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The Impact of the Proposed Training Units on the Muscles Used in the Skill of Kicking the Ball by Force for Football Players.

أثر وحدات تدريبية مقترحة على العضلات المستخدمة في مهارة ركل الكرة بالقوة للاعبي كرة القدم

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Abstract: this research aims to know the effect of the training units on developing the skill of kicking the ball hard for mid-football players. The researcher used the experimental method as the most appropriate for this type of research. The research sample consisted of 22 player, who were divided into two groups. 11 players are active in the Sherif division championship in Batna state for football. The experimental group applied the training program proposed by the researcher, consisting of 6 weeks, at a rate of 3 lessons per week, while the control group applied the regular program with the team coach, and tests were conducted before and after by testing the strength of the lower extremities and the test of kicking the ball with force to the farthest distance. The proposed training gave better results in the strength test of the lower extremities and kicking the ball with force to the farthest distance among the experimental group players than the control group.

Keywords: training unites ; The skill of kicking the ball; football

الملخص: يهدف هذا البحث إلى معرفة إثر الوحدات التدريبية على تطوير مهارة ركل الكرة بقوة لدى لاعبي كرة القدم صنف أواسط، استعمل الباحث المنهج التجريبي باعتباره الأنسب لهذا النوع من البحوث، حيث تكونت عينة البحث من 22 لاعبا قسموا إلى مجموعتين، ينشطون في بطولة القسم الشرفي في ولاية باتنة لكرة القدم. طبقت المجموعة التجريبية البرنامج التدريبي المقترح من طرف الباحث والمكون من 6 أسابيع بمعدل 3 حصص أسبوعيا بينما طبقت المجموعة الضابطة البرنامج العادي مع مدرب الفريق، وتم إجراء الاختبارات القبلية والبعدية عن طريق اختبار القوة للأطراف السفلية واختبار ركل الكرة بالقوة لأبعد مسافة وقد أظهرت النتائج أن البرنامج التدريبي المقترح أعطى نتائج في اختبار القوة للأطراف السفلية وركل الكرة بالقوة لأبعد مسافة لدى لاعبي المجموعة التجريبية أحسن من المجموعة الضابطة.

الكلمات المفتاحية: وحدات تدريبية، مهارة ركل الكرة بالقوة، كرة القدم.

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1. Introduction :

Any study is considered as an intellectual framework that poses a set of questions and calls for a set of hypotheses. Those hypotheses require a verification of their correctness or error; a validation of their credibility; through a set of field actions and producers. Every theoretical research needs to be confirmed in the field if it is studyable. Therefore, we have highlighted the most important training methods that are specialized for the development of the muscular ability of the muscles used in throwing and kicking the ball in football. In our research, we have examined the impact of a proposed program in the high-level sports on the muscles used in football players' skill of kicking the ball. In order to achieve the objectives of this study, answer its questions and validate its hypotheses; we had to go to the field to investigate the truth. We have used the means and tools of data collections, in which we have prepared a list of tests that are related to the study, in order to nominate the most suitable ones to be applied on the experimental sample in the sake of testing their truthfulness and suitability with the real sample. Then we have started to apply these previous tests and training program on the experimental and real samples. The two researchers have relied on the experimental approach, which is considered as one of the most scientific approaches in which the parameters of the scientific method are clearly represented.

2. Problematic of the Study:

Controlling the ball is considered as one of the most significant skills in the football game. This skill is considered as the key in controlling the game. Therefore, the team gets the possession of the play when the ball is under the control of one of its players. Added to this, the inability of controlling the ball properly might waste the opportunity to send it to another player in the team. Receiving and settling the ball when it is received from another player is

important and affecting the whole team, it is one of the skills that a good player should have; the player must be ready to reach the ball from any angle and any high and even under any speed. The skill of senior players is clearly manifested in receiving and holding the ball in one move exactly where they want it to be. This speed allows the players to think about their next move after receiving the ball. The players should have the ability to shoot powerful and accurate kicks of the ball. This power might make the opposing goalkeeper unable to block the ball and keep it out of his goal net. As for the accuracy of the shot, the player must train himself repeatedly to be able to shoot the ball accurately. Such training exercises can be done either with the use of a small net placed on the goal with attempts to shoot on it or with the use of one of the training tools that covers the goal completely except for a small area in each of its corners and then shooting through it. By taking into consideration the need not to stop the continuous and permanent training to achieve powerful and accurate shots. The player can also watch football matches played by the world's top players by focusing on their shots and trying to learn from them, in which many things must be taken into consideration to enhance the player's ability to shoot well. One of these things is the muscular ability used in the skill of kicking the ball, which has an important and fundamental impact in developing all of the aspects of the sports achievement in football in general and throwing the ball for furthest distance and scoring in particular by knowing the impact of the proposed program.

