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The Effect of Shuttle Run Training on Dribbling Speed in Futsal Games for Students of SMPN 06 Palembang

Tiara Nabila[1] Farizal Imansyah[2] Daryono[3]
Physical Education Study Program, Faculty of Teacher Training and Education, PGRI Palembang University, South Sumatra Province, Indonesia[1,2,3]
Email: tnabila516@email.com[1]

Abstract
The purpose of this study was to determine: (1) the effect of shuttle-run exercises on ball speed ability in Immanuel students, (2) the effect of zigzag exercises on dribbling ability in Immanuel Students, (3) more effective exercises in improving dribbling ability in Imanniel students. The results showed: (1) There was an effect of exercise using the Shuttle-run exercise method on the ability to herd Immanuel Students aged 13-15 years; (2) There is an effect of exercises using the Zig-zag exercise method on speed ability in Immanuel Students aged 13-15 years; (3) Exercises with the Zig-zag method are more effective in improving the ball speed ability in students.
Keywords: Shuttle-Run, Zig-Zag, Speed, Futsal.

INTRODUCTION

Exercise is a physical activity according to certain methods and rules with the aim of increasing the efficiency of body functions which ultimately increases physical freshness and also affects the improvement of achievement in the sports that are followed. Each sport has its own characteristics according to the procedure for its implementation. The purpose of exercising can be divided based on their needs, namely: recreation, education, health, physical freshness, and achievement. Nowadays, sports are increasingly in demand by the public, both individual sports and team sports, one of which is in futsal Muhammad Amrin (2019).

One of the sports that is very popular with the Indonesian people today, both children, teenagers, adults and parents, both men and women is the sport of futsal Mulyono (2017: 5) Futsal is one of the sports that is intended to be a form of big ball game. Futsal football played indoors is a team sport with dynamic nature. Meanwhile, according to Naser & Ali (2016: 1) the definition of futsal is a version of football that is played indoors five against five (one goalkeeper and five as players) that has been approved by the international football governing body or what we usually call (Federation International de association football, FIFA 2014) In playing futsal players must master the types of basic techniques, By mastering futsal techniques can master or play the ball in any situation, resulting in cooperation in the team, to get victory. One of the basic techniques that is important for players to master is the ability to dribble. A player must really master the technique of menribbling the ball well to support the other basic techniques.

Based on the movement pattern, mendribbling the ball involves several elements of movement from several limbs. So that mendribbling the ball can be done well, The parts of the body involved in the movement of mendribbling the ball must be well coordinated. Good speed needs to be supported by dribbling ability, this can be seen from many examples of professional futsal players who have good speed, on average they also have good dribbling skills (Widi Hartomo, 2013: 3).

A beginner can have a good speed, but his dribbling is not necessarily good, this is because the training hours in dribbling are still limited and also the number of ball facilities is

insufficient with the number of children who practice. Agility and speed training will not have a positive effect on dribbling ability if there is no good communication between coaches and students. The ability of students of SMP Negeri 06 Palembang in understanding and applying forms of agility training and speed training is still lacking, It is proven that in training there are fundamental mistakes that affect the training program that has been compiled by the trainer.

A good and correct ball mendribbling technique requires programmatic and continuous training in order to get maximum results, the technique of mendribbling the ball can be done in several forms or types of exercises, for example mendribbling the ball through obstacles, mendribbling the ball forward straight then turning around, running zigzags and other forms of exercise of many types. To be able to master a sport cannot be done by just watching a game from one place to another, but must be done through systematic and programmatic exercises. Efforts to achieve achievements are multicomplex efforts that involve many factors both from inside and outside including the quality of training which is the main support for achieving sports achievements (Djoko Pekik Irianto, 2002:8).

The purpose of doing exercises is to be able to master tactics, techniques, and playing strategies, have a passion to become an outstanding player or athlete. This study aims to improve the ability to dribble or mendribbling the ball with agility and speed training. Agility training and speed training are training by running zigzags by passing through cones that have been set in distance.

