

# THE EFFECT OF RECURRING TRAINING IN THE PERFORMANCE PHYSICAL AND SKILL AT VOLLEYBALL PLAYERS

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## Abstract

Sport training, according to the recurring training, is considered one of the important fundamentals that all rapid sports depend. Volleyball is one of these important sports. Raising 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 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 for 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 exercises used in the training curriculum effectively contributed in improving the performance for Physical performance and skill of volleyball player.

**KEYWORDS:** Ballistic. Explosive. Strength. Shooting. Handball.

## 1. INTRODUCTION & PROBLEM OF THE STUDY

Volleyball, one of the events that given collective widespread 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 anaerobic 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. (Scott, 2001, 127).

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 anaerobic 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 skills to volleyball

### The research aims to identify

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

## 2. METHODOLOGY

The researcher used the experimental method in a 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 (Mohammad, 1999, 104).

**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 (Nuri., Qubaisi., 2004,75) 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 of**

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 bulwark skill**

**Objective:** To measure the accuracy of skill bulwark.

**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 Form (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 (Batak) to measure the speed of the motor response. Is a modern Korean-made origin contains (12) lamp and Powered by electricity, see (Form 2).

**Tests Defense Skills in Volleyball (Juma M., Khalil I., 2011, P6)**

**The first test: Diving Anterior:**

. **The goal of the test:** Restore the ball from the diving anterior.

. **Tools:** balls (10), volleyball court legal.

. **Performance:** Player standing in the center of play (6) at a distance (3 meters) from the circles beside volleyball court (playing center 2 and 4). Radius of the circle (0.5 meters). Coach standing in the other half of the pitch and throwing (5) balls across the network to each department. Player moves the ball to re-dip the front of both (2 & 4), see (Form 3).

. **Registration:** (3 points) for each attempt and go up the ball between the edges of the top and bottom of the network and (2 points) for each attempt to rise higher than the network and (1 point) if it touched the ball and failed to replay and (zero) when failing to touch the ball, Great class for the test (30 points).

**Second Test: Rolling Side:**

. **The goal of the test:** re-balls by rolling sideways.

. **Tools:** volleyball court legal, (10) balls.

. **Performance:** The player stands between the two circles side radius (50 cm) in the center of play (2&4) with instruct the player moves toward the ball fired by coach to one circuit to bring it back, Five balls to each circle (Form 4). . **Registration:** (3 points) if the ball went over the level of the upper edge of the network, (2 points) if the rose between edges of the top and bottom of the network, (1 points) if the ball went from the earth without the lower edge of the network and (zero) if he fails the player touching the ball "The maximum score for the test (30 points)".

