The effectiveness of small-sided games training on the passing accuracy of young soccer players

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Abstract

Passing in the game of football is an important technique to master for soccer players. In the FIFA Farmel Hatta Palembang football team, young people need more passing accuracy. From this, researchers took the initiative to approach training by providing training methods for small-sided games. The research aimed to determine the effect of small-side game training on the passing accuracy of young soccer athletes Farmel Hatta Palembang. The research method used in this study is experimental. The research design used was a pretest-posttest group design. The sampling technique used in this study used all members of the population in a youth soccer team of 40 players. The analysis techniques used are normality tests, homogeneity tests, and paired sample tests using the SPSS program version 26. The result obtained from the normality test (Kolmogorov-Smirnov Test) for the pre-test data was 0.56, and the post-test data was 3.28, so the data obtained from the pre-test and post-test were normal. The homogeneity test results show that the sig p is 0.633>0.05. Then the results of the hypothesis test obtained are t count 10.801 and t table 1.685 (df 39) with a sig (2-tailed) value of 0.000, so that small-sided game practice greatly influences the results of passing accuracy. Based on the research results on the impact of small game training, it fully affects the passing accuracy of young athletes of the FIFA football school Farmel Hatta Palembang.

Keywords: small-sided games, passing, accuracy, soccer.


Authors contribution: a – Preparing concepts; b – Formulating methods; c – Conducting research; d – Processing results; e – Interpretation and conclusions; f - Editing the final version

INTRODUCTION

Passing is one that has an important role in creating goals. Passing is the movement of passing the ball as a step in planning an attack on the opponent's goal. From observations made in the field, the passing accuracy of all teenage soccer athletes could be better. A high level of passing accuracy is a determining factor in the success of a football
match. From this observation, the researcher wants to experiment by providing small-sided game training treatment. With this small-sided games training, you will gain mastery of aspects of good accuracy tactical and physical techniques because this training presents a game situation like a real game, only limited by being divided into several small groups and fields.

The application of small-sided game training is an exercise that develops by presenting game situations that make players gain mastery of technique, tactics, and physical aspects. Sanchez-Sanchez et al. (2017) Small-sided games practice more directly applying technical and physical training and tactics in a game, which means players are required to face pressure situations as if they were in real game situations. The application of small-sided games training in the skills training process can provide more effective training mastery because by using small training boxes carried out by several players, it will be easy for the coach to supervise.

One of the factors is passing. Okilanda et al. (2020) passing is the art of transferring the momentum of the ball from one player to another. One technique that players must really master is passing. Castellano et al. (2016) Passing the ball to a team can create space so that the player can score a goal against the opponent's goal and can defend the defensive area for the defender. Passing that is done at high speed with good accuracy will create opportunities and build strategies and attacks. Passing skills are a technique that is often used by players in football games, by using passing players can play the ball in the game (Subarja et al., 2022). According to Asmara et al. (2022), the factors that affect passing abilities are the level of ability to play football (passing) for each student and practice; by doing regular exercises, the ability to play football, such as the basic passing technique, will gradually increase.

According to Ridwan (2020), small-sided games are the proper situation to develop for younger gamers so that they can study and expand. Small-sided games are a training approach that supplies sports situations like real games, allowing players to master technical and bodily
factors (Malik et al., 2022). The above understanding of small-sided games concludes that they are a good exercise for sports activities by means of using physical and technical education inside the shape of games with a decreased area size and restrained quantity of players.

Small-sided games are useful in identifying a soccer player’s abilities. Small-sided games are often used. In small-sided game practice, players interact directly with the ball and face common game situations. This situation requires good technical skills, such as dribbling and passing, as well as tactics, such as running without the ball and having good cooperation with other players (Maekhendra & Yusfi, 2022). This small sided games training model can affect leg muscles such as the fibularis, soleus muscle, tendons, superior fibular, inferior fibellar, and extensor hulluces longus (Amani-Shalamzari et al., 2019).