Understanding Futsal A ball game played by two teams, each team has five people, namely futsal. Putting the ball into the opponent's goal is the goal. Each team has a reserve player, in addition to the main player. Futsal is also known by various other names. According to (Ainun Najib, 2012: 1). The term "futsal" is its international term, derived from the Spanish or Portuguese words, football and sala. (Murhananto, 2008: 1-2). Futsal is very similar to football except it is played by five against five in the field a small one, a smaller wicket and a smaller, relatively heavy ball. In the game of futsal, the movement of players is very important and the player must constantly make passes (passing). It is not strange that 90% of futsal games do a lot of passing. Meanwhile, according to (Agus Susworo Dwi Marhaendro and Saryono, 2012: 1).

According to Justinus Lhaksana, (2011: 29) futsal is a futsal game in which players are guided to play with a very fast rotation of the ball, attacking defense, and rotation of players without the ball. According to Suharjana (2013: 38) exercise is to provide regular, systematic, and continuous physical emphasis so as to improve the ability to perform and improve physical fitness or physical ability.

Shuttle Run is a form of exercise that develops speed and agility where this exercise is assumed to train which is needed in mastering dribbling techniques in futsal. The distance between row A to row B in a 5-meter back-and-forth run. This is in accordance with what Harsono (1988: 172) stated in Melkianus Udam (2017) "the distance between the two points should not be too far, about 4-5 meters is enough". This is because if the distance is too far, it is feared that players or students after several runs back and forth are no longer able to restore their bodies quickly due to fatigue factors. The way to do this is to run back and forth as fast as possible 8 times within 5 meters. Every time it comes to a point as a boundary, it immediately tries to change direction towards another point. It should be noted that the distance between the two points is not too far and the number of replays is not too much so that it will not cause fatigue for the perpetrator. In this case, what needs to be considered is the ability to change direction as quickly as possible at the time of moving. This is because there is often a loss of balance.

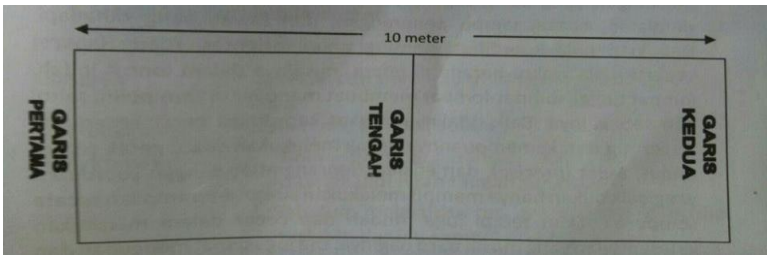


Figure 1. Field Run Test Running Back and Forth
Source: Alfabertus and Muhammad Muhyi (2014:157)

RESEARCH METHODS

This research uses an experimental research method regarding causal relationships, according to Kusumawati (2015: 46) experimental research is research carried out by providing treatment or treatment to samples, until it is seen that there are changes that occur or not. This experimental research uses the research design of Pre Test And Post Test Two Group Design, schematically it can be described as follows:

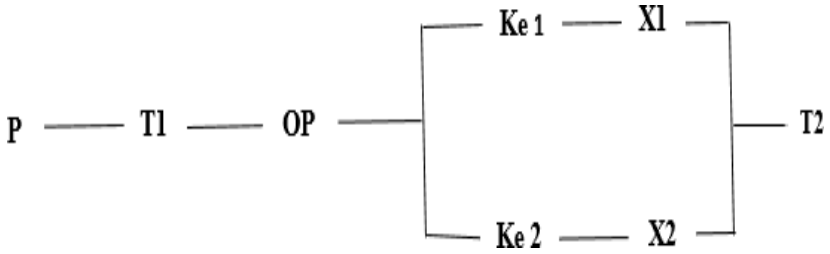
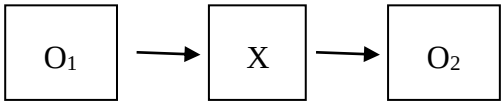


Figure 2. Research Design of Dribbling Skills.

