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The Effectiveness of Agility Training on the Improvement of Football Dribbling Skills at SSB Kalegowa

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Abstract. The purpose of this study is to ascertain whether agility training improves soccer players' dribbling abilities at SSB Kalegowa. Using a one-group pretest–posttest model, the study used a quasi-experimental approach with 25 players between the ages of 13 and 15. Three sessions of the agility training program were held every week for a duration of six weeks. The Illinois Agility Test and the zigzag dribbling test were used to gather data, and the Paired Sample t-test was used to analyze the results at a significance level of α = 0.05. The average pretest duration was 12.96 seconds, whereas the average posttest time was 10.87 seconds, with a mean difference of 2.09 seconds, according to the data. A significant difference between the pretest and posttest findings was found by the t-test analysis, which yielded a value of t = 88.38 with p = 0.000 (p < 0.05). We may conclude that agility training significantly improves soccer players' dribbling abilities. Agility-based exercises improve balance, speed, and coordination, which improves control and dribbling efficiency.

Keywords: agility training, dribbling, soccer, physical fitness, skill improvement

1 Introduction

Football demands strong technical, tactical, mental, and physical abilities. (Hamzah et al., 2023). People of all ages, from young toddlers to adults, play football, which is the most popular sport in the world. Dribbling is one of the fundamental skills that is crucial in the game of football. (Hasyim & Jahrir, 2024). According to (Luxbacher, 2013), The ability to master fundamental football skills including kicking, passing, holding, heading, and dribbling determines a player's success in the game. Among these techniques, *dribbling* has a strategic role because it is the basis for players to control the ball when facing the opponent's pressure. Good *dribbling* skills allow players to pass opponents, defend the ball, and create scoring opportunities. Therefore, improving *dribbling* skills is the main focus in coaching young people in football schools (SSB).

Dribbling is a player's ability to dribble with his feet with the aim of passing an opponent or creating space to attack (Mappaompo et al., 2024). This technique not only requires good coordination between the eyes, feet, and ball, but also requires speed, balance, and agility. Players who have good *dribbling* skills will be able to maintain ball possession,

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open up attack opportunities, and add variety to the team's game. Therefore, *dribbling* mastery is one of the main indicators of basic technical skills in early childhood football coaching.

Research (Yusuf et al., 2022) confirms that agility and balance training have a significant influence on dribbling speed in football. In his study, zig-zag run and T-drill exercises were able to improve the player's ability to change direction quickly when dribbling. This shows that agility training not only improves physical ability, but also has a direct impact on improving engineering skills. Similar findings were revealed by (Daulay et al., 2021) who examined the relationship between coordination and agility on the dribbling ability of young players in Medan. They found that the better a player's coordination and agility, the higher his dribbling skills. The results of this study confirm that agility exercises must be integrated with body coordination exercises in order to produce optimal ball control.

In addition, (Hidayat et al., 2024) also found that balance, agility, and speed have a significant relationship with dribbling ability. Players who have a stable body balance will find it easier to maintain control of the ball when making sudden changes of direction. Thus, agility, balance, and speed are a set of interrelated physical components in improving dribbling skills. Furthermore, research conducted by (Syahruddin et al., 2023) regarding the relationship between agility and eye-to-toe coordination on dribbling ability in high school futsal athletes also provides additional insights. Despite the futsal context, the principles found remain relevant to football because both sports demand high speed of change of direction and ball control in tight spaces. The results of the study show that players with agility and good eye-foot coordination have superior dribbling skills compared to other players.

From the various results of these studies, it can be concluded that agility training has a real positive impact on improving the *dribbling* ability of football players. Agility exercises help players develop quick reaction skills, speed of change of direction, and stable body balance when dribbling. Agility also allows players to be more efficient in defending the ball from opponents' pressure and performing tactical movements in the game.

In the context of youth coaching such as at SSB Kalegowa, the implementation of agility training programs is very important because the 13-15 year old phase is a period of optimal development of motor coordination and movement control. Coaches need to design exercises that focus not only on dribbling techniques, but also on the development of supporting physical components, such as *cone drills*, *ladder* drills, and *shuttle* runs. With the application of structured training, players are expected to significantly improve *dribbling* performance and show more stable technical skills in matches.

