# The Effect of Ladder Drill Training on the Dribbling Agility of Futsal Extracurricular Students

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## The Effect of Ladder <mark>Drill Training on the Dribbling</mark> Agility <mark>of Futsal Extracurricular Students</mark>

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**ABSTRACTS:** The main obstacle in mastering futsal playing techniques well is the player's lack of agility when dribbling the ball. Agility is a physical component that is very important for sports that require speed in changing the direction of movement. In the sport of futsal, agility plays a crucial role in supporting a player's performance to win the game. One of the agility exercises is the ladder drill exercise. This research is a type of pre-experimental research method (weak experiment). There are 2 variables in this study, with 1 independent variable (ladder drill training model) and 1 dependent variable, namely (agility). The design of this research is to use (pre-experimental designs). This research was conducted at SMP NU Arosbaya, located in Berbeluk Village, Arosbaya Bangkalan District. The population in this study was 10 students who participated in futsal extracurricular activities at SMP NU Arosbaya. The Wilcoxon test results showed pratue of 0.001 < 0.05, indicating a significant effect. Hence, ladder drill training significantly influences the dribbling ability of futsal extracurricular students. The advice in this research is that extracurricular futsal participants are expected to be able to perform good dribbling techniques in futsal games to make it easier to win every match.

**KEYWORD:** 

Ladder drill, futsal, students.

#### 1. INTRODUCTION

In this research, the problem was that the dribbling technique of SMP NU Arosbaya futsal extracurricular futsal players was not optimal in carrying out dribbling techniques. Futsal is a sports game played by 2 teams of 5 players, 1 goalkeeper and 4 strikers. This game lasts 2 x 20 minutes (Wahyudi, 2020). Physical education functions as a means 18 encourage motor development, physical abilities, knowledge, and reasoning. Apart from that, this education also teaches values such as attitudes, mental, emotional, spiritual, and social, as well as getting used to healthy living, which aims to stimulate balanced growth and development. Physical education is essential to intensify education as a lifelong process of human development. Physical education provides opportunities for students to be directly involved in various learning experiences through systematic physical activities. (Handayani, Purwoto, Widodo, & Utama, 2022). Futsal has developed very rapidly and has become a trendy game today. This sport is growing and has its fans regardless of age. This futsal game does not require a large, spacious field like futsal football. It only requires a smaller field and can be played indoors or outdoors night or day. Futsal in Spanish is "futbol sala" which means indoor football (Hutama, 2021). The game of futsal is similar to soccer, but there are several differences, such as the number of players, the size of the ball, the size of the field, and some basic techniques. One of the advantages of futsal is that the field is small, so it does not require a large area like a football field. Futsal is a sport that is proliferating in Indonesia. This is proven by the many contested futsal competitions at general, student, and professional league levels. The popularity of futsal continues to

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increase as more and more schools and universities make futsal part of extracurricular activities. Apart from that, the emergence of many active local futsal clubs and high public enthusiasm shows that futsal has becomes an essential part of sports culture in Indonesia.

Futsal in Spanish is "futbol sala," which means indoor football. The game of futsal is the same as soccer. The difference between these two games is the number of players and the size of the ball (Narlan et al., 2017). The field size and some basic futsal techniques have significant differences compared to soccer. One of the main advantages of futsal is that the field is smaller, so it does not require a large area like a football field. The advantage is that it makes futsal more accessible and allows it to be played in urban and rural places that may not have enough space for a full-scale soccer field. Futsal competitions are not only limited to the general level but also involve students from various levels of education, even up to the professional league level (Hutama, 2021).

In futsal, players are also required to always be active in moving. This game is done by moving the ball very quickly, and players must make maximum movements in a narrow space when defending or attacking (Putra & Purbodjati, 2022). In the futsal game, players must also master basic techniques such as dribbling, shooting, passing, and control. Futsal players must be able to master dribbling techniques well. This all requires good quality dribbling skills at a certain level in order to be able to play futsal well and master the game in order to make their team superior.

Futsal is a ball game played on an indoor field consisting of two teams facing each other and trying to put the ball into the opponent's goal (Utomo, 2016). his futsal sport is a team sport that competes to score as many goals as possible against the opponent's goal. Futsal has physical characteristics, including speed, strength, accuracy, reaction coordination, balance, and agility. Futsal players should carry out training to increase speed to create quality. Good and quality play because various essential technical characteristics support a player's ability to score goals against opponents. Of course, they must master basic techniques such as passing, control, shooting, and dribbling well. Every player must develop good playing potential and have an excellent physical and mental condition. Every player must be skilled and proficient in passing, dribbling, shooting, and controlling. It is also important to master the basics of futsal (Akbari et al., 2019).

