### ORIGINAL ARTICLE

# Combination of varied agility training with small sided games: How it influences football dribbling skills?

Didi Suryadi<sup>1,3ABCDE</sup>, Ardo Okilanda<sup>2ABCD</sup>, Novi Yanti<sup>3ACDE</sup>, Mikkey Anggara Suganda<sup>4BCDE</sup>, Mashud<sup>5CDE</sup>, I Gusti Putu Ngurah Adi Santika<sup>6BDE</sup>, Kadek Dian Vanagosi<sup>6BDE</sup>, Riyan Hardinata<sup>7DE</sup>

Authors' Contribution: A – Study design; B – Data collection; C – Statistical analysis; D – Manuscript Preparation; E – Funds Collection

#### **Abstract**

Background Dribbling is the ability of a soccer player to carry the ball by kicking it slowly or forcefully. Therefore, and Study Aim special treatment is needed so that the skills of dribbling the ball get better. This study aims to

prove the effect of a combination of agility variation exercises with small sided games on soccer

dribbling skills.

Material and In this study using the type of experiment design one-group pretest and posttest. The population Methods in this study was Pusaka FC club football athletes. The research sample used purposive sampling so

that there were 20 players who were the sample. Data analysis in this study was assisted by using

the SPSS Version 26 application.

Results Based on the results of the analysis of the research data above, it shows that there is a difference in

the mean value at the pretest of 21.85 and the mean value of the posttest of 17.48 thus showing an increase that occurred, namely by 4.37. Based on the results of the significance value obtained 0.000 <0.05 then the data shows that the combination of variations in agility training and small training

sided games have a significant effect on dribbling skills in soccer games.

Conclusions The results prove that the combination of agility variation exercises with small sided games have a significant effect on football dribbling skills. Based on these results, a combination of agility

variation exercises with zig-zag runs can be implemented to improve dribbling skills soccer player.

**Keywords:** agility variation exercises, zig-zag running, dribbling, football.

## Introduction

Football is a sport that is often played by all levels of society and is one of the most popular games. Football is a favorite sport for the community, both in cities and villages [1]. Even women are very enthusiastic and participate in this game [2, 3], apart from that also men, youth, parents, and children [4]. Football is not only played to pass the time, have fun, and exercise, but it can also introduce and provide pride to the nation and country through successes [5]. Also, encourage better levels of sportsmanship. [6]. Football is used also as a form of recreational sport with an intense and versatile form of exercise

A beautiful game in football can be seen if the players master the technique well [13]. Therefore, technique is the main foundation for supporting soccer players to play well [14]. Technique is an element that every player must prepare to be able to play football [15], and is prioritized because it is a serious coaching idea. In addition, in an effort

<sup>&</sup>lt;sup>1</sup>Postgraduate Sport Science, Faculty of Sport Science, Yogyakarta State University, Yogyakarta, Indonesia

<sup>&</sup>lt;sup>2</sup>Department of Coaching, Faculty of Sport Science, Padang State University, Padang, Indonesia

<sup>&</sup>lt;sup>3</sup>Department of Sports Science, Faculty of Teacher Training and Education, Tanjungpura University, Pontianak, Indonesia

<sup>&</sup>lt;sup>4</sup>Department of Physical Education, Faculty of Teacher Training and Education, Nahdlatul Ulama University Cirebon, Indonesia

<sup>&</sup>lt;sup>5</sup>Postgraduate Physical Education, Faculty of Teacher Training and Education, Lambung Mangkurat University, Pontianak, Indonesia

<sup>&</sup>lt;sup>6</sup>Department of Physical Education, Health and Recreation, FKIP, PGRI Mahadewa University, Indonesia <sup>7</sup>Department of Physical Education, Faculty of Teacher Training and Education, Lambung Mangkurat University, Pontianak, Indonesia

with a variety of high-impact actions and is beneficial for bone health [7]. Football has several aspects to support the quality of the game, namely basic techniques, physical conditions, character building and teamwork [8, 9, 10]. In addition, there are things that must be considered, namely technical, tactical, physical, and mental skills [11]. Furthermore, to be able to play football well, you must have skills or techniques that must be learned and mastered first [12].

<sup>©</sup> Didi Suryadi, Ardo Okilanda, Novi Yanti, Mikkey Anggara Suganda, Mashud, I Gusti Putu Ngurah Adi Santika, Kadek Dian Vanagosi, Riyan Hardinata, 2023 doi:10.15561/26649837.2023.0302

to foster football sports achievements, supporting elements are needed which are very vital [16]. The basic techniques of football consist of kicking, controlling, heading, dribbling, throwing and feinting [17,18]. The basic technique of dribbling is one of the most important skills to master in football [19]. Dribbling is one of the techniques that must be considered by coaches and players to be able to play ball.

