

The Effect of Special Exercises in the Diamond Style in Some Physiological Variables and the Basic Skills of Futsal Players

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Abstract

As the importance of research in the preparation of special exercises and knowledge of their impact in some physiological variables and basic skills of futsal players. The problem of research: researchers see the problem of research is slow to move the player of the station from the attack to defend when the loss of the ball and this generates pressure by the opposing team because of the numerical increase of the players of the opposing team, especially in the case of possession of the ball begins to weaken in this style of midfield Will cause serious problems in defending the goal of the team and will work researchers put physical exercises and skills to develop the basic skills, variables and physiology to promote the reality and development of this method.

Research Objectives

- Preparation of exercises in the style of diamond for futsal players.
- To identify the effect of the exercises in the diamond style in some physiological variables and the basic skills of futsal players.

Research Hypothesis

- There is an impact of the exercises in the diamond style in some physiological variables and the basic skills of futsal players.

As for the research methodology and its field procedures, researchers used the experimental method to solve the problem of research. The research society was determined by the players of the University of Kufa for the halls of futsal, and they were divided into two groups (experimental and control) in the simple random way (Lottery).

As for the most important conclusions and recommendations, the most important conclusions are the following:

- The exercise of the diamond method helped to develop some physiological variables (the concentration of lactic acid, the enzyme L.D.H) in the members of the experimental group.
- Diamond-style exercises have helped to develop the basic skills of members of the futsal group of the gyms.

The main recommendations included the following:

- Recommend the researchers to pay attention to the use of special exercises in accordance with the diamond style when training the futsal players.
- Researchers recommend conducting similar studies on different age groups.

Keywords: *Special exercises, Diamond style, Physiological variables and basic skills.*

Introduction

The rapid development of achieving high levels of sports in all areas of sports, whether in the collective or individual games and upgrading this level did not come from a vacuum, but has become and is still the science is the basis, so the scientific research has tended to study the various applications

of pure science, including chemistry and science Mathematical physiology and training science in all areas of sports because these sciences are of fundamental importance in the development of training methods and evaluate their methods and knowledge of the responses that occur during the practice of

sports activity and beyond and contribute to the upgrading of the athlete [1]. And that the diamond style is a method of schematic, which has an active role in the development of physical abilities as used in accordance with a standardized approach, and this method is proportional to the way to play futsal stadiums, and the nature of the game is the effort is high, and the rules of the game modern work to make the game Fast and exciting as a result of changes from defense to attack, thus achieving a greater chance of scoring goal in the opponent's goal [2].

One of the games that have become a great attention in recent times is a futsal game for the halls, as this game requires high physical efficiency to achieve the movements of fast, powerful and sudden, and described the game of futsal halls as a tactical skill and when you look at the nature of performance we find that he needs energy to perform the work fast and powerful muscle [3].

The player needs a high level of physical and skill performance according to his or her position on the pitch. It is therefore important that the physical, skill, physiological, and tactical abilities serve each other to achieve the goal.

The physical, physical and skill level of the player can be determined through skillful performance. Hence the importance of research in the preparation of special exercises in the diamond style to influence some of the physiological variables and basic skills of futsal players [4].

Research Problem

The Link Futsal game is one of the games that need integration of physical elements and skillful performance as well as functional integration because it is a fast-paced game that requires high energy and effort by players.

And through the experience of field researchers, they see the problem of research that there is a slow transition to the player of the station from the attack to defend when the loss of the ball and this generates pressure by the opposing team because of the numerical increase of the players of the opposing team, especially in the case of possession of the ball begins to weaken in this mode of middle this will cause serious problems in defense of the team's goal and

the acquisition of the ball. This method loses the participation of the goalkeeper in the guidance and his defensive role. The researchers will work out physical and professional exercises to develop the basic skills, variables and physiology.

So, I wanted researchers to prepare special exercises that would develop some physiological variables and basic skills of futsal players.

Research Objectives

- Setting up a diamond-style exercise for gymnasts.
- Identify the effect of exercise in the diamond style in some physiological variables and the basic skills of the futsal players.

Research Hypothesis

- There is an impact of the exercises in the diamond style in some physiological variables and the basic skills of futsal players.

Research Methodology and Field Procedures

Research Methodology

The researchers followed the experimental approach to fit the nature of the research problem. They also chose the design of the two experimental (control and experimental) methods of the pretest and posttests.

Community and Sample Search

The research community was determined by the players of the Kufa University futsal team for the 2017-2018 academic season (20) players, which the researcher chose for the experiment.

They were divided equally into two groups (experimental and control) in the simple random way (lottery).

