

The effect of a physical-skilled pregnancy on muscle ability and its relationship to the performance of some of the defensive skills of young handball players

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Abstract

Handball has received special attention from experts and specialists working in its field, as international levels require determining the form of training planning process, methods and programs, both for local teams and at the level of national teams, technicalization of training, loads, efficiency, types and objectives has become an important issue sought by those involved in the game, and different means of training Strength and its methods depending on the type of training system and the level of player capability and the fact that muscle capacity is one of the basic requirements for performance in the handball game, which is credited with performing the skills of the game effectively to achieve the goals of those skills, it should be concerned with the development of capacity and be a priority of coaches in the periods of general and private preparation.

Through his follow-up researchers noted that there is a clear weakness in the performance of some defensive skills in the game of handball with the required strength and speed such as pounce on the opponent at the moment of competition and effective and quick movement in closing the defensive gaps and this weakness in the Iraqi player in muscle ability is a barrier to the effectiveness of the performance of defensive skills, which has a prominent role in winning matches or tournaments and here crystallized the problem of research.

The study aimed to learn about the impact of (physical- physical) exercises on the muscular ability of young handball players, and to learn about the relationship between muscular ability and some defensive skills of young handball players. The researchers assumed that there were moral differences in the results of the tests (pre- - post-) of the experimental group in muscle ability, and there is a correlation between muscle ability and the performance of some defensive skills of young handball players

Keywords: Pregnancy (physical, skilled), muscular ability

1-Introduction

The handball game has received special attention from experts and specialists working in its field. Strength training and methods depending on the type of training system and the level of player capability and the fact that muscle capacity is one of the basic requirements for performance in handball, which is credited with performing the skills of the game effectively to achieve the goals of those skills, it is important to take care to develop the ability of the players and to be a priority of the coaches in the periods of general and private preparation to raise the performance level of the players and hence the importance of research in the use of skilled physical exercises to develop the muscle capacity of the arms and legs and what This development reflects the performance of handball defensive skills as the researchers believe that the development of the level of muscle ability of handball players is reflected in their performance of special skills, especially defensive skills.

By following the researchers as a former player and current coach, he noted that there is a clear weakness in the performance of some defensive skills in the handball game with the required strength and speed such as pounce on the opponent at the moment of competition and effective and quick movement in closing the defensive gaps and the process of covering the opposing player, as it must be The performance of all defensive skills at a momentary speed in order to reduce the effectiveness of the opposing team and this weakness in the Iraqi player in muscle ability is a barrier to the effectiveness of the performance of defensive skills, which has a prominent role in winning matches or tournaments, and here crystallized the problem of research.

The study aimed to learn about the impact of (physical- physical) exercises on the muscular ability of young handball players, and to learn about the relationship between muscular ability and some defensive skills of young handball players. The researchers assumed that there were moral differences in the results of the tests (pre- - post-) of the experimental group in muscle ability, and there is a correlation between muscle ability and the performance of some defensive skills of young handball players, and the temporal field of 7/2/ 2/ 2020 Until 9/5/2020 and represents the human field of the youth players of Diyala Handball Club Bamar (16-18) for the sports season 2019-2020, the spatial field is the Hall of the Directorate of Youth and Sports / Diyala Sports.

Field search procedures

The nature of our work aims to know the effect of a particular variable. 2.2 Sample search

The researchers selected the research sample in a deliberate manner to provide the possibility of controlling its research variables more accurately than the rest of the other samples, "the ratio between the sample size and the size of the community should not be less than 5%" (Student and Samurai 1981: p. 16). On this basis, the research sample represents the real society of origin represented by (10) players of Diyala Youth Handball Club, and the following table shows the homogeneity of the research sample in terms of growth variables represented by weight and length.

The Table (1)

to	Variables	Unit of measurement	arithmetic medium	Standard deviation	Broker	Sprain factor
1	Weight	he murmured	78.41	74.50	10.46	.750
2	Length	poison	179.00	179.00	4.13	.130

The value of the sprain factor was within (+_3) evidence of the homogeneity of the sample.

2.3 Means of gathering information

Arab and foreign references and sources.