Information:
P : Porposive
Pre test (T1) : Initial test of dribbling skills
OP : Ordinal Pairing
1st : Experiential group 1
2nd : Experiential group 2
X1 : Agility Treatment
X2 : Speed Treatment.
Post test (T2): Final test of dribbling skills.

In this study, two experimental groups (treatment) were divided. The division of experimental groups A and B is based on the ranking results in the initial test. In this study using a quantitative approach to the Pre-Experimental design method with the form of the one group pretest-posttest design. The process is carried out in three stages, namely:



Arikunto (2014 : 124)
Information
O1 = Pretest Value (before treatment)
X = Perlakuan atau Treatment
O2 = Posttest Value (after the subject has been treated)

According to Sugiyono (2013: 55) population is a generalized area consisting of objects or subjects that have certain quantities and characteristics that are determined by researchers to be studied and then concluded. The population used in this study was class VII and VIII futsal extracurricular students totaling 24 male students. The entire population is used as a research sample so that it can be referred to as population research.

1. Pretest, giving pretest by dribbling to find out the abilities of students
2. Treatmen, giving good dribbling treatment by means of shuttle run exercises
3. Posttest, measuring students how to dribbling after being given shuttle run exercises

Data collection techniques are the most important step in research, because the main purpose of research is to obtain data (Sugiono, 2013: 308). This data collection technique uses tests and measurements. The technique or method of collecting research data was carried out as many as 16 treatments (treatment) and 2 times for pretest and posttest. That the 16-time training process can be said to be trained, because there have been changes that have settled. Each test is given 2 times the opportunity and the best results will be used as research data. The test result obtained is a unit of seconds. A test is a spate of questions or exercises as well as other tools used to measure skills, intelligence knowledge, abilities or aptitudes possessed by an individual or group. Arikunto (2014: 193) The implementation is as follows:

Illionis Agility run

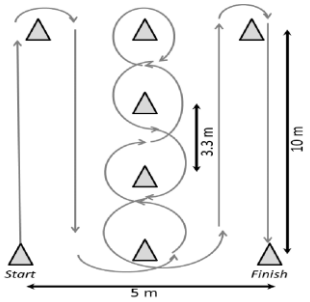


Figure 3.

1. Purpose. From this test is to measure the speed and agility of students.
2. Test equipment; field; Stopwatch; whistle; cones and meters; Timekeeper
3. Implementation; students are on the starting line with a downward view; at the moment when the aba-aba start is given, the student immediately runs according to the drawing; The assistant records the time obtained by the student from start to finish

Assessment Results

The time score obtained is 21.1 seconds Based on the table below, it is included in the category: sufficient

Gender	Exellent	Abort Average	Avarage	Below Average	Poor
Male	<15,2 s	15,2-16,1 s	16,2-18,1 s	18,2-18,3 s	>18,3 s
Female	<17,0 s	17,0-17,9 s	18,0-21,7 s	21,8-23,0 s	>23,0 s

Figure 4.

Data analysis is a way to be taken to obtain or analyze the data that has been obtained. Data analysis is aimed at the correctness of the formulated hypothesis. A hypothesis will be accepted or rejected depending on the results of the data. The data analysis technique used in this study was a t-test with a degree of confidence of 95%. Test, the steps: Test the normality of the data and Test the hypothesis.

RESULTS OF RESEARCH AND DISCUSSION

The research data was obtained from the results of the prestest and posttest data conducted at SMP Negeri 06 Palembang. Where in conducting this study conducted as many as 16 meetings, 1 pretest, 14 treatments and 1 posttest, the data obtained in the form of numbers in seconds based on instrument validation techniques on the assessment of speed and agility. Normality Test is intended to find out whether or not a formulation used to test data normality is to use the spss 22.0 application, the results are as follows:

Table 1. Tests of Normality

	Class	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Pretest and Posttest	1.0	.153	24	.155	.937	24	.137
	2.0	.148	24	.185	.949	24	.264

