The effect of ten weeks mixed football training program on dribbling, passing and shooting performance of Jimma University and Jimma Tesfa male football project

Samson Wondirad and Dawit Atomsa

Abstract

The purpose of this study was to examine the effect of ten weeks football training on dribbling, passing and shooting performance of Jimma University and Jimma Tesfa football project. To achieve this, twenty-eight (N = 28) male football players were selected using purposive sampling technique. Project players’ age ranged from 12 to 15 years. Pretest and posttest were conducted in-between mixed football training program was given to them. The recorded data of pre and posttest of football dribbling, passing and shooting were presented by descriptive statistics using tables and graphs and also paired t-test was performed to explore the significance difference between pretest and posttest due mixed football training sessions. The results indicates that there was significant difference between pre and posttest mean value of football dribbling, passing and shooting performance of football players after the training intervention p < 0.05. In conclusion, mixed youth football training program is an effective method in football to enhance dribbling, passing and shooting performances of players. It is better to recommend that various specific youth training programs applied for youth soccer players to develop their soccer technical and tactical capabilities.

Keywords: Dribbling, passing, shooting, performance, football and training

1. Introduction

Soccer requires a combination of technique, tactics, physical fitness, mental strength, and team work. Ball skill is divided into dribbling, trapping, and kicking, and training is performed to improve those skills. The majority of studies on ball skill in soccer games focus on skill tests (Asami, 2000), and some studies focus on trapping and kicking skills (Togari, et al., Aami, 2003; Anderson and Sidaway, 2004). Few studies, however, focus on dribbling skill and the effect of dribbling training. Meanwhile, from the viewpoint of developmental growth and motor learning, the ages between nine and twelve, the last half of the junior age and the golden age, in which children are capable of quick learning in general, is the best time for learning skills (Nishimura et al., 2010, Ono, 1998). However, ball skills should be learned during all ages, the pre-golden age, golden age, and the post-golden age (Nishimura et al., 2010, Ono, 1998) and it is important to discuss the methods and effect of ball skill training in each age stage.

In our country concerning football the major problems related to soccer skill deficiencies. This is lack of training focused on football fundamental skills (dribbling, passing and shooting). To get talented players and to see our players in international football field, these problems should have to be solved in Jimma University and Jimma Tesfa football project. The assessment of soccer-specific skills such as passing, shooting and dribbling has largely been hindered by the lack of research into the area of soccer skill performance. More specifically, this has resulted in a lack of valid and reliable skills tests. Furthermore, Ali et al. (2007a) (1) expressed that while several skills tests that are specific to soccer have been developed in research, many have yet to be validated and consequently have Limited applicability as research tools. An additional and significant problem that contributes to this lack of developmental research is the difficulty in assessing skill performance in a reliable way (McGregor et al., 2007) (7).
Therefore, the researchers were passionate to evaluate the effect of ten weeks football training on dribbling, passing and shooting performance of Jimma University and Jimma Tesfa football project. As a result the researchers hypothesized that there was no significant difference between pre and posttest mean value of football dribbling, passing and shooting performance of football players after the training intervention (H0: μ1 = μ2).

2. Methodology
2.1 Study area
This study was conducted in Jimma University which is found in Oromia region, south western part of Ethiopia, and 346 kilometers away from the capital Addis Ababa. The university campus is located in the city of Jimma, situated around 352 kilometers southwest of Addis Ababa. Its grounds cover some 167 hectares. JU is Ethiopia’s first innovative community-oriented educational institution of higher learning, with teaching centers for health care students in Jimma, Omo Nada, Shebe, Agaro, and Asendabo. JU is a pioneer in Public health training. It has academic and scientific collaboration with numerous national and international partners.

2.2 Study design
The researcher has used quasi experimental design to evaluate the effect of ten weeks football training on dribbling, passing and shooting performance of Jimma University and Jimma Tesfa football project.

2.3 The target population
The target population of the study was twenty eight (28) football players who were being trained in Jimma University and Jimma Tesfa football project.

