

The Effect of Proposed Teaching Curriculum in the Development Speed and Accuracy Performance of some Types of Shooting for Juniors Players of Handball

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Abstract

The shooting skill in handball varied performance, types and requirements imposed by the position of the different play and all of them share there quisite speed and accuracy in performance. Through the Notes researchers being handball coaches found weakness in the performance of shooting types of junior players in terms of performance with accuracy and high speed in same time and this is position requirement during the match with the defenders as well as goalkeeper for the purpose of scoring goals on the opposing team. So this came as result of lack of coaches' interest by the teach this skill according to these requirements. As well as the tests used to measure the types of shooting depends on measure the accuracy without speed which lead to incorrect results. Therefore, the first aim was knowing the effect of the teaching curriculum in the development speed and accuracy performance of some shooting types in handball (shooting from the pivot and the level o the head, shooting from high jumping, Shooting from front falling). The second aim was the development of shooting tests to measure the speed and accuracy of shooting in same time. The researcher used the experimental research by groups' equal design. The sample research consisted of (20) players from the junior at the center specialist than dball in Babylon city. The researchers used some of shooting tests to measure the skills at the pre-test and post- test. After that, the results were analyzed by some of statistic means such as, (paired-samples T Test-, independent- samples T Test, leven test, mean, Standard deviation. according to the results of the study and discussion, the researchers conclude following, that the teaching curriculum positive effecting the development of shooting types performance through the development the speed and accuracy performance and access to a balanced relationship between speed and accuracy.

Key words: Speed and accuracy, performance, shooting, handball, players.

1. Introduction

The handball is one of the games that dependants performance in various abilities, such as physical, motor, and mental because of the complexity of the performance skills that are characterized by strength, speed and accuracy. The skills of handball are many and varied. The most require performance speed and accuracy at the same time in order to be a performance influential during the match. The shooting is most important skill, which mainly dependent on the accuracy in guiding the ball into the empty areas and high speed so cannot goalkeeper stopped. The fitts law refers to the inverse relationship between speed and accuracy, so the trainers must to observe this law, through the delivery of the players to a level that achieves the performance of the shooting at the best possible speed and better accuracy. This requires players to high motor control in the performance of their skills, and that comes through continuous training and exercises affecting quality.

The problem of research included: The shooting skill in handball varied performance, types and requirements imposed by the position of the different play and all of them share there quisite speed and accuracy in performance. Through the Notes researchers being handball coaches found weakness in the performance of shooting types of junior players in terms of performance with accuracy and high speed in same time and this is position requirement during the match with the defenders as well as goalkeeper for the purpose of scoring goals on the opposing team. So this came as result of lack of coaches interest by the teach this skill according to these requirements.

As well as the tests used to measure the types of shooting depends on measure the accuracy without speed which leads to incorrect results? So the first aims was knowing the effect of the teaching curriculum in the development speed and accuracy performance of some shooting types in handball (shooting from the pivot and the level of the head, shooting from high jumping, Shooting from front falling). The second aim was the development of shooting tests to measure the speed and accuracy of shooting in same time. Such as the first hypothesis was, there are significant differences between pre-test and post-test for two groups experimental and control in speed and accuracy of performing some shooting types and in favor of the post test. The second hypothesis was there were statistically significant differences in post-test between the experimental group and control group in speed and accuracy of performing some shooting types and in favor of the experimental group.

2. Methodology

2.1 Sample

The sample of research consisted of (20) players represented the junior team of the training center Specialist handball in the Babylon city. The sample divided into two groups, the first group was experimental groups (10 players) and the second group was control group (10 players).

The experimental group trained according to the proposed curriculum that prepared in accordance with development the speed and accuracy but the control group trained according to the curriculum coach. The Table (1) shows the equality and homogeneity between experimental and control group in the types of shooting skill

Table (1)
shows the equality and homogeneity between experimental and control group in the types of shooting skill

Tests	T test	Sig.	Type of significance	F	Sig.
Shooting from the pivot	2.3	0.34	Insignificant	0.45	0.23
Shooting from high jump	5.8	0.12	Insignificant	23	0.14
Shooting from front falling	1.9	0.08	Insignificant	5.34	0.34

2.2 The teaching curriculum

The teaching curriculum included (12) teaching unit, two units at the week and It was the time of the main section (90) minutes which included many exercises that aim to improve the performance of shooting types quickly and accurately in same time and Annex(1) shows teaching unit model.

