

The relationship of agility with women's football playing skills

Galih Pamungkas^{1*}, Komarudin¹, Saryono¹, Muhamad Ichsan Sabillah²

¹Health and Recreation Physical Education, Faculty of Sports Science, Yogyakarta State University, Colombo Street No. 1, Karangmalang, Depok, Sleman, Daerah Istimewa Yogyakarta, Indonesia.

²Sports Science, Faculty of Sports Science, Yogyakarta State University, Colombo Street No. 1, Karangmalang, Depok, Sleman, Daerah Istimewa Yogyakarta, Indonesia.

*Corresponding Author: galihpamungkas.2021@student.uny.ac.id

Abstrak

This study aims to test the relationship of agility with women's football playing skills. Methods used correlational research. The study was carried out on the players of Putri Mataram Sleman with a total sample of 20 players and an average age of 15-20 years. Players perform exercises with a frequency of 3 times a week. The instrument used to measure the agility of the Mataram Women's Player is the Illinois Agility Test with a validity of 0.87. Football skills ability using David Lee development test. Based on the statistical analysis of the normality test that has been carried out using the Shapiro-Wilk Test, the significance value is $0.085 > 0.05$ which means that the data is normally distributed. In this study the correlation value obtained was 0.964. It can be concluded that there is a relationship between agility and football playing skills since the significance value is $0.964 > 0.05$. Based on research conducted by researchers, it was found that agility correlates with the football playing skills of the Princess Mataram Sleman player.

Keywords: agility, skills, football, women.

INTRODUCTION

The game of football is a game that requires good physical condition. Good physical condition is needed in combining the technical, tactical, and mental skills of football players (Maliki et al., 2017). Football is a complex game that requires excellent physical condition (Bryson et al., 2012). Good physical condition is one way to achieve maximum achievement (Pratama & Imanudin, 2019). Physical condition has a very important role in all fields of sports (Hermawan et al., 2022). Football athletes must have excellent physical condition in all components, such as passing, dribbling, shooting, juggling, and heading (Dahlan et al., 2020). To maintain good basic game techniques, it needs to be supported by an excellent physical condition, namely endurance, strength, agility, speed, and coordination (Hamdi et al., 2019). Getting a good physical condition certainly requires exercises that can improve and develop the physical condition and functional abilities of the body system (Mansur et al., 2020). Practice is a long and long process so the exercise must be done systematically (Mikail & Suharjana, 2019).

Agility is an indispensable physical component of football players (Nasution & Suharjana, 2015). Agility is the main physical element in performing dribbling techniques in passing opponents. There is a significant influence between exercise variations in agility on football dribbling skills (Effendi et al., 2018). A football athlete who has good agility will be able to change the direction of speed with the right and precise movement when dribbling. Based on research conducted by (Guntoro & Muhammad, 2020) Proves that agility has a relationship with football playing skills as evidenced by the significance of the test of 0.568. Football playing skills do not come casually, it takes a long and continuous training process (Hadi, 2019). Football playing skills cannot be interpreted in a narrow sense because football playing skills there are attacking skills, defensive skills, and skills with the ball and without the ball (Yang, 2014). Improving the skills in playing football can be done with special exercises with a high degree of difficulty (Dahlan et al., 2020). Improving football playing skills requires effective and efficient training methods (Yulifri & Ali Asmi, n.d.).

Women's football requires special attention, especially in anaerobic qualities (strength, speed, and agility), aerobic capacity, and some anthropometry in the body (Turner et al., 2013). The physical demands of women's football are essential to developing a training conditioning program, which aims to prepare players for their best performance (Martínez-Lagunas et al., 2014). The preparation includes physical, technical, tactical, and mental, these elements are supporting factors in getting the achievements of sports athletes (Allsabab & Weda, 2020).

Female football athletes who have good agility will easily pass opponents, easily create opportunities to score, and usually, the athlete has a high level of playing skills. Based on the description and identification of various problems related to the training process in the football branch, researchers are interested in conducting research that aims to determine the relationship of agility to football playing skills in young women's football players.

METHOD

The research conducted is correlational. The study was carried out on the players of Putri Mataram Sleman with a total sample of 20 players and an average age of 15-20 years. Players perform exercises with a frequency of 3 times a week. The instrument used to measure the agility of the Mataram Women's Player is the Illinois Agility Test with a validity of 0.87. The ability of football playing skills using David Lee's development test.

RESULTS AND DISCUSSION

Result

Data on the results of measuring agility with the skills of playing football for Putri Mataram Sleman.