- Testing and measurement.
- Test results registration form.
- Measuring tape.
- Computer not laptop
- Electronic timer hours number (2).
- Handballs number (6).
- Number (10).
- Athsaid different shapes and weights
- Rubber ropes with different resistances

2.4 Field search procedures

2.4.1 Identify search variables

The process of identifying the variables in the subject of research is an important necessity that the researchers have to identify accurately and carefully to achieve the objectives of the research, and has identified the variables according to the requirements of the research and the tests for muscle ability and some defensive skills were determined by the researchers being competent in the game and training science.

2.4.2 The tests used in the research

1- Explosive force test of the arms.

- Test throwing medical ball (3) kg with hands. (Khashali: 2012: 66)
- The laboratory is given three consecutive attempts, the best of which is calculated for the farthest throw distance recorded for the nearest (cm).
- 2- Testing the explosive force of the two men.
- : The broad jump of stability for the maximum distance: (Abdul Hamid and Hassanin: 1980: 400).
- The jump distance is measured from the starting line (inner edge) to the last after leaving the laboratory near the starting line, or when the heels touch the ground, and the laboratory has two attempts to score the best.
- 3. Testing the characteristic force of the arms at speed.
- Front-based payment test for (10) seconds. (Safety: 2000: 115).
- Record the number of correct attempts within the time of 10 seconds.
- 4- Testing the strength of the two men with speed.
- Partridge test maximum distance within 10 seconds. (2008: 46: Robert Morford)
- The measurement is made for each man individually and the rate is calculated for the two degrees of each man.

5-Wall of Repellent

- One-way defensive repellent wall test. (Abdul Hamid and Hassanein: 1980: 179)
- The laboratory records the number of correct attempts made during the 10w period specified for the test.

6. Defensive moves

- Testing various defensivemoves. (Darwish: 2002: 150)
- Each correct attempt is calculated by three degrees when the laboratory reaches mark B, a degree when it reaches mark C and a degree when the player returns again and reaches mark A. The laboratory records the number of correct attempts he made in 30 seconds.

2.4.3 Exploratory Experience

The researchers conducted the reconnaissance experiment on Sunday on 23/2/2020 on (4) players of the youth club Diyala, and the purpose of this experiment was to apply some exercises in order to adjust the mechanism of its performance and determine the possibility of its application and ensure the validity of the devices and tools that will be used in the main experiment on the research sample.

2.4.4 Pre- Tests

The pre- tests of the search sample were conducted at 3:00 a.m. on Thursday, 27 February 2020, in the closed hall of the Diyala Sports and Youth Directorate on the research sample of 10 players. Diyala Youth Handball Club, where measurements of height and weight were recorded and age recorded and then tested by the auxiliary staff, and extraneous factors were adjusted that may affect the results of the tests represented by time, location, hardware and tools used.*

2.4.5 Application of the training curriculum

In order to achieve the objectives of the research, the researchers developed a training curriculum containing physical exercises with resistances aimed at developing the muscle capacity of the arms and legs and skilled exercises that enhance skilled performance under the pressure of training loads controlled by the performance of resistance exercises, and the trainers applied the curriculum to the sample. The researchers were supervising the application and a controlled group was not used because the research hypotheses do not require it, as Saad Mohsen quoted Sachs as saying that "the use or non-use of the control group depends on the search hypotheses being tested" (SaadMohsen: 1996:87). The number of training units (24) training units from Sunday 1/3/2020 to Thursday, 7/5/2020 and three training units in Asbo A1, and the two researchers took advantage of the physical part of the main section of the training unit by (30-25 d) and the two researchers adopted the principle of training progression in the implementation of the vocabulary of the training curriculum in terms of resistance values and time of performance

2.4.6 Post- Tests

The post- tests of the research sample were conducted on Saturday, 9 May 2020 at 3 p.m., and the researchers followed the same pre- test conditions and procedures and adjusted the extraneous variables that may directly affect the results of the tests in terms of location, time, tools used and the auxiliary staff.

2.5 Statistical means:

The researchers used spss to statistically process search results
Presentation, analysis and discussion of research results

3.1 Presentation and discussion of the results of the muscle ability tests of the arms and legs (pre--post-) to the members of the research sample.

