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EFFECT OF EXERCISES USING DIFFERENT RESISTORS IN THE DEVELOPMENT OF THE SPECIAL STRENGTH OF THE ARMS AND THE COMPLETION OF JAVELIN FOR THE ATHLETES OF THE SCHOOL SPECIALIZED ATHLETICS

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ABSTRACT:

Athletics are different from other games as a competition between individuals to show their competence and physical ability to achieve new record numbers in the various activities and various between the boards, jumping and throwing and each type of these activities in particular performance so found the researcher to find the method of training resistors in the development of special power and achievement In the effectiveness of javelin, where the researchers chose the sample of the athletes from the specialized school of athletics to effectively throw the spear at the ages of 15-17 years and carried out the tests of the research, which includes the strength of the speed of the arms and explosive power and The various resistance exercises contributed to the development of these tests, and the researchers recommend comparisons between different training methods and training resistors.

Keywords: EXERCISES USING DIFFERENT RESISTORS, DEVELOPMENT OF THE SPECIAL STRENGTH, SPECIALIZED ATHLETICS

INTRODUCTION AND PROBLEM OF RESEARCH:

The scientific development achieved a great renaissance in all fields, which led to the development of the sports field significantly through the wonderful achievements in various sports thanks to the reliance on the methods and methods of scientific training in sports, such as regular training and built on the basis of scientific, which in turn led to the development of physical abilities and skills and functional Which is the basis that enables the individual athlete to reach the highest level in sports championships and has interfered many sports sciences in the field of training to achieve the development of the level of motor performance and development of the achievement correctly to serve the type of sports effectiveness practiced, where Biomechanics and physiotherapy overlap in sports training to indicate the achievement of the required level, and athletics is distinguished from other games as a competition between individuals to show their competence and physical ability to achieve new record numbers in the various activities and varied between the races and jumping and throwing and each type of these special events In performance, resistance exercises that use weights and other means of resistance to muscle work are to strengthen the muscles surrounding the

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joints. The training of resistance and regular muscle strength aims to "tighten muscle and connective tissues, increase bone mass, flexibility, muscle tone and metabolism, as well as aesthetic appearance." Hence, the researchers found that the various resistance exercises are very important in training and believed that this importance is embodied through the preparation of exercises using Different resistors in the development of the special strength of the arms and completion in the javelin, noting that the resistance exercises have been used in many different games and multiple categories. The new research in this research the use of different resistors in the training of the spear and an important category such as class the boys from the Olympic champion school must pay attention to improving their own strength and completing their spear [1].

RESEARCH OBJECTIVES:

1. Preparing exercises using different resistors in improving the special strength of the arms and completing javelin for the athletes of the specialized school of athletics.
2. Identify the effect of exercise using different resistors in improving the special strength of the arms and completing javelin for the athletes of the specialized school of athletics.

RESEARCH HYPOTHESES:

- There are statistically significant differences between the tribal and post-test tests for the research sample.

RESEARCH AREAS:

Spatial field: in the playground of the specialized school in the sports city in the Ministry of Youth and Sports.

Time domain: for the period from 10 - 1 - 2018 to 15-2 - 2018.

Spatial field: A sample of athletics players at the Olympic Champion School in the event of the spear (6) ages (15 - 17) years.

RESEARCH METHODOLOGY AND FIELD PROCEDURES:

RESEARCH METHODOLOGY: The researchers used the experimental approach to suit the research problem.

THE SAMPLE OF THE RESEARCH: "The selection of the two samples of the sample in the important steps of the research is no doubt that the researcher thinks in the research sample from the beginning and identify the problem of research and objectives because the nature of research and its terms and plan speak in steps and the selection of tools such as sample, questionnaires and tests necessary" (3: 348) The researchers selected the sample of the research after a visit to the specialized school of athletics and met with a number of trainers and the number of players in the events of throwing and training time was chosen (6) players of javelin players aged (15 - 17) (Age - Weight - Height - Age Training).

As shown in Table (1) Table (2).

The researchers developed a set of tests and measurements used in the research based on the opinions of expert experts with experience and specialization. The appropriate tests were selected for the research problem and for the research sample which are as follows:

Medical Ball Push Test (2 kg)

PURPOSE OF THE TEST: MEASURE THE EXPLOSIVE FORCE OF THE ARMS.

Performance description: The laboratory stands in the area of approach between the two lines, placing the medical ball on one hand and the other hand is based on the ball. The laboratory moves in the direction of the approach line within a specified distance and when it reaches the line the ball is pushed from the side as the weight is pushed so that it does not exceed the approach line [3].

REGISTRATION: The laboratory has three attempts to calculate the best result.

Test for bending and extending the arms from the front-loading position during 10 seconds

PURPOSE OF THE TEST: MEASURE THE SPEED OF THE ARMS.

PERFORMANCE DESCRIPTION: The player takes the front-loading position, the distance between the hands is chest width and when the start signal is heard, the player will bend and extend the arms.

Registration: The player counts the number of folds and tides during (10 seconds).(

Test for bending and extending the arms from the front-loading position during 60 seconds (8: 287) [10].