The skill of dribbling the ball is a basic technique that must be owned and owned properly by players so that it is easy to process the ball when it is at the feet [20]. Which resulted in the movement of the ball from its original place in order to open up the opponent's defense area [21]. Apart from that, the technique of dribbling the ball can be the difference and advantage of a team in football [22]. Dribbling the ball is done by means of the process of pushing the foot on the ball in close or long distances [23]. Through dribbling techniques players can make it easier to set the tempo, feed, receive the ball, enter the opponent's defense and score as many goals as possible against the opponent's goal [24]. The ability to dribble more quickly will be seen and make it easier to detect level differences professional players and amateur players from an early age of 12 years [25]. Once the technique of dribbling the ball is so important, proper training must be given [26].

Right training method is needed to develop and improve dribbling skills in football so that it can be done properly [10]. The study says that to improve dribbling skills, more varied and continuous training is needed to improve the agility of a soccer team [27]. Because agility training has an effect on improving the dribbling abilities of soccer players [28]. The research study conducted by Rosyadi et al. [29] said that there was a contribution of balance and agility to dribbling skills. The results of subsequent studies said that there was a significant effect of speed, balance and agility training on the dribbling ability of Sapoetri futsal players [30]. Furthermore, the results of the study of Padrón-Cabo et al. [31] revealed that coordination exercises and agility ladders were not effective in improving physical fitness and dribbling in soccer.

Based on the results of the study preliminary through interviews with Pusaka FC club coaches. The problem of soccer dribbling skills is still not monitored. Even though the skill of dribbling soccer is one of the things that supports success [26]. So it needs special training so that dribbling skills can improve. Therefore, the solution offered is a combination of agility variations with small sided games to improve soccer dribbling skills. The use of a variety of exercises is due to the ability to change body position in a short time [32]. Also, can fast and effectively enhance dribbling skills [33]. Although previously conducted research discussing agility variation exercises by Prayoga et al. [34], and

small sided games – studied by Doewes et al. [35]. However, researchers have not found an exercise that combines agility and small variations sided games in sports education especially towards soccer dribbling. So this is one of the gaps that can be developed and the importance of this research to be carried out. Based on these problems, this study aims to prove the effect of a combination of agility variation exercises with small sided games on soccer dribbling skills.

## Materials and Methods

**Participants** 

The subjects in this study were athletes of Pusaka FC soccer club aged 18-23 years. Sampling using purposive sampling technique so that 20 athletes are obtained who will be used as research samples. This study was conducted by the Declaration of Helsinki and was approved by the Ethics Committee of University. All participants had provided written informed consent.

Research Design

This study used an experimental type with *a one group pretest and posttest design*. Initial data collection (pretest) is the first step taken in this study in order to have data on the players' initial abilities before being given treatment. In this study, the treatment used variations of agility and small training sided games as many as 12 meetings in accordance with the principles of practice. After the treatment has been given, the last thing to do is *posttest*.

The instrument used as a *pretest and posttest data collector was in the form of a dribbling* skill test. In this study to determine dribbling skills in soccer games using a test instrument based on dribbling tests [36]. The instruments used can be seen in Figure 1 as follows.

Statistical Analysis

Data analysis in this study used the prerequisite normality test after that the effect test (t) and if the data is not normal then use the non-parametric test with the help of the SPSS Version 26 application

#### Results

The research was started by conducting a pretest to collect data on Pusaka FC Club players first to find out their initial abilities about dribbling skills in soccer games. Then the players were given treatment in the form of a variety of agility exercises and small sided games, finally doing a posttest to find out their dribbling skills after being given treatment. Based on the results of the analysis in testing the data using the normality test with the one-sample Kolmogorov Smirnov formula. the results of the normality test say that the residual values are normally distributed with a significance value of 0.68 > 0.05, so we will

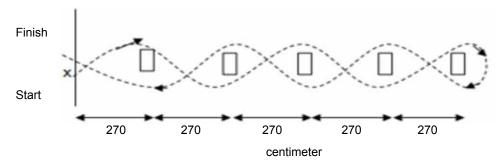


Figure 1. The dribbling test instrument [36].

