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EFFECT OF POLYMETRIC TRAINING IN THE DEVELOPMENT OF SOME TYPES OF MUSCLE STRENGTH AND ACHIEVEMENT OF THE EFFECTIVENESS OF THE LONG JUMP FOR THE DISABLED (DEAF AND DUMB)

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Abstract

The sports activities for the impaired hearing and freely considered an entertainment aspect before accomplishment and at the same time working to raise or increase social cohesion and inclusion in society and thus achieved an adjustment with self and others through the practice of sports activities and making good relations with others is an important part of the life of people with disabled hearing , neediest are equipped with self - confidence and made him feel appreciated and that the interest.

Research problem. Through the experience of researcher they found that there is a weakness in not using exercises and the biometric stages for the technical performance of the effectiveness of the long jump and the need for these exercises in order to improve performance and achievement.

Research hypotheses .There are significant differences between the tests of muscle strength and completion for the effectiveness long jump players deaf and dumb.

The use of the biometric and special exercises to develop the skill of long jump contributed to developing muscle strength and thus achieve the objectives and hypotheses.

KEYWORDS: POLYMETRIC. JUMP. TRAINING. DEAF AND DUMB.

1. INTRODUCTION

The sports activities for the impaired hearing and freely considered an entertainment aspect before accomplishment and at the same time working to raise or increase social cohesion and inclusion in society and thus achieved an adjustment with self and others through the practice of sports activities and making good relations with others is an important part of the life of people with disabled hearing , neediest are equipped with self- confidence and made him feel appreciated and that the interest of others and this all helps him to continue in the areas that would improve the potential itself without despair and cooperation to become useful and productive element then can recognize the disabled hearing and how to deal with others and thus comes out of seclusion and accept his disability audio, increasing his experience and maturity and culture, linguistic and social and sports activities .thus

can be used in the treatment of many problems for the deaf and dumb, progress levels in various sports is the result of the use of methods or Modern training methods through systematic training and rated based on scientific bases which enabled the individual athlete to reach the highest level of sports championships despite the rosy picture offered by the world's screens, indexes advanced Iraqi steps forward, especially in the long jump and the fun events to feature its exciting and attractive and competitive and break records and this certainly will require the use of special training to help them evolve to achieve the indices and the Caliphate Researchers to use the exercises the biometric to believe that these exercises have great impact to reach higher technique and achievement here is the importance of research.

2. RESEARCH PROBLEM

Hearing disability with their different degrees is one of common types of disabilities occurring among people and groups that have not yet attained equal opportunities of education like their peers from students and this of course will not prevent them from being talented but in another area as the broad jump players which require a physical capabilities and specifications as each phase of her long jump performance of motor skill as well as motor and rebuilt , through the experience of researcher they found that there is a weakness in not using exercises and the biometric stages for the technical performance of the effectiveness of the long jump and the need for these exercises in order to improve performance and achievement also noted that there are weaknesses in the application of professional stages by all the jumpers clearly starting by Approaching and ending in landing and that all these factors affect the level of technical performance and the level of achievement in the long jump with jumpers so felt researchers studying this problem in order to reach appropriate solutions that will help in the development of technical performance and achievement of the effectiveness of the long jump.

3. RESEARCH OBJECTIVES

The Research aims to:-

1- Development of training curriculum for the biometric method.

2- Identify the muscle strength and achievement of effective player's long jump the deaf and dumb.

3- Learn about the impact of the training in the development of some types of muscle strength and achievement for the long jump players for deaf and dumb

4. RESEARCH HYPOTHESES

There are significant differences between the tests of muscle strength and completion for the effectiveness long jump players deaf and dumb.

5. RESEARCH METHODOLOGY

The researchers used experimental method in a group with two tests in line with the nature of the problem.

6. RESEARCH SAMPLE

The research sample is chosen by the intentional way of Club ashno'na in the Paralympic team in Diyala Governorate, (4) players.

UNIFORMITY BETWEEN THE RESEARCH SAMPLES

The researchers calculated the Torsion coefficient to identify the homogeneity of the sample in the variables height, age and weight, as shown in table (1), and have limited Torsion coefficient between (-3, + 3) which indicates the homogeneity of the sample.

Table (1).Tests of homogeneity with the height, age, weight and value of between Torsion coefficient members of the experimental group

Torsion coefficient	Standard deviation	The mediator	Center	Statistical methods Variables
1.01	1.79	168.50	169.50	Length
0.00	1.29	23.50	23.50	The temporal age
1.01	1.44	66.50	67.00	Weight

7. IDENTIFICATION TESTS

Through research we reference using the following tests:

I. TEST OF STRENGTH WITH SPEED.

First: the trunk: abdomen test (10 sec) 1-329

The aim of the test: Measuring power with speed to the trunk.

Tools used: Stopwatch, Hall, terraces, registration form.

