The Effect of Zig-Zag Running Training using Weights on Increasing Dribbling Ability in Football Athletes Club Porma FC U-20th Kepahiang

Feby Elra Perdima¹, Remon Pebriadi², Wiwik Yunitaningrum³, Nugraha Adita⁴, Rayvin Domingo Pestano⁵

¹ Physical Education, Universitas Dehasen, Bengkulu, Indonesia
² Physical Education, Universitas Bengkulu, Bengkulu, Indonesia
³ Recreational Health Physical Education, Universitas Tanjungpura, Kalimantan Barat, Indonesia
⁴ Physical Education, Universitas Negeri Jakarta, Jakarta, Indonesia
⁵ Physical Education and Recreation, Central Luzon State University, Philippines

Abstract

The aim of the study was to determine the effect of zig-zag running training using weights on increasing the dribbling ability of the U-20 year old Kepahiang football club Porma FC athletes. This study used an experimental method with the One Group Pretest – Posttest design. The research instrument used was the Arsil dribbling test with a validity of 0.71 and a reliability of 0.63. The sample in this study consisted of 30 U-20 year old Kepahiang Po rma FC players. The results of the research on the dribbling test were that the pretest average was 51.23, and the posttest average was 57.7, an increase of 12.62%. The results of the t-test analysis between the pre-test and post-test have a significant effect. The calculation results state that the value of t count = 9.95 ≥ t table = 1.669 with a level of α = 0.05. There is a significant effect of zig-zag running training using weights on increasing the dribbling ability of U-20 year old Porma FC Kepahiang players.
INTRODUCTION

Sport is a necessary form of physical activity and also a competition for every region around the world because the game can be considered very close to every individual anytime and anywhere. In today's life, people cannot be separated from sports, both as ordinary positions, exhibitions, entertainment, welfare, and culture, as stated in the sports system law number 3 of 2005 concerning the national sports system in article 75 paragraph 2 which reads: "Public participation can be carried out individually, in groups, families, organizations, professions, business entities, or other social organizations in accordance with the principles of openness and partnership". One of the sports that is in great demand by the whole community, in fact, almost everyone can play this sport.

Football is the most famous game from all corners of the world. This game movement is something that is powerful in uniting various nations around the world, with various histories and societies, this action can be a tool to join the countries of this world by limiting differences in nationality, race, and religion. Football is a team game, each team consisting of a goalkeeper, defenders, midfielders and forwards (Darussalam, 2018). Football is a ball game played by two teams consisting of 11 people, and is played on a rectangular field with a size of 90-120 m & a width of 45-90 m, and has strict rules regarding physical contact & has the goal of hitting ball against the opponent's goal by kicking the ball with his feet (Atiq, 2018).

Dribbling is a vital basic procedure and must be mastered by every soccer player because dribbling is a continuation of the attack on the opponent. A player who doesn't master dribbling properly, it will be difficult for these players to form a quality game. Zig-zag running is a running strategy by utilizing obstacles that must be passed by running to avoid obstacles or cones that have been arranged. Zig-zag running is a very good type of activity for developing player agility. Training is a systematic sporting activity for a long time, gradually and individually, aimed at forming a human being whose physiological and psychological functions are to fulfill the demands of the task (Budiwanto, 2012). Therefore, to get good performance, you must combine physical, technical, tactical, and psychological (Nopiyanto et al., 2021). In the framework of fostering physical conditions to support the performance of a player, various kinds of training can be carried out, such as zig-zag exercises using weights.

The PORMA FC football club is one of the teams in Kepahiang Regency, namely in Mandi Angin. This club has been around for a long time since 1980, but because the management of the club's organization has not been well structured, the PORMA FC club has been formed only when there will be tournaments. PORMA FC's best achievement was only qualifying for the last 16 of the BUPATI CUP tournament in 2010. Many factors made this club inconsistent in coaching the club, that's why this club lacked achievement, incomplete training facilities made it a little difficult for the players to do exercises such as football, cones and other equipment are still limited, so that it has an impact on the basic techniques of Porma FC players who are not optimal, especially in dribbling techniques.

METHODS

This research is quantitative research using experimental methods. Experimental research is research that is used to find the effect of certain treatments on others under controlled
conditions (Sugiyono, 2016). This study used the One-Group Pretest-Posttest research design. So in this study there was a pretest, before being given treatment and posttest after being given treatment. The technique for collecting data in research conducted is by providing trials and exercises, then the impact will be seen from the effects of the training itself. The data collection technique used in this study used a dribbling test compiled by (Arsil, 2010). The process carried out in this study consisted of: first carrying out an initial test or pretest, namely the dribbling test, then being given zig-zag running exercises using weights, and closing with a final test or posttest, namely the dribbling test.

RESULTS

This research was conducted at the Porma Fc Kepahiang club. Pretest data collection begins on Monday April 10 2021, while for posttest data it will be held on Wednesday May 12 2021. Treatment (treatment) is carried out in 16 meetings. The description of the initial test statistics can be seen in the image below:

![Figure 1. Dribbling Initial Test Bar Chart](image1)

In Figure 1 it can be seen that in the pre-test the members who took part in the training activities or pre-test obtained the minimum score: (40), maximum score: (61), mean (average): (51.23), standard deviation: (5.81).

