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THE EFFECT OF EXERCISES MUSCULAR STRENGTH CONSTANT FOR ARMS ON BOTH TYPES OF STRENGTH (DISTINCTIVE SPEED AND EXPLOSIVENESS) AND THE ACHIEVEMENT OF THE JAVELIN THROWER

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Abstract

The importance of the research is evident through the scientific information we provide about the training of fixed muscle strength and its role in raising the level of strength that is Distinctive speed and explosive strength and achieving the required achievement for the javelin thrower.

The most important Objectives of the research were:

1- Identify the effect of constant muscle strengths of the arms on the strength of its types (Distinctive speed and explosive) and the achievement javelin thrower.

The most important Conclusion:

1- Muscle strengths of the arms helped achieve advanced results in the strength of its types (Distinctive speed and explosiveness) and achievement of javelin thrower.

Accordingly, the Recommendation was:

1- Adopting the hard muscle strengths of the arms because they helped achieve advanced results in the strength of its types (distinctive with speed and explosive) and achievement for javelin thrower.

Key words: muscular strength; strength; Distinctive speed and explosiveness; javelin thrower.

1 - Definition of Research:

1-1 Introduction Research and importance:

Scientific development helped the human progress and prosperity towards the best as a result of creating and discovering everything that is new and useful and helps to provide an appropriate environment in terms of scientific, social and even sports. On the sports side, the scientific development played a major role

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in the progress of sport and prosperity as a result of the development of science related to achieving achievement, especially training The athlete and the various methods, methods and exercises that help to develop the physical, skill and planning aspects, as science helped the coaches discover the effective exercises and the appropriate training and what sports need according to its specialization of physical and skill requirements to achieve sports achievements. The effectiveness of throwing spears is one of the sporting events with excitement and suspense for their practitioners And its audience, especially in sports races, when the competition is great in achieving sporting achievement, so this event requires the physical side in a large way, especially my ability to force with speed and explosive strength to achieve achievement. The best and fast way to develop these two capabilities together are fixed muscle strength exercises, as it increases muscle strength Weakening from its predecessor, which gives better results. And from here it is evident to search through what we provide from scientific information and tote about the training of fixed muscle strength and its role in raising the level of strength that is characterized by speed and explosive strength and achieving the required achievement for javelin thrower .

1-2 Research Problem:

Achievement in throwing spears requires the player javelin thrower a distance and here the explosive force in throwing with each attempt requires any strength and speed in that one. Therefore there are multiple exercises to develop muscle strength, but each exercise gives production of strength that differs from another exercise and for this the exercises constant force achieved its success in most other sports games, and its role in achieving the achievement of the players throwing the spear. During the experience of the modest researcher with sports training, games, the square and the field, especially throwing the spear, and through contact with some coaches, he noticed that the force producing the spear does not achieve the required achievement and this is considered A research problem that requires its studies and the experience of exercising and other force exercises, including fixed for the purpose of experimenting with its role in producing the explosive force and the force that is characterized by speed and achieving the achievement of the players javelin thrower.

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1-4 Research objectives:

1- Identify the effect of fixed muscle strengths of the arms on the strength of its types (Distinctive speed and explosive) and the achievement of javelin thrower.

2- Learn about the results of the differences between tribal and post-tests and for the two control and experimental groups in the force with its types (Distinctive speed and explosive) and achievement of javelin thrower.

3- Learn about the results of the differences in post -test tests between the two controlled and experimental groups in the force with its types (Distinctive speed and explosive) and the achievement of javelin thrower.

1-5 Research hypotheses:

1- The presence of a positive effect of the fixed muscle force exercises for the arms in the force with its types (Distinctive speed and explosive) and the achievement of javelin thrower.

2- The presence of moral differences between tribal and post-test tests and in favor of the dimensional tests of the two controlled and experimental groups in the force with its types (Distinctive speed and explosive) and the achievement of javelin thrower.

3- The presence of moral differences in the dimensional tests between the two controlled and experimental groups in the force with its types (Distinctive speed by speed and explosive) and the achievement of javelin thrower.

1-6 Research fields:

1-5-1 human field: javelin thrower players at Basra Sports Club.

1-5-2 spatial field: throwing squares at Basra Sports Club.

1-5-3 Time field: from 10/7/2022 to 9/13/2022.

1-6 Terms:

1-6-1 Constant muscle strength:

Constant muscle contraction "is the most powerful muscle contraction in which the largest group of muscle fibers works in the maximum contraction as it contributes to strengthening the weak muscles of the players in a short time, so it is the duty of the trainer to include the daily training program (training units) a set of exercises performed by fixed contracting One of the advantages of muscle force training is the stability (Isomiterce) -Achieving maximum muscles in the various steps of competition movements and thus developing the

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maximum strength of these movements, and the muscular groups can be directed to work in a specific articulated angle, Results appear quickly to develop a specific muscle group in the movement path (Hassan Suleiman: 1993). One of the advantages of muscle force training is the stability (Isomiterce) - - Achieving maximum muscles in the various steps of competition movements and thus developing the maximum strength of these movements, and the muscular groups can be directed to work in a specific articulated angle, its results appear quickly to develop a specific muscle group in the movement path. (Abdul Raouff Qasim: 2017)

2 - Research Approach and field Procedures:

2-1 Research Curriculum:

The experimental approach of the two controlled and experimental groups was used to suit the search problem and achieve its goals.

