



The Influence of Moving and Fixed Target Training Methods, Eye-Foot Coordination on the Accuracy of Passing Soccer (UIR Football School Age-16)

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ABSTRACT

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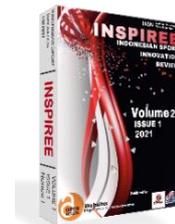
The purpose of the study. This study was to analyze the method of passing training with fixed target eye-foot coordination high-low and target passing moving eye-foot coordination high-low and analyze the interaction between passing training methods and eye-foot coordination on football passing accuracy.

Materials and methods. This study used a quasi-experimental method of pre-test and post-test design. The population in this study was 36 players with an average age of 16 years. The sampling technique used was total sampling with a total sample of 36 players, data analysis used the ANOVA test.

Results. 1) There is a difference in the effect between fixed target passing practice and moving target passing on football passing accuracy on average $p = (82.78 \pm 7.51)$, $p\text{-value} = (0.000 < 0.05)$ and $F_{\text{count}} (18,050) > F_{\text{table}} (0.225)$. 2) There is a different effect between high and low eye-foot coordination on soccer passing accuracy where the value of sig $p\text{-value} = (0.007 < 0.05)$ and $F_{\text{count}} (8,450) > F_{\text{table}} (0.225)$. 3) There is a difference in the Effect of Fixed Target Passing Training Method with High and Low Eye-foot Coordination on Soccer Passing Accuracy with an average value of $p = (83.33 > 67.78)$. 4) There is a difference in the effect of moving target passing practice with high and low eye-foot coordination on soccer passing accuracy with an average value of $p = (85.56 > 80.00)$. 5) There is no interaction between training methods and eye-foot coordination on football passing accuracy with sig $p\text{-value} = (0.053 > 0.05)$ and $F_{\text{count}} (4,050) > F_{\text{table}} (0.225)$.

Conclusions. Research shows that moving target passing exercises are better at improving passing accuracy than fixed target passing exercises and players with high eye-foot coordination have better accuracy than players with low eye-foot coordination.

Keywords: *exercise method; eye-foot coordination; past accuracy; football.*



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INTRODUCTION

Football is the sport of kicking a ball with the feet. Football matches are played on a rectangular flat field about 100 to 110 meters wide and 110 meters long (Salim dalam Awang, 2016). UIR Football School age-16 which was established in 2015, UIR Football School age-16 carried out the training program 3 times, namely on Mondays, Wednesdays, Saturdays in the afternoon at the Riau Islamic University Campus. UIR

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Football School age-16 as one of the football schools at the Islamic University of Riau which is trained by an expert in the field of soccer who has been licensed at the National level. As a football school that is well known by the people around the Islamic University of Riau, this football school also gets support from community leaders and the university chancellor as well as an injection of funds for training purposes and for match purposes, of course there are achievements made by football school players. This can be seen from several achievements that were won by the 1st place in the inter-university football school football league in 2017, the 1st place in the 2018 Bhayangkara football school festival.

Based on observations of soccer passing abilities, students aged 16 have an average of 40 on target including the category of less capable which still needs to be improved to become better and even very good. In addition to taking observation data, interviews were also carried out with information obtained to conduct performance coaching. Not quite satisfied with the achievements that have been obtained so far because they have only been able to win at the University level and have never won at the Provincial level or at other high level competitions, so there are still many who One of the things that must be developed is the skill of passing the ball. For players, in terms of ball passing skills, they are still not good or maximal, it can be seen in a series of official matches, trials, and exercises that the players still often miss the ball from the target when they pass the ball at speed. In the exercises that have been carried out, there has never been a form of precision passing practice to improve ball passing skills, one of which is the form of Fixed Target passing exercises and Moving Target passing.