Table (2) shows arithmetic circles, standard deviations and (t) calculated for pre--post- tests of muscle capacity of the arms and legs

Statistical treatments Variables	Pre- testing		Post- testing		Value (t) Calculate d	Level of significan ce
	A	STD	A	STD		
Medical ball throwing test	9	0	9.38	0.73	2.09	sign
The broad jump of stability to the maximum distance	46.7	5.3	54.7	4.22	8.25	sign

Front-based payment test for (10) seconds	27.3	6.5	30	6.8	2.08	sign
Partridge test maximum distance in (10) seconds	41.7	2.08	47.2	1.92	0.00	No moral.

Table value (t) = 1.83 at freedom score (9) and error ratio (0.05)

Through Table2, which shows the results of the first test, the test of pushing a medical ball (3) kg by hand, it appeared that there are moral differences between the pre- and post- test of the research sample and in favor of the post- test attributed by the researchers to the occasion of the exercises used in the development of the explosive force of the arms, as they had exercises with effective resistances in raising the intensity of training loads scientifically and deliberately, which led to The development of the explosive force of the arms, this shows that explosive force is a key factor in achieving achievement and mentions "Schmidt and Buhle" that the fast fibers responsible for the production of high-capacity movement can be recruited to work if this high strength is required in addition to the large weights help to develop dynamic performance as the heavy weights in training are weights to recruit both types of slow and fast fibers" (Talha and others) 1997: 78), so it can be said that the exercises used have led to the survival of the training intensity so high that the development of explosive force focuses on the idea of prolonging and repeating the exercise with the participation of a large percentage of muscle fiber for a longer period of traditional exercises.

As for the broad jump test of stability to the maximum distance, there is a statistical indication between the results of the pre- and post- tests of the research sample and attributes it to the exercises used was effective in the development of the explosive force of the muscles in the jumping movements as it is focused on the performance of most of the weight exercises movement and this leads to the participation of the working muscles of the two men even if the exercise For another part of the body as well as skilled exercises whose performance is inseparable from the participation of the two men in it, this is confirmed by al-Rubadi that the development of part of the body can be translated on the basis of the specificity of the shape of the sport and the necessary numbers according to the nature of the sport in terms of the motor direction of performance and organic organs participating in the performance (Al-Rubadi: 2001:24).

As for the front-based propulsion test for (10) second, the results of its pre- and post- tests indicated moral differences, which means that several exercises have succeeded in developing the distinctive strength of the arms as they focus on exercises that develop forms of strength through the training method. "Station training can be used using public and private exercises and training can be carried out to develop maximum strength or strength with speed or extended strength" (Qasim: 124:1998). As for the partridge test for the maximum distance of (10) seconds, the results of the pre- and post- tests resulted in no moral differences, which the researchers attribute to the fact that most of the exercises used were geared towards exploding in muscle contraction, which translates into a lack of moral differences for this test, which means that the proposed exercises failed to achieve moral progress in the strength characteristic of speed for the two men, which means "the lack of qualification of the muscle groups involved in the work leads to ... Weakness for specific groups of muscles." (Saad eddin:48:2000) as when training the force and noting the lack of improvement initially... It can be instructed not to have neurological changes that help the muscle to reach a better achievement (komi:1992:86.)

3-2 Presenting and discussing the results of the (pre--post-) tests of some of the defensive skills of the research sample members.

Table (3) shows computational circles, standard deviations and (t) calculated for pre--post- tests of the defensive skills variables of the research sample members

Table (3)

Statistical treatments Variables	Pre- testing		Post- testing		Value (t) Calculate d	Level of significa nce
	A	STD	A	STD		
Wall of Repellent	3.40	.510	5.00	.810	7.23	sign
Various defensive moves	43.90	2.33	41.91	2.12	4.38	sign

Table value (t) = 1.83 at freedom score (9) and error ratio (0.05)