Table 1. Kolmogorov Smirnov One Sample Normality Test

Results	Unstandardized Residuals
N	20
Asymp, Sig.(2-tailed)	0.68 _

Table 2. Paired Sample t Test

	Test for Sample	t	df	Sig.(2-tailed)
Pairs	Pretest Dribbling- Posttest Dribbling	17.510	19	.000

**Table 3.** Descriptive Statistics

<b>Dribbling Test</b>	N	Minimum	Maximum	Means	Std Deviation
Pre-test Dribbling Skill	20	24.10	20.19	21.85	1, 23398
Post-test Dribbling Skills	20	19.30	16.01	17.48	1.25918

continue to use the t test. The results can be seen in table 1.

The results of the analysis using paired test sample t test in table 2 shows a significance value of 0.000 <0.05. Based on these results, it can be concluded that variations in agility training have a significant effect on dribbling skills in soccer games.

Based on the results of the descriptive statistical analysis of the data shown in Table 3, the mean pretest of dribbling skill results is 21.85 while the mean in the posttest of dribbling skills is 17.48, which means that there is an average difference which proves that after being given the treatment of variations in agility and small training sided games there is an increase in football dribbling skills.

## Discussion

This study aims to determine the effect of a combination of variations of agility training with small sided games on soccer dribbling skills. Based on the results of the analysis of the research data above, it shows that there is a difference in the mean value at *the pretest* of 21.85 and the mean value of the posttest of 17.48. As a result, a 4.37 percent increase occurred. The t count results also show that it is greater than the t table, which means that there is a significant effect related to the combination of agility variation exercises with small sided games on dribbling skills in soccer games. Previous research has demonstrated that agility variation workouts

[34], and small sided games [35] have a substantial effect on soccer dribbling. Furthermore, the results prove that agility has a significant relationship to dribbling skills [37]. Then reiterated by research of Saputra et al. [33] that the implementation of agility training has an effect on improving dribbling skills in soccer games. This is due to the ability of the player's performance in dribbling according to the ability of action (perception), so that players will be like artists in developing their own skills [38].

Agility is a fast body movement and a change of direction and movement which is a basic component of sports such as football and futsal [39]. Players who have played at the professional level show a faster time during the dribbling speed test compared to amateur players [40], and semi-professional players [41]. Because agility plays a very important role, every player, especially football, needs to practice agility diligently and continuously [42]. Speed and agility have an influence on the level of lower body explosive power and are associated with faster times on sprint tests and changes of direction [43]. Therefore, agility is a movement skill or skill needed by football players to change motion at high speed [44]. There are lots of exercises for agility that can be used, such as three corner drill exercises and zig-zag running [45] to increase Shadow's agility in extracurricular badminton activities). Subsequent research by Domaradzki et al. [46] confirms the significance of mediation analysis in the application of sports training by identifying the most essential



factors of player agility performance. So that the training program designed only focuses on effective components.

Other studies have shown that zig zag and shuttle runs can help athletes improve their agility [47]. By performing zig-zag running workouts, the muscles become more elastic and the joint space improves, allowing the limbs to swing widely [48]. Therefore, the ability of football players to change direction quickly is one of the important physical qualities and is related to success in football [49]. With good physical quality, fitness will also be good and will certainly affect performance in the game [50–53]. Furthermore, agility is related to dribble ability in basketball extracurricular kids. Because having agility and arm muscle power allows you to easily control the ball and make more dribbling variants [54]. Furthermore, in order to maintain or win the ball, players must repeatedly accelerate and decelerate unexpectedly, change direction swiftly, jump and land tasks, and be involved in various tackle situations [55]. Soccer players who have good agility, such as being able to change direction and make moves quickly and move quickly and precisely in tight spaces, both with and without the ball [56]. Because speed and agility have a strong and negative relationship with lower body explosive power in each age group [57].

Research results that show there is a significant increase in dribbling results. Provide further references for sports coaches or practitioners based on these findings. That way, variations of agility and small training sided games in soccer games, especially in dribbling ability. However, there are weaknesses in this study, which lie in the activities carried out and the condition of the athletes before

conducting the initial and final tests. In addition, athlete endurance can also be one of the factors that affect the results given.

#### **Conclusions**

The results of this study have a strong foundation regarding variations in agility and small training sided games that have been discussed in the discussion of the results of the discussion. Based on research results prove that the combination agility variation exercises with small sided Games have a significant effect on soccer dribbling skills. The treatment was given using a variety of agility and small exercises sided games showed an increase after the treatment was completed. The results of this study provide a new reference for coaches and field practitioners as well as sports teachers regarding dribbling skills which can be improved through combinations agility variation exercises with small sided games. Recommendations for further research can use 2 different teams or groups, and the treatment time is more than 12 meetings so that it is clear that the effectiveness of variations in agility training in improving soccer dribbling skills.