Dribbling is moving the ball dynamically using one or two feet alternately. (Firmansah, Hernawan, Aan, & Widiastuti, 2019). The basic technique of dribbling is a technique that every futsal player must master because, in a futsal game, the player must be able to protect the ball well so that it is not quickly snatched by the opponent, as well as control the ball well when it is moving, standing or taking a kick or pass. Therefore, to master the technique of playing futsal well, futsal players must have good agility so that when dribbling the ball, it is difficult for the opponent to grab it (Saputra et al., 2023).

Dribbling is a movement that must be learned through practice. Dribbling in the game of futsal is entrolling the ball using the feet while moving around the playing field using either the outside, the inside of the foot, or the back of the foot (Akbari et al., 2019). In the game of futsal, dribbling is an essential technique and is its characteristic. Structured and intensive training is needed to develop good dribbling skills so that players can feel comfortable and proficient in controlling the development of the ball. (Firmansah, Hernawan, Aan, & Widiastuti, 2019).

A futsal player must master good ball dribbling techniques. By mastering dribbling, each player must pay attention to the following aspects: 1. Control of the ball and maintaining distance from the opponent; 2. They maintain body balance when dribbling; 3. Focusing your gaze every time you come into contact with the ball. 4. Continuous contact with the ball must be made using the soles of the feet (Saputra et al., 2023). The training process has a massive role in the world of sports, especially performance sports because carrying out training in a planned, regular, and repeated manner can help students improve their



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physical, technical, and mental abilities (Firsta Yosika et al., 2020; Jatmiko et al., 2024; Wahyono et al., 2024)

Agility is the ability to quickly change the position or direction of the body according to the situation and desires (Bima, 2023). This involves the ability to move quickly and change the direction of the body simultaneously with other movements if the physical aspects have been well developed in each player. Suppose the physical components have been fulfilled for each player. Then it will be easier to practice futsal well. To achieve good agility in playing futsal, of course, you have to practice. One of the agility exercises is the ladder drill, which involves the required portion of the exercise. Various ladder drill exercises exist (Arwandi & Firdaus, 2021; Dodi Darmawan et al., 2020).

A ladder drill is a training ladder placed on the ground or the field's surface to train leg agility (Pradana et al., 2018). A ladder drill is a tool for training leg agility shaped like a ladder that futsal players or futsal coaches often use to train leg muscles. This tool helps train speed agility with good leg coordination in various movements. This exercise teaches players to make the right decisions using speed and agility. Stair training combines physical elements and movement skills, aiming to increase speed and agility proportionally (Wahyono et al., 2024).

The following are some relevant research related to this research, specifically previous research conducted by (Kurniawan et al., 2023). The results of this study show that ladder drill training has a better effect on improving ball dribbling ability than zig-zag running training. The following research is conducted by (Hasbi & Heri, 2020). Training using agility ladder drills dramatically impacts a person's agility abilities. The difference between previous research and research conducted by researchers is that two treatments were used. The first treatment is ladder drill, and the second is zig-zag running. Meanwhile, the similarity between the two studies is that they want to know about dribbling agility.

Based on the results of extracurricular observations of futsal at SMP NU Arosbaya in Berbeluk village, Arosbaya District, Bangkalan Regency. It was found that the problem of dribbling ability was still not agile; it was still slow, and the touch on the ball was not good. Therefore, the author researched the ladder drill training method.

#### 2. METHODS

This research is included in the quantitative research type and uses pre-experimental methods (weak experiments). One of the characteristics of experimental research is giving special treatment to subjects or research objects, but in this study, randomization was not carried out. There are 2 variables in this study, with 1 independent variable (ladder drill training model) and 1 dependent variable, namely (agility). This research design is to use (pre-experimental designs) (Hasbi & Heri, 2020). This research was conducted at SMP NLA rosbaya, located in Berbeluk Village, Arosbaya Bangkalan District.

The population in this study consisted of futsal extracurricular participant 201 SMP NU Arosbaya, consisting of 10 students. The sample is a part or representative of the population. The sample in this study was futsal extracurricular participants at SMP NU Arosbaya. The instrument in this research is the T-test (Hasbi & Heri, 2020). The data collection techniques in this research are as follows: (1. Taking dribbling agility test results before doing ladder drill training (pretest), 2: ladder drill training (treatment), 3. After doing ladder drill training (posttest), they took dribbling agility test results.