2.4 Sample size and sampling technique
The selection of the subjects of this study was determined by purposive sampling technique. The sampling size of this study was total of twenty-eight (28) players of the project. The researcher has used this type of sampling method because of the smallness of the size of the sample and its simplicity to get reliable information.

2.5 Selections of variables
There are a numbers of variables attribute the performance of football playing. However, the researcher had decided to concentrate to the following (three ball skills) variables such as, dribbling, passing and shooting performance because they are the back bone of football performance.

2.6 Sources of data
The source of data was both primary data sources. Primary data was collected through structured pretest and posttest of football dribbling, passing and shooting.

2.7 Collection of data
The data was collected through taking pretest before training and posttest after giving the training. This evaluation was taken place in the Gymnasium of Jimma University, which is very attractive and comfortable for the accomplishment of this task.

Table 1: The Variables test and Objectives Score

<table>
<thead>
<tr>
<th>S. No</th>
<th>Variables</th>
<th>Tests</th>
<th>Objectives</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dribbling</td>
<td>12-meter dribbling slalom</td>
<td>quickness and accuracy of ball handling</td>
<td>Number of successful cone passed</td>
</tr>
<tr>
<td>2</td>
<td>Passing</td>
<td>Passing assessment test</td>
<td>Ability to accurately and consistently pass and receive over short distances.</td>
<td>Number of successful cone passed through target gate</td>
</tr>
<tr>
<td>3</td>
<td>Shooting</td>
<td>Shooting assessment test</td>
<td>Ability to shoot accuracy from penalty area to goal in the air.</td>
<td>Number of successful shot traveling from penalty to the goal in the air</td>
</tr>
</tbody>
</table>

2.8 Experimental procedure
The experimental period of the study was carried out from March 15, 2018 - May 23, 2018 at Jimma University football playing field. To achieve the purpose of the study (N= 28) twenty eight male football players were selected by purposive sampling technique. Their age ranged from 12 to 15 years. The training was given for 10 weeks three times per week for one hour. In this study, the subjects were tested in three ball skills, namely dribbling, passing and shooting before and after 10 weeks training with 5 min of passive recovery in between. The testing was conducted before and after training only, that means no testing was conducted during training.

2.9 Method of data analysis
The statistical analysis was performed using SPSS (Version 20) i.e the significance testing (paired t-test) with online statistical calculator using SPSS, version # 20, to determine if there was a significant difference between pre and posttest mean values of football dribbling, passing and shooting performances. All raw data were presented as mean and standard deviation with a statistical significance level set at p < 0.05. Interpretation of the effect sizes was based on. Cohen classified effect size range into “large,” “medium,” and “small” effect sizes. Moreover, a small effect size (d ≤ 0.2) indicates a difference that is somewhat trivial and probably not that important. A medium effect size (d ≥ 0.4 ≤ 0.6) may have importance. A large effect size (d ≥ 0.8) is probably important.

2.10 Ethical issues and code of conduct
The study was dealt with ethical issues; it protected the privacy of research participants and made guarantees and confidentiality in risk of harm as result of their participation. Therefore, the study was conducted according to Jimma University rules, policies and codes relating to research ethics.

