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The effect of ball feeling training on dribbling skills in amateur football sportsmen

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Abstract. *This research aims to determine the effect of ball feeling training on dribbling skills in amateur football sportsmen. This research is experimental. This research 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 research was 20 football sportsmen in Pontianak. The instrument in this research 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 research, 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 posttest results and the pretest results are 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 football is smaller than the mean pretest for players who carry out football 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 amateur football sportsmen.*

Keywords: *Ball Feeling Exercise; Ball Dribbling Skills; Amateur Football Sportsmen*

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

The basic techniques in football include: dribbling, passing the ball, kicking the ball, controlling the ball (Handoko, 2018). These techniques are very much needed in football. One of the techniques often used in football games is dribbling (Mappaompo, 2012). 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 football player because the ability to dribble is very much needed in individual player skills (Siregar et al., 2018).

In addition to the basic technique of dribbling, one of the important components that players must master in football is control of the ball against the feet (Zago et al., 2016). 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) because usually, these young players do not have a good calculation so they often have difficulty controlling the ball (Hong et al., 2019). 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). Usually, players who mastered the ball feeling technique will create many variations of new movements in dribbling (Redwood-Brown et al., 2018).

Ball feeling training is an introduction to the ball or often known as full ball possession under any circumstances (NST & Adnan, 2019). The ball can be controlled and can remain within a single player's line during

the game (Santoso, 2014). This exercise must be straightforward using the ball, one player - one ball (Aprianova, 2016). 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). 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), the player can still control the ball by knowing in advance the reflection or direction of the ball (Unnithan et al., 2012).

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

The following are forms of ball feeling exercises according to (Irianto & Yudhistomo, 2020) 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 feeling exercise (Andika et al., 2014). Students only step on the ball using their right and left feet alternately, 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, then the ball is rolled forward using the sole of the shoe or the sole. 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 researching ball feeling exercises. So the title taken by the researcher in this research is the exercise of ball feeling towards dribbling skills in amateur football sportsmen.

Methods. One group was observed and then treated in this research using the One-Group Pretest-Posttest design. According to (Arikunto, 2019) in this design, the test was carried out twice, namely before the experiment and after the experiment. The test conducted before the experiment (O_1) is called the pre-test, and the test after the experiment (O_2) is called the post-test. The following is the intended design image:

$$O_1 \Rightarrow X \Rightarrow O_2$$

Fig. 1. One-Group Pretest-Posttest design
Information:
O_1 = Pretest value (before being given treatment)
X = Treatment
O_2 = Posttest value (after being given treatment)

The population of this research was 20 soccer athletes in Pontianak. The instrument in this research 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.

The normality test is carried out to test whether the sample comes from a population that is normally distributed or not. Statistical analysis using Kolmogorov-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.

The homogeneity test aims to determine whether the samples come from the same variance or not. In this research, the homogeneity test was carried out through the F test using the SPSS 20 program.

The hypothesis criteria will accept if the price of t count is greater than the table at a significance level of 5%, and the significance is less than 0,05, then the hypothesis can be accepted in this research.

Results and Discussion. Pretest data is data that comes before the load or treatment of an exercise is held. The pretest is the 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	Maximum	35 seconds
7	Sum	606 seconds

Based on table 1 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 amateur football sportsmen in Pontianak didn't reach the time of driving ball well; the description of the research results can be seen in the table below.

Table 2

Frequency Distribution of Dribbling Pretest

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

Based on the results of the pretest of table 2 of the 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 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 Posttest 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	Maximum	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 amateur football sportsmen in Pontianak didn't reach the time of driving speedball well. The description of the research results can be seen in the table below:

Table 4

Frequency Distribution of the posttest dribbling

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

After calculating the normality test from the test data, the following results were obtained:

Table 5

Normality Test Results

Number	Data	Significant	Conclusion
1	Pretest	0,121	Data is
2	Posttest	0,200	Data is

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 posttest 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 results of the pretest and posttest data can be seen in the table.

