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The effect of ball feeling training on dribbling skills in novice soccer athletes

Ahmad Atiq[1], Victor G Simanjuntak[1], Wiwik Yunitaningrum[1], Muhammad Ali[2]
[1]Tanjungpura University, Pontianak, Indonesia
[2] Jambi University, Indonesia

Abstract
This study aims to determine the effect of ball feeling training on dribbling skills in novice soccer athletes. This research is an experimental research. This study used a One-Group Pretest-Posttest design, where one group was observed and then treated. This design test was carried out twice, namely before the experiment and after the experiment. The test that is done before the experiment is called the pre-test, and the test after the experiment is called the post-test. The population of this study were 20 soccer athletes in Pontianak. While the sample of this research is 20 football athletes in Pontianak. The instrument in this study was divided into 2 parts, namely the measurement instrument and the treatment instrument. The test instrument used to measure the results of the ability to dribble is the dribbling test and the instrument used to measure the results of dribbling is the stop time in seconds. The training instrument (training program) used in the ability to dribble is the ball feeling exercise. Based on the results of the study, it shows that there is a significant effect of ball feeling training on the ability to dribble ball feeling. This is indicated by the significant data count between the post-test results and the pretest results is 0,000 which means it is smaller than 0.05 (0,000 <0.05). The results of the data analysis show that the mean posttest value for players who dribble soccer is smaller than the mean pretest for players who carry out soccer dribbling activities without using ball feeling exercises or (26.70 <30.30). So it can be concluded that ball feeling training can improve dribbling skills in novice soccer athletes.

Keywords: ball feeling exercise, ball dribbling skills, beginner soccer athletes

Introduction

Football is also one of the most popular sports in today's society (Muryadi, 2015) [13]. Football games are games played in a field with a total number of players by 11 players including goalkeepers (Ayubi, 2017) [5]. In the early stages of coaching, players are focused on mastering the basic techniques which are the initial capital in this sport. With good basic techniques, it will be easier for players to develop their individual abilities (Efendi, 2016) [6].

The basic techniques in soccer include: dribbling, passing the ball, kicking the ball, controlling the ball (Handoko, 2018) [8]. These techniques are very much needed in soccer. One of the techniques often used in soccer games is dribbling (Mappaompo, 2012) [11]. Dribbling is defined as a running motion using the foot to push the ball so that it rolls over the field. Dribbling is an absolute individual skill and must be mastered by every soccer player, because the ability to dribble is very much needed in individual player skills (Siregar *et al*., 2018) [18].

In addition to the basic technique of dribbling, one of the important components that players must master in soccer is control of the ball against the feet (Zago *et al*., 2016) [22]. Mastery of the ball against the feet can be trained using ball feeling exercises (train the feeling of the ball). Ball feeling is a form of good training for young players (Meckel *et al*., 2012) [12], because usually these young players do not have a good calculation so they often have difficulty controlling the ball (Hong *et al*., 2019) [9]. By having a good ball feeling, a player will feel connected to the ball and will be younger in possession of the ball (Tjomsland *et al*., 2016) [19]. Usually players who have mastered the ball feeling technique will create many variations of new movements in dribbling (Redwood-Brown *et al*., 2018) [15].

Ball feeling training is basically an introduction to the ball or often known as full ball possession under any circumstances (NST & Adnan, 2019) [14]. The ball can be controlled and can remain within a single player's line during play (Santoso, 2014) [16]. This exercise must be straightforward using the ball, one player one ball (Aprianova, 2016) [2]. Players are emphasized on understanding the motion or reflection produced by the ball. The impact of the ball on the body part desired by each player must be fully felt and understood (Wardana *et al*., 2018) [21]. The meaning that it can be fully felt and understood is that if one touches it with one part of the body such as the back of the foot or thigh (Festiawan *et al*., 2019) [7], the player can still control the ball by knowing in advance the reflection or direction of the ball (Unnithan *et al*., 2012) [20].

Based on the results of observations, it is indicated that the football athletes in Pontianak still seem to have very low ball feeling skills, even though the ability to master the ball feeling is good (Atiq, 2018) [4]. It will be easier for these players to do new techniques in soccer games and do it with great enthusiasm (Saputra *et al*., 2015) [17].

