

## The Effects of Agility Exercise and Eye-Foot Coordination against The Dribbling Capability Football Training Players Bintang Pelajar

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### Abstract

The purpose of this study is to know and analyze the effect of agility training and eye-foot coordination (experimental study of T-Drill training and 40 Yard Ladder Sprint on the football star student training players in Semarang in 2018. This research method is an experiment with a 2x2 factorial design. Data analysis technique using Analysis of Variance (ANOVA) at significance level ( $\alpha$ ) 0.05. Independent variable in this research that is T-Drill and 40 Yard Ladder Sprint Training of high and low eye-foot coordination as attribute variable and dependent variable the dribbling skills. The population in this study is Football Training Players Bintang Pelajar of Semarang district in 2018 which amounted to 60. The sampling technique using purposive sampling with then number of samples of 40 players. The results of this study: There is a significant influence difference between T-Drill and 40 Yard Ladder Sprint against dribbling ability with sig value  $(0.004) < \alpha(0.05)$  and  $F_{\text{value}} (9.758) > F_{\text{table}} (5.117)$ , There is influence between high and low eye-foot coordination with dribbling ability where significant value  $(0.010) < \alpha(0.05)$  and  $F_{\text{value}} (7.374) > F_{\text{table}} (5.117)$ . There is no significant interaction between agility training and eye foot coordination on dribbling ability with sig value  $(0.231) > \alpha(0.05)$  and  $F_{\text{value}} (1.487) < F_{\text{table}} (5.117)$ .

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## INTRODUCTION

Football sport has undergone many changes and developments from a simple form to become a popular soccer game that is liked and loved by the public (Beni Apriansyah, 2017). M. Al-Ghani (2017) said that football is a team game in which a team consists of 11 players which consists of a goalkeeper. To play soccer well every player must master some basic techniques in playing football, such as herding, feeding, controlling the ball (stopping), shooting, heading, snatching the ball and goalkeeping techniques (Yasriuddin, 2012).

Sadik (2016) said that the basic techniques or skills in the game of football: Passing (kicking ball technique), stopping (stopping technique and ball control), dribbling (dribbling technique) Football game itself when we observe one of the important basic techniques is dribbling (Apriansyah, 2017).

A football player is required to have good basic technical mastery because it is a major requirement to become a quality player and have a high skill in the game of football. The explanation above can be deduced that the dribbling skill is one of the basic techniques in soccer game, the dribbling skills are indispensable for mastering the game and initiating a team initiating an attack.

Dribbling is one of the most important basic techniques in a soccer game (Tri Sutrisno, 2015). The dribbling technique is basically dribbled foot. Many soccer players have the ability to dribble above average, even with their excellent dribbling ability becomes easier to get past the opponent when the ball is over (Wahyu Jayadi, et al. 2015).

Effortsto improve the basic techniques of playing football, physical condition also play an important role.

Physical conditions associated with aerobic and anaerobic capacity is what plays an active role in football (Nafis Ali Kafas, 2012).

Doing dribble motion well, it takes the element of physical condition consisting of speed, speed, agility, coordination, balance, power, the formation that can not be separated from dribble

is a moving technique aims to deceive the opponent or reduce the balance of the opponent, so the dribble movement (dribble) is needed level of agility (very high) on a football player.

Agility according to Rubianto Hadi (2007) is the ability to change the direction of body or body parts quickly without losing balance. Agility is one element of physical condition that is influenced by speed, strength, and flexibility (Viki Widiantoro, 2017).

Agility is very important for sports that require high adaptability to changes in the situation in the game. The required agility has certain characteristics according to the demands of a particular sport (Restu Yoga, 2016).

On the basis of these explanations, it is necessary that there are forms of exercise that can improve one of the abilities of the physical condition of agility that can improve the speed of dribbling on the game of football. Improving the ability of techniques can be done on the development of early age to the next age which can be expected to improve football achievement.

An important aspect of improving the ability is to conduct coaching and training, especially in improving football achievement in Indonesia (Wahyu Hidayat, 2015). Achievement of peak achievement can be achieved if the athlete coaching through the stages beginner level to athlete achievement or from the stage of an early age to adulthood. Achieved sports achievement is an accumulative result of various aspects of the business, in addition to achieving sports achievements require a relatively long process of them through training or training that is professionally managed (Gunawan, 2013).