Small-sided games are widely used in football training because of their multifunctional nature, including the ability to increase playing intensity compared to full-field matches. Small-sided games develop specific playing tactics content for the better (Wardana et al., 2018). Small-sided games are carried out in smaller areas with modified rules and with fewer players than real football games (Yudi, 2019). Accuracy in kicking is not only used for passing to teammates, kicking accuracy can also be used to score goals against opponents (Muzaffar & Saputra, 2019). Mubarok & Mudzakir (2020) accuracy is a person’s ability to control the free movements of a target. The factors that influence the determinant of accuracy are high coordination, good accuracy, size of the target, sharpness of the senses, distance of the target, mastery of techniques, fast, slow movement, feeling from the players and accuracy, and the strength and weakness of a movement.

In carrying out the passing movement, the level of accuracy of the bait to a friend is very large, in order to be able to send the ball carefully to a friend, it is necessary to continue to train and always pay attention to accuracy (Mubarok et al., 2019). The observation data shows that all young soccer athletes need more accuracy in making passes when
applying passes using the inside of the foot in FIFA Farmel Hatta Palembang soccer athletes, this requires reducing the accuracy of these passes. This small-sided game workout was tailored to the material, contemplating the state of affairs and situations in addition to the characteristics needed of the athletes. Small-sided games practice by playing actual games is done to make players gain technical, physical, and tactical mastery. Small-sided games are used in soccer training because they are multifunctional and can increase playing intensity compared to full-field matches Sarmento et al., (2018). The exercise is implemented to improve passing accuracy for soccer school athletes.

Previous research conducted by Ariffudin & Pramono (2021) showed that the practice of small-sided games alone influences accuracy results in futsal games with pre-test results of 0.54 and post-test of 0.48. The difference between this research and the previous research was conducted on futsal games where the futsal playing field is smaller than the soccer game, and the difference is that the sample used in the previous study consisted of 10 futsal athletes and in this study, there was 40 young soccer player.

METHOD

This study used an experimental study type with a one-group pre-test and a post-test research design. This experimental research was a method that provided a symptom called training. The researcher chose this experimental approach because it is in line with the research objective, namely, to compare the effects of treatment in small-side games to see whether it has an impact on the results of passing accuracy in soccer.

The study was carried out at the Hatta Field in Palembang, and this activity was carried out for 6 weeks 3 times a week. In the beginning, the initial test was carried out, then a small-sided games workout was given, and at the end of the study, a very last take a look at turned performed. The population in this study were SSB FIFA Farmel Hatta Palembang athletes, totaling 40 young soccer players. The sample used was the
entire population, namely 40 young soccer players in SSB FIFA Farmel Hatta athletes in Palembang. The sample as a whole was chosen because, from the results of initial observations, the overall passing accuracy of the athletes could have been better; therefore, all sports school athletes were used as research samples.

The instrument used in collecting data for passing accuracy was a test for passing accuracy in football games. This test aims to measure the technical ability of bait accuracy quickly and precisely (Izzuddin et al., 2020). In making an assessment, each player kicked five times and then added them up. The following were the assessment criteria for the accuracy of the bait test.

<table>
<thead>
<tr>
<th>No</th>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Good</td>
<td>10-14</td>
</tr>
<tr>
<td>2</td>
<td>Fair</td>
<td>5-9</td>
</tr>
<tr>
<td>3</td>
<td>Poor</td>
<td>&lt;4</td>
</tr>
</tbody>
</table>

The data analysis technique in this research uses the normality test (Kolmogorov-Smirnov), homogeneity test, and t-test assisted by the SPSS version 26 computer program. The analysis aimed to determine the outcomes of increasing the accuracy of passing.

The procedure for this research is that first, the test participant stands behind a predetermined line, and then when they hear the whistle, the test participant kicks the ball with their best foot using the inside of their foot towards the target. Scoring: each player kicks 5 times and then totals them up.
RESULT

From the research that has been carried out, the pre-test and post-test results of football passing accuracy were obtained. The data that has been obtained is processed so that we can compare whether there is improvement or not after being given the small-sided games training treatment.