Source: Spss 22.0 App

Based on the table above, the test results on SPSS using the Test Of Normality with a signification level of 0.05. Two variables are said to exist Normal because their significance value is more than 0.05 (>0.05). The t-test was used to test a hypothetical that reads "is there a significant influence on shutle run training on the speed and agility of dribbling in the futsal game of students at SMP Negeri 06 Palembang", based on the results of the pre-test and post-test if the analysis results show a significant difference, the use of the shutle run training method has an influence on the speed and agility of dribbling in the futsal game at SMP Negeri 06 Palembang. The conclusions of the study are stated to be significant if the t_hitung> t_tabel value and sig value are smaller than 0.05 (sig < 0.05) based on the results of the analysis obtained data in the following table:

Table 2. T-Test

One-Sample Test						
Test Value = 0						
95% Confidence Interval of the Difference						
	T	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Pretest	73.233	23	.000	17.1250	16.641	17.609
Posttest	68.730	23	.000	16.4167	15.923	16.911

Source: Spss 22.0 App

From the results of the t-test, it can be seen that t count > t table with t count of 68.730 and t table 2.064 (df 23;0.05) with a value of 0.000 (2-tailed) smaller than 0.05, then the results show that there is a significant difference thus the alternative hypothesis (Ha) is accepted (Ho) which reads "there is a significant influence on shuttle run training on the speed and agility of dribbling in futsal games at SMP Negeri 06 Palembang", accepted means that the shuttle run training method has an influence on the speed and agility of dribbling in student futsal games in students of SMP Negeri 06 Palembang.

Discussion

This study aims to determine the effect of shutle run training on the speed and agility of dribbling in the futsal game of students at SMPN 06 Palembang. The research began with conducting a pretest to determine the speed and agility of students before being given treatment, the study was carried out as many as 16 meetings 1 meeting for the pretest, then samples were divided into two groups (ordinal pairing), The division of experimental groups A and B (A-B-B-A) was based on the ranking results in the initial test, followed by 14 meetings for treatment and after the treatment was completed, Posttest was carried out as many as 1 meeting to find out the increase in speed and agility of dribbling in student futsal games in students after being given treatment.

Table 3. Group A Pretest and Posttest Results

Initial Sample	Time	
	Pretest	Post-test
AR	15,84	15,24
J	17,51	16,08
MFR	15,92	15,20
MA	18,91	18,20
MBM	15,20	14,80
MYJ	15,09	14,48
MKAS	16,70	16,13
MGAI	18,14	17,10
MR	15,33	14,50
PB	16,90	16,12
RTR	18,50	18,30
RT	18,01	17,90

Tabel 4. Group B Pretest and Posttest Results

Initial Sample	Time	
	Pretest	Post-test
FI	16,27	16,02
FT	18,11	17,70
MNI	18,19	17,40
MAH R	18,53	17,88
MHIR	16,63	16,04
MKS	18,20	17,13
MAH	17,49	16,60
MAEP	17,84	16,70
M R	16,30	15,19
MZ	16,60	15,80
RM	16,89	16,06
R	18,12	17,50

The pretest was carried out to determine the speed and agility of dribbling in the futsal game of students in extracurricular students of SMP Negeri 06 Palembang before the treatment. The pretest results obtained the exellent category as many as 1 sample (4%), abort average as many as 4 samples (17%), average as many as 14 samples (58%), below average as many as 2 samples (8%) and poor category as many as 3 samples (13%). And posttest results on students of SMP Negeri 06 Palembang with exellent categories as many as 3 samples (13%), abort average as many as 10 samples (42%), average as many as 9 samples (38%), below average as many as 2 samples (8%) and poor category as much as (0%). The results of the pretest and posttest on students of SMP Negeri 06 Palembang after being given shuttle run exercises, are explained through the following table:

Table 5. Difference between Pretest and Posttest Results

Sample	Pretest	Posttest	Difference	
			Skor	Category
AR	15.8	15.2	0.6	Increase
FI	16.3	16.0	0.3	Increase
FT	18.1	17.7	0.4	Increase
J	17.5	16.1	1.4	Increase
MFR	15.9	15.2	0.7	Increase
MNI	18.2	17.4	0.8	Increase
MAHR	18.5	17.9	0.6	Increase
MA	18.9	18.2	0.7	Increase
MBM	15.2	14.8	0.4	Increase
MHIR	16.6	16.0	0.6	Increase
MKS	18.2	17.1	1.1	Increase
MYJ	15.1	14.5	0.6	Increase
MKAS	16.7	16.1	0.6	Increase
MAH	17.5	16.6	0.9	Increase
MAEP	17.8	16.7	1.1	Increase
MGAI	18.1	17.1	1.0	Increase
MR	15.3	14.5	0.8	Increase
MR	16.3	15.2	1.1	Increase
MZ	16.6	15.8	0.8	Increase
PB	16.9	16.1	0.8	Increase
RTR	18.5	18.3	0.2	Increase
RM	16.9	16.1	0.8	Increase
R	18.1	17.5	0.6	Increase
RT	18.0	17.9	0.1	Increase
Total			15.1	Increase

Based on the table above, descriptive pretest and posttest statistics in students of SMPN 06 Palembang after being given shuttle run exercises, explained through the following table:

Table 6. Descriptive Pretest and Posttest Statistics

Statistic	Pretest	Posttest
Mean	17.125	16.417
Std. Error of Mean	.2338	.2389
Median	17.200	16.100
Mode	18.1[a]	16.1[a]
Std. Deviation	1.1456	1.1702
Variance	1.312	1.369
Range	3.8	3.8
Minimum	15.1	14.5
Maximum	18.9	18.3
Sum	411.0	278.14

Based on the data in the table above, the initial test and the final test after being given a shuttle run exercise can be presented in the following figure:

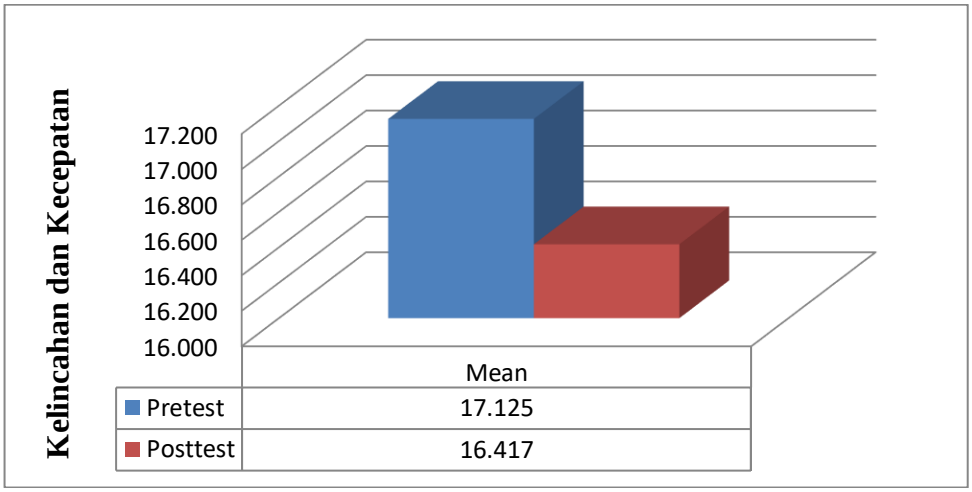


Figure 5. Pretest and Posttest Diagrams

Based on the diagram above, it shows that the speed and agility of dribbling in the futsal game at the time of pretest had an average of 17,125, then increased by 16,417 after being given shuttle run training for 16 meetings. The results showed that shuttle run training had a significant influence on the speed and agility of dribbling in futsal games in students of SMP Negeri 06 Palembang with a percentage increase of 0.708. This is because shuttle run training is a form of training that develops speed and agility where this exercise is assumed to be able to train the needed in mastering dribbling techniques in futsal. The distance between row A to row B in a 5-meter back-and-forth run. This is in accordance with what Harsono (1988: 172) stated in Melkianus Udam (2017) "the distance between the two points should not be too far, about 4-5 meters is enough". This is because if the distance is too far, it is feared that players or students after several runs back and forth are no longer able to restore their bodies quickly due to fatigue factors.

