Original Article

The Effect of using Various Exercises using Rubber Resistances Accompanying some Visual Means and Vision Training in Developing Scoring Accuracy in Football

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ABSTRACT

Scoring accuracy is one of the main factors for any team to win. Any weakness is considered a problem for training officials. This problem should be overcome. Through the researchers' experience in training, practicing the game and continuous follow-up of the tournament, they noticed that many players lack scoring accuracy which is considered by the researchers as a real problem sought to be solved through setting a training course using various exercises and determine its effect on developing scoring accuracy in football. In the light of results of the study, the researchers found that all exercises affect developing scoring accuracy in football, regular exercises and vision exercises by the second group are better in developing scoring accuracy in football, and there is a significant difference between pre- and post-tests for all groups and in favor of post-test. Through conclusions, the researchers recommend adoption of regular training and vision training in developing scoring accuracy in football, it is necessary to increase scoring during various training periods due to its positive effect on mastering scoring, it is also necessary to conduct scientific studies and researches in using regular training and vision training to reach the best achievement through developing all basic football skills.

Keywords: Various training, rubber resistance, visual means, vision exercises, scoring accuracy, football

INTRODUCTION AND SIGNIFICANCE OF THE STUDY

Football is characterized by a special nature that is different from the other ball games in terms of other ball games and other course, in terms of the way of technical and tactical performance, the way of the goal is counted as well as the pace of great speed in performance



encouraged by rules of the game. This leads to a high level of excitement especially during the implementation of high-level demands of the game. It is among these requirements that can be developed and upgraded through the use of various methods and techniques of training. Through this diversity training process, we reach the goal of sports training we seek, which is to reach high levels in the way of scoring goals, high precision, and speed. In addition, football includes multiple basic skills in defense and attack, the separating line between winning and losing is scoring, and the main objective, which culminates performance in the game of football, is scoring accuracy as the team can win the game through scoring more goals of the opposing team at the end of the game's time. Hence, the significance of the study lies in the scientific serious attempt that researchers want to try

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using a variety of exercises for the purpose of achieving broader goals in sport training. It is a study which the researchers hope to serve the game of football.

Problem of the Study

Scoring accuracy is one of the main factors for any team to win. Any weakness is considered a problem for trainers as they should be working on overcoming this problem. Through the experience of researchers in training, practicing the game and continuous follow-up of the tournament, they noticed that many players lack scoring accuracy which is considered by the researchers as a real problem sought to be solved through setting a training course using various exercises and determine its effect on developing scoring accuracy in football.

Objectives of the Study

The study aims to:

- 1. Design an educational course using various exercises to develop scoring accuracy in football.
- Comparing priority of various exercises in developing scoring accuracy in football for members of the study.

Hypotheses of the Study

- 1. There are statistically significant differences between pre- and post-tests in developing scoring accuracy in football for members of the study.
- 2. There are statistically significant differences between post-tests for the three various exercises.

METHODOLOGY

Methodology is one of the important and basic elements in conducting scientific researches. Accordingly, the researchers used the empirical method using three symmetric groups as it is proper to the nature of the research problem.

Sample of the Study

The researcher selected junior players of Electric Industries Football Club. A number of the study population individuals were 36 players divided into three groups. Each group consisted of 12 players. The researcher applied rubber resistance exercises on the first group while regular training and vision training were applied on the second and the third group using visual means.

Scoring accuracy test in football (Zaid, 2013: p. 781).

Pre-tests

Pre-tests for the sample of the study and for the three groups were conducted in a single day on 06/09/2015. Testing results were recorded based on the following methods: Rubber resistance, regular training, vision training, and some visual means with consideration of all conditions related to tests including time, place, and tools.

Training Course

After the researcher selected the sample, it was divided into three equal groups. Each group works with a certain method under study. Rubber resistance training was applied on the first group while regular training and vision training were used with the second group. The third group applied visual means. The researchers applied the course represented in 8 weeks with three training units per week (Saturday, Monday, and Wednesday), where the number of training units reached 24 units, and both researchers intended to make the diversified duration of exercise with rubber bands in the module of 30-40 min of preparatory section and then strongly graduation exercises in the modules by changing band type based on severity or numbers. Tests were under the supervision of the researchers and the team's coaches.

Post-tests

After implementing the training course on the sample of the study, post-tests were applied in a single day on 07/11/2015.

PRESENTING AND DISCUSSING RESULTS

Presenting and Discussing Results of Pre- and Post-tests

Table 1 shows that the counted (T) value for the first group reached (3.05) which is higher than tabulated value of 2.36 at freedom degree of 11 and significance level of 0.05. It shows that there is a significant difference between pre- and post-tests in favor of post-tests. The researchers attribute this development to the effect of resisting rubber bands that helped players to be distinctive at scoring accuracy variables through the increase of muscular strength by the effect of resistance during training. This agrees with the view that "the use of the style of disability (resistance) leads

to the development of the force or its compounds, while the calculated (t) value for the second group was 3.84 and is also higher than the tabulated value of 2.36 at the same degree of freedom, the same level of significance with significant difference and in favor of post-tests." The researchers attribute emergence of such differences to the use and adoption of regular exercise and training vision that effectively influence the development of scoring accuracy that should be considered and exercised. This also corresponds to Nagah Mahdi who said that "visual exercises are very important for players in various sporting events as they develop motor correspondence" (Mahdi, 2011: p. 249), as it should be practiced without exception, especially eye exercises. This is to overcome visual stress, which negatively affects the functions of vision with the passage of time. Moreover, the researchers believe that the use of visual exercise significantly contributes to the development of optical capacities because the sense of sight plays an important role in performing special skills especially the scoring skill with the presence of a barrier to block vision. As for the third group, the calculated value of (t) 3.96 which is higher than the tabulated value of 2.36 at freedom degree of 11 and significance level of 0.05, this shows that there is a significant difference in favor of posttests for the sample of the study through the method which refers that using visual means represented in various educational means in education (static pictures, sequenced pictures, and silent movies) makes motor education more effective and positive. They make the learner responsible, participant and positive to a great extent. The use of these means leads to push education forward, reduce time period and

work on building and developing individuals (Ayoub et al., 2004-2005: p. 38).