**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.

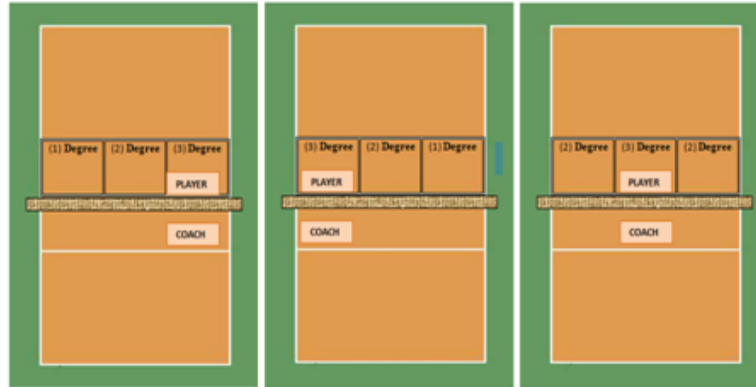


Figure (1) Show Testing the performance bulwark skill in Volleyball

### 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.



Figure (2) Illuminating Lamps device to measure the speed of the motor response

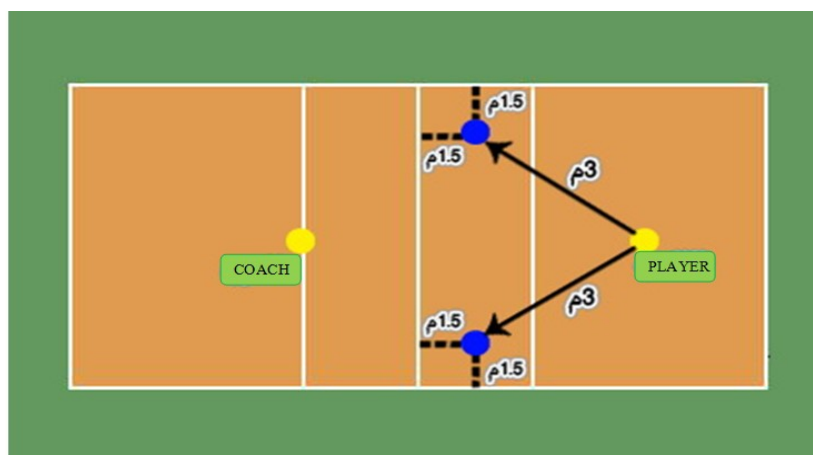


Figure (3) Test Dive Anterior

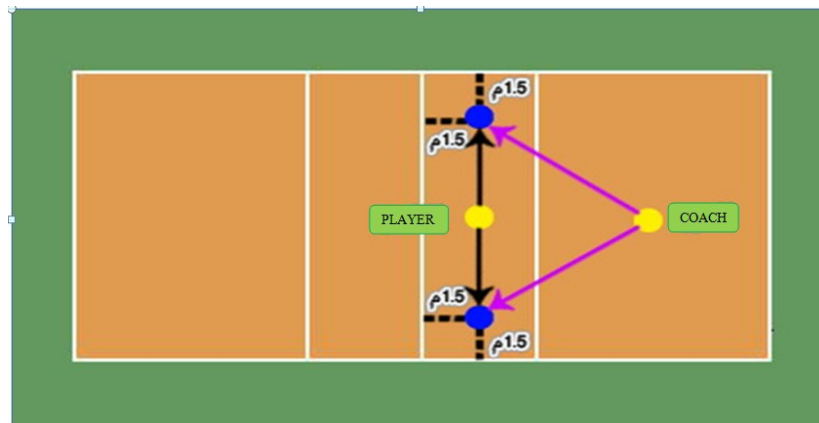


Figure (4) Rolling Side

**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: (Wadih , 1999,101)

1. The arithmetic mean:
2. Standard deviation:
3. Value (T) of the samples associated with:
4. Coefficient sprains and Broker:

### 3. RESULTS AND DISCUSSION

#### View and analyze the results of the pretest and posttest in the experimental group

Through the table (2) to test bulwark skill in Volleyball 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 skills in defense (Diving Anterior). 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). Which indicates the existence of a real difference between the two tests for the benefit of post-test.

The results of tests defensive skills (Rolling Side). Appeared in the pretest to the arithmetic mean value was (17.9) and the standard deviation was (0.99). In the post test became the arithmetic mean value (22.1) and standard deviation (2.80) and value (T) was (10.60) which is greater than the tabular value of (2.10). The level of significance equal to (0.05), which indicates the existence of a real difference between the two tests tribal and posttest 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 bulwark 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 (diving anterior). 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.

The results of tests defensive skills in volleyball (Rolling Side). Appeared in the pretest to the arithmetic mean value was (17.7) and the standard deviation was (3.62). In the post test became the arithmetic mean value (20.2) and standard deviation (4.26)

and value (T) was (1.28) 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. Previous results show the existence of the real difference in the search for the two variables (experimental and control) and in favor of the control group, through the development of players at the level of performance of the motor response and defense skills in volleyball, which demonstrates the success of anaerobic exercise that applied to the experimental sample.