Exercise is the process of preparing physically and mentally train children systematically to achieve the optimal performance quality with given the burden of regular practice, directed, increased, and repeatedly the time (Samsudin, 2017). Exercise is an exercise material designed and developed by a trainer for one practice session or one-on-one in the exercise. It is therefore important that the trainer understands and applies the Individualization principle to the implementation

of the exercise program activity (Radita Dwi Candra, 2015).

There are two coordinations in football game, first is motion coordination between hands, feet, and eyes (M. M. Faruq, 2008). Coordination is required in almost all sports and games. The level of whether or not a person's motion coordination is reflected in his ability to perform a movement smoothly, precisely, quickly, and efficiently. Thus can be said good eye-foot coordination is a requirement in the effort achievement of the maximum achievement for players in the practice of playing soccer skills, in this case, is the ability to dribble.

The ability to dribble players Football Training Bintang Pelajar Semarang district has an average of 22.31 seconds which, including the medium-capacity category that still needs to be improved to be better and even be very good. Besides passing the observation data is also done an interview with the trainer training Bintang Pelajar Drs. Widodo Mulyo and Ahmad Mbolo obtained information to perform achievement coaching is not quite satisfied with the achievements that have been achieved so far there is still much to be fixed and developed one of them with dribble skills (dribble).

Football Training Bintang Pelajar Semarang district especially for players in terms of dribbling skills are still not maximized, seen in a series of official matches, trials, or training players still often lose the ball as they dribble at speed, dribble past the opponent, and dribble to move the direction of the game. In the exercise that was also never given a form of agility training combined with dribbling to improve dribbling skills, one of which is a form of T-Drill training and 40 Yard Ladder Sprint.

## METHODS

This research is a quasi-experimental research that aims to compare two different treatments to the research subject by using factorial design technique. The data in this research compiled a research design framework with a 2x2 factorial design. Data analysis technique using Analysis of Variance (ANOVA) at

the significance level ( $\alpha$ ) 0.05. The population in this study is the Football Training players Bintang Pelajar Semarang district year 2018 which amounted to 60 players. The sample in this study is the Training players Bintang Pelajar Semarang district year 2018 a total of 40 players. Sampling technique in this research is by using Purposive Sampling. The independent variables in this research are T-Drill and 40 Yard Ladder Sprint. Attribute variables in this research are high and low eye-foot coordination. The dependent variable in this study is the dribbling ability. The data retrieval technique is carried out by tests and measurements, to obtain objective data. To measure eye-foot coordination was measured by a Soccer Wall Voley Test test (M.M Faruq, 2015) and to measure the dribbling ability using a dribbling instrument (Nur Hasan, 2007). Data analysis technique used is the technique of variance analysis (ANOVA) 2x2 factorial design at  $\alpha = 0.05$ . If the  $F_{\text{value}}$  obtained ( $F_o$ ) is significant the analysis is continued with a Hewman-Keuls range test (Sudjana, 2002). To fulfill the assumption in the ANOVA technique, the normality test is performed (Kolmogorov Smirnov test) and Homogeneity Variance test (leavene's test) (Sudjana, 2002). Hypothesis test using analysis test General Linear Model (GLM) Two Way Anovawith the help of program SPSS 16.0.

## RESULTS AND DISCUSSION

Hypothesis test using GLM test (two-way ANOVA) to know whether or not dribbling ability after being given different training. The research hypothesis is accepted if the significance value is less than 0.05 ( $\text{sig} < 0.05$ ) if the sig value is greater than 0.05 ( $\text{sig} > 0.05$ ) then the research hypothesis is rejected.

The results of testing the first research hypothesis, it is evident that there is a significant difference of influence between T-Drill training methods and 40 Yard Ladder Sprint on the ability to dribble players Football Training Bintang Pelajar Semarang regency year 2018 with  $F_{\text{value}} = 9.758$  with a significance value of 0.004, with a significance level of  $0.004 < 0.05$ . T-Drill

practice method is better than 40 Yard Ladder Sprint in improving dribbling ability.

T-Drill practice method has an average increase in dribbling ability of 16.67 seconds, while the practice method of 40 Yard Ladder Sprint has an average of 17.46 seconds. An average increase in dribbling ability on Football Training players Bintang Pelajar Semarang regency year 2018 which performs T-Drill training methods greater than the 40 Yard Ladder Sprint practice and has a very significant difference. So the T-Drill practice method is better to increase the dribbling speed of the 40 Yard Ladder Sprint practice.