Ball passing skills are basic things that must be mastered by players. Miellke, (2007) said Passing requires a lot of technical skills which are very important in order to stay on the ball. According to Luxbacher which is interpreted by (Tarju & Wahidi, 2017) explained that in general there are 3 types of passing that must be mastered by football players, namely passing with the outside of the foot, passing with the inside of the foot and passing with the shell of the foot/tortoise foot (Satria, 2019). With good passing skills, you will be able to run into open spaces and control the game while developing an attacking strategy to suppress and break down the opponent's defense (Riski, 2019).

Coordination is a process of muscle cooperation that will result in structured oriented movements with the aim of forming the movements needed to apply technical skills (Irawadi, 2011). Coordination is one element of physical condition. The condition referred to here is the coordination associated with movement (Sors et al., 2018). Almost all the sports and competitions that participate in require coordination (Faruq, 2008). The degree of coordination of a person's movements is reflected in his ability to move smoothly, precisely, quickly and effectively (Azi, 2019). Based on the description of the background above, it is necessary to conduct experimental research related to the effect of exercise method and eye-foot coordination on football passing accuracy.

MATERIALS AND METHODS

Study participants

This study was a quasi-experimental pre-test and post-test design. The sample in this study was the Football School player at the Islamic University of Riau Age 16, totaling 36 players. This research took place at the Islamic University of Riau with a maximum age category of U-16 years old, the implementation of the training program three times a week.

Study organization

The variables in this study were manipulative independent variables, namely: 1) X₁: Exercise targeting fixed target passing high eye-foot coordination, 2) X₂: training target target passing fixed eye-foot coordination low, 3) X₃: Target passing exercise moving target coordination high eye-foot, 4) X₄: Low eye-foot coordination passing target practice shifting target.

Testing Procedur

Eye-foot coordination test measurements

The number of players is then measured eye-foot coordination, eye-foot coordination data can be measured using the soccer wall volleyball test instrument Ismaryati, (2008: 56), to find out which players have high and low eye-foot coordination by means of data after doing eye-foot coordination tests are ranked first.

Initial test of accuracy of passing

Furthermore, pre-test treatment is given to measure the accuracy of football passing accuracy, and data of passing accuracy.

Fixed target and moving target passing practice

The next step is to provide treatment with fixed target and moving target passing exercises. The fixed target passing exercise is passing the ball where the target is only one way, where the player stands at a distance of 9 meters, the player passes with the target to enter the target, namely a small goal and is carried out repeatedly and the moving target passing practice is passing the ball with several targets, players pass with the target entering the target, namely small goals 1, 2, 3, and 4. The player passes the target to a small goal with the distance between the goal and the kick limit area is 9 meters, done repeatedly

The final test of passing accuracy

Ended with a final test (post-test) to measure football passing accuracy with the aim of seeing the effect of training programs and eye-foot coordination on soccer passing accuracy.

Data analysis

Residual normality test, homogeneity test results, and hypothesis testing and data analysis using analysis of variance IBM SPSS Version 20.

RESULTS*Test Results*

Description of soccer passing accuracy fixed target exercises and moving target exercises.

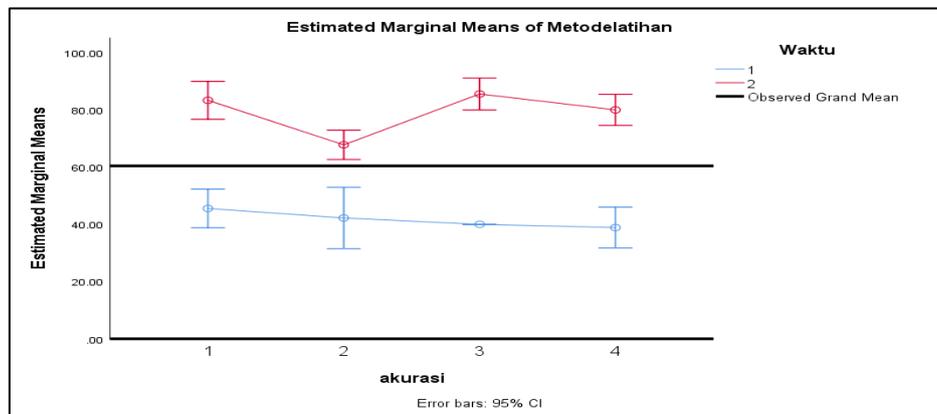
Table 1. Test Results soccer passing accuracy