In addition, the muscle ability has a clear importance as it is described by Abu Al-Nasr Mohammed, the muscle ability has a great important for games in general and for football in particular such as fast running, attacking and changing directions, has a significant role in acquiring and mastering the motor performance in the game as quickly as possible while saving effort, Especially at

the high levels that require the player to link his move and running with his superior ability to control the ball because he can start, stop, turn, jump, hit and follow the ball either with the foot or with the head. Through the researcher's humble experience and contact with team coaches, he noted that there is a clear weakness in the characteristic of the muscular ability of the muscles used in the skill of throwing and kicking the ball by force in football because the coaches are not familiar with the modern scientific training methods that are correct and well-studied, which reflected negatively on the performance of players from all aspects of the sporting achievement, especially throwing the ball to the farthest distance and aiming at the goal. Therefore, the researchers decided to search for other means and methods to develop the muscular ability of the muscles used in throwing and kicking the ball skill by force in football by proposing a training program with high-level sports training to develop the muscular ability of the muscles used in throwing and kicking the ball the skill by force For middle class football players.

The researcher's choice of the problem of his research stems from his sense of the importance of the problem and the possibility of adjusting the variables and the desire to solve it due to the extent of the originality and novelty of the problem and the amount of its scientific contribution to high-level sports training. In light of this we ask the following questions:

1. Main Question:

How much does the training units affect the muscles used in the skill of kicking the ball hard for mid football players?

2. Sub-Questions:

1. How much impact the proposed training modules have on the development of the muscles used in the skill of kicking the ball hard for mid football players?

2. What is the impact of the proposed training unites on developing the skill of shooting power on the goal for mid football players?

3. General Sypothesis:

The training units may have a positive effect on the muscles used in the skill of kicking the ball hardly for mid football players.

Sub-Sypothesis:

1. The proposed training units have a positive effect on the development of the muscles used in the skill of kicking the ball hardly for mid football players.
2. The proposed training modules have a positive effect on developing the skill of shooting power on the goal among mid football players.

4. Significance of the Study:

1. Achieving a physical and skillful development for the experimental research sample players as a result of applying the proposed training program.
2. Knowing the sufficient period of application of the program to have positive effects on the mid-football players.
3. Drawing attention to those who are interested in the high-level sports training programs and the use of modern methods in sports clubs.

5. Objectives of the Study:

1. Know the impact of the proposed training program on the development of the muscles used in kicking the ball strongly for mid football players.
2. Knowing the effect of the proposed program on developing the skill of shooting power on the goal among the mid football players.

6. The Definition of the most important terms used in the study:

1. Training units:

Procedurally: Is a set of training units proposed to a sample of players to improve the physical and motor abilities in a period of time in order to achieve

achievement at the sporting level. The training unit aims to develop different aspects of the preparation, these units can vary depending on the direction of impact of the physical loads formed between units of uniform or multiple direction and also can vary according to the different size of the physical loads. These units are widely used for the purpose of the physical preparation when developing strength, speed, endurance and flexibility as well as to develop technical and planning skills.

The relative importance of the training units increases according to the high sporting level its development from one stage to another. At the level of the seasonal training plan, training unites are frequently used in the second period of the preparation stage and the beginning of the competition stage.

Terminologically:

Cometti has defined the training unites as a method of strength development, where it consists in repeating heavy loads alternately with repeating lighter loads in the same training session as quickly as possible. In order to achieve a high sporting level, there must be a high degree of physical and psychological susceptibility. In addition to the health aspect, and on the other hand, there must be a relationship between the training load and rest.(Cometti 2005)

2. The skill of kicking the ball hard:

Procedurally: The player throws the ball as far as possible with all of his strength towards the goal.

Terminologically: Hanafi Mahmoud Mokhtar has defined it as the instantaneous force that works to move the ball from a place in the field towards the goal or to the furthest distance in the field (Mokhtar, 1988).