Sample Homogeneity and Equivalence of the two Research Groups

Sample Homogeneity

For the purpose of finding homogeneity of all members of the research community in terms of length, body mass, age, and training age, the researchers used the torsion factor before applying the main experiment to the two groups (experimental and control) as shown in Table (1).

Table 1: Shows the homogeneity of the research community

| Variables | Measuring unit | Mean | Median | STD.EV. | Skewness | Significance |
|--------------|----------------|--------|--------|---------|----------|--------------|
| Tall | Cm | 175.65 | 175 | 3.937 | 0.256 | homogeneous |
| Mass | Kg | 74.65 | 74.5 | 3.199 | 0.579 | homogeneous |
| Age | Year | 20.5 | 20 | 1.147 | 0.465 | homogeneous |
| Training age | Year | 5.55 | 5.5 | 1.05 | 0.460 | homogeneous |

The results of table (1) show that the values of the torsion coefficient are less than (1), indicating the homogeneity of the research community in all variables

Equal Search Groups

In order for researchers to attribute the difference in the results of the post tests of the variables under study to the effect of the

experimental factor, the researcher sought to verify the equivalence of the two groups using the t-test of the independent samples as shown in Table (2).

Table 2: Shows the equivalence of the two sets of research

| Variables | Measuring unit | Control group | | Experimental group | | t value | Level of significance | Type of significance |
|-------------------------------|----------------|---------------|---------|--------------------|---------|---------|-----------------------|----------------------|
| | | Mean | STD.EV. | Mean | STD.EV. | | | |
| Concentration of lactic acid | Mall / L | 14.736 | 0.372 | 14.792 | 0.427 | 0.312 | 0.759 | Non sig. |
| Concentrate of enzyme (L.D.H) | Unit / l | 509.762 | 20.181 | 507.616 | 15.27 | 0.261 | 0.797 | Non sig. |
| Put down, rolling, scoring | Degree / sec | 0.549 | 0.028 | 0.551 | 0.023 | 0.172 | 0.865 | Non sig. |

Table (2) shows that the value of the sig is the largest value of the significance level (0.05) and for all the variables in question. Therefore, the significance of the test is insignificant.

Means, Instruments and Tools used in Research

- Arab and foreign sources and references.
- Personal interviews.
- Tests and measurements.
- Special forms to record test results for players.
- Futsal stadium for legal lounges.
- Soccer halls number (10).
- Colored adhesive tape number (4).
- Measuring tape in centimeters.
- Terraces with different heights (50, 60, 70, 80, 90) cm for each height (2).
- Characterized by height (20 cm) number (14).
- Wooden boxes measuring (40 × 40 cm) number (3)
- Sport stopwatch number (3).
- Whistle number (3).
- Rings with diameter (50 cm) number (10).
- Conduction number (10).
- China-made Hammer (1).

- Lactic acid.
- Abbot (C 4000) for the measurement of enzyme (L.D.H)
- Medical cotton, sterile materials.
- Laptop Calculator Type Lenovo Number (1).
- Camera type Canon number (1).
- Electronic device to measure height and weight.

Field Research Procedures

Specify Search Variables

Search Variables Were Determined to Suit the Search Problem

First

Physiological variables: (concentration of lactic acid in blood, concentration of enzyme (L.D.H) in blood).

Second

Basic skills of futsal halls: (put down, rolling and scoring).

Identification of Metrics and Tests Variables

Description of Measurements of Physiological Variables

First: Measure the level of concentration of lactic acid in the blood:

Method of measuring: The level of concentration of lactic acid in blood was measured after the physical exertion (non-tactile stress test of Cungan and Folkens) in the fitness hall of the College of Physical Education and Sports Sciences / University of Kufa. (9 ° C) and at a speed of 8 mph (12.5 km / h) for 3 minutes, 5 minutes after the test is performed, the best time to transfer lactic acid from muscle to blood "(2) Place the measuring tape in the location assigned to the device, after placing the tape will show the code number of the bar, and then take a sample Blood from the research community of (20) player during the use of a complaint through which the prick of one of the fingers and then press it so that we can remove the drop of blood, and then notice through the screen of the device the proportion of lactic acid in the blood and according to the specified percentage.

Second

Measuring the level of the concentration of dehydrogenase (L.D.H) in the blood:

Method of measuring: The level of concentration of the dehydrogenase enzyme (LDH) was measured after the completion of the previously mentioned lactate stress test. The laboratory sits on a chair immediately after 5 seconds, and venous blood is withdrawn by 2 cc Before the chemist from the research community of (20) players, which is sufficient quantity as indicated by the instructions attached with the katate, which is placed in the tubes (medical) written on the name of the player and number, and were transferred to the laboratory of Sadiq Specialist directly, where Analysis of the enzyme specific lactate by the specialist doctor (Zafer al-Wadis).

