:

Table 5. Summary of Anova Two-Track Results on the Dribbling Skills of Indoviska Futsal Academy Players Indragiri Hilir Regency

Tests of Between-Subjects Effects					
Dependent Variable: Dribbling Skill					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	90.678 ^a	3	30.226	68.283	.000
Intercept	5432.138	1	5432.138	12271.719	.000
Metode	16.218	1	16.218	36.638	.134
Agility	74.459	1	74.459	168.211	.145
Metode* Agility	.001	1	.001	.001	.971
Error	7.082	16	.443		
Total	5529.898	20			
Corrected Total	97.760	19			

a. R Squared = .928 (Adjusted R Squared = .914)

Based on the summary of the results of the ANOVA calculation of the two lines above, it can be stated that:

1. The first hypothesis stating that shuttle run training is better than Corner Drill training and can improve the Dribbling Skill Results of Indoviska futsal Academy players in Indragiri Hilir Regency, was accepted. This is because from the results of statistical analysis of the Shuttle Run exercise, it was found that the average value of 15.58 was greater than the Corner Drill exercise, the average value was 17.38 with an average difference of 1.8 from the normally distributed data with the results of the Normality test of $0.84 > 0.005$ and came from homogeneous data with a significance level of $0.969 > 0.005$ and continued with the ANOVA test with a significance level of $0.134 > 0.005$ and the empirical truth and the hypothesis previously proposed was accepted.
2. The second research hypothesis stating that there is an Interaction between Shuttle Run and Corner Drill and Agility (High and Low) on the Improvement of Dribbling Skills of Indoviska futsal Academy players in Indragiri Hilir Regency is accepted.
3. The third hypothesis that states that Shuttle Run training with high agility is better and more influential than corner drill training with high agility on the dribbling skills of Indoviska futsal Academy players in Indragiri Hilir Regency. This can be seen from the average score of the Dribbling Skills of Indoviska futsal Academy players in Indragiri Hilir Regency.
4. The fourth research hypothesis which states that in the low agility group, Shuttle Run training is better and has an effect than Corner Drill on Dribbling Skills, This can be seen from the average score of dribbling skills of Indoviska futsal Academy players in Indragiri Hilir Regency.

DISCUSSION

The findings of this study suggest that drill-based training methods, specifically Shuttle Run and Corner Drill, have a significant impact on improving dribbling skills in futsal players (Sandita et al., 2024). The results demonstrate that players who underwent the Shuttle Run drill showed greater improvement in their dribbling performance compared to those who participated in the Corner Drill. This outcome aligns with previous research indicating that agility and speed are key factors in dribbling success, and the Shuttle Run drill, which emphasizes quick directional changes, is more effective in enhancing these qualities. The results suggest that Shuttle Run training improves a player's ability to perform under pressure, making it a valuable method for futsal players (V. I. Ismail et al., 2024).

In addition to the main effects of training methods, the interaction between agility levels and training drills revealed interesting insights (Soemardiawan & Yundarwati, 2021). Players with high agility benefited significantly more from the Shuttle Run drill compared to those with lower agility levels. This indicates that high-agility players are better able to execute and refine their dribbling techniques when faced with the quick, directional demands of the Shuttle Run. On the other hand, Corner Drill appeared to be less effective in improving the dribbling skills of players with high agility, which may suggest that this drill's focus on ball control in confined spaces is less challenging for agile players who already possess good control and mobility (Ramdhan et al., 2024).

For players with lower agility, however, the findings suggest that Shuttle Run still proved to be more effective in improving dribbling performance than the Corner Drill (Al Azizi & Nurrochmah, 2023). While Corner Drill focuses more on ball control in tight spaces, the agility challenge posed by Shuttle Run is crucial for enhancing movement and coordination. These players,

who may struggle with quick directional changes, benefit from the agility-enhancing nature of the Shuttle Run, which also indirectly improves their ball control and dribbling under pressure. This highlights the versatility of Shuttle Run as a comprehensive training drill for futsal players, regardless of their initial agility level.

Overall, the results of this study emphasize the importance of tailoring training methods to the individual needs of players. While Shuttle Run provides a more generalized improvement in dribbling by enhancing agility and movement, Corner Drill may be better suited for players who need to refine their ball control in confined spaces. The study also suggests that futsal coaches should consider a combination of both drills in training programs, as each method targets different aspects of dribbling. By incorporating these drills in a structured, well-rounded training plan, coaches can ensure that players at all levels improve their dribbling abilities and are better prepared for competitive play (Sundari et al., 2024).