3. Muscular ability:

Procedurally: The player's muscular and physical abilities to use his maximum strength in the shortest possible time, which is called muscular ability.

Terminologically: Mohammed Hassan Allawi has defined the muscular ability as the ability to achieve maximum strength in the shortest time, it is represented by the following equation: muscular ability is equal to strength in speed (Allawi, 1990).

7. Literature Review (Similar and Previous Studies):

The First Study:

The Impact of a training program proposed by the plyometric training method for the development of the explosive force of the upper and lower limbs of the athletes of karate do "from15 to 17 years". By the researcher Ben Yettou Saif al-Islam (2018).

The aim of this study is to propose a scientifically based training program for the development of the explosive strength of the upper and lower limbs in the athletes of karate do from 15 to 17 years. General hypothesis: The training program proposed by the method of plyometric training has a great impact on the development of the explosive strength of the upper and lower limbs of the athletes of karate do. The researcher reached the following results: 1. the training program proposed by the plyometric training method has an impact on the development of the explosive strength of the upper and lower limbs in the players of karate do (15-17 years old). 2. The characteristic of the studied explosive power is of great importance and reflects on the future development of players by assuring that its development at this stage is a must.

The Second Study:

The effect of training with weights to develop muscular ability on the accuracy of passing and shooting among junior footballers. By the researcher Ibrahim al-Faqih Mustor Ali (2015).

The study aims at identifying the impact of training with weights for the development of the muscular ability on the accuracy of passing and shooting

among 16-year-old junior footballers at Al-Tasamah Club Al Qunfudhah Governorate. The sample of the research consisted of 18 young football players registered with the Saudi Football Federation. One of the most important results that have been reached is the presence of statistical differences between the Pre and post measurements of the research sample in the muscular ability tests that are under discussion. In favor of the post-measurement, as well as the existence of differences between the pre- and post-measurements of the research sample in the skill tests (Scrolling, shooting) and in favor of the post- measurement.

The Third Study:

The impact of using plyometric training on improving the performance of the high jump shooting skill in handball. By the researcher Wafa Abdul Majeed Mohammed (1998-1999)

The study aimed at showing the importance of using one of the plyometric training programs to raise the level of performance of the high jump shooting skill in handball. The reached results were: Improving the muscular ability of the legs and arms and improving some chemical variables affecting the skill of shooting in the high jump, as well as the high jump shooting accuracy.

Commenting on previous studies and locating the current study from previous studies:

The researcher has noted that the previous studies covered by the previous researchers and addressed in our research are limited and fall into one destination, which is the impact of the training programs in the development and improvement of muscle strength. The researcher has approached the problem by using the experimental approach in most of the stages. The aim of all this studies is to develop physical and skillful abilities. Looking at these dissertations and thesis, we have noted that these researches have a direct connection with our subject. Therefore, we used them as references and sources to enrich the

research in depth to reach the audited results using the reached recommendations and findings.

8. Field study

"The experimental approach is the only research approach that can truly test the hypotheses of the cause or effect relationships, through the problem we are studying, the researcher used the experimental approach for its suitability to the nature of the research," says Mohammed Hassan Allawi and Osama Kamel Rateb.

1. **Fields of the Study:** It is represented in n the temporal, spatial and human spheres (when, where and who).

The Spatial field: the Mid-football players in the team of Timgad, who are active in the honorary section of Batna State Football Ligue.

The temporal scope: The experiment was conducted between November 02, 2018 to April 03, 2019.

The human field: The research community was deliberately selected from the top football players in the municipality of Timgad, Batna state. 11 player were excluded from the survey in the municipality of Tufana. 22 players remained, who were randomly divided into two groups, the first group consists of 11 players and the second group consists of 11 players, which is called the control group.

2. The Study tools: In order to start the research procedures, the researcher used tools and aids. The research tools play an important role in the experimental study in order to reveal the truth that we seek to reach. A number of methods were used that helped us reveal the aspects of this research, which are as follows:

3. The proposed program: The proposed program has been prepared after an extensive reading of the specialized scientific programs as well as reviewing

some of the previous studies and researches. The proposed program was presented to a group of experts to get their opinions on the basis of the proposed program and its suitability for this category, the duration of the program, the number of practice times per week and the time of the study unit. In light of the results of the exploratory experiment, the program was designed as follows:

number	Axes	periods	Expert's opinions %
01	The duration of the program	6 weeks	90%
02	The number of the training unites	3 training sessions per week	80%
03	The total number of the training units	18 training sessions	70%
04	Training days per week	Saturdays, Tuesdays, Thursdays	80%
05	Training unit time	90, 120 minutes	85%

Table N.01 Each training unit included three sections, the content of which is consistent with the objectives of the unit, as follows:

-Warm-up: The warm-up is sometimes called the warm-up or the set-up period, all of which are terms for a single content used in the training unit, ranging from 25 minutes according to several circumstances.