The following are forms of ball feeling exercises according to (Irianto & Yudhistomo, 2020) [10] including: (1) Alternately stomp the ball using the sole of the shoe, this form of exercise is the most basic and easy form of ball feling exercise (Andika *et al*., 2014) [1]. Students only step on the ball using their right and left fe *et al.* ternately, to feel the first touch on the ball. (2)

Rocking the ball between the two legs, that is, the ball between the legs then rolling it with the inner foot one after another, over and over. (3) Ball feeling with the sole of the shoe moving to bring the ball forward, is a form of ball feeling that is almost similar to the form of stomping the ball, but this movement is combined with moving the ball forward or backward. (4) Pulling the ball to the side using the sole of the shoe, which is a ball feeling exercise with the initial position of the body sideways and the ball is placed under the sole of the foot, then the ball is rolled forward using the sole of the shoe or the sole of the foot. Furthermore, the movement is carried out repeatedly and alternately from the right leg first then continued using the left leg.

Ball feeling is a form of training to improve the ability to dribble the ball that does not require a lot of space and wide space so that it is not boring for players due to variations in training. Therefore, researchers are interested in conducting research through ball feeling exercises. So the title taken by the researcher in this study is the exercise of ball feeling towards dribbling skills in novice soccer athletes.

Methods

In this study using the One-Group Pretest-Posttest design, one group was observed and then treated. According to (Arikunto, 2019) [3] in this design the test was carried out twice, namely before the experiment and after the experiment. The test conducted before the experiment (O1) is called the pre-test, and the test after the experiment (O2) is called the post-test. The following is the intended design image:

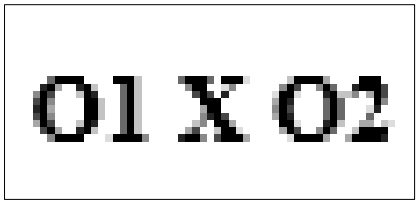

Fig 1: One-group pretest-posttest design

Information

O1 = Pretest value (before being given treatment)

X = Treatment

O2 = Posttest value (after being given treatment)

The population of this study were 20 soccer athletes in Pontianak. While the sample of this research is 20 football athletes in Pontianak. The instrument in this study was divided into 2 parts, namely the measurement instrument and the treatment instrument. The test instrument used to measure the results of the ability to dribble is the dribbling test and the instrument used to measure the results of dribbling is the stop time in seconds. The training instrument (training program) used in the ability to dribble is the ball feeling exercise.

Results and Discussion

Pretest data is data that comes before the load or treatment of an exercise is held. The pretest is a preliminary test to get the value or result of a measurement, in this case the test to dribble over an obstacle as far as 20 meters with a recording of the time per second.

Table 1: Descriptive pretest statistics

Number	Statistics	Pretest
1	N	20 people
2	Mean	30.30 seconds
3	Median	30.50 seconds
4	Modus	33 seconds
5	Minimum	24 seconds
6	Maksimum	35 seconds
7	Sum	606 seconds

Based on table 2 above, it is known that the maximum value is 35, the minimum value is 24, the average value is 30.30, the middle value is 30.50, and the value that often appears is 33.This shows that novice football athletes in Pontianak have not reached the time of driving ball well, the description of the research results can be seen in the table below:

Table 2: Frequency distribution of the dribbling pretest

Number	Interval class	Frequency	Percentage
1	24-26 seconds	4	20%
2	27-28 seconds	4	20%
3	30-32 seconds	4	20%
4	33-35 seconds	4	20%
5	36-38 seconds	4	20 %
	Amount	20	100%

Based on table 2 of the results of the pretest research dribbling in the frequency distribution table, the results: 24-26 second value there are 4 players (20%), 27-29 seconds value there are 4 players (20%), 30 - 32 seconds value there are 4 players (20%), a score of 33 - 35 seconds there are 4 players (20%), a value of 36 - 38 seconds there are 4 players (20%). Posttest data

Posttest data is data that comes after the load or treatment of an exercise is held. Posttest is a final test to get the value or result of a measurement, in this case the test to dribble over an obstacle as far as 20 meters with a recording time per second. The following is the statistical data from the posttest results and can be seen in table 3:

Table 3: Descriptive postest statistics

Number	Statistics	Posttest
1	N	20 people
2	Mean	26.70 Seconds
3	Median	27.50 Seconds
4	Modus	27.50 Seconds
5	Minimum	20 Seconds
6	Maksimum	31 Second
7	Sum	534 seconds

Based on table 3 above, it is known that the maximum value is 31, the minimum value is 20, the average value is 26.70, the middle value is 27.50, and the value that often appears is 29. This shows that novice football athletes in Pontianak have not reached the time of driving speed. ball well. The description of the research results can be seen in the table below:

Table 4: Frequency distribution of the posttest dribbling

Number	Interval class	Frequency	Percentage
1	20 – 22 seconds	3	15%
2	23 – 25 seconds	5	25%
3	26 – 28 seconds	4	20%
4	29 – 31 seconds	4	20%
5	32 - 33 seconds	4	20%
	Amount	20	100%

Based on table 4. results of posttest research dribbling in the frequency distribution table, the results: values 20-22 are 3 players (15%), scores 23-25 are 5 players (25%), scores 26-28 there are 4 players (20%)), scores 29 - 31 there are 4 players (20%), values 32 - 33 there are 4 players (20%).