From Table 3, with regard to the fender variable, the results showed the moral differences of the members of the research sample in raising the performance effectiveness of this skill as an effective and positively influential skill in the team and negatively in the effectiveness of the opposing team and the researchers attribute the

development that occurred in the performance of this skill due to the success of his vision in the occasion of exercises by carrying physical skills focused on muscle groups working in special skills, especially during defensive performance, which shows the accuracy of the targeting of exercises, which included Muscular work by overcoming resistances and a specific muscle group followed by the work of Mahari and for the same muscle group and this enhances the performance of the skills of the game by performing under high physical pregnancy and the researchers agree with (Hanafi Mahmoud) that "in order for the player to perform the skill in the ideal way his muscles must be strong so that he can make the required effort, especially in games under pressure, the power helps him to overcome the opponent on the one hand and on the other hand can perform the required skill." (Mukhtar: 94:1998) The researchers agree with what he said (Frank Abdul Karim, 1986) quoting (Qassim Hassan Hussein) that focusing on training in which the same muscle groups are used common in sports activity is considered more effective and useful (Fadhli: 1986:44).

The results presented in the table above also showed a remarkable development in the efficiency of the members of the sample with regard to various defensive moves and in the speed of their performance defensive movements and refers to the moral differences shown by the statistical indication, which means the success of the exercises used by the researchers and the efficiency of its training contents, which was developed in accordance with a training philosophy that uses resistance to muscle groups to perform technical duty, both sharply Contractions may reach the limits of what should be reflected in the requirements of the game, which is indicated by (Kamal Darwish et al.) that "the development of physical qualities should be associated with training basic skills, especially in the special preparation period because the training at this stage is very similar to that of during the competition" (Darwish et al.: 101:1998). In this regard, it can be said that "the coaches should give the defense more importance than they give to the attack and the reason for this is that when the team improves the defense and the acquisition of the ball can attack steadily and quickly so that the opponent's team misses the opportunity to return quickly and organize its ranks" (Abdul Jawad: 95:1977).

3.3 Present and discuss the results of the correlation semantics of muscle capacity and some defensive skills.

3.3.1 Presenting and discussing the results of the correlation semantics of muscle ability and the skill of the fender wall

Table(4)

Shows computational circles, standard deviations, calculated value (r) and the significance of the link between muscle ability and the skill of the wall of repellent

Coefficient			Wall of Repellent		Calculated value (r)	Correlation significance
Muscle ability	A	STD	A	STD		
Explosive force of the arms	9.38	0.73	5.00	.810	-0.13	No moral.
The explosive force of the two men.	54.7	4.22			0.74	sign
Quick arm strength	30	6.8			-0.05	No moral.
Quick power for the two men.	47.2	1.92			0.65	sign

The scheduling value (r) at the degree of freedom (9) and the level of indication (0.05) amounted to (0.60)

From table 4, which shows the mathematical circles, standard deviations, the value of (r) calculated and the indication of the correlation between the variables of muscle ability and the wall of repellent, the researchers addressed the results by the law of the simple correlation factor (Pearson) the results were as follows, in terms of the correlation between the explosive force of the arms and the rust wall we find that the value of (R) calculated is less than scheduling, which means the lack of morale of the association and the researchers see The lack of morality of the association is due to the fact that the exercises prepared were not at a high level of focus on the muscles of the arms, which is a logical result in not being associated with the fender wall, as the performance of

most of the exercises was related to the movements of the two men physically and technologically and in this regard resan khreib states that "all these elements are linked and mutually required and when any element is overlooked, it leads to a decrease in the effectiveness of the work and the change of the type of force" (khreib). : 1988: 212).

With regard to the correlation between the explosive force of the two men and the wall of repellent, we find that the value of (R) calculated is greater than scheduling, which means the morale of the link and this is due to the method developed thoughtfully and which is concentrated the performance of most of his physical exercises with the movement of the two men followed by a skilled exercise in which the movement of the two men is undoubtedly present and this led to the adjustment of the muscles of the two men and which the handball player needs to move efficiently and effectively during the play in defense i.e. the player needs to overcome the different resistances throughout the two rounds of the game defensively to be The player is active during the competition and the strength of the handball is "the whole movement of the player he performs on the field, which requires him to have high fitness and good mobility"(tailor and life: 1988:15) and in this regard (Friend Tolan) indicates that (strength has a prominent role in achieving good results in the exercise of sports, especially the production of strength at the right moment and at the right speed, as the concentration of strength while increasing its speed is one of the characteristic characteristics of good skill performance)." (Tolan:1980:30).