- The main part: The main part contains exercises that work to achieve a goal or goals of the training unit, where it gives exercises that raise the level of physical fitness of the players and exercises that improve their performance and gain muscle abilities. Its time ranges around 60 Minutes.

-The Closing part: The closing part contains relaxation and calming exercises. At this stage we have chosen exercises that help to eliminate fatigue and calm the work of the vital organs, which provide the player with a physical rest with a duration of 15 minutes.

4. Muscular abilities tests:

1. **Strength test for lower limbs:** Vertical jump test of stability (for Sargent)

-Objective of the test: To measure the explosive power of the legs.

- Tools: Fixing a blackboard on the wall so that its lower edge is 150 cm above the ground, after that it will be fixed again from (151 – 400cm), pieces of chalk (The Blackboard can be dispensed with and marking on the wall directly according to the performance conditions).

-Performance Specifications: The tested person holds a piece of chalk, then stands up so that his chalk-holding arm is next to the board, then the tested person raises his arm over its entire length to make a chalk mark on the board and records the number in front of which the mark was placed.

From the standing position, the tested person swings his arms up front, then down and behind with the knees bent in half and then weighted up front with the knees individual to jump vertical to the maximum distance he can reach to make another mark; the arm over its entire stretch. Then he records the number in front of which the second mark is placed.

-conditions: When performing the first mark, one or both of the heels should not be lifted from the ground and the marked arm should not be raised above the level of the other shoulder during the marking, as the shoulders should be straight .The tested person has the right to two swings (if desired) when preparing for the jump. Every person has two tries to score the best.

-marking: The distance between the first and second marks expresses the amount of explosive power the tested person has, measured in (cm).

2. Name of the test: choosing to kick a fixed ball for the farthest distance. (Rissan Krebt Majeed, 1988, pp. 293-294.)

-**Objective of the test:** Kicking the ball to the restricted distance and kicking force (by measuring the distance the player achieves by kicking the fixed ball on to the ground for as long as possible)

- Tools: Football stadium, two balls, Tape measure, two Whistle, Burke to fix the test distance, Flags fixed on the sides of the test area.

Performance method: The test field is determined by the width of (3) m from the side line of the football field which is the starting line.

1. The player stands behind the starting line and the ball in front of his fixed on the ground.
2. The player kicks the ball as far as possible towards the end line, within the boundaries of the test area. the attempt is not correct in the following cases:
    A. Failure in kicking the ball.
    B. If the player does not face the test area.
    C. If the ball rolls on the ground from the start because of the air or other effects.

5 - Statistical Methods: The Statistical data was processed using the Statistical Package for the Social Sciences (SPSS) version number 19, in which it includes processing methods.

Calculating the reliability and validity of muscle abilities tests:

1. Test stability:

Test stability is a prerequisite for standardizing the test, i.e. the test must be of a high degree of accuracy and perfection in what it is designed to measure. According to Marwan Abdul Majid Ibrahim the stability of the test means "Consistency is the test's preservation of its results if it is repeated on the same sample (Marwan Abdul Majid Ibrahim, 1995, p.).While Mohammad Subhi Hassanain asserts «the test should give the same results if it is replayed on the

same individuals and in the same circumstances. (Mohammed Subhi Hassanain , 1987, p. 107.).

The stability of the physical and motor abilities tests in this study was calculated by using the application and re-application as the best method in this type of tests with an interval of 15 days. Table No. 1 illustrates the values.

number	Variables	Sample size	Indication level	Self-honesty
01	Lower limbs strength	11	Indicated at 0.01	0.935
02	Throwing the ball as far as possible	11	Indicated at 0.01	0.970

Table N.02: coefficient of stability coefficient for muscular abilities tests.

Table analysis: From the table we find that the tests have high stability values where the tests have maintained their results by more than 60%, which indicates the stability of the test.