Performance description:

N. type of trunk bending forward with two legs fixed (10 sec) then record count number.

B. hung up on bars with lifting legs (90) parallel to the ground.

II.LEGS: PARTRIDGE FAR (RIGHT, LEFT) FOR (10) SEC [345-1]

THE AIM OF THE TEST: measurement the Force with the speed of the two legs

TOOLS USED: Stopwatch, measuring tape, a wide square, and registration form.

PERFORMANCE DESCRIPTION: Stand on one foot the Partridge to the maximum distance on line drawn on the ground in time (10 sec) without stopping or touching the ground with any part of the body except the Partridge foot and then revert to the second foot and measuring the level three times and take the best bid.

TEST OF ACHIEVEMENT OF LONG JUMP

The aim of the test: measuring the achievement of long jump [51-2]

Tools used: Track and field stadium, the field for the long jump, the registration form.

Description: all players were tested together to ensure a competitive and may start the test as follows. When the player hear the call , he takes a preparedness from the beginning, the player jogging into the field and then jump and was given six attempts for each player and the best effort is taken and register the achievement in its own registration form.

PRE-TEST:-

Tribal tests has been done on the research sample in the effectiveness of the long jump at 10 am starting on Wednesday 27/11/2013-28/11/2013.

Has been testing

1. Wednesday 27/11/2013 testing muscle strength (strength with speed) for each of (the arms, trunk, legs).
2. Thursday, 28/11/2013 completion test
3. These tests were done on the Sports Club Stadium of Diyala , alkatonfi forum in diyala Province.

CURRICULUM:

A period of implementation of the training curriculum took (8) weeks, three training modules (weekly)

The number of modules (24) training module was applied in the period 1/12/2013 and up to 1 March 2014 as "the biometric exercises, special force exercises are more influential force, must be consistent and maximally agree with competition exercises in term of form and the curve and speed . the development of the force during the pre-trial phase to reach the level of maximum strength and development process is designed to master the move-ments included the optional or compulsory program in the development process are consistent in nature with the nature of muscular contraction in the performance Exercises and development of force during President phase in the late part of training "[55-3]

POST-TEST:-

After applying the training curriculum to develop muscular strength within specified time duration, the re-searcher did tests at 10 a.m. on Sunday, 2/3/2014 by the method and the same circumstances where tribal tests done as follows:

1. Sunday, 2/3/2014 muscle strength test (strength with speed) for each of (the arms, trunk, legs)
2. Monday, 3/3/2014 long jump achievement test

8. RESULTSAND ANALYSIS AND DISCUSSION

Statistical research data is processing using appropriate statistical methods

Table (2). Shows the arithmetic mean, standard deviation and the value of (T) calculated and indexed sample re-search in the present variables

Tests	Measurement Unit	Measurement of tribal	Telemetric	The value of calculatedT	The value of the indexed T	Level indication

		O	P	O	P			
Test of strength with speed of the trunk and the back	Time/k	12.25	0.95	15.50	1.29	3.80	3.18	moral
. Test of strength with speed of the two legs right	M	31.20	1.15	24.00	0.76	9.79	3.18	moral
Test of strength with speed of the two legs left	M	31.40	0.69	33.92	0.95	4.63		moral
achievement	M	4.92	0.33	5.51	0.19	0.914		Not significant

The degree of freedom (3) and the possible error (0.05).

Can be seen from table 3 that the arithmetic circles in the tribal test in research variables influence the biometric training in the development of technical performance and achievement of the effectiveness of the long jump for the disabled (deaf and dumb) (the biometric) and the test of strength with speed (trunk, legs, and achievement) (12.25) (31.20) (31.40) (4.92) respectively and the standard deviations of (0.95) (1.15) (0.69) (0.33) respectively

While the mathematical communities in the test in the variables in question the same effect of the biometric training in the development of technical performance and achievement of the effectiveness of the long jump for the disabled (deaf and dumb) (the biometric) and the test of strength with speed (, trunk, legs, and achievement) (15.50) (24.00) (33.92) (5.51), respectively, with standard deviations of (1.29)(0.76)(0.95)(0.19), respectively. and values of calculated (t) (3.80)(9.79)(4.63)(0.914), while the value of (t) indexed (3.18) level indication (0.05) and the degree of freedom (3), the calculated value is larger than the indexed signifying moral differences between the two tests, the tribal and the post and in the variables under research except (xD) effect the biometric training in the development of technical performance and achievement of the effectiveness of the long jump for the disabled (deaf and dumb)and for the post test

9. DISSCUSSION OF TEST RESULTS WITH SPEED AND FORCE THE TRUNK AND LEGS AND ACHIEVEMENT.

Shown in table (3) significant differences between the two tests, the tribal and the post test of research sample and the researchers attribute to the fact that this moral differences due to the training curriculum which included vocabulary helped to use loads of different stressed the development of muscular strength and the severity (60-75%) from The maximum that individual can accomplish. Which led to the increase in tool enough to stimulate the physiological processes in addition to the occurrences of these exercises and the duration of the rest periods between duplicates and aggregates has helped this all develop strength with speed to develop muscular strength

