THE EFFECT OF SPECIAL EXERCISES USING THE (REBOUND NET) DEVICE IN DEVELOPING THE ACCURACY OF SPIKE DIAGONAL SKILL IN VOLLEYBALL

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Abstract

The aim of the research was to prepare special exercises using the Rebound Net to develop the performance of the of accuracy of spike diagonal skill for university of Baghdad players. The researcher used the experimental method. The sample has been selected in intentional way. They are the 8 players. They divided into two equally groups, experimental groups and control group. After finishing the main experiment and tests, SPSS program was used to statistically process the data to reach the results, Results were presented and discussed. The results showed that there were significant differences between the pre test of the accuracy of spike diagonal skill between the control and experimental groups for the benefit of the experimental group. In addition to the significant positive role played by Rebound Net exercises in developing the accuracy of spike diagonal skill. The researcher recommended using Rebound Net device exercises by coaches because it plays an important and rapid role in the development of accuracy skill, as well as the need to use modern training tools and devices and keep up with the evolution to upgrade the training process and reach the level of achievement.

Keywords: Exercises. Sports. Spike diagonal. Volleyball

Introduction

The development achieved in the world's sports levels in all sports was not by chance, but a result of planning in the field of sports training and the integration of athletes' preparation well in all skill, physical, psychological and planning aspects. Volleyball is one of sports that is widely practiced and occupies a good place as an interesting game. It contains a variety of skills that players should train and master highly by preparing training programs and following modern scientific methods in developing and achieving the best results for them. In training Volleyball, there are a number of tools, including the use of device training (tools, such as Swedish seating tools, wooden boxes, elementary networks, weightage training and others). skill plays a significant role in achieving positivity for the team. It plays essential role in the process of mastery and success of the way they play a high degree of what confuses the opponent team, and its inability to control the events of the game. High skills of the team members led to a good situation. Serving can be defined as hitting the ball with one hand or any part of the arm after it has been thrown or released from the hand, and before it touches any part of his body or the surface of the court.(aqel A. and Amer J.(2001). The accuracy of spike diagonal skill is one of the most important

offensive skills in the volleyball, A spike is defined as "the technical and offensive skill in volleyball, as the player jumps and quickly hits the ball over the net to the opponent's court, in a legal manner."(Marion, 1980). The spike is one of the technical skills in volleyball, the powerful offensive weapon, the final result of the efforts of the entire team, and the most effective and effective way to outperform the competing teams in achieving winning matches by scoring points and taking possession of the serve(Muhammed and Lutfi, 2001). Sabhan S. H. (2019) mentioned that it is considered the first and most effective way to score points, compared to the rest of the skills, which have a major role in deciding the match, and this skill requires players who are characterized by motor capabilities such as speed, motor response, motor accuracy, agility, flexibility, etc., and directing the balls to the right place, and these abilities need certain training methods to develop it. The key of winning in games. Through self-observation, the researcher found frequent weaknesses and errors in the execution of the spike skill when the most of the sample players as well as the non-use of modern training devices and means in the training process by coaches to improve performance. Thus, they sought to prepare special exercises accompanied by a modern training device (Rebound Net) to develop the accuracy of spike diagonal skill of the sample personnel. The importance of the research in preparation special exercises using the Rebound Net to develop the accuracy of the skill performance.

Objectives

•   Identify the effect of exercises using the (Rebound Net) device in developing the accuracy of spike diagonal skill in volleyball.

•   The exercises using the (Rebound Net) device had a positive effect on developing the accuracy of spike diagonal skill in volleyball.

Hypotheses:

- The exercises using the (Rebound Net) device had a positive effect on developing the accuracy of spike diagonal skill in volleyball.

Methods

The Experimental approach by designing the two equal control and experimental groups is empirical in dealing with research problems being more appropriate to the nature of the search and access to the results approach, it is more appropriate to the nature of the research and leading to results. (Jawad A.,and Athab A. 2021).

Participant

Community includes the players of the College of Physical Education and Sports Sciences (12) players. The sample(8) players was chosen from them, and divided into two equal groups, control and experimental group. Two equalizers, and equivalence was conducted for them based on the pre-test scores of the sample. (4) players were excluded due to injury as shown in table 1 (Table 1):

Research Test

Testing the skill of spike the diagonally: The purpose of the test. Measuring the accuracy of spike diagonal skill. Tools were five volleyball. The court is divided into two triangles (half of the court on the other side) and then the inner triangle (the net side) is divided into three areas, the width of each area is (3 m).

Test Specification

After setting, the tester performs the diagonal spike blow towards the inner

Table 1: The equivalence of the two groups in the pre-accuracy test.

Indication	Sig.	T	Experimental group pre test		Control group pre test		Skill
Non sig.	0.447	0.8-	SD	Mean	SD	Mean	Accuracy of spike diagonal skill
			0.8	1.8	0.5	1.4	
Confidence level (0.05) degrees of freedom n-2 = (6)							

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Table 2: Shows mean, standard deviation, and T value of the pre and posttest.