2. Reliability of the tests:

-Self-honesty: For the validity of the test, the researcher used the coefficient of self-honesty as one of the types of honesty, which measures the relationship between stability and honesty that is measured by calculating the square root of the reliability coefficient of the test.as it is presented in the following table:

number	Variables	Sample size	Indication level	Self-honesty
01	Lower limbs strength	11	Indicated at 0.01	0.940
02	Throwing the ball as far as possible	11	Indicated at 0.01	0.961

Table N.03: represents the self-honesty of the tests of muscular abilities.

Table analysis: As self-honesty is one of the types of honesty that measures the relationship between stability and honesty, it turns out that the tests have a high degree of honesty, which is shown by the results in the table above.

-Content validity (muscular ability tests): it means knowing the test units and items separately, and the extent to which this unit measures the quality measured by the test as a whole. The validity of the content depends on how well the test represents the aspects it measures, and honesty is the most important condition for a good test ،The good test is the one that measures what was created for nothing else. Ahmed al-Assaf Saleh says, "The test is considered honest if it is measured only what it is intended to measure, but if it is prepared for a certain behavior but it measures another, therefore, the characteristics of honesty do not apply to it" (Ahmed Al-Assaf Saleh 1989, p. 429).

It also relies on the construction of achievement tests, where the achievement test should represent the content and objectives of the curriculum truthfully, it requires building a test specification table, which is a two-dimensional table that determines the distribution of the test vocabulary in relation to its objectives And for the elements of the course for which the test was set. (Ezzat Abdel Hamid, 2011, p. 512.)

7. Presentation and discussion of test results:

Table N.4: strength test for lower limbs

test	sample	SMA 1	The first standard deviation	SMA 2	The second standard deviation	The calculated value	Tabular value	Level of significance	Statistical significance
Lower limbs strength	Control group	38.05	5.35	37.96	4.12	0.60	1.81	10	Not statistically significant0
Lower limbs strength	Experimental group	37.95	4.20	42.05	5.51	1.90	1.81	10	statistically significant

From Table N. 4 it is clear that:

The control group in the pre-test obtained an arithmetic average of 38.05, and a standard deviation of 5.35, while in the post-test, it obtained an arithmetic mean of less than 37.96 and a standard deviation of 4.12. The value calculated t was 0.60, this means that there are no statistically significant differences. Therefore, the regular training program did not affect the development of the throwing muscles in the control group. Whereas, in the pre-test, the experimental group got an arithmetic average of 37.95 and a standard deviation of 4.20 while in the post-test, it got an arithmetic mean of 42.05 and a standard deviation of 5.51. This means that the differences were statistically significant and therefore the program of the proposed is 0.05 and the level of significance is 10 has positively affected the development of the muscles used in throwing the ball among the members of the experimental group.

The impact size and program effectiveness data can be summarized in the following table:

Table N.5: the Impact size and effectiveness of the proposed program (strength test for lower limbs):

data				Value
Possible degree of strength test for lower limbs test (maximum end of the test)				42
average pre-measurement (strength test for lower limbs)				37.95
Average post-measurement (strength test for lower limbs)				42.05
Gain score =(average pre-measurement+ average post-measurement)				4.1
Possible gain score = (maximum end of the test - pre-measurement average)				4.05
Ratio 1 = gain score = (gain score ÷ Possible gain score)				0.89
Ratio 2= (gain score ÷ maximum end of the test)				0.36
Black's Gain Ratio equation = Ratio 1- Ratio 2				1.25
Black's Gain Ratio equation	ETA square ($^2\eta$)	Effect size	value (t)	variable
1.25	0.882	2.006	1.90	strength test for lower limbs

It is clear from the previous table:

- The value of the effect size is equal to (2.006), which is higher than the value (1.5), which corresponds to a huge effect size as in the Cohen reference table (Hassan, 2011). This shows that the proposed program has a huge impact on raising the level of acquisition (strength test for lower limbs) to the players.

-The value of ETA square ($^2\eta$) reached (0.882),which means that the percentage of the total variance of the scores of the experimental sample members is due to the effect of the program that was prepared to raise the level of gain (strength for the muscles used in kicking the ball) among the players have reached (88.2%).this can possibly explain the (88.2%) of the total variance of the scores of the sample members in the (strength test of the lower limbs) among the players as it indicates the high level of scientific significance for this program.