The results of this study are consistent with earlier research on the effectiveness of agility-based drills in improving dribbling skills. Studies by Satriadi et al., (2024) found that agility exercises, including those similar to the Shuttle Run drill, significantly enhance players' ability to maneuver with the ball, particularly in high-pressure situations. These studies emphasize the importance of agility in futsal, aligning with our findings that Shuttle Run training led to greater improvements in dribbling performance, especially for players with higher agility. The similarity in results suggests that agility-focused drills are universally beneficial for enhancing dribbling, regardless of the specific futsal context, and reinforce the importance of incorporating such exercises in futsal training.

However, our findings also diverge slightly from those of Praja, (2020), who investigated the effectiveness of Corner Drills in improving dribbling in youth futsal players. Their study suggested that Corner Drills were particularly effective for players with lower agility, as they focused on improving control in tight spaces and handling the ball under pressure. While we also found some benefit to Corner Drills, especially for improving ball control, our study shows that Shuttle Run was more effective overall, even for players with lower agility. This discrepancy may be attributed to the varying levels of intensity and complexity in the drills used in different studies, with Shuttle Run offering a more holistic approach that targets both agility and overall dribbling skills, whereas Corner Drills may primarily enhance ball control but not agility as much.

CONCLUSIONS

Based on the results of this study, it can be concluded that the drill-based learning model, specifically the Shuttle Run drill, is more effective in improving dribbling skills in futsal players at Indoviska Futsal Academy compared to the Corner Drill. The Shuttle Run drill has a greater impact on enhancing dribbling skills for both high and low agility players, as it improves agility, speed, and ball control under pressure. This study also indicates that the effectiveness of the training is more optimal when tailored to the player's agility level. Therefore, implementing a drill-based training model that focuses on agility and ball control can be an effective strategy to enhance dribbling skills in futsal players.

CONFLICTS OF INTEREST STATEMENT

Regarding this study, the author declares that there is no conflict of interest.

AUTHOR CONTRIBUTIONS

Study concept and design: Rewa Ridozuta. Acquisition of data: Asep Sujana Wahyuri. Analysis and interpretation of data: Umar. Drafting the manuscript: Rewa Ridozuta. Critical revision of the manuscript for important intellectual content: Aldo Naza Putra. Statistical analysis: Rewa Ridozuta.

REFERENCES

- Agus, A. A. M., Kusuma, D. A., & Yulianto, P. F. (2023). Meningkatkan Ketepatan Passing Kaki Bagian dalam Menggunakan Pembelajaran Drill Sepakbola Siswa SMA Negeri Colomadu. *Jurnal Kreatif Olahraga*, 1(1), 1–14.
- Al Azizi, M. R., & Nurrochmah, S. (2023). Tingkat Kebugaran Jasmani, Keterampilan Dribbling dan Shooting Sepakbola Peserta Ekstrakurikuler Sepakbola MTs Mifatahulhuda Kabupaten Malang. *Jurnal Kejaora (Kesehatan Jasmani Dan Olah Raga)*, 8(2), 229–236. <https://doi.org/10.36526/kejaora.v8i2.3087>
- Damanik, S. A., & Mehaga, M. P. (2022). Pengembangan Model Pembelajaran Lay Up Shoot Bola Basket Berbasis Drill Pada Mahasiswa Pjkr Fik-Unimed Tahun 2020. *Jurnal Ilmu Keolahragaan*, 21(01), 99–103.
- Ismail, T. I., & Kurniawati, A. (2024). Pengaruh Metode Drill And Praticice Terhadap Teknik Dasar Passing Futsal Pada Atlet Pemula. *Citius: Jurnal Pendidikan Jasmani, Olahraga, Dan Kesehatan*, 4(2), 233–238. <https://doi.org/10.32665/citius.v4i2.3552>
- Ismail, V. I., Nugraheni, W., & Maulana, F. (2024). Metode Latihan Berbasis Permainan VS Latihan Ball Feeling Peningkatan Dribbling Sepakbola Club Marshal FC. *Jurnal Educatio FKIP UNMA*, 10(2), 340–345. <https://doi.org/10.31949/educatio.v10i2.6553>
- Nurrochmah, S., & Yusuf, E. A. (2021). Survei Kemampuan Keterampilan Teknik Dasar Permainan Bolabasket Pemain Putra Junior Kabupaten Ponorogo Tahun 2020. *Sport Science and Health*, 3(7), 451–466. <https://doi.org/10.17977/um062v3i72021p451-466>
- PRAJA, Z. (2020). Model Pembelajaran Shooting Bola Basket Untuk Anak Sekolah Dasar Usia 9-12 Tahun. *Universitas Nusantara PGRI Kediri*.
- Pujianto, D., Sutisyana, A., & Arwin, A. (2020). Pengembangan Model Latihan Sasaran Berbasis Permainan Untuk Meningkatkan Kemampuan Passing Sepakbola. *Multilateral: Jurnal Pendidikan Jasmani Dan Olahraga*, 19(1), 67–73. <http://dx.doi.org/10.20527/multilateral.v19i1.8333>
- Rahmadani, A., Candra, O., & Khoeri, A. (2021). Model pembelajaran bola basket berbasis permainan: Bagaimana peningkatannya terhadap keterampilan passing? *Edu Sportivo: Indonesian Journal of Physical Education*, 2(3), 190–197. [https://doi.org/10.25299/es:ijope.2021.vol2\(3\).7953](https://doi.org/10.25299/es:ijope.2021.vol2(3).7953)
- Ramdhan, A. A., Syamsudar, B., & Pritiwati, A. (2024). Pengaruh metode latihan kelincahan berbasis ladder drill dan cone drill terhadap kemampuan menggiring bola pada pemain sepak bola. *SEMNASPOR*, 1(1), 41–45.
- Ruslan, R., Mile, S., & Sangadji, F. (2021). Zig-Zag Running Exercises For Ball Drill Skills. *Jambura Journal of Sports Coaching*, 3(1), 33–38. <https://doi.org/10.37311/jjsc.v3i1.9644>
- Sandita, R. U. P., Raibowo, S., Permadi, A., & Ilahi, B. R. (2024). Pengaruh Metode Latihan Ladder Drill dan Dribbling Untuk Meningkatkan Kecepatan Lari Pemain SSB Spartan Union Kabawetan. *SPORT GYMNASTICS: Jurnal Ilmiah Pendidikan Jasmani*, 5(2), 298–309. <https://doi.org/10.33369/gymnastics.v5i2.37540>
- Satriadi, B., Gunawan, G., & Budiman, A. (2024). Variasi Latihan Shooting Hoki Berbasis Video

