ISSN: 0975 -8542

Journal of Global Pharma Technology

Available Online at www.jgpt.co.in

RESEARCH ARTICLE

The Effect of Speed Exercises on Kinetic Response and Block Skill in Volleyball

Labeeb Zouyan Mosiseek[1*], Hameed Hammad Khalaf[2], Majid Hamid Majid[3]

University of Anbar/the Collage of Physical Education and Sport Science / Iraq.

***Corresponding Authors Email:** *alzwayan2003@yahoo.com*

Abstract

Sport training, according to the Recurring training, is considered one of the important fundamentals that all rapid sports depend on. Volleyball is one of these important sports. Rising up the level of skills requires major training effort that can be known through the physical and functional competence. Volleyball depends fully on the system of the anaerobic energy Through at Recurring training due to the nature of this sport that requires quick response for the players' limbs so as to face some sudden difficult balls. That system does not need oxygen foe a very short period of time. The physiological variables give a general assessment of the efficiency and capacity of the muscles to work in the absence of oxygen. This requires coaches and players to be aware of the functions of the various parts of the body. Thus, they determine the components of training load to improve the level of sports. Areas of Research 20 players was divided into two groups the first experimental and the second control group. Conclusions it The recurring training, lead to a positive change in the proportion of the rapid interaction activity in muscle and lead to raising up the level of the kinetic response. Codifying the elements of training with the high interval training style has a significance to improve the physical and physiological competence. Special Speed exercises used in the training curriculum effectively contributed in improving the performance for Physical performance and skill of volleyball player.

Keywords: *Speed exercises, Kinetic Response, Block, Skill and Volleyball.*

Introduction

Volleyball, one of the events that given collective wide spread attention by those managing sports. As characterized by this game from other games with the basic skills of offensive and defensive, which are linked together while playing, and whatever team master of attack is bound to be as much as of defense to receive and recover balls and pass it to another player to do the attack opposite against the opponent. the fact that volleyball requires speed in performance, they rely on the energy system of Speed is very large and the system works strongly high contractility contribute movements and rapid strides when faced with balls " work is muscular high for a period of 20-45 seconds leads to the consumption of a large amount of the compounds of phosphate in the muscle and that work quickly in order to reconfigure the energy for body [1]. Importance of this study is through the vital elements and functional in the muscles of the body that have a key role in motor responses, as well as the legalizing sports training. Because of the lack of study on actively volleyball which is linked with the Physical performance and skill side, which depends on speed. Must therefore put physical exercise and skill according to the anaerobic energy system, in order to activity of some muscle cell interaction during the performance of motor responses player in the game, and that are commensurate with Physical performance and skill in order to develop the level of volleyball players.

The Research a Problem

After informed researcher on some local matches for volleyball in Iraq, and the fact that the researcher learn to play, discerned a weakness in some of the training programs, which is linked to responses kinetics of the players, as well as the lack of interest in exercise anaerobic that have a significant impact on physical performance and skill of through functional efficiency of the muscles of the body. Add to focus the attention of the players on the offensive skills are more of them for defensive skills. So I choose

researcher recurring training in accordance with Speed system, which has an effect on Physical performance and skill. In order to get the players to the speed of the motor response during the performance, to develop the Block Skill of volleyball.

The Research Objectives to Identify

Effect of Speed training in physical performance and skill of Volleyball players.

Research Methodology, Sample and the Measures of Field

Research Methodology

The researcher used the experimental method in manner equal groups, to suit the data and procedures in the search. The empirical research is characterized by exactly the control variables, and the curriculum is the only one that shows the relationship between cause and effect more precisely.[2]

The Research Sample:

Consisting of (20) player of clubs Anbar province, volleyball, were divided into two groups, the experimental group (10) players and the control group (10) players. It was to find a synergy between players using law coefficient sprains see Table (1).

Tests used in the Research

Basic research tools must be adopted by the researcher in order to achieve the results required to achieve the goals of the research.[3] Used an integrated set of research tools and some special services through which to get the data to come up with the final results.