1. Normality Test

The normality test is carried out to test whether the sample comes from a population that is normally distributed or not. Statistical analysis using Kolmogrov Smirnov was carried out with the SPSS 20 program. Because the data is included in the interval data. The distribution that will be tested for normality is the two data pretest and posttest. After calculating the normality test from the test data, the following results were obtained:

Table 5: Normality test results

Number	Data	Significant (p)	Conclusion
1	Pretest	0,121	Data is normally distributed
2	Posttest	0,200	Data is normally distributed

Based on table 5 above, it can be concluded that the pretest and posttest data of the test subjects who were given ball feeling training were normally distributed, because the Kolmogorov-Smirnov column stated that the pretest data sig value was 0.121 and the postest data sig was 0.200, both significant data is greater than the significance of 0.05 (0.121> 0.05 and 0.200> 0.05).

2. Homogeneity Test

The homogeneity test aims to determine whether the samples come from the same variance or not. In this study, the homogeneity test was carried out through the F test using the SPSS 20 program. The results of the pretest and posttest data can be seen in the table.

Table 6: Homogeneity test data

Number	Group	Significant (p)	Information
1	Pretest	0,797	Homogen
2	Posttest		

Based on table 7, the results of the research homogeneity test at the pretest and posttest note that the pretest and posttest sig values are 0.797 greater than 0.05 (0.797> 0.05). So it can be concluded that the pretest and posttest data have homogeneous variances.

3. Hypothesis Testing

The hypothesis criteria will accept if the price of t count is greater than t table at a significance level of 5%, and the significance is less than 0.05, then the hypothesis in this study can be accepted.

Table 7: Results of the paried t test (T Test)

Number	Group	Mean	T count	T table	Significant (p)
1	Pretest	30,30	17,121	1,729	0,000
2	Postest	26,70			

Based on the out put analysis of the paired samplest test above, it can be seen that the sig of the data count between the posttest results and the pretest results is 0,000, which means that it is less than 0.05 (0,000 <0.05). T table of 1.729. So the hypothesis in this study was accepted. This means that there is a significant effect of ball feeling training on the ability to dribble soccer for beginner soccer athletes in Pontianak. Furthermore, to see the effectiveness of improving the ability to lead new soccer athletes in Pontianak. It is shown from the results of the average value where it is known that the average value at the pretest is 30.30 and the average value at the postest is 26.70.

Conclusion

Based on the results of the study, it shows that there is a significant effect of ball feeling training on the ability to dribble ball feeling. This is indicated by the significant data count between the post-test results and the pretest results is 0,000 which means it is smaller than 0.05 (0,000 <0.05). The results of the data analysis show that the mean posttest value for players who dribble soccer is smaller than the mean pretest for players who carry out soccer dribbling activities without using ball feeling exercises or (26.70 <30.30). So it can be concluded that ball feeling training can improve dribbling skills in novice soccer athletes.

This ball feeling exercise also has a positive impact on every young player who is not too good at dribbling to become more proficient in dribbling. This means that young players who are initially stiff, after treatment for 1 month they experience an increase in dribbling.

In the process of taking research data the players seriously follow the data retrieval procedure and the players are always on time in the research process because there is a soccer tournament coming up in the next month so the players must focus on training.

References

1. Andika, Atiq, A, Kaswari. Pengaruh model permainan terhadap hasil passing sepak bola pada kelas VIII A SMPN 4 Sambas. Jurnal Pendidikan Dan Pembelajaran Khatulistiwa,2014:3(7):1-12.
2. Aprianova, F. Metode Drill Untuk Meningkatkan Teknik Dasar Menggiring Bola (Dribbling) Dalam Permainan Sepakbola Pada Siswa Sekolah Sepakbola Putra Zodiac Kabupaten Bojonegoro Usia 13-15 Tahun. Jurnal Kepelatihan Olahraga, 2016,
3. Arikunto. Metodelogi Penelitian, Suatu Pengantar Pendidikan. In Rineka Cipta, Jakarta, 2019.
4. Atiq A. Pengembangan Model Latihan Tehnik Dasar Heading Sepak bola Berbasis Bermain Untuk Atlet Pemula Usia 8-12 Tahun. *Jurnal Locomotor:* Jurnal Keolahragaan Universitas Tanjungpura,2018:3(1):1-11.
5. Ayubi. Profil Kondisi Fisik Pemain Liga Pendidikan Indonesia (Lpi) Sepakbola Universitas Negeri Yogyakarta (Uny) Dalam Menghadapi Liga Pendidikan Indonesia (Lpi) Tahun 2017. *Pendidikan Jasmani Kesehatan Dan Rekreasi*, 2017.
6. Efendi R. Pengaruh Metode Latihan Practice Session, Test Session Dan Motivasi Berprestasi Terhadap Keterampilan Menendang Dalam Sepak Bola. Jurnal Pendidikan UNSIKA, 2016.
7. Festiawan R, Nurcahyo PJ, Pamungkas HJ. Pengaruh Latihan Small Sided Games Terhadap Kemampuan Long Pass pada Peserta Ekstrakurikuler Sepakbola. *Media Ilmu KeolahragaanIndonesia*,2019:9(1):18-22. https://doi.org/https://doi.org/10.15294/miki.v9i1.20666
8. Handoko AH. Analisis Kemampuan Teknik Dasar Pemain Sepak Bola SSB Deli Serdang United Kabupaten Deli