Variables	X ₁		X ₂		X ₃		X ₄	
	Pre Test	Post Test						
Accuracy	40	80	40	60	40	80	50	80
	50	80	60	70	40	100	20	80
	30	90	50	70	40	80	40	70
	50	90	30	60	40	80	40	80
	60	100	60	70	40	80	50	90
	40	80	20	70	40	90	30	90
	50	80	40	60	40	80	40	80
	50	70	30	70	40	90	40	80
	40	80	50	80	40	90	40	70
	Total	410	750	380	610	360	770	350
Mean	45.55	83.33	42.22	67.77	40	85.55	38.88	80
Std	8.81	8.66	13.94	6.66	0	7.26	9.27	7.07
N	36							

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Description: X₁: Passing practice on fixed target with high eye-foot coordination, X₂: Practice on passing target with low eye-foot coordination, X₃: Practice on passing target with high eye-foot coordination, X₄: Practice on passing target with moving eye-foot coordination low, and N: the sample.

Based on the table above, it shows that players with high eye-foot coordination who are given moving target passing practice have an average accuracy of passing the ball of 84.44. Furthermore, players with low eye-foot coordination who are given moving target passing practice have an average soccer passing accuracy of 73.89. Based on the explanation above, it shows that the moving target passing practice has better soccer passing accuracy than players with high and low eye-foot coordination who are given fixed target passing training.



Information: time 1 = pre test, 2 = post test, Accuracy, 1. Practice passing target with high eye-foot coordination, 2: Exercise in passing target with eye-foot coordination, with low eye coordination, 3: Exercise in passing target with eye coordination -high leg, 4: Practice passing target moving target eye-foot coordination is low.

Figure 1. Graph of Hypothesis Testing Results

Passing accuracy description

- 1) There is a difference in the effect of fixed target passing practice and moving target passing on soccer passing accuracy, as evidenced by the ANOVA test results with a significance value of $p\text{-value} = 0.000 > 0.05$ and $f_{count}: 18.050$. The fixed target passing practice method is smaller than moving target passing in improving soccer passing accuracy. The fixed target passing practice method has an average increase in soccer passing accuracy of 75.56, while the moving target passing practice method has an average of 82.78. Average football passing accuracy increase, Efendi (2016) stated that the overall test session method had a better effect than the practice session method.

- 2) There is a difference in the accuracy of football passing which has high and low eye-foot coordination. Marzuki., & Pamuji, (2018) There is a significant difference in the effect of high eye-foot coordination and low eye-foot coordination on soccer playing skills, as evidenced by the results of the ANOVA test with a significance level of $p\text{-value} = 0.007 < 0.05$ and $F_{\text{count}} : 8.450$. Players Who Have High Eye-Foot Coordination have an average increase in accuracy of Football Passing greater than Players who have low Eye-Foot Coordination, but the difference in Significant Improvement.
- 3) There is a difference in the effect of the fixed target passing practice method with high and low eye-foot coordination on soccer passing accuracy, this is proven to be in accordance with the differences shown in the fixed target passing exercise with high eye-foot coordination on average 83.33 while in the practice of passing fixed targets with low eye-foot coordination, the average is 67.78. Rachman (2014) there is a significant difference in the effect of high and low coordination skills on dribbling skills.
- 4) There is a difference in the effect of the moving target passing training method with high and low eye-foot coordination on soccer passing accuracy, this is proven to be in accordance with the differences shown in the moving target target passing exercise with high eye-foot coordination on average 85.56 while in the practice of passing a fixed target with low eye-foot coordination, an average of 80.00 was obtained.
- 5) There is no interaction between fixed target passing practice and moving target passing and eye-foot coordination on football passing accuracy, as evidenced by the results of the anova test with $f_{\text{count}} : 4.050$ with a significance value of 0.053. with a significance level of $0.053 < 0.05$. it can be stated that there is no significant interaction between exercises (fixed target passing and moving target passing) and eye-foot coordination on soccer passing accuracy.