2-2 Sample OF Research:

The research community was identified in the intentional way, they are javelin thrower in Basra Sports Club, which number (14) player from young. After that, the research sample of 12 player was chosen and they have local and external posts, and they constitute (85.71%). They were divided into two groups in the random method (control and experimental) so that the number of each group has become (6) players and was homogeneous within each group separately and the equivalent between the two groups as in Table (1).

Table (1) Shows Homogeneity and equal control and experimental in research variables

Verbal	Experimental group			Control group			T Collected Value	Sig
	Mean	Std. Deviation	difference factories	Mean	Std. Deviation	difference factories		
Length	152.2	2.44	0.539	152.32	2.652	1.741	0.074	random
Wight	68.54	1.98	2.888	68.74	1.886	2.743	0.163	random
Speed force for arms/ number	14.56	0.654	4.491	14.62	0.589	4.028	0.152	random
The explosive power of the arms /mm	7.562	0.554	7.326	7.654	0.442	5.774	0.291	random
Achievement /meter	40.55	0.784	1.933	40.56	0.865	2.132	0.019	random

T Value = (1.812) at a degree of freedom (10) and a significant level (0.05)

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2-3 Means of collection of information and data:

1- Arab and foreign sources
2- International information network
3- The tests and measurements used

2-3-1 Research devices and tools used:

1- Time hour.
2- Medical balance.
3- A length tape (10 meters).
4- Medical speaker.
5- Square javelin

2-3-2 Research variables:

The sources have been relied on to determine the physical research variables consisting of :

1- Speed force power of the arms.
2- The explosive force of the two legs.
3- Achievement.

2-3-3 physical Tests used:

2-3-3-1 Test of the explosive force measuring the arms (Muhammad Hassan and Muhammad Nasr al-Din: 1996).

Push of medical force (3 kg) with hands:

Test purpose: measuring the muscle capacity of the arm and shoulder area.

The necessary tools: medical balls (2) - measurement tape.

Performance description: The laboratory stands a medical ball cassa with hands so that the movement is above the head, and the trunk should be erect, then the laboratory works in the trunk in order to give additional strength to push the ball forward according to the theory of kinetic transport.

Calculating grades: The degree of each attempt is the distance between the front edge of the line on which the laboratory stands and the closest point made by the ball on the ground.

2-3-3-2 Testing speed force by the speed of the arms (Muhammad Subhi Hassanein: 1995): From the putting position of the bunny and the stretch of the arms (the maximum number of 10 seconds).

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2-3-3-3 Achievement: Performing completion according to the effectiveness law and according to the distance.

2-4 Exploratory Experience:

The researcher conducted an exploratory experience on some of the original research sample of (3) players for the purpose of legalizing the pregnancy of the exercises used and indicating the sample's ability to apply them, and that was on 10/7/2022.

2-5 Field Experience:

2-5-1 Tribal Tests: conducted on 1 7 /7 /2022

2-5-2 Training used:

A set of required exercises for fixed muscle strength (Isomatric) has been developed and legalized. These exercises were applied according to the following detail:

Number of months: two months
Number of weeks: (8) weeks.
Number of units: (24) training units.
Units Days: Sunday, Tuesday, Thursday.
Steel: (80-90 %)
Size: The volume was determined according to the required severity
Comfort: The pulse was approved as an indicator of comfort (between repetitions 120-130 z/d) (between groups 110-120 z/d).
It was programmed in the main section of the training units of the coach, and it was applied during the special preparation period and the training application starts on 7/18/2022 and ended on 9/12/2022

2-5- 3: post- Tests: conducted on 13/9/2022

2-6 Statistical Means:

1- The mathematical milieu
2- Deviation.
3- The difference factor.
4- Law (T) of the interconnected samples.
5- Test (T) for unconnected samples.

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3- Presenting, Analyzing and Discussing Results:

Table (2)

Shows the results of the differences in the mathematical mean and the values (T) calculated for the control group and physical teases

Physical tests	Tribal Tests Mean	Post Tests Mean	Standard error	Sig
Speed force for arms/ number	14.56	16.523	2.298	moral
The explosive power of the arms /mm	7.562	8.998	2.555	moral
Achievement /meter	40.55	41.986	2.606	moral

T Value = (1.812) at a degree of freedom (10) and a significant level (0.05)

Table (3) Shows the results of the differences in mathematical mean and the values of (T) calculated of the experimental group and physical tests

Physical tests	Tribal Tests Mean	Post Tests Mean	Standard error	Sig
Speed force for arms/ number	14.62	18.62	1.441	moral
The explosive power of the arms /mm	7.654	10.521	0.669	moral
Achievement /meter	40.56	43.121	0.665	moral