Description of the Technical Tests used in the Research

First

Test (suppression - rolling - scoring).

- Test Name: Put down and then run the ball (rolling) in different directions and scoring.

- Purpose of the test: measuring the speed and accuracy of the suppression and rolling and scoring.
- Used Tools:
 - Futsal halls size (4 number (3).
 - Leather measuring tape.
 - Colored adhesive tape.
 - Whistle number (1).
 - Dirt paint type (spray).
 - A wooden box dimensions (1 × 1) m to determine the areas of scoring and extinction.
 - Kicker device.
 - Goal (soccer hall) legal (2 × 3) m.
 - Flex material placed on the target painted by three rectangles overlapping dimensions: -
 - Large rectangle (2 x 3) cm.
 - The center rectangle (160 x 240) cm.
 - Small rectangle (120 x 180 cm).
 - Specific area of extinction dimensions (1 x 1) m.
 - Specific target area (1 x 1) m (3).
 - Digital camera.

Performance Description

The laboratory is located behind the line of the specified extinguishing zone, which is away from the kicker device (8 m). After giving the starting signal, the ball launcher is aimed at the area of the extinguishing zone.

To stop the movement of the ball in the way of mute the ball down the foot (Sole) with a change of direction to be the ball (roll) in a way of dragging the ball down the foot (Sole) to reach the scoring area (1), to target towards the areas indicated in the target (rectangles Overlapping) according to their importance and difficulty, all testers perform the first attempt on the And then move on to perform the second attempt for all the testers by putting down and then rolling towards the scoring area (2) and moving to the third attempt of the scoring area (3) in the same way as the first and second attempts.

- The scoring area (2) mediated by the suppression zone and the target, 6 meters

away from the suppression area and 9 meters from the target.

- The scoring area (1) the right of the scoring area (2) and the distance (3) m.
- The scoring area (3) is the left of the scoring area (2) and is 3 meters away.

Performance Conditions

- The movement of the ball must be stopped within the specified area of the quench.
- The ball must be stopped in a way that the ball is closed down the foot (Sole).
- The test begins by putting the ball down and changing the direction by turning the ball towards the scoring areas (1-2-3) according to the sequence and then the direction towards the overlapping rectangles.
- The laboratory must perform the roll by pulling the ball down the foot (sole).
- If the ball is out of the control of the player during the rolling, the laboratory is given zero (0) of the grades.
- The scoring must be performed from the target areas.
- The laboratory should perform the test as soon as possible.

Registration Method

- The laboratory is given three attempts.
- Calculate the laboratory (one degree) for successful suppression.
- Calculate the laboratory (zero) of the grades for the failed suppression.

- Calculates the laboratory (one degree) for successful rolling.
- Calculate the laboratory (0) of grades if the ball out of control during the rolling.
- Calculate the laboratory (four degrees) if the ball hit the field number (4).
- Calculate the laboratory (three degrees) if the ball hit the field No. (3).
- Calculate the laboratory (two degrees) if the ball hits the field (2).
- Calculate the laboratory (one degree) if the ball touched the outer parts of the target, including the players and the crossbar.
- Calculate the laboratory (0) of grades if the ball came out of the target (overlapping rectangles).
- In terms of precision, the highest level of accuracy is (18) degrees (3) of which to put down (3) for rolling and (12) for scoring.
- Time is extracted from the digital camera film through the program (Kenova) on the computer, which is calculated by (1/1000) of the second.
- Measure unit (degree / sec).

The time of the test is calculated by collecting the time of the three attempts. The time of each attempt is calculated from the moment the laboratory is put out of the ball through the skill of rolling to the moment the ball reaches the target (the intervening rectangles) and the total scores during the amended Fits Law, which states:

Performance skill = Total Accuracy / Total Time

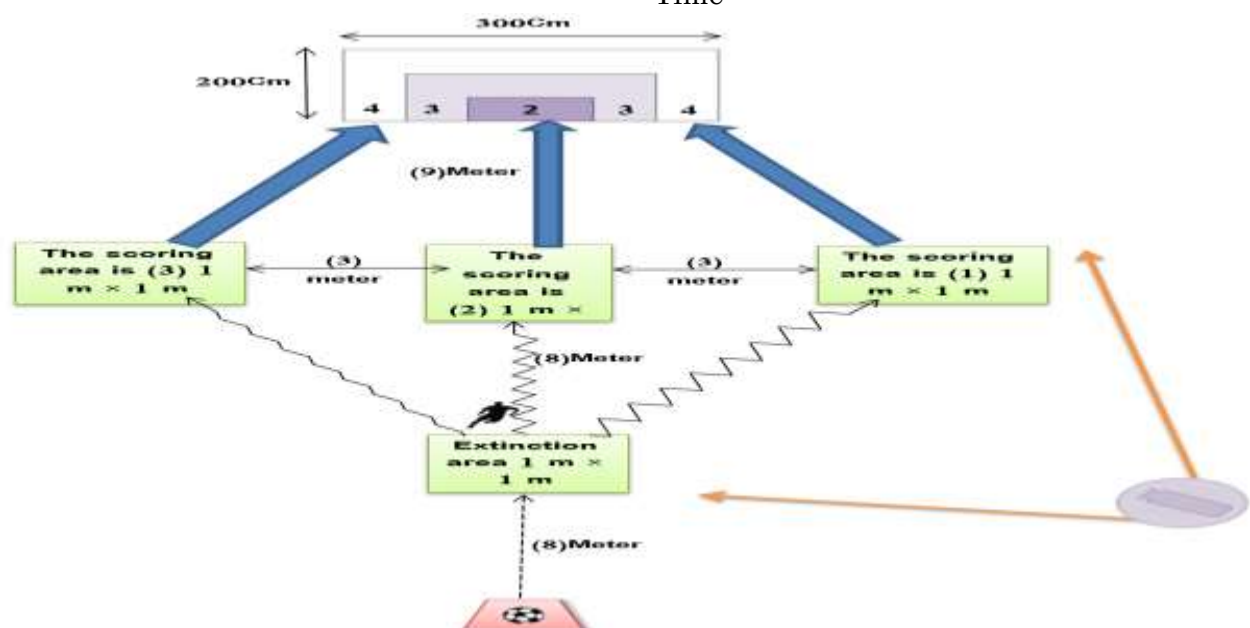


Figure 2: Shows test (Extinction - rolling - scoring)

The Pilot Study

The researchers conducted a pilot study for the tests (basic skills compound) on a sample of the original research community and the same sample of the research and the number of (4) players on Saturday, 17/1/2018 where the pilot experiment aims to:

- Verification of the adequacy of the tests for the sample members and their ease of application.
- Verification of the validity of the devices and tools used in the research.
- Identify the time required to carry out the tests.
- Identify the time required for the exercise and the number of repetitions.
- Know the obstacles that may appear and avoid the occurrence of errors and overlap in the work.

Main Experiment Procedures

Pretests

The researchers carried out the pretest tests on the research community of the two groups (control and experimental) of the study variables (physiological variables, basic skills of futsal halls) on Thursday (1/2/2018). The tests were in the following sequence:

- Tests of physiological variables (concentration of lactic acid in blood, concentration of L.D.H in blood).
- Composite tests of the basic skills of futsal halls.

Apply Diamond-style Exercises

The researchers prepared and organized the exercises in the diamond style based on the personal experience of the researchers. The exercises were applied to the experimental group on 3/2/2018 to 5/4/2018, taking into consideration the intensity of the exercises.

The physical and functional aptitude of the research community, the tools used and the method of training, so that these exercises are able to develop the physiological variables and basic skills of futsal halls to achieve the objectives and objectives of the training process.

The Details of the Phosphate Exercises in the Training Curriculum are as Follows

- The total number of training units included exercises in the diamond style (24) doses.
- The number of weekly training modules that exercises the diamond style (3) units and for period of (8) weeks.
- The exercise time of the diamond style in the unit (45-50) minutes (main section only).
- The researchers adopted the method of early training (high intensity) and the method of repetitive training in all training units.
- Training days during the week are (Sunday, Tuesday, and Thursday).
- The goal of the exercises in the diamond method is to develop the physiological variables (the concentration of lactic acid in the blood, the concentration of the enzyme L.D.H blood).
- The objective of the exercises in the diamond style is to develop the basic skills of futsal for the halls (the suppression, rolling, handling, and scoring).
- Considering the exchange of work between the muscle groups.
- Planning the formations of exercises for the diamond style during the weekly units are (2-1)
- The proportion of work to rest for exercises is (10: 1 18: 1).

Posttests

The researchers, with the assistance of the assistant staff and the medical staff, carried out the posttests of the research community after the completion of the exercise of the diamond method. This was on Thursday (7/4/2017) and in the same sequence of pretest tests. The researchers took the same conditions as the pretests Where sequence tests.