- Black's Gain Ratio equation amounted to (1.25), which is greater than the value (1.2) proposed by black to judge the effectiveness of any program. It shows that

the program is effective in gaining and improving the acquisition (strength of the muscles used to kick the ball) among players.

-We can explain this improvement in the muscular abilities of the muscles used in kicking the ball (strength of the lower limbs) due to the effectiveness of the training units proposed by the researcher, where the player needed to develop the responsible muscles for throwing the ball strongly. This is what has been emphasized in the training units and the attempt to develop the muscular strength of the muscles used in kicking the ball and develop it as much as possible. The results also showed this superiority because of the regulation of the number of repetitions and the development of the associated physical abilities.

Through the previous tables, it can be concluded that there is a statistically significant difference at the significance level (0.01) between the averages strength test for the lower limbs before and after the application of the program in favor of the average strength test for the lower limbs after the application of the program. That is to say, the program has contributed with statistical significance to gaining and improving the strength of the muscles used in kicking the ball for the player, which means that there has been a progress in e acquisition and growth of the muscular abilities of the muscles used in kicking the ball under study during the field trial period.

Table N. 6: the ball kicking test for the farthest distance

test	sample	SMA 1	The first standard deviation	SMA 2	The second standard deviation	The calculated value	Tabular value	Level of significance	Statistical significance
Kicking the ball to the farthest distance	Control group	37.62	5.15	37.19	5.20	1.50	1.81	10	Not statistically significant
Kick ingthe ball to the farthest distance	Experimental group	37.17	37.17	42.10	5.80	2.85	1.81	10	statistically significant

It is clear from table (6) that:

In the pre-test the control group obtained an arithmetic average of 37.62, and a standard deviation of 5.15, while in the post-test, it obtained an arithmetic average less (37.19), and a standard deviation of 5.20. This means that there are no statistically significant differences, at a degree of freedom 1.81, which is less than the tabular one. The regular training program did not affect the development of kicking the ball to the farthest distance among the members of the control group. Whereas, in the pre-test, the experimental group obtained an arithmetic average of 37.17 and a standard deviation of 5.35, while in the post-test, it obtained an arithmetic average of 37.17 and a standard deviation of 5.35 average of 42.10 and a standard deviation of 5.80, which means that the differences were statistically significant at 0.05 and level of significance 10. Thus,

the proposed program has positively affected the development and improvement of kicking the ball strongly as far away among members of the experimental group. The data on the size of the effect and the effectiveness of the program can be summarized in the following table:

Table N .7: Impact size and effectiveness of the proposed program (the ball kicking test for the farthest distance):

data				Value
Possible degree of the ball kicking test for the farthest distance (maximum end of the test)				43
average pre-measurement (the ball kicking test for the farthest distance)				37.17
Average post-measurement (the ball kicking test for the farthest distance)				42.10
Gain score =(average pre-measurement+ average post-measurement)				4.93
Possible gain score = (maximum end of the test - pre-measurement average)				5.83
Ratio 1 = gain score = (gain score ÷ Possible gain score)				0.82
Ratio 2= (gain score ÷ maximum end of the test)				0.29
Black's Gain Ratio equation = Ratio 1- Ratio 2				1.31
Black's Gain Ratio equation	ETA square ($^2\eta$)	Effect size	value (t)	variable
1.31	0.750	1.7003	2.85	the ball kicking test for the farthest distance

It is clear from the previous table that:

- The value of the effect size is equal to (1.7003), which is higher than the value (1.5) that corresponds to the huge size of the effect shown in Cohen's reference table (Hassan, 2011). It shows that the proposed program has a huge impact on raising the level of acquisition among the players.

- The value of the ETA square (2η) reached (0.750), which means that the ratio of the total variance of the scores of the experimental sample members effected by the program that is prepared to raise the level of gain (strength of the muscles used in kicking the ball to the furthest distance) among the players amounted to (75. %). That is possible to say that the (75%) of the total variance of the scores of the sample members in the (kicking the ball to the farthest distance test) in the players as it indicates the high level of scientific significance of this program.

- Black's Gain Ratio equation amounted to (1.25), to (1.31), which is greater than the value (1.2) proposed by black to judge the effectiveness of any program, which shows that the program is effective in gaining and improving the acquisition (strength of the muscles used to kick the ball) to players.

