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The Effect of Box Drill With Rings And Bounding With Rings Training On Improving Dribbling In Futsal Games On The Futsal Team of The Moria Congregation Palu

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ABSTRACT

This research is motivated by the problems faced by the Moria Hammer congregation futsal team, which lies in the basic technique of dribbling the ball, this is because every training schedule is still monotonous. The goal that the author wants to achieve in this study is to determine whether there is an effect of box drill training with rings and bounding with rings on improving dribbling in futsal games on the Moria Hammer congregation team. This type of research uses a quantitative approach with a preliminary experimental method. The population and sample in this study were 66 people. And the sample taken amounted to 30 people using the t-test analysis technique. Based on the results of the analysis conducted, it was found that (1) there is an increase in dribbling agility in futsal players of the moria hammer congregation following box drill training with rings by 4.59 seconds and hypothesis testing where the value of tcount = 9.520> ttable = 2.145, accepted, (2) there is an increase in dribbling agility in futsal players of the moria hammer congregation following bounding training with rings by 7.55 seconds and hypothesis testing where tcount = 6, 850> t table 2,145, accepted (3) there is no difference in the influence between box drill training with rings and bounding with rings on the agility of dribbling futsal games on the moria hammer congregation futsal team ", with these results the tcount value of 0.310 is smaller than the ttable value of 2.145 or (0.310> 2.145) with a value of d. bn-1 or 15-1 = 14). bn-1 or 15-1 = 14, at a significant level a = 0.05.

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A. Conception and design of the study;
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INTRODUCTION

Futsal, a high-intensity indoor sport derived from football, has gained global popularity due to its emphasis on quick decision-making, technical precision, and small-team collaboration (Stanković et al., 2022). Unlike outdoor football, futsal is played on a smaller court with fewer players, which increases the frequency of ball contacts and places greater demand on players' technical skills, especially dribbling (Castagna et al.,

2019). Among these skills, dribbling is considered a cornerstone of performance as it allows players to manoeuvre through tight spaces, retain possession under pressure, and create offensive opportunities (Reis et al., 2021).

In both recreational and competitive contexts, the ability to dribble effectively contributes to a team's offensive success and is often a marker of individual talent. Therefore, training methods that improve dribbling performance are central to futsal coaching at all levels (Silva et al., 2020). The development of agility, balance, coordination, and lower-limb power is known to support dribbling ability, and many innovative training methods are being integrated into futsal training to target these components (Nakamura et al., 2020).

Recent developments in sports science emphasize the importance of drill-based training models that simulate game-specific movement patterns to improve sport-specific skills. Among these are box drills with rings and bounding with rings exercises, both of which aim to enhance agility, foot coordination, explosive movement, and spatial awareness—elements crucial to dribbling in futsal (Yap et al., 2021).

The box drill with rings typically involves lateral and diagonal footwork through a marked square, enhancing agility, change of direction, and cognitive decision-making under spatial constraints (Moran et al., 2018). It mimics the multidirectional demands of futsal, where players must frequently change direction in response to opponents' movement.

On the other hand, bounding with rings incorporates repetitive, explosive jumps from ring to ring in varying patterns, developing lower-body power, proprioception, and motor coordination. These components are essential for effective dribbling, where players need to accelerate, decelerate, and maneuver with control and balance (Faude et al., 2017). The combination of these two training methods may offer synergistic benefits for futsal athletes, particularly in enhancing their neuromuscular efficiency and footwork precision.

Despite the increasing interest in using agility and plyometric-based drills to improve futsal performance, many amateur and community-based teams still rely on generalized conditioning programs. As a result, improvements in dribbling performance often occur inconsistently. In the case of the Futsal Team of the Moria Congregation Palu, a church-based recreational team, many players exhibit good game sense but lack technical consistency, particularly in dribbling when under pressure.

Observational data suggest that dribbling errors—including poor control, ineffective change of direction, and loss of balance—frequently occur during matches, limiting the team's offensive capabilities. These performance deficiencies are often linked to inadequate agility training and insufficient targeted movement drills (Putra & Susanto, 2022). There is a growing need to implement structured, scientifically informed training programs that are adaptable to community teams with limited resources.

While several studies have validated the effectiveness of agility and plyometric training in improving sports performance, including dribbling, the combined use of box drills with rings and bounding with rings in futsal training remains underexplored (Milanović et al., 2019). Most existing research focuses on elite athletes in structured academies, overlooking grassroots or recreational-level players such as those in community or faith-based teams (Rahmatullah et al., 2022).

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Additionally, studies that evaluate the transferability of agility-based drills to specific technical skills like dribbling in futsal are limited. Many investigations isolate physical components, such as speed or power, but fail to measure their direct impact on technical execution in gameplay contexts (Yanci et al., 2020). Furthermore, in the Indonesian context, limited empirical data are available on the application of such methods in religious or non-school-based sport settings.