2.3 Measurement of the variables (tests used)

2.3.1 Test indexes the accuracy of shooting from pivot and head level on accuracy boxes.



Figure1. Shows the device measuring ball speed (Sports Radar)

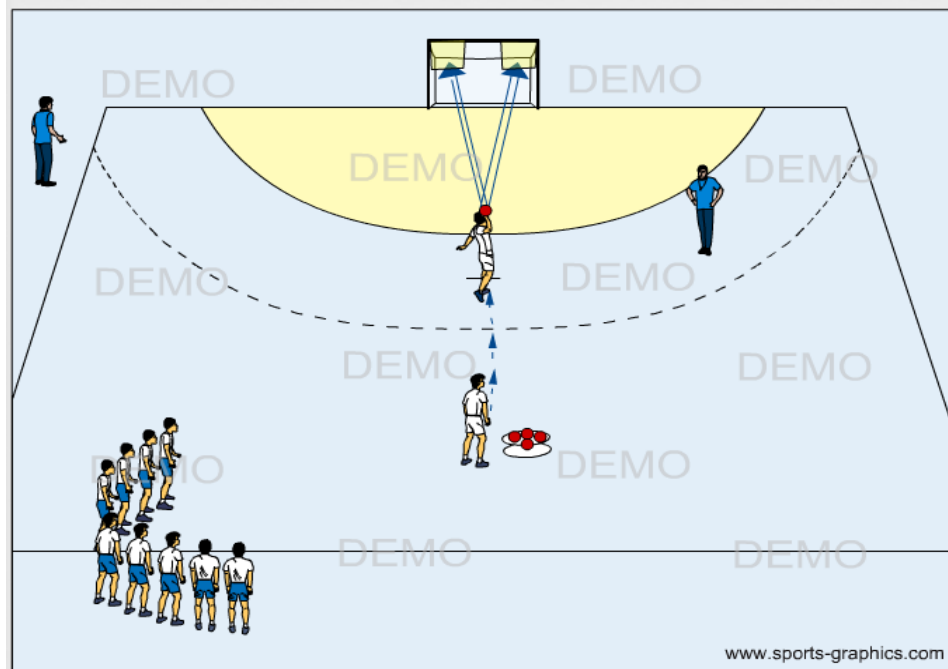


Figure.2 Shows Test of index the accuracy of shootingofthe focalperformancefrom levelheadon accuracyboxes.

*The purpose of test: measure index the accuracy of shootingofthe focalperformancefrom levelhead

*The Devices and tools:

- Handball court
- Boxes accuracy shooting (50*50) cm number (2) Installed in theupper cornersof thegoal.
- Handball balls (6).
- Sport radar device

* Descriptionof performance:

After running the device (Sports Radar).The players' stands in front of goal behind the (8) meter line and the balls beside it, then take the ball and lead shooting (three balls on each box). Asian Figure 2. The performance is in accordance with the following conditions:

- Give the player six attempts
- Shooting behind the line (8) meter
- Canceled attempt beyond the laboratory where the8-meter line.
- If the ball entered inside the box directly or touched its borders and entered, giving players two degrees.
- If the ball touched, the boarders box and out of, the player giving one degree.
- If the ball shot out of the box, the player giving nothing.
- The full marks for accuracy is (12) degree
- We get the speed from (sport radar) device

- Calculation the index accuracy:
 The index accuracy = Outputperformance (total the degrees of six attempt) / sum times of shooting attempt.
 The measurement units (degree/second).

2.3.2 Test index the accuracy of shootingofhigh jumps on accuracyboxes.
 Same the last test conditions except the performance from (9) meter line.

2.3.3 Test indexes the accuracy of shooting of front falling on accuracy boxes.
 Same the last test conditions except the performance from (7) meter line.

2.4 statistical means

Data of study was analyzed through a program of SPSS and using mean, stander deviation paired-samples T Test, independent- samples T Test, leven test.

3. Results and Discussion

Table (2)
Shows significant differences between pre-test and post-test of experimental group

Tests	T test	Sig.	Type of significance
Shooting fromthepivot	2.3	0.00	significant
Shooting from highjump	5.8	0.00	significant
Shooting from front falling	1.9	0.00	significant

By analyzing, the table (2) notes the significant differences between pre-test and post-test of experimental group in all the skills because that significant values are less than (0.05).