This improvement in the muscular abilities of the muscles used in kicking the ball can be explained due to the effectiveness of the training units proposed by the researcher, where the player needed to be taught how to throw correctly by moving his hands and legs in a correct way, focusing on raising his knee and putting his hoof feet instead of the toes while throwing the ball. Added to this, teaching him how to move the hands to achieve the motor compatibility between the eyes and the legs, this what was emphasized in the training units as well as its attempts to develop the muscular strength of the muscles used in kicking the ball and its implementation as much as possible. The results also showed this superiority because of the regulation of the number of repetitions and the development of the associated physical abilities.

Through the previous tables, it can be concluded that there is a statistically significant difference at the significance level (0.01) between the averages strength test for the lower limbs before and after the application of the program in favor of the average strength test for the lower limbs after the application of

the program. That is to say, the program has contributed with statistical significance to gaining and improving the strength of the muscles used in kicking the ball for the player, which means that there has been a progress in e acquisition and growth of the muscular abilities of the muscles used in kicking the ball under study during the field trial period.

9. Analysis of the results:

From the results obtained, we came to the following conclusions: through the results of the control group which, practices the regular training program with the head of the team, it clearly appeared to us that this group did not give any tangible results .This means that the exercise training program did not lead to the development of the muscles used in kicking the ball to the farthest distance and the skill of scoring and shooting for middle soccer players. Whereas, the experimental group that practiced the proposed training program exercises, the results are generally very clear and have clear moral differences as well. This was shown in the results of the strength test of the lower limbs and the kicking the ball to the farthest distance for mid- football players. The results show that the research hypotheses have been realized, which states that the proposed training program effectively affects the development of the muscles used in kicking the ball hard and for the farthest distance and scoring power among the football players in the research sample. These results are important for both coaches, players and specialists in the physical preparation and who wants to develop the physical abilities and skills, taking into account the comfort factor between the training units, which must be more during a certain stage of the competition or training, especially if the sessions contains high training loads.

Also, this study agrees with an article NOUR HAMED HDAD 2015 that the program has proven to be effective, and this is consistent with the current study

This study is consistent with the studies that dealt with the effectiveness of the training program befoe, including the study of Bin Yattuo Saif Al-Islam (2018) and the Study of Wafaa Abdel-Majid 1999. This study is consistent with (MESTOUR ALIIbrahim al-Faqih 2015،P107) Weight training has a positive effect on speed, accuracy of passing and shooting in under-16 football players.

This is due to the use of the proposed training program and what it included of targeted and focused exercises that take into account the identification of the goal of each class, the appropriateness of the classes for this category, the duration of the classes, the number of times of practice per week, the time of the class, the frequency of the exercise and the time and intensity of the exercise.

This study also agrees with an article by Bedjaoui Fadili in 2015. The higher the level of the clubs, the better the level of strength

Hanafi Mahmoud Mokhtar points out that"developing a basic skill, or training on a specific plan or physical attribute does not come at once rather it is imperative for the coach to repeat the training, organize his units in a way that allows players to learn correctly, develop their level, and link the goal of the previous training unit to the goal of the Subsequent training unit (Hanafi Mahmoud Mokhtar, 1988, 47).

General conclusion:

Starting from the main objectives of the study, which were formulated in the form of procedural hypotheses, We deliberated the effect of the impact of proposed training unites on the muscles used in the skill of kicking the ball forcefully for football players for the category of players under 19 years old. Through the results obtained based on a theoretical framework, from literature review and previous foreign and Arab studies, Relying on applied techniques and statistical methods for processing and analysis, we came to the following conclusions:

1. The presence of statistically significant differences at the level 0.05 between the pre and post measurement of the experimental group in the longest distance test and the skill of scoring and shooting in favor of the post.
2. There are no statistically significant differences at the level of 0.05 between the pre and post measurements of the control group in the test of farthest distance and scoring skills.
3. There are statistically significant differences at the level 0.05 between the pre and post measurements in favor of the experimental group in the strength test of the lower limbs and kicking the ball to the furthest distance and in favor of the post.
4. There are no statistically significant differences at the level 0.05 between the pre and post measurements of the control group in the strength test of the lower limbs and kicking the ball to the furthest distance.

The results of the study showed the superiority of the experimental group over the control group in all the variables under consideration for players under 19 years old in football due to the proposed training program taking into account scientific foundations and principles.

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