PURPOSE TEST: MEASURE THE POWER BEARING OF THE ARMS.

PERFORMANCE DESCRIPTION:

The player takes the front-loading position, and when he hears the signal to start the test, the player will bend and extend the arms [2].

REGISTRATION: The player counts the number of folds and tides during (60 tha).

Test the strength of the grip. (198: 4)

Purpose of the test: Measure the strength of the right and left fist muscles (flexor muscles of the fingers).

Tools used: manual (dynamo meter) device with a scale inserted in kilograms

PERFORMANCE DESCRIPTION: Hold the laboratory (dynamo Mitter) with the fist of his hand and squeezing the hand on the device to try to take out the maximum force possible.

REGISTRATION: Each lab is given two attempts for each hand and records the best attempt or result.

The completion of the javelin / javelin test (700 gm) of the full movement and the flat field.

PURPOSE OF THE TEST: Measuring the distance of the throwing (completion).

DESCRIPTION OF PERFORMANCE: The laboratory will throw the spear from the field of full rapport full subject to all the legal conditions of effectiveness.

Registration: Two attempts are awarded to the best.

Note / This test is regulated by the Iraqi Central Athletics Federation.

MEANS OF GATHERING INFORMATION, INSTRUMENTS AND TOOLS

Arabic and foreign references. - Circles of circular resistance number (6). - Length measurement tape. - Medical ball weighing 2 kg (number 2). laptop . Dynamometer - A legal shaft weighing 600 g / 700 g / 800 g. - Medical balance room for testing. (5 kg) Weight loss (0.5 kg / 1 kg / 1.5 kg / 2 kg / 2.5 kg) [4].

EXPLORATION EXPERIMENT:

The exploratory experiment is one of the most important necessary procedures carried out by the researchers before the final experiment to choose the methods of research and its tools and to indicate the requirements of scientific work accurate and correct without difficulties [6]. The exploratory experiment is "preliminary experimental study by the researcher on a small sample Before resurrection research to choose the methods of research and tools. " (7: 82). The purpose of the exploratory experiment is to identify the difficulties that may face the researcher and the auxiliary work team and the suitability of the equipment and tools for the nature of the tests and the time necessary to complete the tests on all the sample members. The researchers conducted the pilot experiment at 10 am on 10/1/2018 on a sample of (2) players.

TRIBAL TESTS: The researchers conducted the tribal tests at 4 pm on 12/1/2018 and at the playground of the specialized school of athletics.

MAIN EXPERIENCE: The two researchers conducted exercises using different resistors. • To develop the special strength of the arms and the completion of the javelin and display them to a group of experts with experience and competence. The main experiment included the following

- The duration of the training curriculum (6) weeks.
- Number of training units (12) training units by two units per week.
- The intensity of the training curriculum ranged from resistance exercises (60 - 80%).

Table (1): Bacterial primers used in this stud

primer	Primer sequence(Ferward/Reverse)	Target(Sizes of amplification bp)	Tim℃	Ref
16SrRNA	F 5'-CAGCTCGTGTCGTGAGATGT-3'	16SrRNA *Acinetobacter* spp.(150)	55℃	28
	R 5'-CGTAAGGGCCATGATGACTT-3'			
OXA51	F 5'-TCGTGCTTCGACCGAGTATG-3'	bla_{OXA51} (506)	53℃	This study
	R 5'-GAGGCTGAACAACCCATCCA-3'			
CTX	F 5'-ACCGCCGATAATTCGCAGAT-3'	bla_{CTX-M} (600)	58.3℃	This study
	R 5'-CGGCCAGATAACCGCGATAT-3'			
TEM	F 5'-AACTGGATCTCAACAGCGGG-3'	bla_{TEM} (300)	59.3℃	This study
	R 5'- TTCATTCAGCTCCGGTTCCC-3'			
SHV	F 5'-TTCCCATGATGAGCACCTTT-3'	bla_{SHV} (250)	57℃	This study
	R 5'-CGCTGTTATCGCTCATGGTA-3'			

- The researchers have been crowned in the intensity and repetition and rest throughout the weeks of the training curriculum based on the principle of upward and downward spikes to avoid overload [7].

POST - TESTS: The researchers carried out remote tests after the implementation of the curriculum on 27/2/2018 and the tests were conducted under the same conditions as the tribal tests in terms of time and place and the same conditions.

Statistical means: arithmetic mean. Standard deviation.

1. Test (T) for interrelated samples

2. Presentation, analysis and discussion of the research results:

Presentation, analysis and discussion of the results of force tests.

In Table (3), (4), which shows the computational and standard deviations and calculated and tabular values of the search variables, we find that the value (t) calculated for the test (medical ball throw, front end 10 th, front end 60 th) (4,53,6,82,4,9), which is greater than the two-dimensional scale (2,57). This means that the differences are significant in these tests. The researchers attribute the exercise to the research sample, which was characterized by the use of various resistors (rubber ropes, Added) in addition to the circular bands with resistance to performance, which helped in the development of explosive power and (Essam Abdel Khaleq, 1999). "Weight training is a role in training programs aimed at the number of players in various sports activities" (6 124). Resistance exercises also contributed to improving muscle strength in various forms and developing them. Which was adopted by all sporting events [5].

