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JOGGING TRAINING WITH PERIPHERAL RESISTORS IN SOME ANAEROBIC CAPACITIES AND COMPLETION OF 100M RUN UNDER 18 YEARS

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ABSTRACT:

The 100m competition is one of the competitions running short distances exciting Olympia and the world in athletics, and can not develop the level of sport of hostility in it without focusing on the development of continuous muscle work and time constraints of the race time taking into account the type of training used and physical abilities of this competition and used the method Demo to suit the nature of the search. The research community deliberately determined the 100-meter runner of the 10-year-old Olympic champion in Najaf, aged between 16 and 17 years, divided into two groups of 5 players per group if each group implemented a different program than the one they implemented The other group and all time variables have evolved to members of the experimental group due to the effect of the exercises used in the development of muscle groups working in the movements of tides and folds on the joints related to these movements.

Keywords*: peripheral resistors - anaerobic capacities – 100m run.*

INTRODUCTION

The 100m competition is one of the most exciting short distance races in Olympia and the world of athletics. The level of sport can not be developed without focusing on the development of continuous muscle work and the approaching time of the race, taking into consideration the type of training used and the physical abilities of the competition.

It is known that the strength of the muscles working at the moment and the frequency is the characteristic of the competitors of this event, as the repetition of the steps and efficiency without high speed decreases means the continuation of angular work of the muscles of the two men with the same intensity required to complete the requirements of this race. It is the strength of rapid and temporary muscular dystrophy and its persistence during the performance that qualifies the athlete to produce the necessary force to ensure the repetition of angular movements of the two men and arms during the running stages of the competition.

The ability of the force of all kinds is one of the important physical capabilities required by a runner running 100 meters, which can be developed by training the added resistors of the parties (men, arms and trunk) associated with a continuous effort greater or less than the distance of the race.

Strength training exercises for the muscles of the body parts contribute to the implementation of physical effort is one of the most important exercises that develop the work of muscle groups to contribute to the performance of jogging movements and require the continuation of the maximum muscle contraction throughout the competition time, as it plays the muscles of the two legs or arms or trunk large role, with Participation of body weight in these exercises absolutely and this training case affect the

ability to endurance positive if used to different muscles of the body contribute to this effectiveness.

Hence the importance of research in the development of the strength of the muscle groups working on the ends of the body while running as resistors in order to effect the muscle strength angle required during the 100 m race and to show the impact of these exercises on physical changes in the stages of running 100 meters, Speed, strength, number of steps, length and frequency, as well as disclosure and contribution to the development of achievement.

The problem of the research is that the 100 meter race is based on the ability of the immediate and rapid strength and the continuous contraction of muscle for a short time to ensure the continuation of movements and performance of the steps effectively, which requires focusing on the development of general muscles during the jogging of different parts of the body and according to the performance of these movements, Added to the different parts of the body may give a positive return in the development of angular work of these parts during the performance and the development of the situation in this work for a time may up to the time of the competition, and so the work of the researchers with the training of resistors for the purpose of working on To increase the mobilization of these muscles and motivate them to work for as long as possible commensurate with the time of the competition and increase their tolerance for as long as possible with the continuation of physical effort.

The aim of the study was to prepare strength training exercises for various body parts of the body using the weights of the body parts and to determine the effect of the use of the terminal resistors in the development of force in some anaerobic capacities of the running stages of 100 meters of the research sample.

The researcher hypothesized that there are statistically significant differences between the test (tribal - post) in the anaerobic abilities and the strength of the research sample.

And the existence of statistically significant differences between the test (tribal - post) in the achievement of the sample of the research.

MATERIALS AND METHODS:

Research Methodology:

The researchers used the experimental approach to suit the nature of the research. The research community deliberately determined the 100-meter racetrack of the Olympic champion project in Najaf

Search community and sample:

(10) aged 16-17 years, were divided into two groups of 5 players per group, each group implementing a different program than the other group.