Table (3)
Shows significantdifferences between pre-test and post-test of control group

Tests	T test	Sig.	Type of significance
Shooting fromthepivot	5.3	0.00	significant
Shooting from highjump	3.7	0.00	significant
Shooting from front falling	8.2	0.00	significant

By analyzing, the table (3) note the significant differences between pre-test and post-test of control group in all the skills because that significant values are less than (0.05). By analyzing the two tables (2) and (3) showed that all the differences between the pre-test and post-test for the experimental and control groups are significant. The researchers attribute that to enough number of teaching units which carried out by the experimental and control groups, which contained influential exercises through the type and repetition.

Table (4)
Shows significant differences between the experimental and control group in post-test

Tests	T test	Sig.	Type of significance
Shooting from the pivot	4.80	0.03	significant
Shooting from high jumping	0.00	0.00	significant
Shooting from front falling	2.80	0.01	significant

By analyzing, the table (4) note the significant differences between experimental and control group in post-test in all the skills and in favor of the experimental group because that significant values are less than (0.05).

The researchers show through the table (4) significant differences between the two groups in favor of the experimental group in all tests. The researcher indicates to the effect of the curriculum proposal, which included skill and physical vehicle exercises, which had a great role in the development of shooting types performance in handball. So has been the development of speed and accuracy in special balance in the relationship between them so that the player can lead effectively skill. Schmidt explains the concept within fits law implies an inverse relationship between the "difficulty" of the movement and the speed (the time) which it can be performed. Increasing the index of difficulty decreases the speed (increases the movement time).

One way to think about this is that individual in same way "trades off" speed against accuracy, and this trade-off is done so that the rate of information processing is held constant (1-227). Magell notes about index of difficulty according to fits law, a quantitative measure of difficulty of performing a skill involving both speed and accuracy requirements (2-137). Speed-accuracy trade-off a characteristic of motor skill performing in which the speed at which a skill is performed is influenced by movement accuracy demands, the trade-off is that increasing speed yield decreasing accuracy, and vice versa (2-137).

Also the curriculum content feedback that guide the performance player to the accuracy and speed in same time without Depends on accuracy only to be suitable with requirements of motor conditions in match. The presence of the vehicle and included strength exercises to develop muscle groups that control the performance of shooting types have a significant role in the development of faster performance with increased ability to motor control and thus the evolution of accuracy in performance.

4. Conclusion

According to the results of the study and discussion, the researchers conclude following, that the teaching curriculum positive effect in the development of shooting types performance through the development the speed and accuracy performance and access to a balanced relationship between speed and accuracy.

References

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 Richard A. Schmidt and Timothy D. Lee. 2011. Motor control and Learning. A behavioral emphasis. Fifth edition.

Index (1) Shows teaching unit model

Sections of the unit	Skills and exercise
The aim Tools	Developing the speed and accuracy of shooting types Handball court , balls for juniors(10), overloaded handball (900 grams), tennis balls(15),handball goals, accuracy boxes (50 cm X 50cm)
Warm - up (15 min)	-Trot (5) min Swedish specialized exercises(5) min passing between players (warm-up balls) 5 (d)
Types skill	1 shooting from the pivot and above the head level 2 -shooting from high jump 3 - shooting from front falling
The main section (60min)	1- Shooting on accuracy boxes, which installed in the upper corners of goal with all types of shooting from the line (7 m) from the front of the goal and using overloaded handball. (8 repeat) 2- shooting on accuracy boxes which installed in the upper corners of the goal through the use of all types of shooting from a distance (8 m) using a hand balls for junior after exercises build on the front (8 repeat) 3- shooting on accuracy boxes which installed in the upper corners of goal through the use of all types of shooting from a distance (9 m) from the front of the goal and using hand balls for junior, tennis balls exchange after high jump exercises (8 repeat). 4- shooting on accuracy boxes which installed in the upper corners of goal through the use of all types of shooting from Center forearms mutually from a distance (8 m) using a hand balls for juniors using hi speed shoots . (8 repeat). 5- Shooting on accuracy boxes, which installed in the lower corners of goal from the front and distance (7 m) preceded the dribble for a distance 5 m using all types of shooting after Drawback exercises(8 repeat). 6 - Shooting on accuracy boxes, which installed in the lower corners of goal from the front and distance (8 m) as randomly using all types of shooting. (8 repeat). 7- Shooting on accuracy boxes, which installed in the upper and lower corners of goal from the front and distance (8 m) and randomly using all types of shooting. (8 repeat)