Table 1: Homogeneity of the sample through the coefficient of torsion of the variables age, height, weight and length

S	Statistical Variables	Unit Measurement	Arithmetic Mean	Standard Deviation	Mediator	Coefficient Sprains	Signify
1	Age	Year	18.45	1.37	18	0.98	Moderate
2	Weight	Kg	73.56	6.05	75.5	-0.96	Moderate
3	Length	Cm	181.35	5.94	182	-0.32	Moderate
4	Training period	Year	4.8	1.11	4	0.26	Moderate

Testing the Performance Block Skill

Objective: To measure the accuracy of block skill.
Gadgets: Volleyball legal, balls (5), colored duct tape to divide the pitch
Performance specifications: divide the front area of the stadium into three regions of equal standing player in the center (2) to perform bulwark against the balls that the trainer beat overwhelming on a table in front of the player and across the network. Each player (3) attempts from each center (2, 3, 4) to be calculated and the correct class majority (27) degrees and all as (Figure 1). Registration: the player takes on the degree of the region that falls out of the ball as in the forms below.2.3.2 Test the speed of the motor response.

Test the Speed of the Motor Response

Use of the device called the illuminating lamps to measure the speed of the motor response. Is a modern Korean-made origin contains (12) lamp and Powered by electricity, see (Figure 2).

The Field Procedures

Exploratory Experiment

Conducting exploratory experiment by a team of assistance on a sample of (4) players from outside the main sample. The goal is to find out the validity of the tests and devices to understand and realize time to test and measurement.

Pretest

After (7) days from conducting exploratory experience, the staff assistant to the intended application of the tests on the sample at the place and time specified then get the desired results.

The Experience Main

After a pretest, apply special exercises on the sample through training modules that are given by the coach. Are three units in the week and within your stage setup for three months by (36) unit and start at four in the afternoon. And given exercises with the use of some tools sometimes. Be physical training according to the time of the anaerobic energy system and the use of the ball in defensive skills in volleyball own. That's where training modules starting from 85% to 100% of the highest intensity possible for the player according to time. Gradient in pregnancy by changing the number of iterations and aggregates and rest periods.

The posttest

Assistant team has applied the same tests on the sample the tribal. The same conditions of time and place and then get the data for statistical processing.

Statistical Methods

The researcher used the statistical means of the following: [4]

- The arithmetic mean:
- Standard deviation:
- Value (t) of the samples associated with:
- Coefficient sprains and Broker:

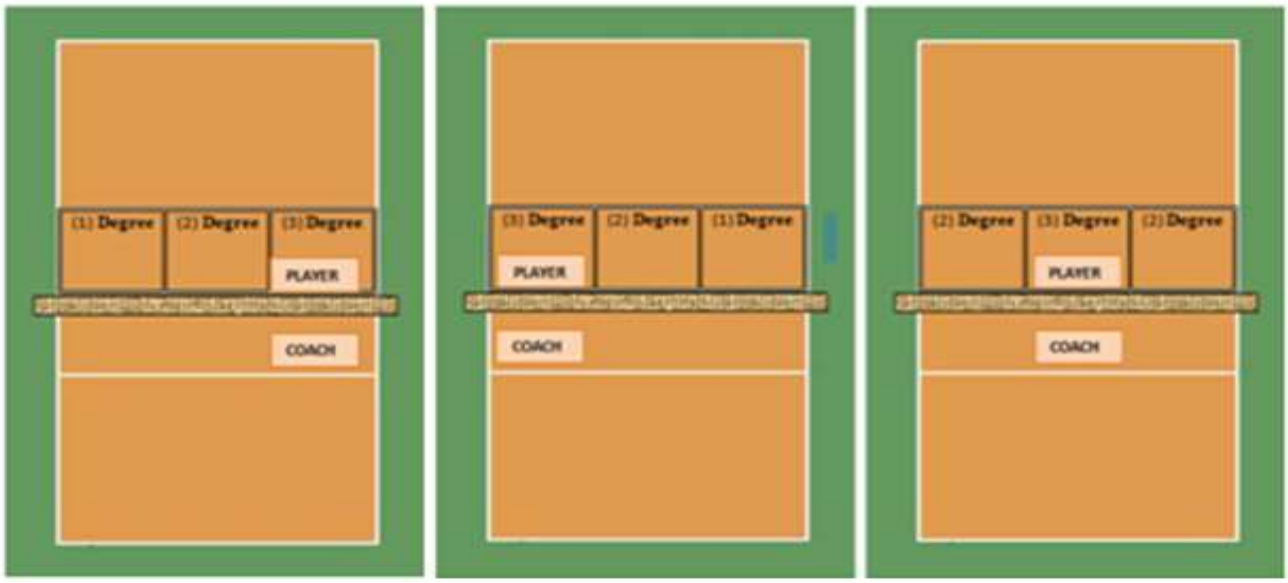

Figure 1: Show testing the performance blocks skill in Volleyball

Figure 2: Illuminating Lamps device to measure the speed of the motor Kinetic Response

View and Analyze the Results of Tests of Research and Discussion

View and analyze the Results of the Pretest and Posttest in the Experimental Group:

Through the table (2) to test block skill for Volleyball players of the experimental group. It turned out that the value of the arithmetic mean of the pretest was (31.74) and the standard deviation was (2.51). As for the post test became the arithmetic mean value (35.14) and standard deviation (0.85) and value (t) was (5.64) which is greater than the tabular value of (2.10).

The level of significance (0.05), which indicates the existence of a real difference between the results of the two tests for the benefit of post-test. The results of tests (Kinetic Response). Appeared in the pretest to the arithmetic mean value was (19.7) and the standard deviation was (4.83). In the post test became the arithmetic mean value (23.3) and standard deviation (2.86) and value (t) was (7.26) which is greater than the tabular value of (2.10). The level of significance equal to (0.05). This indicates the existence of a real difference between the two tests for the benefit of post-test.

View and Analyze the Results of the Pretest and Posttest in the Control Group

Through the table (3) to test the block skill in Volleyball of the control group. It turned out that the value of the arithmetic mean of the pretest was (31.51) and the standard deviation was (2.19). As for the post test became the arithmetic mean value (32.27) and standard deviation (1.53) and value (t) was (3.14) which is greater than the tabular value of (2.10). The level of significance (0.05), which indicates the existence of a real difference between the results of the two tests for the benefit of post-test. The test results defensive skills in volleyball (Kinetic Response).

Appeared in the pretest to the arithmetic mean value was (18.8) and the standard deviation was (4.34). In the post test became the arithmetic mean value (18.0) and standard deviation (4.98) and value (t) was (0.95) which is greater than the tabular value of (2.10).The level of significance equal to (0.05). This indicates that there is no real difference between pretest and posttest.

Table 2: Shows the arithmetic mean, standard deviation and the value of (t) in the tests before and after the experimental group

S	Variables	Unit Measurement	Pretest		Posttest		Value (t)	Signify
			Mean	STD.EV	Mean	STD.EV		
1	block	Points	31.74	2.51	35.14	0.85	5.64	Significant
2	Kinetic Response	Time	19.7	4.83	23.3	2.86	7.26	Significant

Tabular value (2.10) and the significance level (0.05)

Table 3: Shows the arithmetic mean, standard deviation and the value of (t) in the pretest and posttest in the Control group

S	Variables	Unit Measurement	Pretest		Posttest		Value (t)	Signify
			Mean	STD.EV	Mean	STD.EV		
1	block	Points	31.51	2.19	32.27	1.53	3.14	Significant
2	Kinetic Response	Time	18.8	4.34	18.0	4.98	0.95	Not Significant

Tabular value (2.10) and the significance level (0.05)

View and Analyze Differentials Posteriori Tests, between the two Groups (Experimental and Control)

Table (4) shows the difference in the posttest tests of the two groups, experimental and control, Test block skill in Volleyball the experimental group, it turned out that the arithmetic of the mean value was (35.14) and the standard deviation was (0.85).