Table (T) is valued at a degree of freedom (5) and under the level of significance (0.05) = 2.015

Table (4)Shows the results of the post-test differences between the two controlled and experimental groups in the mathematical mean and the values (T) calculated in the physical tests

Verbal	Experimental group		Control group		T Collected Value	Sig
	Mean	Std. Deviation	Mean	Std. Deviation		
Speed force for arms/ number	16.523	0.652	18.62	0.667	5.028	moral
The explosive power of the arms /mm	8.998	0.532	10.521	0.563	4.401	moral
Achievement /meter	41.986	0.784	43.121	0.744	2.349	moral

T Value = (1.812) at a degree of freedom (10) and a significant level (0.05)

By Table (2) and (3) there are moral differences between tribal and dimensional tests and in favor of the dimensional tests of the two control and

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experimental groups in physical capabilities, and this is evidence that the exercises used by the control and experimental groups helped to develop muscle strength (characterized by speed, explosive) and achievement For javelin thrower the reason for this is to achieve the goal of sports training as mentioned by (Marwan Abdel Majid and Mohamed Jassim Al -Yasari: 2010) “The goal of the sports training process is to reach the sports individual to the highest level of sports achievement in the event or the activity in which the player specialized” (Marwan Abdul Glorious: 2010).

While he sees Muhammad Ali (1999), "The success of the training curricula is measured by the extent of progress achieved by the sports individual with the type of sports activity practiced and through the skill, physical and functional level achieved, and this depends on the adaptation achieved by the athlete with the training curriculum that he applied" (Muhammad Ali: 1999) .

By Table (4), it became clear to us that the experimental group over the control using fixed strength exercises, which reflected the development of the force with its types (distinctive with speed and explosion), as well as the achievement, as Muhammad Abdullah (1997) sees "giving regular exercises consistent with the correct scientific method enhances an increase The efficiency of the joint muscle groups in performing motor skills and physical qualities that the player acquires during the training "(Mohamed Abdullah: 1997).

(Muhannad Abdul Sattar: 2001) states that "there is a scientific fact that must be standing at them, which is that the exercises used in the training curricula lead to the development of performance if it is based on scientific foundations in organizing the training process and using the appropriate pregnancy and observing individual differences and under good training conditions and under the supervision of specialized trainers Whereas, the codified and organized training programs according to the scientific foundations work on the development of the physical and skill level of the players ((Muhannad Abdul Sattar: 2001).

Regarding the use of influencing exercises on the muscular side, especially if the strength exercises are sure to help the success of the physical side, and this is what is seen by explicit Abdul Karim (1986), "The focus on the exercises in which the same muscular groups common to sports activity are used is more effective and beneficial." (Sabha Abdul Karim: 1986).

Training on exercises also contained fixed muscle strength on weights and other training tools that lead to stability and for a specific period of repetitions that

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helped raise the level of strength and see (Qasim Hassan Hussein and Bastweisi Ahmed: 1995) "Training with different weights and tools has a great impact on the development of the characteristic of the distinctive strength. Speed, as these exercises depend on increasing the speed of muscle contraction, because the goal of creating muscle strength is to obtain rapid strength "(Qasim Hassan and Bastweisi Ahmed: 1995).

And the firm muscle strength exercises are tackled to raise the level of muscle strength, which in turn contributes to the physical side associated with it, the skill and achievement, and this is confirmed by (Mufti Ibrahim Hamada: 2002). From Sports "(Mufti Ibrahim: 2002).

While (Abd Ali Nassif and Qasim Hassan Hussein) (1978) sees "the development of muscle strength leads to the development of a kinetic character at the same time" (Abd Ali Nassif and Qasim Hassan: 1978).

4-Conclusions and Recommendations

4-1 conclusions:

1- Fixed muscle strengths of the arms helped achieve advanced results in the strength of its types (characterized by speed and explosive) and achievement for javelin thrower.

2- Organized training and the use of influential exercises help raise physical abilities according to the level, capacity, specialization and game for javelin thrower.

4-2 Recommendations:

1- Approving the hard muscle force exercises for the arms because they helped achieve advanced results in the strength of its types (characterized by speed and explosive) and achieve for javelin thrower.

2- Emphasizing organized training and the use of influential exercises because it helps in raising physical capabilities according to the level and capacity for javelin thrower.

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Appendix (1)

A model of used exercises

: The first Week severity: 80 %

Training Unit: 1-2-3 Total Time: 30-32 minutes

Sections of unit	Time mint	Exercises Used	Training Volume	Rest	
				Between repetitions	Between groups
The main (physical)	3.23	Push a pivot wall	2×3	Back pulse (120-130) p/m	Back pulse (120-110) p/m
	3.4	Raise the weight of weight (5) kg and steadfastness with pregnancy	3×3		
	3.45	Pulling rubber ropes (3) meters and stability	2×3		
	3.4	Raise the weight of (10) kg of lying and steadfastness	3×3		