Results and Discussions

View the Results of the Pretest and Posttests of the Control Group of Physiological Variables

Table 3: Shows the mean, standard deviations, the calculated value of (t) of the interrelated samples, the level of the significance of the test and the significance of the difference for the pretest and posttests of the control group of physiological variables

| Variables | Measuring unit | Pretest | | Posttest | | (t) value | Level of significance | Type of significance |
|-------------------------------|----------------|---------|---------|----------|---------|-----------|-----------------------|----------------------|
| | | Mean | STD.EV. | Mean | STD.EV. | | | |
| Concentration of lactic acid | Mall / L | 14.736 | 0.372 | 13.009 | 0.208 | 14.83 | 0.00 | Sig. |
| Concentrate of enzyme (L.D.H) | Unit / l | 509.762 | 20.181 | 489.098 | 11.89 | 3.619 | 0.006 | Sig. |

View the Results of the Pretest and Posttests of the

Experimental Group of Physiological Variables

Table 4: Shows the mean, the standard deviations, the calculated value of (t) of the interrelated samples, the level of the significance of the test and the significance of the difference for the pretest and posttests for the experimental group of physiological variables

| Variables | Measuring unit | Pretest | | Posttest | | (t) value | Level of significance | Type of significance |
|-------------------------------|----------------|---------|---------|----------|---------|-----------|-----------------------|----------------------|
| | | Mean | STD.EV. | Mean | STD.EV. | | | |
| Concentration of lactic acid | Mall / L | 14.792 | 0.427 | 11.917 | 0.538 | 11.517 | 0.00 | Sig. |
| Concentrate of enzyme (L.D.H) | Unit / l | 507.676 | 15.272 | 450.43 | 17.412 | 7.059 | 0.00 | Sig. |

Discussion of the Results of Pretest and Posttests of the Control and Experimental Groups of Physiological Variables

The results shown in Tables (3) and (4) of the lactic acid concentration in the blood showed significant differences in favor of the test results of the control and experimental groups. The researcher found that the accumulation of lactic acid in the blood after the effort in the pretest test due to performance of the two groups to test the lactic resistance And high intensity, as work with high intensity is able to increase lactic acid in the blood because of the process of glycolysis anaerobic body to return the compound (ATP) inside the muscle cell with insufficient oxygen to the working muscles, which leads to the inability of mitochondria The release of the hydrogen ion is released into the respiratory chain, so that the pyruvic acid is combined with the hydrogen ion, a component of the lactic acid.

The brain confirms that when the molecule is broken, the pyrophoric acid is released with a small amount of ATP. The pyruvic reaction then reacts with the oxygen. In this case, the oxygen ratio in the blood will be reduced so that the pyrophoric will unite with the hydrogen ions released to form the lactic acid

[5]. In the view of the researchers that another reason for the accumulation of large amounts of lactic acid after the test of lactic stress is that the high-intensity anaerobic effort can increase the ability of the internal organs to crack a large amount of glycogen to restore the compound (ATP) inside the muscle cell through the process The sugar dissolves anaerobic, which leads to the accumulation of large amounts of lactic acid, which is the final product of the process of glycolysis anaerobic, an increase cracking of the kykogen increases the amount of lactic produced as well as increase the duration of anaerobic work, which in turn lead to increased oxygen and then Z Accumulation of accumulation. Reassan Khreibat (1999) emphasizes that the increase of lactic acid in the muscle and blood in many cases of fatigue is caused by the cyclic decomposition [6].

McCardl and Kach confirm that during low physical exertion and constant effort, the ratio of lactic acid in the blood does not exceed the biological range during resting time. When the intensity of the effort increases, the acid ratio rises above the normal limit [7]. This indicates that the two groups Which resulted in a high-intensity physical effort led to the accumulation of amounts of lactic acid, and the results of the researcher in this regard is consistent in

principle (high lactic acid after high voltage intensity), and this is evidenced by the results of the above tables of the concentration of lactic acid in Posttests for members of the two groups And the experimental low concentration of lactic acid after the effort, and researchers believe that the reason for the reduction in the concentration of lactic acid is due to the adaptation of the working muscles and internal organs of the body of the player in the rapid disposal of the accumulation of large amounts of lactic acid in the blood during physical effort, Physiologically due to the quality of the exercises prepared by the trainer in his training curriculum for the members of the control group, which was exposed to the players on a continuous basis, as it was characterized by frequent repetitions of exercises that led to a state of functional adjustment, and members of the experimental group was the reason for the decline of women.