In the control group the value of the arithmetic mean (32.37) and standard deviation (1.53) and value (t) is equal to (4.75), which is greater than the tabular value of (2.10) and Significance level (0.05). This is indicates the existence of a real difference in the results of the tests between the two groups for the benefit of the experimental. Tests (Kinetic Response) of the experimental group, it turned out that the value of the arithmetic mean was (23.3) and standard deviation (2.86) either the control group the value of the arithmetic mean (18.0) and standard deviation (4.98) and value (t) is equal to (2.91), which is greater than the tabular value of (2.10) and Significance level (0.05).

This is indicates the existence of a real difference in the results of the tests between the two groups for the benefit of the experimental group.

Table 4: Shows the difference in the posttests between the Experimental group and the Control

S	Variables	Unit Measurement	Experimental		Control		Value (t)	Signify
			Mean	STD.EV	Mean	STD.EV		
1	Kinetic Response	Time	35.14	0.85	32.37	1.53	4.75	Significant
2	Blouck	Points	23.3	2.86	18.0	4.98	2.91	Significant

Discuss the Results of the Tests

Through the Table (2) above, in the experimental group and when you display and analyze the results of tests before and after the block skill in Volleyball, there appeared a real difference between the tests and for the post test. The reason for this difference is due to the use of anaerobic exercise according to the style of scientific training, and it was of great significance in the development of Jump that do have a role in the basis of the speed of the motor response, in order to raise the level of performance of rapid movements in volleyball.

Games with high intensity and short time you need to edit the energy quickly in the muscle of the body [5]. And is the direct source of energy that is used in muscle contractility [6]. And appears in the high activity of the enzyme in the blood [7]. It also appeared a real difference between the test (pre and post-test) in defense skills and block skill of volleyball in the interest of post-test.

The reason for this difference is to use skills exercises with anaerobic energy ball that was used, and the performance of the exercises also lead while playing in the games, such as starting, jumping, rolling side and diving. The researcher believes that the proposed anaerobic exercise was comprehensive and has a role to adapt and develop capacity in the performance of the player's defense skills. In the control group, and when you view and analyze the results of tests of enzymes, appeared that there was a slight difference between the tests (tribal and a posteriori) and for the post-test, and the lack of a real difference to the defense skills tests. Through Table (4) appeared a real difference in the results of the posttests between the two groups (experimental and control) and in the interest of the experimental group [8]. This is due to the success of anaerobic exercises that developed by the researcher, and that lead to raising the level of defense skills in volleyball.

Conclusions

- Recurring training is working to raise the capacity of the player to continue the effort and fatigue resistance.
- Training according to the anaerobic energy system works in the muscles adapt to the activity of enzymes.
- According to training the Recurring is working to develop the skill to defend the pitch in volleyball.
- Anaerobic exercise work to increase the speed of muscle contraction and motor performance during game play.

References

1. Scott KP, Edward Th (2001) Exercise Physiology. 4ed. Mc Grow hill.
2. Abul-Ela, Nasreddin R (1993) Physiology of fitness, p1, Arab Thought House.
3. Bahaa Eddin IS (2008) Biochemical characteristics of sports physiology, c1, Cairo, Arab Thought House.
4. Brain, M (1999) Sport coach-Ply metric, disclaimer. BBC Education, Web guides Sports.
5. Juma M, Khalil I (2011) Building and legalizing tests skill to defend the deep. Research publication, the Journal of Physical Science and Sports, College of Physical Education, University of Anbar.
6. Khawla AA (1986) Entrance to the biochemistry, and the Ministry of Higher Education, University of Mosul.
7. Mohammed HA (1984) Abou El Ela Abdel Fattah; physiology of sports training, Cairo Arab Thought House.
8. Mohammad HA, Osama KR (1999) Scientific research, physical education and sports psychology, the Arab Thought House, Cairo.
9. Nuri A, Rafe Q (2004) Guide researchers to write research in Physical Education: Baghdad.
10. Talal N (1987) B biochemistry Book House for printing and publishing, University of Mosul.
11. Vassilis M (2006) Exercise Biochemistry. 1st Ed: USA, library of congress cataloging.
12. Wadih Y, Hassan M (1999) Statistical applications and uses of Computer Research in Physical Education: Mosul, Library of Printing and Publishing.