The result of the second hypothesis test shows that there is a difference of influence between students who have high eye-foot coordination with students who have low eye-foot coordination on dribbling ability. Evident from the results of ANOVA test with  $F_{\text{value}} = 7.374$  with a significance value of 0.010. With a significance level of  $0.010 < 0.05$ .

Football Training Players Bintang Pelajar Semarang regency year 2018 which has high eye-foot coordination has an average increase in dribbling ability is greater than the Football Training players Bintang Pelajar Semarang regency which has low eye-foot coordination, but the difference in the increase is significant.

The result of the third hypothesis testing there is no interaction between agility drills (T-Drill and 40 Yard Ladder Sprint) and eye-foot coordination on dribbling ability on Football Training players Bintang Pelajar Semarang regency year 2018. The results of the analysis show that there is no interaction between agility drills (T-Drill and 40 Yard Ladder Sprint) and eye-foot coordination of dribbling ability on Football Training players Bintang Pelajar Semarang regency year 2018. Evident from the results of ANOVA test with  $F_{\text{value}} = 1.487$  with a significance value of 0.231. With a significance level of  $0.231 > 0.05$ . Football Training Players Bintang Pelajar Semarang regency year 2018 of the statement above can be stated there is no significant interaction between exercise (T-Drill and 40 Yard Ladder Sprint) and eye-to-eye coordination of dribbling ability.

This study uses T-Drill exercises, in which The T-Drill exercise in this study is adjusted to the dribbling motion, by replacing the shuffle and back paddle movements by using only one motion of run movement accompanied by dribbling. Procedure in doing T-drill exercises is Begin in standing stance with parallel legs, Run forward 10 yards by dribbling to the marked spot on the ground, Run dribble side ways by shifting the foot to the right side and passing a line 5 yards away, the ball side ways back to the left side which is 10 yards and over the line, Run away side ways back to right with in 5 yards to the marked spot, Skip the point marked by sprinting by dribbling 10 yards through the starting line to finish.

The 40 Yard Ladder Sprint exercise is a combination of bio-motor abilities during exercise on each leg, starting exercises from various positions with additional tumbling while spinning. These 40 Yard Ladder Sprint agility drills do it with a combined dribble. This training procedure starts standing on the start line, jogging 5 yards with dribbling on the first line, turning on the starting line, this is done the same but the distance is different from 10 yards, then run dribble back 5 yards as before to finish.

## CONCLUSION

From the analysis results obtained the following conclusions: There is a difference in the effect of T-Drill training and 40 Yard Ladder Sprint on the ability of Dribbling Football Players Bintang Pelajar Semarang regency year 2018, There is a difference in the ability of Dribbling Football Bintang Pelajar Semarang regency year 2018 which has high and low eye-foot coordination, There is no significant interaction between exercise (T-Drill and 40 Yard Ladder Sprint) and eye-to-foot coordination on the ability of Football Players Dribbling Bintang Pelajar Semarang regency year 2018. Based on the conclusions of the results of this study, it can be submitted suggestions as follows: For further researchers who are interested in doing similar research should use a larger population so that the results obtained can be generalized more broadly,

For coaches to train the ability to dribble using the form of agility exercises to need to categorize groups that have eye-foot coordination high and low so that the process of training is more optimal because agility and eye to eye coordination affect the improvement of dribbling ability, For the coach should be given the exercise varies between T-Drill with 40 Yard Ladder Sprint recall these two types of exercises are just as good at improving dribbling ability.