Table 6

Homogeneity Test Data

Number	Group	Significant	Information
1	Pretest	0,797	Homogeny
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

Based on the output analysis of the paired samples 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). So the hypothesis was accepted in this research. This means that there is a significant effect of ball feeling training on the ability to dribble football for amateur football sportsmen in Pontianak. Furthermore, to see the effectiveness of improving the ability to lead new football sportsmen 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 posttest is 26,70.

Table 7

Results of the Paired t Test (T Test)

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

Conclusion. Based on the results of the research, 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 are 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 football is smaller than the mean pretest for players who carry out football 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 amateur football sportsmen.

This ball feeling exercise also has a positive impact on every young player who is not so 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 football tournament coming up in the next month so the players must focus on training.

Conflict of interest. The authors note that there is no conflict of interest.

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Анотація. Ахмад Атік, Віктор Г. Сіманджунтак, Вівік Юнітанінгрум, Мухаммад Алі. Вплив тренування почуття м'яча на навички дриблінгу у спортсменів-любителів футболу. *Мета даного дослідження - визначити вплив тренування почуття м'яча на навички дриблінгу у спортсменів-любителів футболу. Дане дослідження носило експериментальний послідовний характер. Тести в даному дослідженні проводилися двічі, а саме, до експерименту і після експерименту. У даному дослідженні взяли участь 20 спортсменів з Понтіанак, які займаються футболом. Для визначення показників техніки дриблінгу використовувалася контрольна вправа «Тест на дриблінг», результати якої визначалися в тривалості виконання завдання, в секундах. У тренувальній програмі досліджуваних футболістів, спрямованої на вдосконалення дриблінгу, використовувалися вправи на почуття м'яча. За результатами проведеного дослідження доведено наявність значного вплив вправ, спрямованих на розвиток почуття м'яча, на володіння м'ячем при дриблінгу. На це вказують значні зміни показників контрольної вправи, отриманих після проведеного педагогічного експерименту (p<0,05). Аналіз отриманих даних показує, що середнє значення результатів контрольного тесту гравців, що беруть участь у педагогічному експерименті краще, ніж середнє значення показників контрольної вправи гравців, в тренувальному процесі яких не використовувалися вправи на відчуття м'яча (26,70 <30,30). Таким чином, можна зробити висновок, що тренування почуття м'яча може сприяти утворенню навички дриблінгу у спортсменів-любителів футболу.*

Ключові слова: *вправу на почуття м'яча; навички дриблінгу м'яча; спортсмени-любителі футболу*

Аннотация. Ахмад Атик, Виктор Г. Симанджунтак, Вивик Юнитанингрум, Мухаммад Али. Влияние тренировки чувства мяча на навыки дриблинга у спортсменов-любителей футбола. *Цель данного исследования - определить влияние тренировки чувства мяча на навыки дриблинга у спортсменов-любителей футбола. Данное исследование носило экспериментальный последовательный характер. Тесты в данном исследовании проводились дважды, а именно, до эксперимента и после эксперимента. В данном исследовании приняли участие 20 спортсменов из Понтианака, которые занимаются футболом. Для определения показателей техники дриблинга использовалось контрольное упражнение «Тест на дриблинг», результаты которого определялись во времени выполнения задания, в секундах. В тренировочной программе исследуемых футболистов, направленной на совершенствование дриблинга, использовались упражнение на чувство мяча. По результатам проведенного исследования доказано наличие значительного влияние упражнений, направленных на развитие чувства мяча, на владение мячом при дриблинге. На это указывает значительные изменения показателей контрольного упражнения, полученных после проведенного педагогического эксперимента (p<0,05). Анализ полученных данных показывает, что среднее значение результатов контрольного теста игроков, участвующих в педагогическом эксперименте лучше, чем среднее значение показателей контрольного упражнения игроков, в тренировочном процессе которых не использовались упражнения на чувство мяча (26,70<30,30). Таким образом, можно сделать вывод, что тренировка чувства мяча может способствовать образованию навыка дриблинга у спортсменов-любителей футбола.*

Ключевые слова: *упражнение на чувство мяча; навыки дриблинга мяча; спортсмены-любители футбола*

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