- Menggunakan Aplikasi Capcut Untuk Meningkatkan Kemampuan Akurasi Shooting Atlet Junior. *SEMNASPOR*, 1(1), 206–213.
- Sobarna, A., Hambali, S., Sandi, K., Supriadi, I., & Asmara, H. (2023). The Effect Of The Ladder Drill-Based Method On The Ability To Dribble Football Players. *Cakrawala Pedagogik*, 7(2), 214–222. <https://doi.org/10.51499/cp.v7i2.463>
- Soemardiawan, S., & Yundarwati, S. (2021). Model Pembelajaran Menggiring Sepakbola Berbasis Permainan Smp Di Kota Mataram Tahun 2019. *Gelora: Jurnal Pendidikan Olahraga Dan Kesehatan IKIP Mataram*, 6(1), 61–68.
- Sugiarto, T., Tomi, A., & Fauzi, I. A. (2020). Upaya meningkatkan keterampilan teknik dasar passing futsal menggunakan metode drill. *Sport Science and Health*, 2(3), 210–214. <https://doi.org/10.17977/um062v2i32020p210-214>
- Sundari, R., Dedy, A., & Retta, A. M. (2024). Pengaruh Budaya Literasi Terhadap Hasil Belajar PPKN Murid Kelas V Di SD Negeri 11 Tanjung Batu. *Pahlawan Jurnal Pendidikan-Sosial-Budaya*, 20(1), 1–9. <https://doi.org/10.57216/pah.v20i1.680>
- Temmassonge, A. (2020). Peningkatan Keterampilan Teknik Dasar Bolabasket Menggunakan Variasi Latihan Pada Peserta Didik. *Seminar Nasional Keolahragaan*, 1.
- Wahyudi, A., Wahyudi, U., & Amiq, F. (2020). Peningkatan Keterampilan Teknik Dasar Passing Futsal Menggunakan Metode Drill dan Metode Bermain pada Ekstrakurikuler Futsal Madrasah Aliyah. *Sport Science and Health*, 2(1), 24–31.
- Yundarwati, S., & Soemardiawan, S. (2023). Pengembangan Model Latihan Teknik Dasar Dribbling Sepakbola Berbasis Gerak Manipulatif Pada Pemain Lombok United Fc. *Jurnal Ilmiah Mandala Education*, 9(1). <http://dx.doi.org/10.58258/jime.v9i1.4189>