Each group is subjected to a pre-test to determine its condition prior to the introduction of the experimental variable. The first group performs the jogging exercises with added resistors while the second group performs the regular jogging exercises.

The research tests were:

:Tests for special anaerobic capacities and guarantees the following -

- Test run 30 meters from the low start (special acceleration) and measure the force at the last step.
- Test run 60 meters of stand (speed special) and measure the force in the last step.
- Test achievement and guarantee

Run 100 meters and measure the force at the last step

The researchers conducted the three-day tribal tests on August 29, 2018. They were run 30 meters first, giving rest for 20 minutes, then testing 60 meters for both groups and then giving rest (30 minutes) rest. On the second day of 30/8/2018, the researcher conducted a test running 100 m completion, and the researcher used video imaging, and the Dina Foot system to measure the strength exerted for each man.

The researchers used the method of high-intensity infantile training with resistance to the ends of the limbs of the different muscles working for the body parts. The resistors were determined according to the weights of the body parts and the total body weight. The duration of the pregnancy was determined by determining the maximum time through the tribal tests to be trained for specific parts and distances of distance The race according to the stages of performance and gives a respite between repetitions to adopt the time of rest of the working time, and to determine the intensity used in accordance with the maximum times approved for the training distances identified in tribal tests. (2 months) with two training units per week (every Sunday and Wednesday), ie, the implementation of (16) training modules, which took a long time to complete the training. The training unit (35-45) minutes, and the total training volume of the two

groups was completed. The researchers conducted the tests on 25/6/2018.

RESULT AND DISCUSSION:

Table (1): Statistical results and differences between the tribal tests and the secondary anaerobic capacities

Significance	Morality	T	P	F	p±	s-	the test	the group	variable
D.	**.0020**	**5.619**	**.020760**	**.116670**	**.064080**	**4.3167**	Tribal	Experimental	Time of 30 m (w)
					.074570	**4.2000**	after		
D.	**.0010**	**6.625**	**.013080**	**.086670**	**.051670**	**4.3050**	Tribal	Officer	
					.088750	**4.2883**	after		
D.	**.0020**	**5.650**	**.031560**	**.178330**	**.084540**	**7.1633**	Tribal	Experimental	60 m (w)
					.099950	**6.9850**	after		
D.	**.0010**	**6.799**	**.022060**	**.150000**	**.089140**	**7.1767**	Tribal	Officer	
					.090420	**7.1267**	after		
D.	**.0010**	**6.642**	**.041910**	**.278330**	**.148460**	**11.0400**	Tribal	Experimental	Time of 100 m (w)
					.180600	**10.7617**	after		
D.	**.0020**	**3.034**	**0.04176**	**.126670**	**.134910**	**11.0400**	Tribal	Officer	
					.122580	**10.9133**	after		

D at the level of significance (0.05) and the degree of freedom (5-1 = 4)

Table (2): Statistical results of the aftertest in anaerobic capacities

Engineering	The value of t		Control		Engineering		measruing unit	Variables
	Morality	Calculated	P	s	P	s		
D.	**0.014**	**3.336**	**0.088**	**4.28**	**0.074**	**4.20**	Time	Special acceleration
D.	**0.003**	**4.571**	**0,09**	**7.13**	**0.09**	**6.98**	Time	Special speed
D.	**0.04**	**3.131**	**0.12**	**10.91**	**0.091**	**10.76**	Time	Achievement

D at the level of significance (0.05) and the degree of freedom (8)

Table (3): Statistical results and differences between the tribal tests and the secondary force