# Acknowledgement

The author would like to thank all parties for the cooperation so that the research can run well and smoothly. Especially to Pusaka FC club owners, coaches, staff and all players. Hopefully what has been carried out sincerely becomes a useful deed for all of us.

## **Conflict of interest**

There is no conflict of interest.

# References

- Suryadi D. Peningkatan Kemampuan Shooting Permainan Sepak Bola Melalui Latihan Kekuatan Otot Tungkai [Improving the Shooting Ability of Soccer Games Through Limb Muscle Strength Training]. J Pendidik Kesehat Rekreasi. 2022;8(2):237– 46. (In Indonesian) https://doi.org/10.5281/ zenodo.6684431
- 2. Carr J, Power MJ. More than a club, more than a game: the case of Diverse City. *Manag Sport Leis*. 2020;25(1–2):99–113. https://doi.org/10.1080/2375 0472.2019.1679039
- 3. Estevez QT, Donato FS. Analysis of the situation of women's grassroots football. The case of the Berguedà region. *Retos*. 2021;43:406–414. https://doi.org/10.47197/RETOS.V43I0.88486
- Perdana RP. Modifikasi Alat Latihan Menendang (Shooting) Dalam Permainan Sepak Bola [Modification of Kicking Training Equipment (Shooting) in Soccer Games]. Musamus J Phys Educ Sport. 2021;4(1):57–68. (In Indonesian). https://doi.

- org/10.35724/mjpes.v4i01.3945
- 5. Wijaya AWE. Manajemen pembinaan prestasi di sekolah sepak bola [Performance coaching management in soccer schools]. *J Olahraga dan Kesehat Indones*. 2021;2(1):27–33. (In Indonesian). https://doi.org/10.55081/joki.v2i1.542
- 6. Kalinowski P, Bezler A, Kubiak R, Zaporowski T, Szczepankiewicz M, Konarski JM. Efektywność a szybkość startowa młodych piłkarzy nożnych klubu Berliner TSC [Efficiency and starting speed of young footballers of the Berliner TSC club]. Aktywność Ruchowa Ludzi Różnym Wieku, 2017;2:95–104. (In Polish).
- 7. Milanović Z, Čović N, Helge EW, Krustrup P, Mohr M. Recreational Football and Bone Health: A Systematic Review and Meta-analysis. *Sport Med.* 2022;52(12):3021–37. https://doi.org/10.22487/tjsspe.v9i1.975
- 8. Laoh R, Hadjarati H, Hidayat S. Manajemen pembinaan prestasi sekolah sepak bola U-12 [U-12 soccer school achievement coaching management]. *Tadulako J Sport Sci Phys Educ.* 2021;9(1):59-69.

- (In Indonesian). https://doi.org/10.22487/tjsspe.v9i1.975
- 9. Bozkurt S, Çoban M, Demircan U. The effect of football basic technical training using unilateral leg on bilateral leg transfer in male children. *J Phys Educ.* 2020;31:1–10. https://doi.org/10.4025/jphyseduc. v31i1.3164
- 10. Mubarok MZ. Pengaruh Latihan Small Sided Games Mengunakan Metode Interval Terhadap Peningkatan Dribbling Pemain Sepakbola [The Effect of Small Sided Games Training Using the Interval Method on the Improvement of Dribbling Soccer Players]. Biormatika J Ilm Fak Kegur Dan Ilmu Pendidikan. 2019;5(02):144–149. (In Indonesian). https://doi.org/10.35569/biormatika.v5i02.513
- 11. Mulhadi T, Supriatna S, Taufik T, Rahayuni K. Survei Manajemen Latihan Olahraga Sepak Bola di SSB Satria Muda Kota Malang [Football Sports Training Management Survey at SSB Satria Muda Malang City]. *Sport Sci Heal*. 2022;4(6):539–550. (In Indonesian).https://doi.org/10.17977/um062v4i62022p539-550
- 12. Aziz OA, Adityatama F. Penerapan model taktis dalam permainan sepak bola guna meningkatkan keterampilan bermain [Application of tactical models in soccer games to improve playing skills]. *J Phys Educ Sport Sci.* 2020;2(3):24–8. (In Indonesian).
- 13. NST GZA, Adnan A. Tinjauan Keterampilan Teknik Sepakbola bagi Anak Usia Remaja pada Klub Sepakbola Garuda FC Kabupaten Pasaman [Review of Football Technical Skills for Adolescent Children at Garuda FC Football Club Pasaman Regency]. *JurnalPatriot*. 2019;1:56–62. (In Indonesian). https://doi.org/10.24036/patriot.v0i0.12
- 14. Irfan M, Yenes R, Irawan R, Oktavianus I. Kemampuan teknik dasar sepakbola [Basic soccer technique skills]. *J Patriot*. 2020;2(3):720–31. (In Indonesian). https://doi.org/10.24036/patriot. v2i3.664
- 15. Candra RD, Sulaiman, Hidayah T. Pengaruh metode latihan dan kemampuan motor educability terhadap hasil latihan teknik dasar sepakbola [The effect of training methods and motor educability on the results of basic soccer technique training]. *Journal Phys Educ Sport*. 2015;4(2):159–64. (In Indonesian). https://doi.org/10.15294/JPES.V4I2.9888
- 16. Herisman, Rahmat Z, Pranata DY. Survei pembinaan sepakbola binapora kota banda aceh tahun 2021 [Binapora football coaching survey of banda aceh city in 2021]. *J Ilm Mhs Pendidik*. 2022;3(2). (In Indonesian).
- 17. Dipiarsa PAA, Yunus M, Andiana O. Analisis Gerak Pada Shooting Menggunakan Punggung Kaki Dalam Olahraga Sepak Bola :Studi Kasus Pada Sekolah Sepakbola Putra Arema U-15 [Motion Analysis on Shooting Using the Instep in Soccer Sport: Case Study on Arema U-15 Boys Soccer School]. Sport Sci Heal. 2020;2(2):137–44. (In Indonesian).
- 18. Erfayliana Y, Wati OK. Tingkat Keterampilan Dasar Bermain Sepakbola Peserta Didik Kelas Atas Sekolah Dasar [Level of Basic Skills in Playing Football for Upper Grade Elementary School