Table 1. Research Data

No.	Agility (X)	Football Playing Skills (Y)
1.	16,3	40,11
2.	16,65	40,40
3.	16,93	40,65
4.	17,45	41,30
5.	17,69	41,66
6.	17,76	41,92
7.	17,91	42,98
8.	18,11	43,01
9.	18,37	43,67
10.	18,45	43,69
11.	19,25	44,60
12.	19,25	44,60
13.	19,45	44,27
14.	19,64	44,46
15.	19,74	44,70
16.	20,26	45,33
17.	20,54	45,50
18.	20,72	45,70
19.	21,23	46,34
20.	22,17	46,20

Table 2. Normality Test

<i>P</i>	Significance	Information
0,085	0,05	Usual

The data obtained are tested for normality. Test its normality using the Shapiro-Wilk Test method. The results of the data normality test were assisted by the SPSS version 20.0 for windows software programs with a significance level of 5% or 0.05. Based on the statistical analysis of the normality test that has been carried out using the Shapiro-Wilk Test, the significance value is $0.085 > 0.05$. Means normally distributed data.

Table 3. Correlation Test

<i>P</i>	Significance	Information
0,964	0,05	Linear

The correlation value coefficient is a calculation using a formula from Pearson to determine the significance or absence of a relationship between two variables. In this study the correlation value obtained was 0.964. It can be concluded that there is a relationship between agility and football playing skills since the significance value is $0.964 < 0.05$.

Discussion

Based on research conducted by researchers, it is found that agility correlates with the football playing skills of Putri Mataram players. The researcher's assumption is reinforced by the theory from Kurniawan et al., (2016) that "Players who have agility will be able to quickly dribble football into the opponent's area and will also make it easier to score goals against the opponent's goal, besides that agility is also needed in the player's efforts to chase the ball". Based on research (Irawan & Hariadi, 2019) revealed that agility and speed greatly affect football playing skills, especially in dribbling.

In this study, it can be concluded that when a player has high agility, the basic skills of playing football for that player can be said to be better. According to (Khalik, 2017) In his research revealed that agility helps players in performing football skills, that is, it helps to move to turn, turning and changing direction without having to lose balance. In dribbling situations, the player must take the initiative where the ball will be taken moving to whom the ball will be given.

Akhmad et al., (2018) In his research that agility is the ability to change the direction and position of the body quickly and precisely at the time it is moving without losing balance and awareness of its body position. So that in carrying out dribbling movements, it is necessary to be able to change direction quickly when moving at high speed. Agility is analyzed from the movement process involved in it, then agility supports dribbling skills in football.

Agility is related to nervous adaptation, the mechanism of nervous adaptation occurs as a result of exercise that causes an increase in the force of muscle contractions that is realized directly. The increase occurs due to increased activation of the main driving muscles, synergistic muscles contracting more precisely, and increased inhibition of the antagonist's muscles. The implication is that trained athletes can activate their muscles to the maximum under normal conditions that functionally their energy stores can be immediately used as a realized maximum effort (Astrawan et al., 2016). Regular physical training will lead to hypertrophy of muscle physiology, which is due to the number of myofibrils, the size of myofibrils, the density of capillary blood vessels, nerve tendons and ligaments, and the total number of contractile, especially myosin contractile proteins, to increase significantly. Changes in muscle fibers do not all occur to the same degree, a greater increase occurs in white muscle fibers (fast twitch), so there is an increase in the speed of muscle contraction. The increased size of muscle fibers will eventually increase the speed of muscle contraction, thus causing an increase in agility (Womsiwor & Sandi, 2014).

Increased agility is in line with the movement learning literature that the practice of repetition in a block (centralized) way over a long period can help participants acquire motor skills faster, but in these skills, it is not necessarily maintainable over time. Conversely, participants who follow a random

practice schedule may acquire skills more slowly but can become better prepared to maintain their skills over time (Rivard, 2014).

CONCLUSION

This research makes evidence that agility has a relationship with football playing skills. Based on the results of research that has been carried out, it is proven that agility has a significant influence on football playing skills.