Significance	Morality	T	P	F	p±	s-	the test	the group	variable
D.	**.0060**	**4.603**	**62.67638**	**288.49667**	**147.37875**	**2771.6700**	Tribal	Experimental	Time of 30 m (w)
					101.82360	**3060.1667**	after		
D.	**.0010**	**7.199**	**19.33239**	**139.17667**	**141.40142**	**2865.5333**	Tribal	Officer	
					161.40427	**3004.7100**	after		
D.	**.0500**	**2.574**	**123.07996**	**316.82000**	**211.33763**	**3185.1783**	Tribal	Experimental	60 m (w)
					221.92287	**3501.9983**	after		
D.	**.0000**	**10.288**	**16.85517**	**173.40500**	**179.51642**	**3163.3967**	Tribal	Officer	
					185.18821	**3336.8017**	after		
D.	**.0030**	**979.3**	**26.6566**	**105.9067**	**277.03521**	**3458.6200**	Tribal	Experimental	Time of 100 m (w)
					282.57243	**3564.5267**	after		
D.	**.0310**	**2.965**	**83.91221**	**248.83167**	**172.29143**	**3494.2317**	Tribal	Officer	
					147.37875	**2771.6700**	after		

D at the level of significance (0.05) and the degree of freedom (5-1 = 4)

Table (4): Statistical results between the post-tests in the force in question

Significance	Moralit	Value t	P	¯f	p±	s-	the group	variable
D.	.0140	.7120	77.90955	55.45667	101.82360	3060.1667	Centralized	Power 10 m Third (Net)
					161.40427	3004.7100	Terminal	
D.	.0350	1.400	118.00031	165.19667	221.92287	3501.9983	Centralized	Power 10 m (net) a sixth
					185.18821	3336.8017	Terminal	
D.	0.041	1.145	155.98311	178.53667	282.57243	3564.5267	Centralized	Power 10 m (Net) tenth
					257.17153	3743.0633	Terminal	

D at the level of significance (0.05) and the degree of freedom (8)

The training of the force in the terminals has resulted in increased muscle strength, rapid angular and quick response to produce the highest muscle capacity in these parties and according to the type of resistance used and upgrading gradually, which means increasing its ability to increase the speed of muscle frequency (repeat movement), which reflected on the increase in speed during The distance of every 30 meters and 60 meters and the distance of completion of the total, as some researchers believe that muscle fibers have the ability to produce a large force during the change in the type of resistance compared to constant resistance, which depends on the lack of change, Will increase and increase accordingly its ability to produce the highest capacity in it.

The researchers note that all the movements of the two men, which are repeated during the steps of jogging or jumping depends mainly on the amount of power is quick and relatively short time of the muscles of the two men, especially during the performance of these movements, which indicate the continued production of speed of power represented by the ability to perform movements against resistance Certain at the lower and higher levels

The evolution of the performance of the experimental group was reflected in the performance of the maximum degree of acceleration and the longest possible time, and this is the result of the level of speed of force and the speed of force of the members of this group, which expressed a high rate of muscle-producing strength during the effort to the performance time, The efficiency of the existing muscles increases as this is done in the shortest possible time, which means increasing the capacity of these muscles.

The researchers found that their findings after comparisons between the strength results of both groups in the group superior to that used to train the force in peripheral weights were consistent with the results of research that showed only that there is a difference in training methods that increase strength. For example, note that there are significant increases in strength for all muscle aggregates when training for two or three different joint exercises and for two, six and ten repetitions and found that there are no statistically significant differences in strength increases resulting from nine different training methods for different sets of exercises and repetitions.

The increase in strength can be generated with the difference in the equipment and the means used for training. Some studies have shown that there are no differences in the development of force between groups using free weights and groups using restricted devices.

The research also found that the level of high voltage is the most important factor in determining the desired results of strength training, and these results were noted by many researchers, the more training the larger the better the response of the muscle more. The high level of intensity of the performance of each exercise to The

central muscle stress limit, that is, when the muscles are so tired that they can not lift the weight with an additional frequency. As stress or muscle fatigue - will result in lack of a result in the development of strength and increase the size of the muscle.

The researchers believe that we must choose what is practical and based on the considerations of safety, time and weight used by resistances and training, because any kind of programs or burdens that will give desirable results. The performance of the exercise can be safe, useful, comprehensive and practical in any type of equipment if used according to the correct scientific basis for training.