Table 2. Description of passing accuracy pre-test

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>40</td>
<td>4</td>
<td>11</td>
<td>7.05</td>
<td>1.825</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 2. The outcomes of the preliminary check, the most accurate passing results were 11 kicks, the minimum result was 4 kicks, the mean was 7.05, the std deviation was 1.825, and the number of samples was 40 athletes. Then, a final test is completed after giving a small-sided game exercise. The very last was completed on March 20, 2023, with the following final test results.

Table 3. Passing accuracy post-test description

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postest</td>
<td>40</td>
<td>6</td>
<td>14</td>
<td>9.83</td>
<td>1.920</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 3. The final test results for the passing athletes obtained the most passes, namely 14 passes, the results of the kicks were at least 6 passes, the mean was 9.83, the std deviation was 1.9720, and the players who took the test were 40. After the test results were obtained, data analysis was carried out using the normality test. The outcomes of the normality test data from the results of the passing accuracy data are obtained as follows.
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Table 4. Normality test

<table>
<thead>
<tr>
<th>Class</th>
<th>Kolmogorov-Smirnov a</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>0.0136</td>
<td>0.946</td>
</tr>
<tr>
<td>Postest</td>
<td>0.141</td>
<td>0.969</td>
</tr>
</tbody>
</table>

From Table 4. The pre-test data obtained a Kolmogorov-Smirnov p (Sig) result of 0.60, and the post-test had a p (Sig) result of 0.43. It can be seen that all data had a value of p (Sig) > 0.05, so the variables were normally distributed. For homogeneity test results, the following results are obtained.

Table 5. Homogeneity test

<table>
<thead>
<tr>
<th>Result</th>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on Mean</td>
<td>0.230</td>
<td>1</td>
<td>78</td>
<td>0.633</td>
</tr>
</tbody>
</table>

The outcomes of desk five confirmed that the pre-test and post-test look at with a sig p fee of 0.633>0.05, which shows that the records changed into homogeneous. In this take look, speculation trying out the usage of the t-test through paired sample t-test was completed. A paired pattern t-test was performed to discover whether there has been an impact in small-sided games training on the accuracy of passing in soccer games. The subsequent outcomes were the hypothesis trying out.

Table 6. T Test results Paired Samples Test

<table>
<thead>
<tr>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>Lower</th>
<th>Upper</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>Postest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.775</td>
<td>1.685</td>
<td>0.257</td>
<td>3.295</td>
<td>2.255</td>
<td>10.801</td>
<td>39</td>
<td>0.000</td>
</tr>
</tbody>
</table>

From the results Table 6, the results of the hypothesis testing that was completed with the use of the paired sample t-test and the use of SPSS model 26, the results obtained were t count 10.801 and t table 1.685 (df 39) with a sig value (2-tailed) of 0.000. The data from the hypothesis test results for the accuracy of the past kick above obtained a significance value of 0.000 <0.05, so Ha was accepted. So, there was a significant influence in small-sided games training on the accuracy of the passing of young players in football school FIFA Faramel Hatta Palembang.
DISCUSSION

The results obtained from the pre-test data on soccer passing accuracy were the highest value of 11, the lowest value of 4, the mean of 7.05, and the standard deviation of 1.825. The post-test data for soccer passing accuracy is the highest value of 14, the lowest value of 6, a mean of 9.83, and a standard deviation of 1.920. From the normality test results, the pre-test value was 0.60, and the post-test value was 0.43, so the data was normal. The homogeneous test result was 0.633, so the data is homogeneous. The results of the hypothesis testing that was completed using the paired sample t-test and the use of SPSS model 16 obtained the results of t count 10.801 and t table 1.685 (df 39) with a sig value (2-tailed) of 0.000. Based on the hypothesis testing criteria, if the importance fee becomes ≤ 0.05, then Ho was rejected, and Ha was accepted.

Meanwhile, if the significance value ≥ 0.05, then Ho was accepted, and Ha was rejected. The statistics from the hypothesis test results for the accuracy of the past kick above obtained a significance value of 0.000 <0.05, so Ha was accepted. Furthermore, in the table of hypothesis test results, the results of running speed for a short distance of 100 meters obtained a significance value of 0.000 <0.05, so Ha was accepted. So, there was a significant influence in small-side games training on the results of the accuracy of the fitting of football school Fifa Faramel Hatta Palembang athletes. The pre-test data had an average (mean) of 7.05, and then the post-test average reached 9.83. The magnitude of the increase in motor skills could be visible from the distinction inside the common price of 2.77.