He asserts (Abu al-Ela, 2003) "The programs of the development of muscle adequacy in terms of functionality to improve the strength of the muscle and its speed and tolerance to work in the face of muscle fatigue on the use of different types of resistors to train this muscle, including the resistance of the weight of the body itself and use many tools and devices to achieve this variety" (2: 235) Many studies confirm the importance of resistance training in the development of muscle strength, and vary the type and quantity of resistors depending on the training objective, as (Hassanein) "The amount of strength in motor performance may be simple or large and

depends on the amount of resistance and the objective of the training module "(9: 239) [8]. It has also been contributed the circular rings help to improve the joints and the strength of the muscles working on these joints. The circular bands also help to increase the work done in those parts that use these hoops, especially when lifting these parts (arms), which contribute to the development of these muscle groups and increase the work done and then increase "The amount of resistance according to the various tools is one of the most important factors in training the resistance. The amount of resistance means the intensity of the physical pregnancy that constitutes the weight of the resistance. (1: 242). The repetition of the exercises contributed

to the improvement of the results of the strength tests, as it gives the force to push the spear not after a possible point, so

Table (2): The homogeneity of the sample in the variables (age, weight, height, age, training)

Variables	Mediator	standard deviation	Arithmetic mean	measuring unit	Torsion coefficient
age	16	2,51	16,32	Cm	0,485
weight	56	9,21	56,89	Cm	0,238
Length	164	13,43	164,54	Cm	0,229
training age	4	1,018	4,77	year	0,314

help to launch the spear as fast as possible and far distance (5: 24) As for table (4), which showed the value of (t) calculated in the moral test the strength of the fist to the right and the achievement is reinforced by the two exercises to the exercises proposed by Alba Two exercises that helped to improve the

grip of the right, where exercises weights, straps and rubber bands to improve the strength of the right grip, and exercise weightlifting in the effectiveness of javelin play an effective and important role is not less important than the rest of the sports, as it is working to develop the physical and skill levels of javelin players And then help them to achieve achievement through the development of muscle strength of different types so they need to this type of training, especially in the preparation stage of the quality of the year and the private [9].

Table (4): shows the computational and standard deviations and the calculated and tabular values of the force tests of the grip (left - right) and the completion of the sample

SIGNIFICANC	VALUE T		THE LAST TEST		THE FIRST TEST		MEASRUING UNIT	Variables
	h	s	h	s	h	s		
Spiritual	2,57	4,086	3,55	17,82	1,44	11,93	kgm	Power grip right
Not Spiritual	2,57	1,073	1,98	12,15	1,65	9,32	kgm	Power grip left
Spiritual	2,57	3,96	3,67	26,83	3,71	19,54	distance	Spear completion

-CONCLUSIONS

- According to the statistical results, analysis, discussion and achievement of the goals and research hypotheses, the researchers concluded:
- Different resistance exercises have an effective effect in the development of the special strength of the arms (explosive force, speed characteristic, power bearing, right grip force) for the research sample
- The use of different resistors within the exercises had a positive effect in the development of achievement for the students of the special school for throwing spear.

- RECOMMENDATIONS

According to the findings, the two researchers recommend:

- Conducting comparisons between various training methods and training resistors.
- Preparation of training exercises in water resistance and training.
- Conducting various resistance exercises on other activities within athletics activities.

ANNEX (1) SUGGESTED EXERCISES

Suggested exercises

1 From the position of the stand and legs open chest opening, the player throws the weight of his weight (1 kg) from the shoulder with the right hand and left.
2 From the standing position, the medical ball on the ground, the player raises the ball from the ground and throw it from above the head.
3 From sitting on the chair, the player carries two dumbbells and raises them over the head.
4 From the standing position the arms to the side, the player holding dumbbells with both hands and circles working towards the clock and reversing the arm of the hour.
5 From sitting on the chair, one end of the rubber band is tied to the foot and the other with the hand, pull the tape up and then switch on the other arm.
6 From the stand position, the player holds the rubber band on both sides, bending the trunk down and returning to position.
7 From the stand position, weight is placed in the right hand, the player loads the weight to the left hand and thus alternately.
8 From the stand position and the legs open with a shoulder width opening, the player will throw the weight (1 kg) within 10 meters.
9 From stand position and legs open by shoulder width the player will throw the weight (2 kg) within 5 m
10 From the position of sitting on a chair upright, put three balls of medicine next to the player, the player throws the medical balls weighing (2 kg) distance of 3 m alternately.
11 From the stand position, the resistance straps in the hands, the player presses the ring and stability (30sec)
12 From the stand position, the resistance straps in the hands, the player presses the ring and raises the hands up with lifting the combs.
13 From the sitting position on a chair, the ring under the feet the player pulls the collar up and is under the feet.
14 From the sitting position on the chair, the ring in the hands pull the ring hands out and then push inward alternately.
15 From the position of sitting on a chair, and the ring in the hands push the ring to the inside and stability (20 sec) and then pulled out and stability (20sec).

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