Serdang. *Jorpres* (Jurnal Olahraga Prestasi), 2018. https://doi.org/10.21831/jorpres.v14i1.19982
9. Hong S, Han D, Cho K, Shin JS, Noh J. Physics-based Full-body soccer motion control for dribbling and shooting. *ACM Transactions on Graphics*, 2019. https://doi.org/10.1145/3306346.3322963
10. Irianto S, Yudhistomo FA. The Effect of Part and Whole Methods to Improving Shooting Accuracy in Futsal Players of UNY, 2020. https://doi.org/10.5220/0009303401650170
11. Mappaompo MA. Hubungan Koordinasi Mata-Kaki, Keseimbangan, Dan Kelincahan Dengan Keterampilan Menggiring Bola Dalam Permainan Sepakbola Tim Gelora Kabupaten Sinjai. *Ilara*, 2012.
12. Meckel Y, Geva A, Eliakim A. The influence of dribbling on repeated sprints in young soccer players. *International* Journal of Sports Science and Coaching, 2012. https://doi.org/10.1260/1747-9541.7.3.555
13. Muryadi AD. Evaluasi Program Pembinaan Sepakbola Klub Persijap Jepara. *Evaluasi Program Pembinaan Sepakbola Klub Persijap Jepara*, 2015.
14. NST GZA, Adnan A. Tinjauan Keterampilan Teknik Sepakbola bagi Anak Usia Remaja pada Klub Sepakbola Garuda FC Kabupaten Pasaman. Jurnal Patriot, 2019.
15. Redwood-Brown AJ, Sunderland CA, Minniti AM, O'Donoghue PG. Perceptions of psychological momentum of elite soccer players. International Journal of Sport and ExercisePsychology,2018. https://doi.org/10.1080/1612197X.2017.1313295
16. Santoso N. Tingkat Keterampilan Passing-Stoping Dalam Permainan Sepakbola Pada Mahasiswa Pjkr B Angkatan 2013. Jurnal Pendidikan Jasmani Indonesi, 2014.
17. Saputra G, Kaswari, Atiq A. Survei keterampilan teknik dasar sepak bola di kelas XI SMAN 1 Mempawah Hilir. *Program Studi Pendidikan Jasmani Dan Rekreasi FKIP UNtan*,2015:*4*(8):111-122.
18. Siregar I, Damanik IA, Sihombing H. Development of Dribbling Exercise Variation in Learning Football Science in Sports Training Education Students 2018, 2018. https://doi.org/10.2991/aisteel-18.2018.193
19. Tjomsland HE, Larsen T, Holsen I, Ronglan LT, Samdal O, Wold B. Enjoyment in youth soccer: its portrayals among 12- to 14-year-olds. *Soccer and Society*, 2016. https://doi.org/10.1080/14660970.2015.1100894
20. Unnithan V, White J, Georgiou A, Iga J, Drust B. Talent identification in youth soccer. In Journal of Sports Sciences, 2012. https://doi.org/10.1080/02640414.2012.731515
21. Wardana CR, Setiabudi MA, Candra AT. Pengaruh Latihan Small-Sided Games Terhadap Keterampilan Passing, Controlling dan Shooting Peserta Ekstrakurikuler Sepakbola SMK Negeri 1 Tegalsari Kabupaten Banyuwangi. *Jurnal Kejaora (Kesehatan Jasmani Dan Olahraga)*, 2018. https://doi.org/10.36526/kejaora.v3i2.212
22. Zago M, Piovan AG, Annoni I, Ciprandi D, Iaia FM, Sforza C. Dribbling determinants in sub-elite youth soccer players. Journal of Sports Sciences, 2016. https://doi.org/10.1080/02640414.2015.1057210