As for the correlation between the characteristic force of the speed of the arms and the fender wall, when processing the results, we find that the value of (r) calculated is less than scheduled, which means the lack of morale of the link, and the researchers believe that the lack of morale of association for this important variable in handball is due to the fact that the training of the strength characterized by the speed of resistance and weightlifting training was not sufficient in a way It ensures its moral association with the fender wall as well as the direction of the effect of exercise was focused more on the working muscles of the two men than on the arms although not neglected for the arms, which can be translated on the basis of the specificity of the shape of the sport and the numbers it takes according to the nature of the sport in terms of the motor direction of performance and organic organs involved in the performance. 24:2001.

As for the correlation between the characteristic force of speed of the two men and the repellent wall and when processing the results we find that the value of (r) calculated is greater than scheduling which means the morale of the link and this indicates that the exercises were effective in developing this ability through resistance exercises which led To recruit more rapid muscle fibers and high strength daughters as well as the association of physical exercises with skill exercises in which the movement of the two men is highly concentrated, as "the most important exercises used to reach muscle strengthening are the type that works against resistance such as weights Various medical balls and resistance colleagues" (Gerges: 45:1990) and this corresponds to what Talha Hossam al-Din and others referred to "If Schmidt and Buhrlé confirmed" that the fast fiber and responsible for producing the movement distinguished by capacity The high can be recruited to work if this high strength is required in addition to the large weights help to develop dynamic performance as the heavy weights in training are the weights to recruit both types of slow and fast fibers" (Talha:1997 : 78) .

3.3.2 Displaying the results of the correlation semantics of muscle ability and defensive movement skill with blitz coverage and discussion

Table(5)

Shows computational circles, standard deviations, calculated value (r) and the significance of the link between muscle ability and defensive movement skill with blitz coverage

Coefficient			Various defensive moves		Calculated value (r)	Correlation significance
Some physical abilities	A	STD	A	STD		
Explosive force of the arms	9.28	0.83	41.91	2.12	0.52	No moral.
The explosive force of the two men.	55.7	3.96			0.15	No moral.

Quick arm strength	30	6.8			0.51	No moral.
Quick power for the two men.	46.07	2.47			-0.28	No moral.

The scheduling value (r) at the degree of freedom (9) and the level of indication (0.05) amounted to (0.60)

From table5, which shows the mathematical circles, standard deviations, the value of (r) calculated and the indication of the correlation between muscle power variables and various defensive movements, and after the results were addressed by the Simple Correlation Factor Act (Pearson), the results were not moral in all of them and this What showed a comparison of the values (R) calculated for all variables with the scheduling value (R) of (0.60) at the degree of freedom (9) and the level of indication (0.05) indicated by the researchers that the proposed exercises Which was used by the researchers, which highlighted the members of the sample during the training units were not sufficient in terms of time period and precise focus as well as the specificity of the sample as it was an advanced degree of physical preparation which is due to training from the previous (traditional) training method when applying pre- tests for research, In otherwise, the development of strength is clear at the beginning of the regularity of the players training unlike the players who reached high physical potential in strength due to their regularity and continued training gradually decreases as the athlete reaches the highest physical level of muscle strength and this is what Mr. Abdul pointed out "The level of maximum strength at lower and medium levels of sports is meant to have a significant impact on the level of achievement, but this effect is gradually reduced with the high level of achievement" (Intentional:1997:119).

the conclusion

In light of the findings of the study, the researchers concluded that there is a positive effect on the use of skilled physical exercises in most variables of muscle ability as well as there is a correlation between some variables of muscle ability and defensive skills and lack of association in others and accordingly the researchers stressed the need to pay attention to the training of local handball teams according to modern scientific trends and foundations, as well as recommended the need to conduct similar studies to study the relationship between muscle ability variables and the rest of the performance requirements in the hand ball.

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