Indication	T	Sig.	Control group post test		Control group pre test		Skill
Sig.	-4.8	.000	MEAN	SD	MEAN	SD	Accuracy of spike diagonal skill
			3.2	0.8	1.4	0.5	
Confidence level (0.05) degrees of freedom (3)							

Table 3: Shows the arithmetic mean, standard deviation, and T-value of the pre and posttest or the experimental group in testing the accuracy of spike diagonal skills.

Indication	T	Sig.	Experimental group post test		Experimental group pre test		Skill
Sig.	0.068-	.028	MEAN	SD	MEAN	SD	Accuracy of spike diagonal skill
			4.4	0.5	3.2	0.8	
Confidence level (0.05) degrees of freedom (6)							

triangle on the side of the grid.

Test conditions:

• Each tester has five attempts.

• Preparation must be good in every attempt.

• Scores are calculated according to the place where the ball landed as follows:

• In the first region {3} scores.

• In the second region {1} scores.

• In the third region {5} scores.

• Outside this area the tester gets {0}.

Register

The tester records the scores obtained in the five attempts, final score for this test is (25). (Mohamed S. H. and H. A. 247, 1997).

Exploratory Experience

The researcher conducted a survey experiment in the stadium of the College of Physical Education and Sports Sciences / University of Baghdad. The research sample and knowledge of the efficiency of the assistant work team and their knowledge of the course of events and tests of the research in addition to knowledge of the appropriateness of the exercises and testing of the research sample.

Pre-tests

The researcher conducted the pre-tests on the research sample, corresponding to 12/15/2022, in the stadium where the used device was located.

The main experience

The main experiment included the implementation of the vocabulary of the training curriculum, the experimental group, using the prepared exercises and the (Rebound Net) device and under the supervision of the researcher.

Post-tests

Post-tests were conducted on the research sample, corresponding to 15/2/2022, and he was keen to create conditions similar to those of the pre-tests in all aspects of temporal and spatial aspects, and the assistant work team in order to identify the extent of improvement that he obtained in the skills under study from exclusively before the independent variable.

Results

Results were shown in tables (Tables 2& 3).

Discussion

Table 1 showed the the equivalence of the two groups in the pre- test accuracy of spike diagonal skill and the two groups, it became clear to us that the sample are equivalent in performing the accuracy of the spike skill, and this means that two groups will start applying from the same point .

Table 2 showed that the results of the pre and post-test for the control group have a simple improvement in the skills. The reason is due to the traditional training followed, in addition to the lack of modern devices and tools that help in raising the skill level.

Tables 1 and 2, showed that there are statistically significant differences between the control and experimental groups, in pre-test and post-test, and in favor of the experimental group.

The attributes superiority to the great role provided by the special exercises that were used during this research period, which characterized by the presence of the device used. Muhammad J. (1993) indicated that the use of exercises with the presence devices and tools in training is an important factor in improving the technical, physical and psychological level of the player.

In addition to the modern device used (Rebound Net), which greatly helped to improve the accuracy of spike diagonal skill players of the experimental group. Abdul Hamid S. (1996) confirmed that the tools and devices that are among the main elements for the success of any program in physical education support motivation and reinforcement.

Conclusions

1. There were significant differences between the post-test with the accuracy of spike diagonal skills between the two groups, the control and the experimental group, for the benefit of the experimental group.

2. The special exercises by (Rebound Net) device have a positive role in developing the accuracy of spike diagonal skill.

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Appendixes

Appendix 1: Training module template

Training method / repetition - time 10 minutes - repetitions 3 times - intensity - low - rest between exercises 1 minutes.

Exercise 1

Purpose: repetition of the performance of spike skills

Number of players: 4 players.

Requirements: Ten balls device.

Performance description:

The players stand in the form of a locomotive in front of the (Rebound Net) device, 5 meters away. The first player performs the skill and continues to repeat the performance for 10 times, then takes turns with his colleague, and so on.

Exercise 2

Purpose: crushing diagonal hit

The number of players is 4 players

Requirements: Ten balls

Performance description: The coach stands near the net, with center 2, while the players stand behind the offensive line in the form of a locomotive near center 3. After that, the coach throws the ball to the device used when wearing and upon rebounding; the first player performs jumping on the spot, which hits the smasher to center 6.

Exercise 3

Purpose: offensive spike

The number of players is 4 players

Requirements: Ten balls

Description: The coach stands near the net of center 2, while the players stand behind the attack line in the form of a locomotive near center 1, and the first players jump on the broadcast after him say and coach throw the ball to the player of position 1, who hits the spike to center 6.

Appendix 2

Illustrative image of the Rebound Net device (Figure 1).

Rebound Net: It measures (1.50 m in length and 2 m in width) and is fixed on columns that can be changed in terms of height and rotation.

Figure 1: Illustrative image of the Rebound Net device