![Figure 2. Dribbling Final Test Bar Chart](image2)

In Figure 2 it can be seen that the minimum value: (47), maximum value: (68), mean (average): (57.7), standard deviation: (5.95) which has been given the zig-zag running training treatment using a load.

Normality test

Before testing the proposed hypothesis, a data prerequisite test is carried out first, namely the normality test. For more details can be seen as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>Dribbling Variable</th>
<th>$X^2_{hitung}$</th>
<th>$X^2_{table}$</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre-test</td>
<td>3.5</td>
<td>12.592</td>
<td>Normal</td>
</tr>
<tr>
<td>2</td>
<td>Post-test</td>
<td>3.36</td>
<td>12.592</td>
<td>Normal</td>
</tr>
</tbody>
</table>

The table shows that the results of the normality test on the pre-test and post-test data with $n = 30$ at a significant level $\alpha = 0.05$ obtained 12.592 which is greater than so it can be concluded that the scores obtained from the dribbling test data are normally distributed.

Homogeneity Test

After carrying out the normality test for the two groups of data, then a homogeneity test is then carried out to see whether the two data are homogeneous or not, for more details it can be seen as follows:
Table 2. Summary of Homogeneity Test

<table>
<thead>
<tr>
<th>N</th>
<th>F count</th>
<th>F table</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>1.36</td>
<td>3.33</td>
<td>Homogeneous</td>
</tr>
</tbody>
</table>

The table above shows that the results of the homogeneity test for the pretest and posttest data for the sample group were given the zig-zag running exercise treatment using a load where the score obtained was calculated F score = 1.36 and F table = 3.33. Then the F table is greater than the F count, so it can be concluded that the two data are homogeneous.

Hypothesis testing

The hypothesis put forward is that there is a significant effect of zig-zag running training using weights on increasing dribbling skills in soccer games at the Porma Fc U-20th club, Kepahiang City. Based on the formula (paired t-test) performed, the results of the analysis (paired t-test) are obtained in the table below as follows:

Table 3. Test Summary t

<table>
<thead>
<tr>
<th>Dk=n1+n2-2</th>
<th>t count</th>
<th>Table α = informati on</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td>9.95</td>
<td>1,699</td>
</tr>
</tbody>
</table>

The results of the t-test analysis stated that there was an effect of zig-zag running training using weights on increasing dribbling skills in soccer games at the Porma Fc U-20th club, Kepahiang City, which consisted of 30 players. This is based on the results of the t test analysis, where it is obtained = 1.699t hitung = 9.95 ≥ t tabel at a significance level of α = 0.05, it can be concluded that there is a significant effect of zig-zag running training using weights on increasing the dribbling ability of the soccer athletes of the Porma Fc U-20th Kepahiang club.

DISCUSSION

Based on the results of data analysis, it can be shown that the proposed hypothesis is accepted. The results of the data analysis show that zig-zag running exercises using weights can have an effect on the dribbling ability of the U-20th Kepahiang Fc players, this effect has been supported by research data. This is in accordance with the elements contained in zig-zag running exercises using weights involving all or part of their activities with speed, agility, leg loads and others, so as to improve dribbling skills efficiently (Hengki, 2017). Speed is a skill in carrying out activities or moving places in a short time (Chania et al, 2021). While agility is the skill level of a person in moving as quickly and precisely as possible and being able to change positions. agility is also a physical activity that is very necessary in every activity, so this activity is usually used as a standard for the quality of a test (Komaini, 2018). Dribbling is a ball control technique that is carried out by dribbling the ball from one place to another or being brought closer to the opponent's goal so that the ball is not captured by the opponent, with the principle that the ball is always near the dribbler and away from the opponent (Kemdikbud, 2016).

This shows that zig-zag running exercises using weights have an effect on increasing dribbling ability, this effect is evident from the results of the study where the final test (post-test) increased from the initial test (pre-test) after being given treatment in the form of zig-zag running training, zag using weights. Zig-zag run is a method of running using obstacles that must be avoided or exceeded in a twisty manner. The zig-zag run exercise is more effective for increasing agility in performing dribbling techniques for soccer players (Udam,
This illustrates that zig-zag running exercises using weights can be used as a training method to improve dribbling skills because they can increase leg muscle agility and power. As it is known that power is a combination of speed and strength (Sihombing, 2019). Where power and agility are needed in dribbling. So efforts to increase the performance of soccer players must have a process in training, because training is one of the factors that is very influential in achieving achievement (Arwandi & Ardianda 2018). The function of training is an effort to improve and develop the elements in the game of football so that skill in playing is very decisive, namely; training in physical, technical, tactical, and mental conditions (Udam, 2017; Raibowo et al., 2021). In addition, coaches must be creative in presenting various training patterns to be able to improve the techniques of all players (Pujianto et al., 2020). So that it can be concluded that zig-zag running exercises using weights have an effect on increasing the dribbling ability of the soccer athletes of the Porma Fc U-20th Kepahiang club. Because zig-zag running exercises using weights have elements of speed and agility so that they can improve the quality of the players in dribbling.

CONCLUSION

Based on the results of data analysis and discussion by testing the hypothesis using paired t-test. The results of data analysis from the dribbling test are (t count > t table) and there is also an increase. Thus there is an effect of zig-zag running training using weights on increasing dribbling skills in soccer games at the U-20th Porma Fc club, Kepahiang City.

REFERENCES

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