Agility is an important component in supporting *dribbling skills*. According to (Arifin & Warni, 2019), agility is the body's ability to change direction quickly without losing balance and speed. In the context of football, agile players are able to anticipate the opponent's movements and dribble with good control in tight spaces. Agility training can be done through various forms of activities, such as *ladder drill*, *cone drill*, *zig-zag run*, or *shuttle run*. These exercises are designed to train reaction speed, coordination, and body balance in changing the direction of movement. Several previous studies have shown a strong link between agility and *dribbling* ability. For example, research by (Hadi et al., 2016) found that players who regularly participated in agility exercises experienced significant improvements in speed and ball control when *dribbling*. This shows that agility has an effect not only on physical ability, but also on the effectiveness of basic technique movements in the game

SSB Kalegowa as one of the youth football coaching institutions in Gowa Regency, South Sulawesi, continues to strive to improve the quality of training for its participants. Based on the results of initial observations made by researchers, most players still have difficulty dribbling, especially when dealing with opponents or when making quick changes of direction. These problems can be caused by a lack of variety of exercises that focus on increasing agility. Therefore, the systematic and measurable application of agility training is expected to be a solution in improving players' *dribbling* skills . This research is important to provide an empirical picture of the effectiveness of agility training in improving soccer *dribbling* skills . In addition, the results of this research are also expected to be a reference for coaches in compiling training programs that suit the needs of young players at the SSB level.

2 Method

This study employs a one-group pretest-posttest design using a quasi-experiment methodology. The purpose of this design was to determine the degree to which agility training improved the dribbling abilities of soccer players at SSB Kalegowa before and after treatment. The term "population" refers to everything that will be examined, whether it takes the shape of inanimate objects, human subjects, or social technologies. (Rahmadani et al., 2023). All SSB Kalegowa players who actively engage in regular training comprise the study's population. According to coach statistics, 25 players between the ages of 13 and 15 consistently take part in training exercises. Any technique used to choose a sample for study is called a sample. (Purba et al., 202 Because the population was small and homogeneous in terms of age and basic ability level, all members of the population were employed as research samples utilizing the whole sampling technique. Thus, 25 SSB Kalegowa football players serve as the study's sample size. The Illinois Agility Test, which has been used extensively in sports research to gauge agility, was the tool utilized in this investigation. This test measures the player's ability to run quickly and change direction through a zig-zag track using a cone. The dribbling test uses a 20-metre-long zig-zag track with five cones as barriers. Players dribble through the track as fast as possible without losing control. Results are measured based on travel time (in seconds). This instrument was adapted from research (Taufik, 20 and has been used in various studies related to basic football technique skills. This study was carried out for 6 weeks with a frequency of 3 times per week (a total of 18 training sessions). Each session lasts 60 minutes, including warm-ups, core exercises, and cool-downs.

A t-test (paired sample t-test) was used to examine the pretest and posttest results in order to determine whether the mean score before and after therapy differed significantly. A significance level of $\alpha = 0.05$ was used for this test. The tools employed in this study have undergone validity and reliability testing through prior research in order to guarantee the legitimacy of the findings. With a coefficient of >0.80, the Illinois Agility Test is highly reliable. (Yanuar et al., 2024), However, the zigzag dribbling test has strong construct validity for evaluating young players' dribbling abilities. (Arwandi & Firdaus, 2021). A t-test for paired samples (Paired Sample t-test) with a significance level of $\alpha = 0.05$ was used for data analysis.

3 Result

The purpose of this study is to ascertain whether agility training improves football dribbling abilities among SSB Kalegowa players. A t-test for paired samples (Paired Sample t-test) with a significance level of $\alpha = 0.05$ was used for data analysis. The purpose of this analysis was to examine the average dribbling test scores prior to (pretest) and following (posttest) the application of agility training.

Table 1. Description of Research Data

Statistics	Pretest (detik)	Posttest (seconds)
Number of Samples (n)	25	25
Average	12,96	10,87
Baku Junction	0,26	0,31
Minimum Score	12,5	10,3
Maximum Value	13,4	11,4

The table above shows that there is a difference in the average dribbling test results between *the pretest* and *the posttest*. Before being given agility training, the average time it takes for players to complete the dribbling trajectory is 12.96 seconds. After undergoing a six-week agility training program, the average time decreased to 10.87 seconds. This decrease in time of 2.09 seconds shows an increase in speed and efficiency in dribbling after being given agility training treatment.