The reference to this gives an idea of the method in which the strength of the body and its parts must be trained in the case of movement, that is, can take advantage of the values of momentum (muscle contraction of the terminals) when calculating to develop training programs aimed at increasing the urge to strengthen muscle strength and development efficiency, Others can minimize the inertia for the purpose of enhancing the state of learning and perfecting performance. The objects around the joints can be calculated to limit the limitations.

We believe that the intensity of the effort is the most important factor in determining the response to strength training, and the intensity is defined as "the rate of rapid power (x velocity), in other words, the intensity of stress or the amount of stress produced in the muscle in a given position when the muscles are initialized The exercise is characterized by a high speed ratio and high intensity at the expense of increasing the speed and reducing the resistance, ie, the resistance is significantly reduced, and when the muscle stress at the end of the exercise less rapid power and less intensity (should not be confused between the ratio of rapid or hard with weight or weight Maximum)

CONCLUSIONS:

- The time variable has all evolved for the experimental group. This is due to the effect of the exercises used in the development of muscle groups working in the movements of tides and folds on the joints related to these movements.

- The emergence of a clear evolution in the strength of the moment and rapid strength because of resistance exercises with added weight to the limbs of the body has achieved an improvement in the efficiency of the muscles working in rapid jogging and improved the level of completion of the research sample.
- Both training (a side-added booster) has achieved the goal of training is to achieve a good achievement in the race of 100 m.
- The effect of the lateral exercises towards the development of angular force (muscle contraction) in the extremities of the lower body and upper.

ENDORSEMENT:

- Adopting the training curriculum used in the training of a 100-year-old male under 18 years of age who proved effective in the development of immediate and rapid strength.

- Conduct similar research to find other training methods to develop physical abilities.
- Conducting a study comparing weight overload exercises with general resistance exercises to serve the type of effectiveness and skills required to develop them to achieve a good level.

REFERENCES:

The Impact of a Proposed Training Curriculum on Special Achievement on the Achievement of a 400m Freestyle Run for Female Physical Education Students - University of Baghdad, Unpublished MA Study, Baghdad, Iraq, 2006		Ahmed Shaker Farman	1
The Impact of a Proposed Curriculum on Teaching the Long Jump Effect Using Assistive Teaching Methods, Unpublished MA Thesis, Karbala University, Iraq, 2014		Remove Abdul Hussein Abdul Jalil	2
A proposed training curriculum for the development of the trait speed and its effect on the achievement of running 400 m freestyle for junior students, unpublished master's study, Babylon University, Iraq, 2008		Iyad Abdul Rahman	3
Encyclopedia of Athletics (Tactic - Training - Learning - Arbitration), i. Dar Al Qalam and Distribution, Kuwait, 2000		Mohamed Ghani Osman	4
Effect of two methods of aerobic exercises in the development of some functional and chemical indicators and electrical activity of muscular and achievement in middle distance runners of junior students, PhD thesis, University of Babylon, Iraq, 2009		Haidar Balash Jabr	5
The Effect of Changing Resistance Exercises on Improving Work and Ability of Men's Muscle, Published Research, Journal of Physical Education, p. 1, p. 12, 2003		sareeh Abdel - Karim Fadhli	6
The Effect of Private Force Development on Achievement of Intermediate Archery Contestants; Published Research, Physical Education Magazine, Vol. X, First Issue, 2001		sareeh Abdel Karim	7
8	Doscher W	The Art of Sprinting: Techniques for Speed and Performance. McFarland & Company Inc. Publisher; North Carolina. USA: 2009.	
9	Faccioni A	Kinematics data. 2009 Available at: www.adrian.sport.com; accessed on 22.11.2012	
10	Lee J, editor	Usain Bolt 100 meter splits and speed endurance. 2008 Available at:http://www.speedendurance.com; accessed on 11.08.2008	
11	Mackala K	Optimisation of performance through kinematic analysis of the different phases of the 100 meters. New Studies in Athletics. 2007;22(2):7–16	