CONCLUSION

Based on the analysis of the results of the research and discussion above, it can be concluded that there is a significant influence on shuttle run training on the speed and agility of dribbling in student futsal games in students of SMPN 06 Palembang, with a t count of 68,730 and a t table of 2,064 (df 23;0.05) with a singnifikan value of 0.000 (2-tailed) smaller than 0.05, then the results showed that there was a significant difference thus the alternative hypothesis (Ha) was accepted (Ho) which read "there is a significant influence on shuttle run training on the speed and agility of dribbling in student futsal games in students of SMPN 06 Palembang", accepted means that the shuttle run training method has an influence on increasing the speed and agility of dribbling in student futsal games in students of SMP Negeri 06 Palembang.

Based on the conclusions of the research above, there are several suggestions that can be conveyed, namely: For schools learners can increase self-confidence by assuming that physical activity is not always tiring with a pleasant atmosphere to improve achievement in particular. For teachers, more exercises are carried out to improve the quality of students so that students develop faster and participate in competitions that require special preparation.

BIBLIOGRAPHY

Agus, S D. M, Saryono, & Yudanto. (2009). “Tes Ketrampilan Dasar Bermain Futsal.”Jurnal IPTEK Olahraga.. Vol. 11. No. 2. Hlm. 144-156”.

Ainun N. (2011). “Pengertian dan Peraturan Futsal”. http://ainunnajib29.blogspot.com

Albertus F. L., & Muhammad, M. F. (2014). Tes dan Pengukuran dalam Olahraga. Yogyakarta: CV. Andi Offset.

Amrin, M. (2019). Pengaruh Latihan Shuttle Run Terhadap Kelincahan Menggiring Bola Pada Siswa Kelas VII Disma Negeri 1 Kabila. Skripsi, 1(831414162).

Arikunto, S. 2014. Prosedur Penelitian Suatu Pendekatan Praktik. Jakarta : Rineka Cipta.

Asriady Mulyono, M. (2017). Buku Pintar Futsal, Jakarta : Anugrah.

Djoko, P. I. (2002). "Dasar Kepelatihan". Yogyakarta: Fakultas Ilmu Keolahragaan Universitas Negeri Yogyakarta.

Kusumawati, Mia. (2015). Penelitian pendidikan penjasorkes. Bandung: Alfabeta.

Lhaksana, J. (2011). "Taktik dan Strategi Futsal Modern. Be Champion".

Murhananto. (2008). "Dasar-dasar Permainan Futsal (Sesuai dengan Peraturan FIFA)". Jakarta: PT Kawan Pustaka.

Naser, N., Ali, A., & Macadam, P. (2016). Physical and physiological demands of futsal. Journal of Exercise Science and Fitness.

Sugiono. (2013). Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D. Bandung : Alfabeta

Suharjana. (2013). Kebugaran Jasmani.Yogyakarta: Jogja Global Media.

Udam, M. (2017). Pengaruh Latihan Shuttle-Run dan Zig-Zagrun Terhadap Kemampuan Dribbling Bola Pada Siswa Sekolah Sepakbola (SSB) Imanuel Usia 13-15 Di Kabupaten jayapura. Jurnal pendidikan jasmani olahraga dan kesehatan. Jilid 3, no1, Juli 2017,: 58-71.

Widi, H. (2013). "Pengaruh Latihan Kecepatan Reaksi dan Latihan Kecepatan Gerak terhadap Kemampuan Menggiring Bola pada Siswa Sekolah Sepak Bola Cakar Mas Berbah Sleman Kelompok Umur 14 Tahun." Skripsi. Fakultas Ilmu Keolahragaan Universitas Negeri Yogyakarta. Yogyakarta.