This underscores the need for research that not only measures improvements in isolated physical attributes but also connects them to technical skill enhancement, particularly in community-based futsal teams, which represent a large and growing segment of sport participation in Indonesia.

This study contributes to the existing body of knowledge by examining the effect of a combined box drill with rings and bounding with rings training program on dribbling skills in a real-world, non-academic futsal setting. The study focuses on the Moria Congregation Palu Futsal Team, offering novel insight into how structured training methods can be implemented effectively in community-based environments.

By focusing on adult amateur players in a faith-based sports group, this research offers a new perspective on the adaptability and effectiveness of performance-enhancing drills outside of elite training environments. It bridges the gap between performance science and practical application in underserved athlete populations.

The study also employs a pre-test and post-test experimental design to quantify improvements in dribbling ability using validated futsal skill assessments. This approach provides empirical evidence that supports or refutes the efficacy of the combined training intervention in enhancing specific futsal skills.

Based on the theoretical and practical importance of agility and explosive movement training in futsal, this study aims to determine the effect of box drill with rings and bounding with rings training on dribbling ability among members of the Moria Congregation Palu Futsal Team. The key research questions are: (1) Does the combination of box drill with rings and bounding with rings significantly improve dribbling performance in futsal players? And (2) How do these training methods influence specific aspects of dribbling, such as control, acceleration, and maneuverability?

The study employs a quantitative, experimental research design using pre- and post-intervention testing to evaluate changes in dribbling performance. It is expected that the results will inform coaches, trainers, and sports practitioners on the value of integrating movement-based training into technical skill development for futsal, especially in non-professional or grassroots settings.

METHODS

This type of research is quantitative, using the preliminary experimental method (pre-experiment). This type of quantitative research is used by researchers on the basis of the nature of the research that provides treatment. According to Suryana (2010.20) explains that experimental research is research that tests whether experimental variables are effective or

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not. To test effectiveness, not only must control variables be used. The instrument in this study is a measuring tool used to collect data. According to Sugiyono (2011: 102), a research instrument is a tool used to measure observed natural and social phenomena. The tools needed in the study are as follows: Test area, 8 cones, Stopwatch, Ball to taste, Pluit, Futsal Field, Stationery and Coach's partner to record time, Training program.

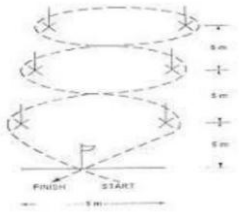

Figure 1.
Diagram of Dribbling Test

So, here we use the data analysis technique that will be used in this study is inferential analysis, conducted to test the hypothesis proposed using the t-test analysis technique by (Sutrisno Hadi, 2001: 490) with the following formula: Looking for the mean difference (MD), use the formula: MD-L Description:

$$N = \frac{MD}{\sum d} \; 2$$

The research design used can be seen in the following figure.

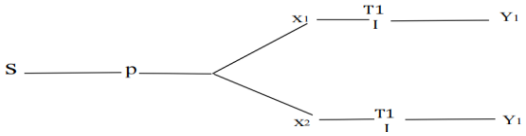

Figure 2.
Experimental Research Design

This study was conducted at the Moria Church field in Palu. For eight weeks, with details, one week was held for preparation for the initial dribbling test. Then six weeks of training box drill with rings (group 1) and bounding with rings (group 2). While the last mingga was carried out, the final test of improving dribbling in futsal games.

Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics set by researchers to study and draw conclusions (Sugiyono, 2011: 117). In this study, the population is PPGT Moria Congregation Palu, namely 66 people.

The sample is part of the number and characteristics of the population (Sugiyono, 2011: 118). Sampling according to the provisions put forward by Arikunto (2006: 120) states that if the research subject is less than 100, it is better to take all so that the research is population research. Furthermore, if the number of subjects is large, it can be taken between 10-15% or 20-25% or more, at least adjusted to the ability of the researcher in terms of time, energy, and funds, so the number of samples used in this study was 30 people. Seeing from the very large population, so that in researchers use sampling techniques such as samples or purposive sampling. Purposive sampling is a sampling technique with certain

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considerations (Sugiyono, 2011: 85). So, the sample used in this study was 30 people, which is 25% of the total population of 66 people, so that these 30 people could be divided into 2 groups: 15 people in group 1 and 15 people in group 2.

Research always has a data collection process. In the data collection process, one or more methods will be used. Data collection techniques need to use the right method, and need to choose relevant data collection techniques and tools in order to collect data. R produces objective data (Margono, 2010: 158). The type of data collection used in this study is in the form of a dribbling agility test with the aim of knowing the extent of the ability and improvement of dribbling on the Jemaat Moria Palu Futsal Team in futsal games.