The concentration of lactic acid is due to the quality of the special exercises prepared by the researchers in the diamond style according to the scientific and physiological bases, as the continuation of training and for a period of time has played a large role in the decline as well as the repetitions performed by the players during the training unit, and the diversification and change exercises, and the nature of exercises in a diamond style Which were prepared by the researchers were the highest proportion of them go towards the endurance of lactic, as gained muscle tissue estimated to eliminate lactic acid quickly, as well as the ability of solutions organized in and out of muscle cells in the maintenance of In order to ensure the proper functioning of anaerobic enzymes in an ideal PH, Mohammed Al-Qatt considers that biological organizations are one of the ways in which the body can increase its tolerance to the accumulation of lactic acid, making it so acidic that pH) In muscular tissue does not rapidly decline, and an increase in the rate of anaerobic plasma is the appropriate way to sustain energy releases [8].

And also through what was shown in Tables (3) and (4) the ratio of the concentration of the enzyme (LDH) in the blood for the presence of significant differences in favor of the results of the posttests of two experimental and control, as observed

through the pre-test for the presence of increasing the concentration of the enzyme (LDH) this means that the concentration of the enzyme increased after lactic physical effort and this increase is the result of the decomposition of sugar an aerobically process, and is one of the most important enzymes of protein structures that contribute to the acceleration of chemical reactions to ensure the liberalization of energy required speed, "Enzymes are proteins of an auxiliary nature that increase the speed of chemical reactions without being involved in them and are found in all living cells as well as secretion by cells in the bloodstream," says Mohammed Salim and Abdel Rahim [9].

The process of glycolysis anaerobic process passes through a series of chemical reactions, with each reaction having a special enzyme. What we observe in the results of the tests of the dimension of the concentration of the enzyme (LDH) is the reduction of the proportion of members of the control and experimental groups, and this decrease led to significant differences for the members of the two groups, and the reason for this is attributed to researchers that when the low concentration of lactic acid in the blood as a result of adaptations taking place In the body as a result of regular and continuous training prepared by the trainer helped control group members to make physiological adaptations.

On the other hand, researchers believe that the reason for the low concentration of the enzyme dehydrogenase (LDH) of the experimental group members of the nature of the diamond exercises that Which was characterized by anaerobic nature led to an improvement in the work of the enzyme responsible for the conversion of pyruvic to lactic acid during the anaerobic physical effort, which reflected the ability of the muscle to get rid of lactic acid and thus low concentration of the enzyme dehydrogenase (LDH) And then increase the time of anaerobic synthesis.

Said Nizar Rajab "The speed of LDH reactions starts to increase gradually after the first minute of the reaction and the amount of the increase is associated with the high concentration of lactic acid"[10].The researchers found that the development of the enzyme (LDH) was reflected in the level of accumulation of lactic acid, which was in large quantities in the blood before the exercise in the diamond style, which

prepared and dropped to large levels, and this is a good indicator of the improvement of the physical condition and functionality of the players as a well-trained athlete can Eliminate the accumulation of lactic acid in the blood. Since the game of gymnasiums of games based on anaerobic systems rather than aerobic, it leads to the lack of oxygen in the skeletal muscles, and here highlights the role of the enzyme (LDH) extractor of hydrogen, which breaks the glycogen to produce glucose in the muscles and use

directly in the production of energy. "Enzymes are of vital importance in living cells because they accelerate the reactivity of a large number of necessary biochemical reactions, enabling enzymes to interact under physiological conditions that in other cases may be unacceptably slow," Edwards and Hassel point out [11].

View the Results of the Pretest and Post Tests of the Control Group of the Basic Skills of Futsal Halls

Table 5: Shows the computational arguments, standard deviations, the calculated value of (t) of the interrelated samples, the level of significance of the test, and the significance of the difference to the pretest and post tests of the control group the basic skills of futsal halls

| Variables | Measuring unit | Pretest | | Posttest | | (t) value | Level of significance | Type of significance |
|----------------------------|----------------|---------|---------|----------|---------|-----------|-----------------------|----------------------|
| | | Mean | STD.EV. | Mean | STD.EV. | | | |
| Put down, rolling, scoring | Degree / sec | 0.549 | 0.028 | 0.745 | 0.049 | 10.764 | 0.00 | Sig. |

View the Results of the Pretest and Posttests of the

Pilot Group of Basic Skills of Futsal Halls

Table 6: Shows the computational circles, standard deviations, the calculated value of (t) of the interrelated samples, the level of test significance, the significance of the difference to the pretest and posttests of the experimental group of physical abilities, basic skills and the behavior of futsal

| Variables | Measuring unit | Pretest | | Posttest | | (t) value | Level of significance | Type of significance |
|----------------------------|----------------|---------|---------|----------|---------|-----------|-----------------------|----------------------|
| | | Mean | STD.EV. | Mean | STD.EV. | | | |
| Put down, rolling, scoring | Degree / sec | 0.551 | 0.023 | 0.908 | 0.023 | 36.5 | 0.00 | Sig. |