Table 2. Paired Sample t-test results

Test Statistics	Value
Average Difference	2.09 seconds
Number of Samples (n)	25
T-calculated value	88,38
Nilai p (Sig.)	0,000
Taraf Signifikansi	0,05
Test Results	H_0 rejected, H_1 accepted

The analysis's findings yielded a t-count value of 88.38 and a p-value of 0.000 (<0.05). This demonstrates that the dribbling ability of SSB Kalegowa football players differs significantly between the pretest and posttest findings. Thus, the player's ability to dribble is greatly enhanced by the agility training they receive.

4 Discussion

The study's findings demonstrated that agility training significantly improved SSB Kalegowa football players' dribbling abilities. According to the paired sample t-test results, there is a very significant difference between the pretest and posttest results (t-count value = 88.38 with p-value = 0.000 (< 0.05)). A player's average dribbling time dropped to 10.87 seconds completing a six-week agility training program from 12.96 seconds before to training. After receiving structured agility training, dribbling ability significantly increases, as seen by a time drop of 2.09 seconds (about 16.1%).

The findings of this study confirm that agility training significantly improves dribbling performance among youth football players at SSB Kalegowa. The reduction in average dribbling time after six weeks of training demonstrates that systematic agility-based exercises enhance players' motor efficiency and technical control. This aligns with Bompa and Buzzichelli's (2019) theory that repetitive and progressive agility training develops neuromuscular coordination and reaction speed, enabling players to respond faster, maintain balance, and control the ball more effectively.

These results are consistent with previous studies by Yusuf et al. (2022) and Daulay et al. (2021), who found that agility and balance training positively influence dribbling speed and coordination. The present research strengthens these findings by providing empirical evidence that structured agility programs can directly improve football-specific technical abilities rather than merely enhancing general physical fitness.

Agility, as defined by Arifin and Warni (2019), integrates reaction time, coordination, balance, and movement control. Luxbacher (2013) also emphasized that effective dribbling requires players to combine these elements to maintain stability and accuracy under dynamic match conditions. The agility drills used in this study—such as zig-zag runs, cone drills, and ladder exercises—proved effective in training acceleration, deceleration, and directional change while maintaining ball control.

This study also supports the motor learning principle that adolescence is a critical stage for improving coordination and agility (Hidayat et al., 2024). Regular and structured agility

exercises enhance synchronization between sensory and motor responses, allowing players to execute dribbling movements more efficiently.

Practically, these findings suggest that agility training should be systematically integrated into youth football programs. Hadi et al. (2016) highlighted that ladder and cone drills significantly increase agility and reaction speed, leading to better ball-handling skills. Moreover, agility serves as a foundation for multidimensional motor abilities that determine success in football (Chryssomallis, 2004). Players with higher agility are better prepared to respond to rapid directional changes and physical challenges during games.

Overall, this study demonstrates that agility-based training effectively develops essential dribbling skills by enhancing players' physical coordination, cognitive responsiveness, and technical precision. Therefore, incorporating agility-focused exercises into youth football training programs can significantly improve both individual performance and overall game readiness.

5 Conclusion

It can be inferred from the research findings and data analysis that agility training significantly enhances the dribbling abilities of football players at SSB Kalegowa. The paired sample t-test results revealed a t-count value = 88.38 with p = 0.000 (< 0.05), indicating a highly significant difference between the pretest and posttest findings. Before and after training, the average dribbling time is 12.96 and 10.87 seconds, respectively. This is an average difference of 2.09 seconds, or a 16.1% gain. Agility exercises applied for six weeks have proven to be effective in improving the player's ball control ability, speed of change of direction, and body balance. This improvement shows that agility training plays an important role in improving basic technical skills, particularly dribbling. Thus, it is recommended that coaches in youth football schools make agility training a major part of the regular training program to optimize the mastery of basic techniques of players.

References

Arifin, R., & Warni, H. (2019). Model Latihan Kelincahan Sepakbola. Multilateral Jurnal Pendidikan Jasmani Dan Olahraga, 17(2), 63–66.