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

S	Statistical Variables	Unit Measurement	Pretest		Posttest		Value (T)	Signify
			SMA	SD	SMA	SD		
1	Motor response	U/L	31.74	2,51	35.14	0.85	5.64	Significant
2	Bulwark	U/L	8,35	0,99	9,79	0.54	7.18	Significant
3	Diving Anterior	Points	19,7	4,83	23.3	2.86	7.26	Significant
4	Rolling Side	Points	17,9	0,99	22.1	2.80	10.60	Significant

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

S	Statistical Variables	Unit Measurement	Pretest		Posttest		Value (T)	Signify
			SMA	SD	SMA	SD		
1	Motor response	U/L	31.51	2.19	32.27	1.53	3.14	Significant
2	Bulwark	U/L	7.83	0.82	9.13	0.62	12.28	Significant
3	Diving Anterior	Points	18.8	4.34	18.0	4.98	0.95	Not significant
4	Rolling Side	Points	17.7	3.62	20.2	4.26	1.28	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 bulwark 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 defense skills (Diving front) 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.

Tests defense skills in volleyball (rolling side) of the experimental group, it turned out that the value of the arithmetic mean was (22.1) and standard deviation (2.80) either the control group the value of the arithmetic mean (20.2) and standard deviation (4.26) 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

**Table 4: shows the difference in the post tests between the Experimental group and the Control**

S	statistical Variables	Unit Measurement	Experimental		Control		Value (T)	Signify
			SMA	SD	SMA	SD		
1	Motor response	U/L	35.14	0.85	32.37	1.53	4.75	Significant
2	Bulwark	U/L	9.79	0.54	9.13	0.62	2.40	Significant
3	Diving Anterior	Points	23.3	2.86	18.0	4.98	2.91	Significant
4	Rolling Side	Points	22.1	2.80	20.9	4.26	2.17	Significant

**4. DISCUSSION**

Through the Table (2) above, in the experimental group and when you display and analyze the results of tests before and after the bulwark 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, (Bahaa:2008,278). And is the direct source of energy that is used in muscle contractility (Mohammed:1984,353). And appears in the high activity of the enzyme in the blood (Vassilis: 2006,295).

It also appeared a real difference between the test (tribal and post-test) in defense skills and bulwark 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 players 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 post tests between the two groups (experimental and control) and in the interest of the experimental group (Brain: 1999,33). 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.

## 5. CONCLUSIONS

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

## 6. RECOMMENDATIONS

1. Approach can be applied to train the user to different age groups or other games.
2. Trainers and experts on attention training programs within the anaerobic energy.
3. Possibility of using other energy systems in regular training.

## 7. REFERENCES

- Scott, K, P., Edward, T. h., 2001 Exercise Physiology. 4ed. Mc Grow hill.
- Abul-Ela., Nasreddin, R., 1993. Physiology of fitness, p1, Arab Thought House.
- Bahaa Eddin, I, S., 2008. Biochemical characteristics of sports physiology, c1, Cairo, Arab Thought House.
- Brain, M., 1999. Sport coach—Ply metric, disclaimer. BBC Education, Web guide Sports.
- 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.
- Khawla A. A., 1986. Entrance to the biochemistry, and the Ministry of Higher Education, University of Mosul.
- Mohammed, H, A., 1984. Abou El Ela Abdel Fattah; physiology of sports training, Cairo Arab Thought House.
- Mohammad, H, A., Osama, K, R., 1999. scientific research, physical education and sports psychology, the Arab Thought House, Cairo.
- Nuri, A., Rafe, Q., 2004. Guide researchers to write research in Physical Education: Baghdad.
- Talal, N., 1987. Bbiochemistry Book House for printing and publishing, the University of Mosul.
- Vassilis M., 2006. Exercise Biochemistry. 1st Ed : USA,library of congress cataloging.
- Wadih, Y., Hassan M., 1999. Statistical applications and uses of Computer Research in Physical Education: Mosul, Library of Printing and Publishing.