Discussion of the Results of Pretest and Posttests of the Control and Experimental Groups of Physiological Variables

The results presented in tables (5) and (6) for the basic skills tests (quenching, rolling, scoring) showed significant differences between the pretest and posttests in favor of the post-test of the control and experimental groups. Was prepared by the trainer, who was instrumental in the development and high level of skilled performance in the control group, as a number of exercises applied by the control group focused on the diversification of skill performance, as for the evolution of experimental group members attributed the researchers the reasons for that development to exercise The high level of skill contributes to reducing the loss of ability of this player on the one hand, and on the other hand, the stability of the high level

of technical throughout the duration of the game is related to the good physical condition the same If the physical build is not enough, the strength and ability to start and the durability of the player retreat during the game with the accompaniment of weakness in the performance of the technical weakness of physical fitness, it increases and increases as the game progresses, and the more tired the player whenever he fell from the level of skills the kinetic motor has a special that needs to be compatible in performance "[12].

This is what researchers did by linking the physical side to the skillful side. The agility and flexibility of the player help him to take the correct position when putting down and rolling in addition to scoring accurately. Based on the above, the special exercises that were prepared according to the diamond method were executed accurately, creating a situation Of the parity between the training

load and the development of the physical abilities of the player, which was reflected in the level of skill performance, as well as the state of repetition and focus on correcting the errors associated with performance, gaining the accuracy of the skillful performance of all the skills under study by estimating the distance which led to the development of this hart, a successful goal based on the presence of two factors are the speed and accuracy, rapid targeting and high accuracy in hitting the target will surprise the opponent and prevent him from acting to prevent scoring, and a large proportion of the exercise was similar to competition in terms of defense and attack and pressure similar to play in order to develop handling and suppression And rolling in addition to the development of physical abilities, and to achieve the greatest possible accuracy in handling and good suppression in the training and competition requires the futsal player of the halls to be a high level of physical performance and skill to be able to reach the goal and achieve the level As well as the number of repetitions that accompanied the training units and the

careful selection of the exercises, taking into consideration their relevance to the sample of the research and their abilities, taking into account the repetition of the exercise on a continuous basis and also the level of difficulty and ensure performance by everyone, , 1988) that "choosing a trainer for difficult exercises will increase the experience of some players"[13].

As the process of receipt and control of the ball and put down require the movement of the whole body, which makes it easy to take the appropriate position for the acquisition of the ball, regardless of the type and direction of the ball because this method of the features of modern play, which requires the player has a high sense of fitness and agility in the joints and muscles of the body for the purpose of performing the movement correctly "[14].

View the Results of Tests (dimensional. Dimensional) of the Two Groups Control and Experimental Variables Physiological

Table 7: Shows the value of (t) calculated for independent samples and the level of the test and were significant differences between the results of the test (posttest) of the two groups control and experimental variables physiological

| Variables | Measuring unit | Control group | | Experimental group | | (t) value | Level of significance | Type of significance |
|-------------------------------|----------------|---------------|---------|--------------------|---------|-----------|-----------------------|----------------------|
| | | Mean | STD.EV. | Mean | STD.EV. | | | |
| Concentration of lactic acid | Mall / L | 13.009 | 0.208 | 11.917 | 0.538 | 5.979 | 0.00 | Sig. |
| Concentrate of enzyme (L.D.H) | Unit / l | 489.098 | 11.891 | 450.43 | 17.412 | 5.799 | 0.00 | Sig. |

Discussion of the Results of Post-test Tests of the Control and Experimental Groups of Physiological Variables

The differences between the control and experimental groups were due to the quality of the exercises. The results showed that there were significant differences between the two groups (control and experimental) in the concentration of lactic acid in the blood and for the benefit of the experimental group.

Which was designed and designed by the researchers according to the diamond style, which is compatible with the system of energy exchange prevailing for the effectiveness of futsal halls based on the scientific foundations of sports training and sportsmanship, as these exercises were prepared according to the system of energy and tactical and this helped players to get rid

of Lactic acid is fast, and researchers believe that sports training leads to increase the work of biological organizations to eliminate the increase of lactic acid, as these exercises led to these differences after the effort between the two groups and after training to the concentration of lactic acid in the blood, of the improvement in the experimental group and therefore an improvement in the work of functional devices, we note the low concentration of lactic acid, but the concentration of lactic acid in the blood of well-trained athletes is less compared to non-trainers or training less influential in the event of the same training loading [15].