Table 2 shows that the counted (F) value is 22.067 which is bigger than the tabulated one which reached (3.40) at freedom degree of 2.33 and significance level of 0.05. This shows that there are no significant differences among the three groups of the study sample that used three different training methods leading to positive results.

Table 3 shows that the value of differences in arithmetic means between first and second group is 13.755 which is bigger than least significant difference (LSD) value of 5.458. This shows that there are significant differences in favor of the second group (group of regular training and vision training. The researchers attribute this to the player's ability on applying the game's strategy based on visual information. It is called previous visual experience as visual training works on improving basic visual capabilities through repeated series of eye exercises work. This is important for all athletes. Therefore, trainers and specialists should grow and develop sensory perception of vision depth of players during training. The more this strength is advanced, the bigger and better the ability to act in various situations of play (Mahjoub, 2002: p. 191) and that the differences value of the circles in arithmetic means between the first and the third group is (-11.847) which is less than the value of LSD of 5.458. This shows that there are no differences between the first and the third group.

On the other hand, the value of differences in means between the second and the third group is 1.881 which

Table 1: Arithmetic means, SDs, the counted and tabulated T-values for the three goals and for all variables in pre- and post-tests

Groups	Measure unit	Pre-test (scoring)				Counted T-value	Tabulated T-value	Significance
		Mean	SD	Mean	SD			
First group	Degree	3.5	1.01	6.37	1.4	3.05	2.36	Significant
Second group		4.44	1.03	7.21	1.8	3.84		Significant
Third group		4.37	1.4	5.5	1.6	3.96		Significant

SD: Standard deviation

Table 2: Analysis of variance, counted and tabulated (T) values for post-tests of the achievement of the three educational groups

Source of variance	Total squares	Freedom degrees	Average	(F) Value		Significance
			squares (variance)	Counted	Tabulated	
Inter-groups	111.94	2	55.47	22.067	3.40	Significant
Intra-groups	60.208	3	25.217			

Table 3: Differences value among arithmetic means of achievement test and the least significant difference LSD for the three groups of the study

Groups	Arithmetic means	Differences	LSD Value	In favor of
First group- Second group	69.999-56.244	13.755	5.458	Second group
First group- Third group	68.118-56.244	-11.847		-
Second group- Third group	68.118-69.999	1.881		Second group

LSD: Least significant difference

is less than the value of LSD of 5.458, and this shows that there are no differences between the two groups. Hence, we conclude that the second group is the one that showed differences in scoring accuracy using regular exercises and vision exercises which indicate that it is the best method in scoring accuracy. The researchers found that the use of rubber bands and assisting means in training units as well as selection of training types and consistency to quality of training prepared by researchers contributed to scoring accuracy as these exercises work mainly in specialized sport (Ebidy, 2010: p. 105).

Findings of the above tables show that there is a development in muscular strength of feet. The researchers attribute this development to the fact that this muscular strength is considered an important indicator and vital element of fitness in order to improve health. This strength developed noticeably because of training which depends generally on quality of rubber bands and the use of 3 types of bands: Red, blue and green as each color represents certain intensity. The red is for low intensity; the blue is for average intensity and the green is for high intensity based on the band's flexibility strength. "The use of rubber bands with various strengths duplicates training efficiency because they help

duplicate movement capacity in joints, and their use has a positive effect on scoring in football" (Magid, 1998: p. 78).

CONCLUSIONS

- 1. All exercises affect in developing scoring skills in football.
- 2. Regular training and vision training used by the second group are the best in developing scoring accuracy in football.
- 3. There is a significant difference between pre- and post-tests for all groups in favor of post-test.

RECOMMENDATIONS

- 1. Regular training and vision training can be adopted in developing scoring accuracy in football.
- 2. It is necessary to stress that increasing scoring during various training periods has a positive effect on scoring mastery.
- It is necessary to conduct scientific studies and researches in using normal exercises and vision exercises to reach the best achievement through developing all basic football skills.

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ANNEX 1

Exercises using rubber:

- 1. Standing, raising arms up, fixing the band from ends with feet facing and holding the band from its ends, lowering arms to the side with a shield on the right eye.
- 2. Standing, arms forward, fixing band around trunks, running forward opposite the fixed end to the goal.
- 3. Standing, side arms, band around legs, alternative pulling feet forward.
- 4. Standing, opening arms forward, the band around one leg and fixed in a wall with raising legs upward.
- 5. Standing opening, fixing the band in legs and attempting to dribble the ball forward.
- 6. Standing, arms raised, band around legs, side opening of legs.
- 7. Standing, the band below right leg, the band is held from ends by hand and raised arms upward.
- 8. Standing, opposite, running between two colleagues in opposite direction.
- 9. Standing, open legs, fixing the band with both feet in a distance 40 cm and dribble the ball between posts.
- 10. Standing, open, fixing the band with both feet in a distance 50 cm and pass the ball on the wall.