- Students]. *TERAMPIL J Pendidik Dan Pembelajaran Dasar*. 2021;7(2):159–166. (In Indonesian). https://doi.org/10.24042/terampil.v7i2.8119
- 19. Fajrin SN, Agustiyawan A, Purnamadyawati P, Mahayati DS. Literature review: hubungan koordinasi terhadap keterampilan menggiring bola pada pemain Sepak Bola [Literature review: the relationship between coordination and dribbling skills in soccer players]. *Indones J Physiother*. 2021;1(1):6-12. (In Indonesian). https://doi.org/10.52019/ijpt.v1i1.2605
- 20. Khusaini A, Rufi'i, Cholid A. Pengaruh Program MFT dan Balke serta Pengetahuan Awal terhadap Kemampuan Menggiring Bola [Effect of MFT and Balke Program and Initial Knowledge on Dribbling Ability]. *J Pendidik Kesehat Rekreasi*. 2022;8(1):32-39. (In Indonesian). https://doi.org/10.5281/zenodo.5813481
- 21. Ardianda E, Arwandi J. LatihanZig-Zag Run dan Latihan Shuttle Run Berpengaruh Terhadap Kemampuan Dribbling Sepakbola [Zig-Zag Run Training and Shuttle Run Training Affect Soccer Dribbling Ability]. *Performa Olahraga*. 2018;3(01):32–41. (In Indonesian). https://doi.org/10.24036/jpo16019
- 22. Widodo A. Hubungan koordinasi mata-kaki dan kelincahan dengan kemampuan menggiring bola pada sekolah sepakbola bina bintang muda kepri [The relationship between eye-foot coordination and agility with dribbling ability at football school bina Bintang Muda Kepri]. *J Bola*. 2021;4(1):1–17. (In Indonesian). https://doi.org/10.31004/bola. v4i1.2282
- 23. Surisman Z, Ramadhan F, Jubaedi A. Hubungan kecepatan dan kekuatan otot tungkai terhadap keterampilan menggiring bola mahasiswa ukm sepakbola universitas lampung tahun 2019 [The relationship between speed and leg muscle strength on the dribbling skills of football ukm students at Lampung University in 2019]. *Sport Sci Educ Journal*, 2020;1(1). (In Indonesian). https://doi.org/10.33365/.v1i1.621
- 24. Saputra A, Yennes R. Hubungan Kelincahan Dan Kecepatan Dengan Kemampuan Dribbling Pemain Sekolah Sepakbola [Relationship between agility and speed with dribbling ability of soccer school players]. *Jurnal Patriot*. 2019;1:71–78. (In Indonesian). https://doi.org/10.24036/patriot. v0i0.14
- 25. Conte D, Scanlan AT, Dalbo VJ, Gang SZ, Smith MR, Bietkis T, Matulaitis K. Dribble deficit quantifies dribbling speed independently of sprinting speed and differentiates between age categories in pre-adolescent basketball players. *Biol Sport*. 2020;37(3):261–7. https://doi.org/10.5114/biolsport.2020.95637
- 26. Pratama M, Alnedral A, Sin T, Soniawan V. Metode circuit training berpengaruh terhadap kemampuan dribbling sepakbola [Circuit training method affects soccer dribbling ability]. *J Patriot*. 2020;2(3):874–84. (In Indonesian). https://doi.org/10.24036/patriot. v2i3.677