.this most important muscles that depend on the type of training effectiveness used during performance which leads to accomplishment in addition to using exercises that have a relationship in development such as physical exercises, which included strengthening exercises for abdominal muscles individually for their look, and the use of duplicate special exercises had a big role in strengthening the abdominal muscles involved in performance and these exercises fall within the principle of privacy training that contributed to the performance test enough so that stress results for the study by a researcher (Abdul Razzak Kadhim), which reaffirmed "the use of developing muscle strength through the use of exercises The performance was a positive influence in the development of some special skills in addition researchers finds that power with speed to the abdominal muscles are developed through training to force her role in developing some skills and where the abdominal muscles play an important role "**[91-4]**

The researchers also attributed the development of sample will develop strength with speed of the muscles of the legs because exercises used in training curriculum by way of exercises the biometric in addition to the training problem with load components using special instruments and tools to develop this capacity in this regard (Talha hussam aldeen), "the growth of muscle strength by using special exercises and tools has exceeded the growth of some species" **[197-5]**. I also agree with the (Mohammed Mahmoud ' Abdul Dayem and others) **[463-6]** "that the rate of force gained using exercises to devices of more than isotonic, anthropometric exercises that power with speed consist of power and speed they could further increase the components and habit be the best way to increase the component of force **[72-7]** , the researchers through the development of training curriculum and focus on developing the characteristic force as fast as the top speed and performance by screwing set (60-75%) **[113-8]**

With regard to the non-development of achievement the researchers attribute that because of achievement can only be developed through short periods of work and exercise that generated high levels of technique and long jump performance skill needed for the accomplishment of the year with its various and specific exercises, commensurate with the requirements of muscle as well as the use of intensity depending on the platform of vocabulary every athlete and the capacity of the selected comfort between repetition and totals by using the training tools that make this job far from previous training means that this type of training is training that can used for all levels and ages as possible and individual sports, especially in games where the muscle Force Commander.

10. CONCLUSIONS

The use of the biometric and special exercises to develop the skill of long jump contributed to developing muscle strength and thus achieve the objectives and hypotheses.

1. The use of the biometric exercises like jumping skill mobility and muscle paths developed and led to the development of capacities and the development of performance skills at the same time.
2. The training curriculum that was used had a positive impact and effective development of muscle strength, which reflected the performance of long jump.

11. RECOMMENDATIONS

The need to emphasize that the biometric exercises similar to the performance of motor speed and track participation and development of General muscle when exercising the long jump.

1. Requirements necessary to perform the exercises the biometric and use scientific methods.
2. Accreditation form on the biometric exercises in the training curriculum for the different categories even involves development of muscular strength and power plus speed, especially at senior levels.

REFRENCES

1. Qais Naji, bastawisi ahmed ; tests and statistics in the field of sport : (Baghdad, higher education press, 1987).
2. Haidar Fayad Hamad: influence of exercises using the means to assist in the development of technical performance and achievement of effective jump stick. master Babylon University, 2009
3. Maayouf Danoun hantoush, Amer Mohammed Saudi; entrance on basic movements of leg gymnastics : (Mosul University, 1988).
4. Abdul Razzak Kadhim Al-Zubaidi; effect of a proposed force in the development of muscular strength some skills and performance requirements on the mat floor at gymnastics players (ages 13-15) years old, Ph.d. thesis (unpublished), Faculty of physical education, Baghdad University, 1999.
5. Talha Hussain husam eldeen ; motor sports training bases : (Cairo, Dar al Arab thought of printing and publishing, 1994).
6. Muhammad Mahmoud ' Abdul Dayem and others; training program physical preparation and training weights : (Cairo, Dar al Arab thought, 1993), p. 463.
7. Essam Ali and Mohammed Jaber; sports training (fundamentals, concepts, directions), 1st floor: (Alexandria, 1999).
8. Amr allah albussaty ; sports training bases and foundations and applications (Alexandria, a knowledge of printing and publishing, 1997)

APPENDEGES

Appendix 1: sample of weekly training module

day	Vocabulary training module	Duplicates	Comfort periods		Intensity
			Between iterations	Between groups	
Saturday	1. jump (Partridge on right leg)	3	2	5	85%
	2. jump (Partridge on left leg)	3	2	5	
	3. jump (by legs 30 meters)	5	2	5	
	The pit	10	1	5	
	4. jump over the hurdle height 91 cm bars(10 bars)	5	1		
	5. constant ran for 15 minutes				

Monday	Iron Half dbeni A quarter of debni Bing Preis Shoulders exercise carry a weight of 2.5 kg A light trot around the pitch for the 1000 m	10 * 3 10 * 3 10 * 3 30 * 2	1, 5 1, 5 1, 5 2	3 3 3 3	75%
Wednesday	Ran 30 meters Ran 50 m Ran 120	3 3 3	3 3 3	2 2 2	90%

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