DISCUSSION

The first finding in this study proved that moving target passing exercises were better at improving soccer passing accuracy than fixed target passing exercises, then players with high eye-foot coordination had better passing accuracy than players with

low eye-foot coordination. , and after being given the exercise a significant increase was seen, this can be proven from the results of the pre test and post test. Marzuki, & pamuji, (2018) there is a significant difference in the effect of high eye-foot coordination and low eye-foot coordination of soccer playing skills, Rachman (2014) also explained that there was a significant difference in the effect of the acceleration training method and interval sprint dribbling on dribbling ability; (2) there is a significant difference in the effect between high and low coordination skills on dribbling abilities. Amir Supriadi (2015) there is an effect of eye-foot coordination on the skill of dribbling. Syarif (2017) there is an effect of increasing the ability to dribbling the ball through the side jump sprint training method with dodging run for students who have high eye-foot coordination in soccer games, Saifulloh (2018) the small sided game training method provides a significant improvement on the passing results at the Islamic University of Riau's Football School Age 16.

CONCLUSION

The difference in the effect of fixed target passing exercises and moving target passing exercises on the accuracy of football passing on players. Furthermore, there are differences in the effect of high eye-foot coordination and low eye-foot coordination on football passing accuracy on players. There is a difference in the Effect of the Passing Target Training Method with High and Low Eye-Foot Coordination on the Accuracy of Football Passing in Football School players, Riau Islamic University Age 16.

REFERENCES

- Amir Supriadi. (2015). Hubungan Koordinasi Mata-Kaki Terhadap Keterampilan Menggiirng Bola Pada Permainan Sepakbola. *Jurnal Ilmu Keolahragaan*, 14(1). <https://doi.org/10.1088/1751-8113/44/8/085201>
- Awang Roni Effendi. (2016). Pengaruh Latihan Koordinasi Mata Kakai Terhadap Kemampuan Ketetapan Shooting Pada Mahasiswa UKM Sepak Bola Putra. *Jurnal Pendidikan Olahraga*, 5(2).
- Azi Faiz Ridlo. (2019). Pengaruh Metode Latihan Slalom Drible Terhadap Keterampilan Dribbling Sepak Bola Mahasiswa Pjkr Universitas Islam "45" Bekasi. *Journal of*

S.P.O.R.T, 3(1), 56–61.

Efendi, R. (2016). Pengaruh Metode Latihan Practice Session, Test Session Dan Motivasi Berprestasi Terhadap Keterampilan Menendang Dalam Sepak Bola. *Jurnal Pendidikan UNSIKA*, 4(1).

Faruq, M. (2008). *Meningkatkan Kebugaran Tubuh dan Olahraga Sepakbola*. Grasindo.

Harika Fitri, A. ., & Ricky, Z. (2021). The Effect of Endurance Training on Vo2max Futsal Athletes MAN 1 Dharmasraya . *INSPIREE: Indonesian Sport Innovation Review*, 2(1), 01–07. <https://doi.org/10.53905/inspiree.v2i1.26>

Irawadi, H. (2011). *Kondisi Fisik dan Pengukurannya*. FKIP UNP.

Ismaryati. (2008). *Tes dan Pengukuran Olahraga*. UNS Press.

Irianto, D. P. (2002). *Dasar Kepelatihan Olahraga*. FIK UNY.