According to Ridlo & Saifulloh (2018), small-sided games are the proper condition for younger players, with a view to research and expand. Small-sided games are a training technique that offers sports like real games, allowing players to master technical, tactical, and physical elements (Aguiar et al., 2012). The conclusion of the above understanding of small-sided games turned into an amusing workout for sports activities games by using physical and technical workout for sports activities games.
by using physical and technical training inside the shape of games with a reduced discipline length and confined wide variety of players.

Clemente & Sarmento (2020) In small-sided games training, a player will be required to make decisions quickly and accurately so that the player gets the opportunity to make more passes than just playing football. The advantages of this small sided games training are that it contains a lot of technical, tactical and physical elements, there are opponents to play with, it is fun, and it is easy for the coach to supervise because it is in small boxes (F. M. Clemente, 2016). The conclusion from the definition of small-sided games above is that it is a fun practice for sports games by utilizing physical training and techniques for sports games by using physical training and techniques in the form of games with reduced discipline duration and limiting the large number of players.

The modified form of training based on the number of players and the scale of the field can increase the number of actions (technical skills). Small-sided games training, which in the future will be very relevant for athletes accelerating with great agility, and players will be quick to make decisions on the field. The small-sided games training model requires soccer athletes to always make movements. The small-sided games training method is considered appropriate for young players because the characteristics of training at a young age must start from the simplest and easy to do as well as fun with elements of the game (Wardana et al., 2018). Some of the advantages of doing small sided games training are more touches on the ball, more time to play, more decision-making in the game, loss of defensive and player involvement, and, of course, it can improve the physical condition of the players (Arianto & Setyawan, 2019). Small-sided games training, which in the future will be very relevant for athletes accelerating with great agility, and players will be quick to make decisions on the field. Fradua et al., (2013).

In this study, small-side game exercises had an influence on the outcomes of passing accuracy, and this was in line with research conducted by (Moch Fath Khurrohman et al., 2021). Similar to research
conducted by Asrul et al. (2021), small-sided game training has an impact on passing accuracy and Vo2max in high school students in football games. Then, it was found in research conducted by (Fitrian et al., 2023; and Safarrudin et al., 2022) that there is an effect of the small-side game method on the passing target, dribbling, passing, and control of 15-year-old SSB players. Small-sided game training aimed to enhance the accuracy of underhand passing soccer.

A limitation of this research is the researcher's problem when providing small-sided games training when dividing several groups, so it is impossible to carry out group supervision. For future research, pay more attention to the sample so that the results obtained are even better. This shape of training changed into useful for sporting out underpasses with tight conditions and slim areas because, in football games, we clearly needed to master the situation in the sport, so players had to carry out underpasses with tight barriers or warring parties, slim spaces and restrained movement. Small-sided games could also be used as an exercise to increase aerobic capacity. This exercise could be introduced to players with an intensity of 70-85% by emphasizing tactical and cognitive technical training.

CONCLUSION

The outcomes of the study showed that small-sided game training could increase the results of passing accuracy in young soccer players at SSB FIFA Farmel Hatta Putra Palembang. It was hoped that the outcomes of this observation could be used as a training method to improve passing accuracy in football games. This small-sided games exercise was not just one variation; it must vary more in carrying out the exercise.

The results obtained from this research show that small-sided game training can improve the accuracy of passing football games in young soccer players at FIFA Farmel Hatta Putra Palembang Football athletes. This small-sided game practice also contributes to the player's passing accuracy. This research implies that the passing accuracy results of athletes increased better than from the pre-test or before being given
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small-sided games training. The limitations in this research are the obstacles when providing small-sided games training and dividing several groups, making it impossible to supervise as a group. Future research should pay more attention to the sample so that the results obtained are even better. As a suggestion for the future, this form of training should be more varied.

REFERENCES


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