Figure 1. Dribbling Instrument (Hulfian & Subakti, 2022)

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#### 3. RESULT

Pada bagian Hasil dan pembahasan membahas tentang hasil penelitian. Hasil penelitian disajikan dalam bentuk grafik, tabel, atau deskriptif. Penulisan sitasi mengikuti format APA sebagai berikut (Kusnanik, 2011). Tabel dituliskan ditengah atau diakhir setiap teks hasil penelitian. Apabila lebar tabel tidak memungkinkan ditulis pada setengah halaman, maka dapat ditulis pada satu halaman penuh. Judul tabel ditulis dibagian atas posisi tengah. Semua penulisan dalam bahasa asing harus dicetak miring. Tabel menggunakan (1 spasi) (Calibri (Body)(11)).

Name	Class	Weight (kg)	Height (cm)	Leg Length (cm)	BMI
MEA	VII	50	167	98	17,9
MSU	VIII	49	157	94	19,9
DA	IX	71	169	102	24,9
AZ	VII	50	157	93	20,3
ABD	IX	60	159	96	23,7
AR	VII	36	150	89	16,0
MAF	VIII	45	159	90	17,8
KI	VIII	51	161	97	19,7
MB	VII	48	154	90	20,2
NS	VII	48	158	92	19,2

Table 1. Characteristics of the research sample

The characteristics of the research sample, including class, age, height, weight, leg length, and BMI, are presented in the table above.

Table 2 Statistical descriptive test					
	Ν	Min	Max	Mean	Std. DV
Pretest	10	13,73	28,60	17,7020	4,47255
Posttest	10	15,79	29,79	19,3120	4,11339
Valid N (listwise)	10				

From the spss results above, it is clear that the N value in the pretest-posttest is 10. The minimum score obtained in the posttest is higher than the pretest, as is the maximum score, and the standard deviation value is higher pretest than the posttest. The next step is to carry out a normality test to determine whether the data being analyzed has a normal distribution. After calculating the normality test on the data, the following results were obtained:

Table 3 Normality Test				
Shapiro Wilk				
	Statistic	Df	Sig	
Pretest	,816	10	,023	
Posttest	,766	10	,006	

Based on the table in the Kolmogriv-Smirnov test, the pretest and posttest results obtained sig values of .023 and .006, indicating that the data distribution is not normal so that the Wilcoxon can be continued.

Table 4 Wilcoxon Test			
Posttest-Prete			
<b>Z</b> -2,803 <sup>b</sup>			
Asymp.Sig.(2 Tailed) ,001			

The Wilcoxon test results showed a P value of 0.001 < 0.05, indicating a significant effect.

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#### 4. DISCUSSION

The research results show a significant influence of ladder drill training on the dribbling ability of futsal extracurricular students. The results of this study are almost the same as previous research on agility increased after drill ladder training (Wahyono et al., 2024). This is a possible example of carrying out the training program seriously. Due to these factors, this increase was obtained because each player was serious about taking the pretest, training program, and posttest. So, it is unsurprising that every player experiences good improvement (Hasbi & Heri, 2020). Dribbling Ability also increases because ladder drill exercises have movements that support dribbling ability (Pasir Pengaraian, 2023). A ladder drill is a form of training to improve agility, speed, and overall foot coordination. It resembles a ladder in a vertical position, and this tool is often used to increase agility and other physical components (Ashar et al., 2021). Training is one of the most essential things in futsal. With programmed training, you will, of course, achieve maximum results. So you can compete with opposing teams (Wahyono et al., 2024). All components of physical condition are obtained from the perspective of training. As with agility, you have to do structured or programmed training to improve this and do not forget the strong desires of ourselves or the environment (Pradana et al., 2018). The Wilcoxon test results showed a Pavalue of 0.001 < 0.05, indicating a significant effect. Hence, ladder drill training significantly influences the dribbling ability of futsal extracurricular students. The advice in this research is that extracurricular futsal participants are expected to be able to perform good dribbling techniques in futsal games to make it easier to win every match.

#### 5. CONCLUSION

The Wilcoxon test results showed a P value of 0.001 < 0.05, indicating a significant effect. Hence, ladder drill training significantly influences the dribbling ability of futsal extracurricular students. The advice in this research is that extracurricular futsal participants are expected to be able to perform good dribbling techniques in futsal games to make it easier to win every match.

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