Arwandi, J., & Firdaus, M. (2021). Effect of agility training towards soccer dribbling skills. 1st International Conference on Sport Sciences, Health and Tourism (ICSSHT 2019), 7–10.

Daulay, B., Azmi, F., & others. (2021). Coordination and agility: How is the correlation in improving soccer dribbling skills? Journal Sport Area, 6(2), 147–161.

Hadi, F. S., Hariyanto, E., & Amiq, F. (2016). Pengaruh latihan ladder drills terhadap peningkatan kelincahan siswa u-17 di persatuan sepakbola Jajag Kabupaten Banyuwangi. Jurnal Pendidikan Jasmani, 26(1), 213–228.

Hamzah, A., Aksir, M. I., Hasanuddin, M. I., & Nurulita, R. F. (2023). PERBANDINGAN TINGKAT KECEMASAN ATLET PADA TIGA KLUB

SEKOLAH SEPAKBOLA (SSC) DI KOTA MAKASSAR. Jurnal Ilmiah STOK Bina Guna Medan, 11(1), 33–38.

Hasyim, M. Q., & Jahrir, A. S. (2024). Hubungan Keseimbangan Dan Koordinasi Mata Kaki Terhadap Hasil Dribbling Menggunakan Kaki Bagian Dalam Pada Permainan Sepakbola. Jurnal Dunia Pendidikan, 4(3), 1421–1434.

Hidayat, N., Syahruddin, S., Hudain, M. A., Suyudi, I., Sudiadharma, S., & Siswanto, W. (2024). The Influence of Speed, Agility, and Confidence on Extracurricular Students' Football Dribbling Ability. Journal Coaching Education Sports, 5(1), 53–64.

Luxbacher, J. A. (2013). Soccer: Steps to success. Human Kinetics.

Mappaompo, M. A., Hasanuddin, M. I., & others. (2024). Literature Study on Increasing Dribbling Agility Through Ball Feeling Training Methods and Ladder Drill Training. ETDC: Indonesian Journal of Research and Educational Review, 3(2), 172–184.

Purba, S., Ahadid, A., Putra, W., Rahman, A. A., Aryani, P., Jannah, F., Widodo, H., Magalhaes, A. D. J., & Hasanuddin, M. I. (2023). Competency Education Research Methodology and Its Applications.

Rahmadani, E., Mashuri, M. T., Sitopu, J. W., Hasanuddin, M. I., Suarsana, I. M., Asriadi, M., Putri, J. H., Maharani, I., Hasanuddin, M. I., Maswar, Elfina, H., & Irwanto. (2023). Education Statistics. https://batukota.bps.go.id/publication/download.html?nrbvfeve=OTc4MDZhYzZhYzAyY2U4ZTBlNTNlYmJm&xzmn=aHR0cHM6Ly9iYXR1a290YS5icHMuZ28uaWQvcHVibGljYXRpb24vMjAxNS8xMC8zMC85NzgwNmFjNmFjMDJjZThlMGU1M2ViYmYvc3RhdGlzdGlrYS1kYWVyYWgta290YS1iYXR1LTIwMTUuaHRtbA%3D

Syahruddin, S., Hakim, H., Saleh, M. S., Saleh, M. S., Surya, M. A., & others. (2023). Pengaruh Persepsi Kinestetik, Kelincahan dan Koordinasi Mata Kaki terhadap Keterampilan Dribbling pada Permainan Futsal. Jurnal Pendidikan Olah Raga, 12(1), 105–118.

Taufik, M. S. (2019). Meningkatkan teknik dasar dribbling sepakbola melalui modifikasi permainan. Pendidikan Jasmani Kesehatan Dan Rekreaksi Fakultas Keguruan Dan Ilmu Pendidikan Universitas Suryakancana, 8(1).

Yanuar, A. H., Hartono, M., & Raharjo, H. P. (2024). THE INFLUENCE OF TRAINING METHODS AND AGILITY ON THE ABILITY TO DRIBBLE THE BALL IN SALFAS SOCCER SCHOOL ATHLETES. Journal of Physical Education and Sports, 13(4), 16–22.

Yusuf, M. Z., Rumini, R., & Setyawati, H. (2022). The effect of agility and balance training on dribbling speed in soccer games. Journal of Physical Education and Sports, 11(1), 125–133.

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