## REFERENCES

- Apriansyah, B., Sulaiman, & Siti, B. M. (2017). Kontribusi Motivasi, Kerjasama, Kepercayaan Diri terhadap Prestasi Atlet Sekolah Sepakbola Pati *Training Center* di Kabupaten Pati. *Journal of Physical Education and Sports*, 6(2), 101-107. Retrieved from <https://journal.unnes.ac.id/sju/index.php/jpes/article/view/17358>
- Candra, R. D., Sulaiman, & Hidayah, T. (2015). Pengaruh Metode Latihan dan Kemampuan Motor Educability terhadap Hasil Latihan Teknik Dasar Sepakbola. *Journal of Physical Education and Sports*, 4(2). Retrieved from [https://journal.unnes.ac.id/artikel\\_sju/jpes/9888](https://journal.unnes.ac.id/artikel_sju/jpes/9888)
- Hidayat, W. & Setya, R. (2015). Evaluasi Program Pembinaan Prestasi Sepakbola Klub Persibas Banyumas. *Journal of Sport Sciences and Fitness*, 4(2). Retrieved from [https://journal.unnes.ac.id/artikel\\_sju/jssf/6307](https://journal.unnes.ac.id/artikel_sju/jssf/6307)
- Jayadi, W., Sukamto, & Hasbunallah. (2015). Latihan Kelincahan dan Latihan Menggiring Bola pada Permainan Sepakbola. *Jurnal Penelitian Pendidikan INSANI*, 18(2), 137-142. Retrieved from <http://ojs.unm.ac.id/Insani/article/view/3642>
- Kafas, N. A., Tri, R., & Mohamad, A. (2012). Korelasi Denyut Nadi Istirahat dan Kapasitas Vital Paru terhadap Kapasitas Vital Aerobik. *Journal of Physical Education, Sport, Health and Recreation*, 1(4). Retrieved from [https://journal.unnes.ac.id/artikel\\_sju/peshr/511](https://journal.unnes.ac.id/artikel_sju/peshr/511)
- M. Al Ghani. (2017). Pengaruh Latihan Resistance Band dan *Power Tungkai* terhadap Peningkatan Hasil Tendangan Lambung dalam Sepakbola pada Atlet SSB Sriwijaya Asah *Soccer U-15* Palembang. *Journal Physical Education*. ISSN 2502-4477.
- Faruq, M. (2008). *Meningkatkan Kebugaran Tubuh dan Olahraga Sepakbola*. Surabaya: Grasindo.
- Faruq, M. M. (2015). *Tes dan Pengukuran dalam Olahraga*. Yogyakarta: CV Andi Offset.
- Nur, H. (2007). *Tes dan Pengukuran*. Bandung: Sajala.
- Rubianto, H. (2007). *Ilmu Kepeleatihan Dasar*. Semarang: Cipta Prima Nusantara
- Sadik. (2016). Upaya Meningkatkan Keterampilan *Dribble* Bola dalam Permainan Sepakbola dengan Metode *Student Teams Achievement Division*. *Jurnal Sportif*, 2(1), 87-92. Retrieved from <http://ojs.unpkediri.ac.id/index.php/pjk/article/view/659>
- Samsudin, & Furkan. (2017). Pengaruh Latihan Kelincahan terhadap Keterampilan Menggiring Bola dalam Permainan Sepakbola. *Jurnal Pendidikan Olahraga*, 7(1). Retrieved from <http://jurnal.lppmstkiptsb.ac.id/index.php/jpo/article/view/57>
- Sudjana. (2002). *Metode Statistika*. Bandung: Tarsito.
- Sugiyono. (2011). *Metode Penelitian Kuantitatif, Kualitatif dan RnD*. Bandung: Alfabet.
- Sutrisno, T. (2015). *Hubungan antara Kecepatan dan Kelincahan dengan Kemampuan Menggiring Bola dalam Permainan Menggiring Bola*. Kediri: Universitas Nusantara PGRI Kediri
- Ulfiansyah, F. N., Kumbul, S. B., & Kriswanto. (2015). Pengaruh Latihan Reaksi Bervariasi dan Tetap terhadap kecepatan Reaksi Penjaga Gawang. Semarang. *Unnes Journal of Sport Sciences*, 4(2). Retrieved from <https://journal.unnes.ac.id/sju/index.php/ujs/article/view/8644>
- Widiantoro, V., Sahri, & Sugiarto. (2017). Hubungan Lengkung Telapak Kaki dengan Kelincahan. *Jendela Olahraga*, 2(1). Retrieved from <http://journal.upgris.ac.id/index.php/jendelaolahraga/article/view/1290>
- Yasriuddin. (2012). Survey Keterampilan Bermain Sepakbola Siswa SMA Negeri 3 Sungguminasa Kabupaten Gowa. *Jurnal ILARA*, 3(2). Retrieved from <http://digilib.unm.ac.id/files/disk1/10/universitas%20negeri%20makassar-digilib-unm-yasriuddin-453-1-9.yasri-k.pdf>
- Yoga, R. S. (2015). Hubungan Antara Kecepatan Kelincahan dan Daya Tahan Kardiorespirasi dengan Keterampilan Bermain Futsal. *Skrripsi*. Yogyakarta: Universitas Negeri Yogyakarta. Retrieved from <http://eprints.uny.ac.id/37761>