Iqbal, M. (2020). Analisis Kebutuhan Mahasiswa Dalam Penerapan Multimedia Interaktif Pada Cabang Olahraga Futsal. *INSPIREE: Indonesian Sport Innovation Review*, 1(2), 90–99. <https://doi.org/10.53905/inspiree.v1i2.9>

Iqbal, M. (2020). The Limb Explosive Power and Goal Target Accuracy on Futsal Playing Skills: Correlational Analysis Study: Poweri Otot Tungkai dan Akurasi Sasaran dalam Keterampilan Bermain Futsal: Studi Analisis Korelasional. *INSPIREE: Indonesian Sport Innovation Review*, 1(1), 01–12. <https://doi.org/10.53905/inspiree.v1i1.1>

Laksono, D. A., & Rachman, H. A. (2014). The Effect of Training Methods and Eye-Foot Coordination On Football Dribbling Ability. *Journal of Physical Education, Sport, Health and Recreation*, 4(2), 1613–1620. <http://journal.unnes.ac.id/sju/index.php/peshr>

Miellke. D. (2007). *Dasar-Dasar Sepakbola*. Pakar Jaya.

Marzuki., & Pamuji, S. (2018). The Exercise Method and Eye-Foot Coordination in Soccer Playing Skills of 14-15 Years Old Players. *Advances in Social Science, Education and Humanities Research*, 278((YISHPESS)), 346–350.



<https://doi.org/10.2991/yishpess-cois-18.2018.85>

Pardilla, H. (2021). Physical Fitness and Learning Achievement Academic in Children Aged 10-12 years . *INSPIREE: Indonesian Sport Innovation Review*, 2(2), 165 of 175. <https://doi.org/10.53905/inspiree.v2i2.51>

Pardilla, H. ., & Husnayadi, I. (2020). Seberapa Besar pengaruh Panjang Tungkai Terhadap Hasil Atletik Triple Jump?. *INSPIREE: Indonesian Sport Innovation Review*, 1(3), 160–167. <https://doi.org/10.53905/inspiree.v1i3.24>

Riski Alfi Hidayat, G. D. (2019). Pengaruh Metode Latihan *Passing* Permainan Sepak Bola Terhadap Hasil Belajar *Passing* Sepak Bola Menggunakan Kaki Bagian Dalam. *Jurnal Pendidikan Jasmani UNESA*, 07(3).

Ridlo, Azi Faiz & Saifulloh, I. (2018). Pengaruh Metode Latihan Small Sided Game Terhadap Kemampuan Passing-Stopping Permainan Sepakbola. *Jurnal Research Physical Education*, IX(2), 116–121. <http://jurnal.unismabekasi.ac.id/index.php/motion/article/view/1591>

Satria, M. H. (2019). Pengaruh Latihan Circuit Training Terhadap Peningkatan Daya Tahan Aerobik Pemain Sepakbola Universitas Bina Darma. *Jurnal Ilmiah Bina Edukasi*, 11(01), 36–48. <https://doi.org/10.33557/jedukasi.v11i01.204>

Sors, F., Prpic, V., Santoro, I., Galmonte, A., Agostini, T., & Murgia, M. (2018). Loudness, but not shot power, influences simple reaction times to soccer penalty sounds. *Psihologija*, 51(1), 127–141. <https://doi.org/10.2298/PSI170926016S>

Syarif, S., & Suardi, S. (2017). Pengaruh Metode Latihan Dan Koordinasi Mata-Kaki Terhadap Kemampuan Menggiring Bola Pada Permainan Sepakbola Siswa SMA Negeri 1 Anggeraja Kabupaten Enrekang. *SPORTIVE: Journal Of Physical Education, Sport and Recreation*, 1(1). <https://doi.org/10.26858/sportive.v2i1.9399>

Tarju, T., & Wahidi, R. (2017). Pengaruh Metode Latihan Terhadap Peningkatan *Passing* Dalam Permainan Sepak Bola. *JUARA: Jurnal Olahraga*, 2(2), 66. <https://doi.org/10.33222/juara.v2i2.35>

APPENDIX

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