- 27. AF OF, Maesaroh S, Imam R, Murti E, Sulistiya F. Analisis kelincahan, kecepatan, dan koordinasi mata-kaki dengan kemampuan dribbling tim sepak bola uss (uir soccer school) [Analysis of agility, speed, and eye-foot coordination with dribbling ability of soccer team]. J *Sport Educ (JOPE)*2. 2021;3(2):137–45. (In Indonesian). https://doi.org/10.31258/jope.3.2.137-145
- 28. Basrizal R, Sin TH, Irawan R, Soniawan V. Latihan kelincahan terhadap peningkatan kemampuan dribbling pemain sepakbola [Agility training to improve the dribbling ability of soccer players]. *J Patriot*. 2020;2(3):769–81. (In Indonesian). https://doi.org/10.24036/patriot.v2i3.667
- 29. Rosyadi I, Iqbal M, Suyatno S. Hubungan Keseimbangan Dan Kelincahan Terhadap Keterampilan Menggiring Bola Dalam Permainan Futsal. [The Relationship Between Balance and Agility to Dribbling Skills in Futsal Games]. In: In Prosiding Seminar Nasional Pendidikan STKIP Kusuma Negara III. 2021. P. 139–44. (In Indonesian).
- 30. Herlambang M, Maulana F, Nurudin AA. Latihan Kecepatan, Kelincahan dan Keseimbangan Untuk Meningkatkan Kemampuan Dribbling Dalam Permainan Futsal [Training Speed, Agility and Balance to Improve Dribbling Ability in Futsal Game]. *J Educ FKIP UNMA*, 2022;8(4):1601–1606. (In Indonesian). https://doi.org/10.31949/educatio. v8i4.4047
- 31. Padrón-Cabo A, Rey E, Kalén A, Costa PB. Effects of Training with an Agility Ladder on Sprint, Agility, and Dribbling Performance in Youth Soccer Players. *J Hum Kinet*. 2020;73(1):219–28. https://doi.org/10.2478/hukin-2019-0146
- 32. Fetri F. Latihan Kelincahan Berpengaruh Terhadap Kemampuan Dribbling Sepakbola [Agility Training Affects Soccer Dribbling Ability]. 2019;1(3):1169–78. (In Indonesian). https://doi.org/10.24036/patriot.v1i3.421
- 33. Saputra DP, Ridwan M, S A, Arifan I, Arwandi J, Irawan R, Yudi AA, Soniawan V, Chan AAS. Pengaruh Latihan Kelincahan Terhadap Kemampuan Dribbling Pemain Sepakbola SSB Gelora Buana Kab. Kerinci. [The Effect of Agility Training on Dribbling Ability of Soccer Players SSB Gelora Buana Kab. Kerinci]. Athena Phys Educ Sport J. 2023;1(1):6–15. (In Indonesian). https://doi.org/10.56773/athena.v1i1.1
- 34. Prayoga NA, Ali M, Yanto AH. Pengaruh Latihan Variasi Kelincahan Terhadap Kemampuan Dribbling Pada Pemain SSB [The Effect of Agility Variation Training on Dribbling Ability in SSB Players]. *Indones J Sport Sci Coach*. 2022;4(2):119–32. (In Indonesian). https://doi.org/10.22437/ijssc.v4i2.19356
- 35. Doewes RI, Purnama S, Syaifullah R, Nuryadin I. The effect of small sided games training method on football basic skills of dribbling and passing in indonesian players aged 10-12 years. *Int J Adv Sci Technol*. 2020;29(3):429–41.
- 36. Endang Sepdanius, Muhamad Sazeli Rifki, Anton Komaini. Tes Dan Pengukuran Olahraga [Sports Tests and Measurements]. *Depok: PT RajaGrafindo Persada*; 2019. (In Indonesian).