3. Result and Discussion
3.1 The statistical (Paired t-test) analysis of football dribbling test
The above table shows, the result of paired t-test conducted to determine if there was significant difference between pretest and posttest mean scores of football dribbling performance. The result exposed that there was an extremely statistically significant difference between pretest (M=86.79, SD= 9.05) and posttest (M= 96.79, SD= 5.48) at the. 05 level of significance (t=6.48, DF = 27 n=28, p< 0.05, 95% CI for mean difference 6.83 to 13.17),On average the mean of posttest was increased about 10 points after 10 weeks football training. According to Cohen (1988) the value of effect size (d) is 1.10, which is considered as large effect size. The above table indicates that the result of paired t-test conducted to determine if there was significant difference between pretest and posttest mean scores of football passing performance. The result demonstrated that there was an extremely statistically significant difference between pretest (M = 39.29, SD= 7.36) and posttest (M = 45.00, SD = 6.94) at the. 05 level of significance (t=4.16, DF = 27 n=28, p< 0.05, 95% CI for mean difference 3.04to 8.39).On average the mean of posttest was about 5.71 points higher than Pretest after 10 weeks football training. According to Cohen (1988) the value of effect size (d) is 0.80, which is considered as large effect size. The above table reveals that the result of paired t-test conducted to determine if there was significant difference between pretest and posttest scores of football shooting performance. Thus, the result revealed that there was an extremely statistically significant difference between pretest (M = 35.18, SD = 9.28) and posttest (M=45.00, SD =7.16), at the. 05 level of significance (t=5.03), DF= 27 n=28, p< 0.05, 95% CI for mean difference 5.82 to 13.82, On average the mean of posttest was about 9.28 points greater than pretest after 10 weeks football training. According to Cohen (1988) the value of effect size (d) is 1.06, which is considered as large effect size. The findings of this study supports the researcher's position concerning the role of training in improving dribbling, which has an important implication for other skills such as passing and shooting (Separovic 2009). The researcher suggests that in sports, training is a process of repeating work that improves potential to achieve optimal performance. Practice and repetition through experimental play is a key element to improving ones soccer dribbling skills. The number of mistakes until you mastered the skill. Even though you still made mistakes, but they were few and far between. The same will be true when you teach a new concept for your players. It is okay if your players make many Mistakes when learning a new concept or skill. It emphasizes that training is the key to improve performance of technical football skills. The results of the present study have shown the extreme significant differences in the mean of dribbling, passing and shooting between pretest and posttest. This indicates that training has a positive role to play in the football dribbling, passing and shooting performances. These results were consistent with the previous study which have indicated that 10 weeks soccer training program with similar characteristics of volume and intensity may lead to significant changes slalom dribble and lob pass tests, 30- and 50-m time-trial performances. The players were evaluated 2 times along the experiment (T1: before training, and T2: after training). Slalom dribble, lob pass. The difference between the evaluation protocols did not allow the researcher to compare the results of the present study with those presented in other investigations. 7day taper increased their run time from 6-22%. This is heartening news for marathon runners, because the 26-mile event is all about maintaining your maximal race pace for as long as you can, revealed that runners following a seven-day taper improved their 5k treadmill time trials by 2.8 percent. athletes who followed a 14-day tapering program improved their 5k times from 1.2 percent to 6.3 percent, certainly nothing to be sneezed at.

4. Conclusions
This study shows that ten weeks football training could be a useful and effective tool for improving dribbling, passing and shooting performances of football players. Thus, ten weeks football training is an effective method to enhance football dribbling, passing and shooting performances.

5. References

<table>
<thead>
<tr>
<th>Variable</th>
<th>Test</th>
<th>Mean</th>
<th>Std. d</th>
<th>Std. error mean</th>
<th>95% CI lower</th>
<th>95% CI upper</th>
<th>t</th>
<th>DF</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dribbling</td>
<td>Pretest</td>
<td>86.79</td>
<td>9.05</td>
<td>1.71</td>
<td>6.83</td>
<td>13.17</td>
<td>6.48</td>
<td>27</td>
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<td>Posttest</td>
<td>96.79</td>
<td>5.48</td>
<td>1.40</td>
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<tr>
<td>Passing</td>
<td>Pretest</td>
<td>39.29</td>
<td>7.16</td>
<td>1.35</td>
<td>3.04</td>
<td>8.39</td>
<td>4.38</td>
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<td>Posttest</td>
<td>45.00</td>
<td>6.94</td>
<td>1.31</td>
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<td></td>
<td></td>
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<tr>
<td>Shooting</td>
<td>Pretest</td>
<td>35.18</td>
<td>9.28</td>
<td>1.75</td>
<td>5.82</td>
<td>13.82</td>
<td>5.03</td>
<td>27</td>
<td>0.001*</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>45.00</td>
<td>7.20</td>
<td>1.36</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

* Significant at 0.05 level of confidence.