RESULTS AND DISCUSSION

Result

The sample used in this study was the futsal team of Jemaat Moria Palu. In the research process, the sample is divided into 2 (two) training groups. Before the application of training in each group, each research sample first conducted an initial dribbling test as initial test data (pretest). The initial test was carried out with the aim of knowing the dribbling ability before being given treatment, which was used to determine the initial ability level of each sample. To clarify the analysis process, before testing the hypothesis, a description of each data group is first carried out. The data processing process of the results of this study used the help of the SPSS computer program version 17.0

Table 1.
Pre-test the test data in group A and the post-test of dribbling

No.	Nama	Dribbling in Futsal	
		Pre-Test (second)	Post-Test (second)
1	Richard	16.69	16.11
2	Aldi	18.23	18.02
3	Acong	18.44	18.16
4	Romi	18.92	18.35
5	Yogi	19.02	18.87
6	Mario	19.26	19.06
7	Robi	19.42	19.13
8	Hendi	19.49	19.17
9	Roi	19.52	19.24
10	Elvano	20.21	19.85
11	Angga	20.22	20.01
12	Berkat	20.53	20.25
13	Lexi	20.83	20.49
14	Iping	21.32	21.03
15	Santo	21.43	21.11
Amount		**293.44**	**288.85**
Average		**19.56**	**19.26**
Improvement		**1.58%**	

Dribbling ability in the initial test before the application of 40 box drills with rings, the fastest value was 16.69, and the slowest value was 21.34, with an average value (mean) of 19.56 seconds. While in the implementation of the final dribbling test after 40 box drills with rings, I obtained the fastest time. Value of 16.11 and the slowest value of 21.11 with an average value (mean) of 19.25 seconds, with an increase in dribbling after following a 40-box drill with rings of 1.58%.

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Table 2.
Pre-test the test data in group B and the post-test of dribbling

No.	Name	Dribbling in Futsal	
		Pre-Test (second)	Post-Test (second)
1	Rama	17.24	16.96
2	Tito	17.54	17.19
3	Veron	18.75	18.16
4	Stivan	18.91	18.21
5	Jais	19.17	18.81
6	Wandi	19.26	18.92
7	Fajar	19.43	19.02
8	Efira	19.45	19.04
9	Anno	19.75	19.11
10	Avet	20.15	19.22
11	Helqi	20.35	19.78
12	Nani	20.42	19.89
13	Yoyon	20.88	20.17
14	Dedi	21.19	20.88
15	Gemal	23.09	22.67
Amount		**295.58**	**288.03**
Average		**19.71**	**19.20**
Improvement		**2.26%**	

Dribbling ability in the initial test before the application of the box drill with rings, the fastest value was 17.24, and the slowest value was 23.09, with an average value (mean) of 19.71 seconds. While in the implementation of the final dribbling test after the box drill with rings, the value was obtained.

Table 3.
Comparison of the post-test of the Two Training Groups

No	Group A		Group B	
	Nama	Post-Test	Nama	Post-Test
1	Richard	16.11	Rama	16.96
2	Aldi	18.02	Tito	17.19
3	Acong	18.16	Veron	18.16
4	Romi	18.35	Stivan	18.21
5	Yogi	18.87	Jais	18.81
6	Mario	19.06	Wandi	18.92
7	Robi	19.13	Fajar	19.02
8	Hendi	19.17	Efira	19.04
9	Roi	19.24	Anno	19.11
10	Elvano	19.85	Avet	19.22
11	Angga	20.01	Helqi	19.78
12	Berkat	20.25	Nani	19.89
13	Lexi	20.49	Yoyon	20.17
14	Iping	21.03	Dedi	20.88
15	Santo	21.11	Gemal	22.67
Amount		**288.85**		**288.03**
Average		**19.26**		**19.20**

Discussion

Futsal is a team invasion game activity played by five against five people in a certain duration of time played on a field, goal and ball that is relatively smaller than a standard-sized game that requires speed of movement, fun and safety to play, and the winning

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team is the team that scores more goals against its opponent. To support good futsal skills, various supporting factors are needed, one of which is the physical condition of a player. As is the case for every player or athlete, good physical condition is needed to compete or practice so that they can improve their achievements he achieves.

CONCLUSION

1. The results of the analysis prove that "There is an effect of Box Drill With Rings training on the agility of dribbling futsal games on the Moria congregation futsal team hammer", with the results obtained a t-count value of 9.690. Greater than the ttable value of 2.145 or (9.690> 2.145) with a value of d.b = N-1 or 15-1-14, at a significance level of a = 0.05. The results of the analysis prove that, "There is an effect of Bounding With Rings training on the agility of dribbling futsal games on the Futsal Team of Jemaat Moria Palu", with the results obtained the tcount value of 6.852 is greater than the ttable value of 2.145 or (6.852> 2.145) with a d.b value of N = 1 or 15-1 = 14, at the significance level a = 0.05The results of the analysis prove that, "There is a difference in the effect between the training of.
2. Box Drill With Rings and Bounding With Rings on the agility of dribbling futsal games on the Moria congregation futsal team hammer ", with the results obtained the tcount value of 0.31 is smaller than the ttable value of 2.145 or (0.31 < 2.145) with a value of d.bN-1 or 15-1 = 14, at the significance level a = 0.05.

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