- 37. Khozim N, Nugroho RA. Hubungan bmi dan kelincahan terhadap keterampilan menggiring bola peserta ekstrakurikuler sepakbola [The relationship between BMI and agility on the dribbling skills of extracurricular soccer participants]. *Sport Sci Educ Journal*. 2022;3(2). (In Indonesian). https://doi.org/10.33365/ssej.v3i2.2220
- 38. Duncan MJ, Martins R, Noon M, Eyre ELJ. Perception of Affordances for Dribbling in Soccer: Exploring Children as Architects of Skill Development Opportunity. *Sports.* 2022;10(7):99. https://doi.org/10.3390/sports10070099
- 39. Fatchurrahman F, Sudijandoko A, Widodo A. The comparison of the effect of ladder drills in out training and ladder drills ickey shuffle exercises on increasing speed and agility. *Jurnal Sport J Penelit Pembelajaran*. 2019;5(1):154–65. https://doi.org/10.29407/js\_unpgri.v5i1.12753
- 40. Altmann S, Ringhof S, Neumann R, Woll A, Rumpf MC. Validity and reliability of speed tests used in soccer: A systematic review. *PLoS One*. 2019;14(8):e0220982. https://doi.org/10.1371/journal.pone.0220982
- 41. Booysen MJ, Bentel D, Harry K, Gradidge PJL. Anthropometric variables and physical fitness characteristics of male South African semi-professional footballers. *South African J Res Sport Phys Educ Recreat*. 2018;40(2):11–21. https://doi.org/10520/EJC-1085e24c75
- 42. Zakiuddin AR, Husin S, Sitepu A. Pengaruh Latihan Shuttle Run dan Lari The Corner Drill Terhadap Kelincahan [The Effect of Shuttle Run and The Corner Drill Running on Agility]. *JUPE: Physical Education UN*, 2019;7(1)1–10. (In Indonesian).
- 43. Cunningham D, West D, Owen N, Shearer D, Finn C, Bracken R, Crewther B, Scott P, Cook C, Kilduff L. Strength and power predictors of sprinting performance in professional rugby players. *J Sport Med Phys Fit.* 2016;53:105–11.
- 44. Hamzah H. Hubungan kelincahan dengan kemampuan dribbling dalam permainan sepakbola di klub ssb gemilang [The relationship between agility and dribbling ability in soccer games at the club ssb gemilang]. *J olahraga inragiri*. 2019;4(1):57–69. (In Indonesian).
- 45. Maulana A. Pengaruh Latihan Three Corner Drill Terhadap Peningkatan Kelincahan Gerak Shadow [The Effect of Three Corner Drill on Increasing Shadow Movement Agility]. *J og Educ Sport Sci.* 2020;1(1). (In Indonesian).
- 46. Domaradzki J, Popowczak M, Zwierko T. The Mediating Effect of Change of Direction Speed in the Relationship between the Type of Sport and Reactive Agility in Elite Female Team-Sport Athletes. *J Sports Sci Med.* 2021;20(4):699–705. https://doi.org/10.52082/jssm.2021.699
- 47. Imron M, Wismanadi H. Pengaruh perbedaan latihan zig zag run dan shuttle run terhadap kelincahan pemain futsal [The effect of differences in zig zag run and shuttle run training on the agility of futsal players]. *J Kesehat Olahraga*. 2022;10(02):137–144. (In Indonesian).

- 48. Hasani ABN, Ardiansah A. Efektivitas latihan lari zig-zag dengan shuttel run terhadap kelincahan pada pemain sepakbola di sman keberbakatan olahraga makassar [The effectiveness of zig-zag running training with shuttle run on agility in soccer players at sman sports specialization Makassar]. *Media Kesehat Politek Kesehat Makassar*. 2022;17(2):169–179. (In Indonesian). https://doi.org/10.32382/medkes.v17i2.2822
- 49. Makhlouf I, Tayech A, Haddad MAMM, Behm DG, Granacher U, Chaouachi A. Reliability and validity of a modified Illinois change-of-direction test with ball dribbling speed in young soccer players. *Biol Sport*. 2022;39(2):295–306. https://doi.org/10.5114/biolsport.2022.104917
- 50. Suryadi D, Rubiyatno. Kebugaran jasmani pada siswa yang mengikuti ekstrakulikuler futsal [Physical fitness in students who take part in futsal extracurricular activities]. *J Ilmu Keolahragaan*. 2022;5(1):1–8. (In Indonesian). https://doi.org/10.26418/jilo.v5i1.51718
- 51. Suryadi D. Analisis kebugaran jasmani siswa: Studi komparatif antara ekstrakurikuler bolabasket dan futsal [Analysis of students' physical fitness: Comparative study between basketball and futsal extracurriculars]. *Edu Sport Indones J Phys Educ*. 2022;3(2):100–10. (In Indonesian). https://doi.org/10.25299/es:ijope.2022.vol3(2).9280
- 52. Suryadi D, Samodra YTJ, Purnomo E. Efektivitas latihan weight training terhadap kebugaran jasmani [The effectiveness of weight training exercises on physical fitness]. *J RESPECS*. 2021;3(2):9–19. (In Indonesian). https://doi.org/10.31949/respecs. v3i2.1029