The researchers also believe that the reason for the decrease in the concentration of lactic acid is due to the adaptation of the working muscles and internal organs of the body of

the player in the rapid disposal of the accumulation of large amounts of lactic acid in the blood during the physical effort. This physiological adjustment comes from the quality of the diamond exercises prepared by the researcher training modules for the members of the experimental group, which are constantly exposed to the players, as they were characterized by diversification and change and the frequent repetitions of exercises lead to a state of adaptation of the internal organs. The exercise will increase the rate of elimination of lactic acid in the muscle.

The enzymes responsible for the regulation of lactic acid in the muscles and other organs have been shown to increase as a result of athletic training. The circulatory system helps to eliminate lactic acid by increasing the blood supply to the working muscles due to increased Heart pressure, capillary density and circulation of blood.

Lactic acid during physical exertion is also transferred from muscle cells to blood or extracellular spaces. Some acid passes through other non-functioning muscle fibers for consumption as a source Energy, is also paid another part of it to the blood until it is transferred to the heart and liver consumes heart, while the liver to convert glycogen, and this also helped to decrease the concentration of lactic acid in the blood [16].

The results showed that there were significant differences between the two groups (control and experimental) in the concentration of lactic acid dehydrogenase (LDH) in the blood and in favor of the experimental group, what is observed in the results of the tests of the dimension of the enzyme concentration (LDH) is the lower percentage of experimental group members than the control group, and the reason is attributed to the researcher that when the low concentration of lactic acid in the blood as a result of adaptations to the internal organs in the body by the use of exercises in the diamond style prepared by researchers,

Which is the basis of the anaerobic energy system, which confirms that these exercises have had a significant and effective effect in the low rate of the enzyme (LDH) in the blood, as well as regular and continuous

training according to the scientific basis of training and physiology has improved the work of the enzyme responsible for the conversion of pyruvic acid Which is reflected in the ability of the muscle to get rid of lactic acid and then increase the time of anaerobic synthesis.

The researchers also found that the development of this biochemical index in terms of the development of the level of performance and the combination of the lowest proportion of the enzyme (LDH) and thus collect the lowest level of lactic acid and this helped in the high adaptation of the players in the level of anaerobic capacity through the decomposition of glucose and the production of lactic acid and the enzyme (LDH) Of the main enzymes involved in its formation. The researcher also explained that the low level of concentration of the enzyme (LDH) in the post-test was due to several factors, including economic.

"The economy plays an important role in providing sports effort and concentration without unnecessary or excessive effort, thus improving the performance of career, physical and physical athletes"[17]. "When an athlete becomes more efficient in training, the need for energy is reduced or decreased compared to the athlete who is less efficient," he said.

Therefore, the researchers prepared the appropriate scientific exercises in terms of performance time and the intensity used and the number of repetitions and intervals of interruptions commensurate with the scientific and physiological basis for the development of this biochemical index.

The development of the enzyme LDH is reflected in the level of accumulation of lactic acid, which was in large quantities in the blood, which dropped to very large levels, and this is a good indication of the improvement of the training situation of the players as a well-trained athlete can get rid of the accumulation of lactic acid In the blood quickly [18].

View the Results of Tests (Posttests) of the two Groups Control and Experimental Basic Skills of Futsal Halls

Table 8: Shows the value of (t) calculated for independent samples and the level of the test and were significant differences between the results of the test (posttests) of the two groups experimental and control skills basic futsal halls

| Variables | Measuring unit | Control group | | Experimental group | | value (t) | Level of significance | Type of significance |
|----------------------------|----------------|---------------|---------|--------------------|---------|-----------|-----------------------|----------------------|
| | | Mean | STD.EV. | Mean | STD.EV. | | | |
| Put down, rolling, scoring | Degree / sec | 0.745 | 0.049 | 0.908 | 0.023 | 9.409 | 0.00 | Sig. |

Conclusions

Based on the research findings reached within the research community, the following conclusions were reached:

- Exercise in the diamond method helped to develop the concentration of lactic acid in the blood.

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Appendix 1: A model for a training module for gym players using diamond-style exercises

Training Unit: First

Day and date: 3/2/2018

Training intensity: 87.5% Exercise time: (45-50) minutes

| S | Intensity | Exercise time | Repetitions | Groups | Rest | | |
|---|-----------|---------------|-------------|--------|---------------------|----------------|-------------------|
| | | | | | Between repetitions | Between groups | Between exercises |
| 1 | 85 | 8 Sec | 3 | 2 | 3Min | 3Min | 3Min |
| 2 | 90 | 10 Sec | 2 | 2 | 2Min | 4Min | 4Min |
| 3 | 85 | 10 Sec | 3 | 2 | 3Min | 3Min | 3Min |
| 4 | 90 | 10 Sec | 2 | 2 | 2Min | 4Min | - |