REFERENCE

- Akhmad, N., Zainuddin, F., & Bausad, A. A. (2018). The Relationship Between Speed And Agility To Dribbling Skills In Football At Red Bee Warrior Mataram Club In 2018. *JISIP (Jurnal Ilmu Sosial dan Pendidikan)*, 2(1).
- Allsabab, M., & Weda, W. (2020). Comparison of Anthropometric Profiles and Physical Condition of Football Players in Kediri City and Regency Women's Football Clubs. *Indonesia Performance Journal*, 4(1), 23-35.
- Astrawan, I. P., Adiputa, N., & Jawi, I. M. (2016). Badminton footwork training 10 reps 2 sets better than 5 reps 4 sets to improve limb muscle strength and agility. *Sport and Fitness Journal*, 4(2), pp. 18-29.
- Bryson, J., Burke, Y., Chang, J. M., Defrantz, A. L., Easton, J., Evans, J., ... & achazewski, P. T. (2012). Soccer coaching manual. LA84 Foundation. Los Angeles: CA.
- Dahlan, F., Hidayat, R., & Syahrudin, S. (2020). The influence of the physical component and the motivation of the exercise on football playing skills. *Jurnal Keolahragaan*, 8(2), 126-139. <https://doi.org/10.21831/jk.v8i2.32833>.
- Effendi, A. R., Pahliwandari, R., & Arifin, Z. (2018). The effect of agility training on the ability to dribble in the football game of UKM Sepakbola IKIP PGRI Pontianak students. *Jurnal Pendidikan Olah Raga*, 7(1), 1-10. <http://dx.doi.org/10.31571/jpo.v7i1.875>.
- Guntoro, T. S., & Muhammad, J. (2020). Factors of physical and psychological abilities supporting the skills of elite football athletes in Papua Province. *Jurnal SPORTIF: Jurnal Penelitian Pembelajaran*, 6(2), 390-406. https://doi.org/10.29407/js_unpgri.v6i2.13768.
- Hadi, R. (2019). The Effect Of Training Methods And Motivation To Achieve On Basic Futsal Technical Skills. *Sains Olahraga: Jurnal Ilmiah Ilmu Keolahragaan*, 3(2), 108-118. <https://doi.org/10.24114/so.v3i2.15201>
- Hamdi, A., Wahyudi, A. S. B. S. E., & Humaedi, H. (2019). Profile of basic football technical skills for students of SMP Negeri 2 Kasimbar. *Tadulako Journal Sport Sciences And Physical Education*, 7(1), 103-113.
- Hermawan, H. A., Nurcahyo, F., & Yudanto, Y. (2022). Monitoring the Physical Condition Profile of Football Branching in Junior High School Students of Special Sports Class in Sleman Regency, Yogyakarta. *Jorpres (Jurnal Olahraga Prestasi)*, 18(3), 9-18.
- Irawan, A. Y., & Hariadi, I. (2019). The Relationship between Speed and Agility with Dribbling Skills. *Sport Science and Health*, 1(3), 222-226.
- Khalik, K. (2017). Analysis of the Relationship Of Agility With Jantho Fc Club Football Playing Skills. *Jurnal Penjaskesrek*, 4(2), 218-227.
- Kurniawan, P. B., Pramono, H., & Fakhruddin. (2016). The influence of cooperative learning methods and student learning motivation on football learning outcomes. *Journal of Physical Education and Sport*, 5(1), 32-40.
- Maliki, O., Hadi, H., & Royana, I. F. (2017). Physical Condition Analysis of Football Players of Persepu Upgris Club in 2016. *Jendela Olahraga*, 2(2).
- Mansur, M., Kurniawan, F., Irianto, S., Herwin, H., & Nurfadhila, R. (2020). Analysis and evaluation of the physical condition (agility) of leading sports athletes in Kebumen Regency, Central Java Province. *Jorpres (Jurnal Olahraga Prestasi)*, 16(2), 72-77.
- Martínez-Lagunas, V., Niessen, M., & Hartmann, U. (2014). Women's football: Player characteristics and demands of the game. *Journal of Sport and Health Science*, 3(4), 258-272
- Mikail, K., & Suharjana, S. (2019). Development of a training model of basic football techniques for children aged 10-12 years in football schools. *Jorpres (Jurnal Olahraga Prestasi)*, 15(1), 14-27.

- Nasution, I. E., & Suharjana, S. (2015). Development of an agility-based football training model with a playing approach. *Jurnal Keolahragaan*, 3(2), 178-193. <https://doi.org/10.21831/jk.v3i2.6241>.
- Pratama, A., & Imanudin, I. (2019). Aerobic capacity (VO2Max) and soccer player mileage. *JTIKOR (Jurnal Terapan Ilmu Keolahragaan)*, 3(2), 12-16. <https://doi.org/10.17509/jtikor.v3i2.10132>.
- Rivard, J.D. dkk. (2014). The effect of blocked versus random task practice schedules on the acquisition and retention of surgical skills. *The American Journal*, hlm. 1-8.
- Turner, E., Munro, A. G., & Comfort, P. (2013). Female soccer: Part 1—A needs analysis. *Strength & Conditioning Journal*, 35(1), 51-57.
- Womsiwor, D., & Sandi, I. N. (2014). Left Bow Circuit Running Training Is Better Than Right Bow To Improve The Agility Of Football Players Students Of SMK X Denpasar. *Sport and Fitness Journal*, 2(1), 10-17.
- Yang, Z. (2014). Study on classification of football techniques and the analysis on factors influencing football techniques. *An Indian Journal of Bio Technology*, 13035-13036.
- Yulifri, M., & Ali Asmi, M. Effect of Play Series Method and Training Series on Football Playing Skills. <https://doi.org/10.24036/sporta.v4i2.105>