- 53. Saputra E, Putra ME, Rianto L, Tjahyanto T, Widiyati R, Aziz I. Profil kebugaran jasmani pada mahasiswa yang mengikuti latihan beban: Yo-yo intermittent test level 1 [Physical fitness profile of students participating in weight training: Yo-yo intermittent test level 1]. *Tanjungpura J Coach Res.* 2023;1(1):18–23. (In Indonesian). https://doi.org/10.26418/tajor.v1i1.63856
- 54. Samsudin S. Pengaruh Kelincahan dan Kekuatan Otot Lengan terhadap Kemampuan Menggiring Bola dalam permainan bola basket Pada siswa Ekstrakurikuler SMP Negeri 3 Belo [The Effect of Agility and Arm Muscle Strength on the Ability to Dribble the Ball in a Basketball Game for Extracurricular Students at Belo 3 Public Middle School]. *J Pendidik OLAHRAGA*. 2022;12(1). (In Indonesian).
- 55. Hulteen RM, Smith JJ, Morgan PJ, Barnett LM, Hallal PC, Colyvas K, Lubans DR. Global participation in sport and leisure-time physical activities: A systematic review and meta-analysis. *Prev Med (Baltim)*. 2017;95:14–25. https://doi.org/10.1016/j. ypmed.2016.11.027
- 56. Fasha LV, Giartama G, Aryanti S. The Effect of Zig-Zag Run Training on The Results of Ball Dribbling Agility. *Prosiding Seminar Nasinoal "Peran Sport Science Pada Masa Pandemi Covid-19"*, 2021;1(1): 8–17.
- 57. França C, Gouveia É, Caldeira R, Marques A, Martins J, Lopes H, Henriques R, Ihle A. Speed and Agility Predictors among Adolescent Male Football Players. *Int J Environ Res Public Heal*. 2022;19(5):2856. https://doi.org/10.3390/ijerph19052856

#### Information about the authors:

**Didi Suryadi;** Postgraduate Sport Science; https://orcid.org/0000-0002-0206-9197; didisurya1902@gmail.com; Faculty of Sport Science, Yogyakarta State University; Yogyakarta, Indonesia.

**Ardo Okilanda;** (*Corresponding Author*); https://orcid.org/0000-0001-6052-703X; ardo.oku@fik.unp.ac.id; Department of Coaching, Faculty of Sport Science, Padang State University; Padang, Indonesia.

**Novi Yanti;** https://orcid.org/0000-0002-5994-2153; noviyanti@fkip.untan.ac.id; Department of Sports Science, Faculty of Teacher Training and Education, Tanjungpura University; Pontianak, Indonesia.

**Mikkey Anggara Suganda;** https://orcid.org/0000-0003-1764-3646; mikkey-anggara-suganda@unucirebon. ac.id; Department of Physical Education, Faculty of Teacher Training and Education, Nahdlatul Ulama University Cirebon; Cirebon, Indonesia.

**Mashud;** https://orcid.org/0000-0003-3107-7134; mashud@ulm.ac.id; Postgraduate Physical Education, Faculty of Teacher Training and Education, Lambung Mangkurat University; Banjarmasin, Indonesia.

**I Gusti Putu Ngurah Adi Santika;** https://orcid.org/0000-0001-7873-0060; ngurahadisantika@gmail.com; Department of Physical Education, Health and Recreation, FKIP, PGRI Mahadewa University; Bali, Indonesia.

**Kadek Dian Vanagosi**; https://orcid.org/0009-0003-1954-3320; kadekvanagosi@gmail.com; Department of Physical Education, Health and Recreation, FKIP; PGRI Mahadewa University; Bali, Indonesia.

**Riyan Hardinata**; https://orcid.org/0000-0001-7504-8824; hardinata.riyan1239@gmail.com; Department of Physical Education, Faculty of Teacher Training and Education, Lambung Mangkurat University; Banjarmasin, Indonesia.

#### Cite this article as:

Suryadi D, Okilanda A, Yanti N, Suganda MA, Mashud, Ngurah Adi Santika IGP, Vanagosi KD, Hardinata R. Combination of varied agility training with small sided games: How it influences football dribbling skills? *Pedagogy of Physical Culture and Sports*, 2023;27(3):190–197. https://doi.org/10.15561/26649837.2023.0302

This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited (http://creativecommons.org/licenses/by/4.0/deed.en).

Received: 02.04.2023

Accepted: 30.04.2023; Published: 30.06.2023