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EFFECT OF MAXIMUM EFFORTS TRAINING PROGRAM ON TUG OF WAR PLAYERS UPPER & LOWER BODY STRENGTH

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Abstract:

The purpose of this study was to examine the effect of maximum efforts training program on tug of war players upper & lower body strength. It was an experimental study in which pre-test & post- test non equivalent groups design was used. 10 boys tug of war players mean of age (18.17±2.15) were selected as sample by using simple random sampling technique from Arts & Commerce College, Khedgaon Tal-Dindori Nashik. Experimental group (n=10) boys tug of war payers. Variables of the study was maximum strength, explosive strength & strength endurance and back full squat, standing broad jump, core sit-ups test was conducted the group obtained data was analyzed by using paired sample t-test. Result shows that data collected was analyzed by using paired sample t-test to see the change of maximum efforts training program was useful to improve upper and lower body strength.

Keyword: Maximum efforts program, Maximum Strength, Explosive Strength & Endurance.

Introduction:

Strength training is a type of physical exercise specializing in the use of resistance to induce muscular contraction which builds the strength, anaerobic endurance, and size of muscles. When properly performed, strength training can provide significant functional benefits and improvement in overall health and well being, , including increased bone, muscle, tendon and ligament strength and toughness, improved joint function, reduced potential for injury, increased bone density, increased metabolism, improved cardiac function.

Tug of war (also known as tug o' war, tug war, rope war, rope pulling, or tugging war) is a sport that pits two teams against each other in a test of strength: teams pull on opposite ends of a rope, with the goal being to bring the rope a certain distance in one direction against the force of the opposing team's pull. In the tug of war game need the muscular strength with endurance capacity to perform and win. Special training requires for improve the upper and lower muscle strength in that select the maximum efforts training program for develop the strength area. Maximum effort training basically modified version of the upper and lower body strength training for athletes include training scheduled is whole body workout four day splitting workouts plan per week. These types of workout program develop the muscle power of athletes and related skill of game like Tug of War (Jim Stoppani 2008, Encyclopedia of Muscle & Strength).

Material and Method:

Method of the study

The present study was an experimental research which was conducted with a purpose to see the effect of maximum efforts training program on tug of war players upper & lower body strength.

Research Design

Experimental design was used for this study to check the hypothesis; this research was based on pre-test & post- test non equivalent groups design.

Method of Sampling

For the present research whole population a total number of 10 boys tug of war players mean of age (18.17±2.15) were selected as sample by using simple random sampling technique from Arts & Commerce College, Khedgaon Tal-Dindori Nashik.

Selection of Variable

The study was taken to pinpoint the variables was maximum strength, explosive strength and strength endurance. For that variable measures back full squat 1 RM, standing broad jump and core sit-ups tests used for collected data.

Training Program

Treatment group was given the 60 minute maximum effort training program, taken for the period of Eight weeks which was given four days in a week. In the program two day in week upper and lower body maximum effort training was given with high load and low repetition and for next two days dynamic effort training was given with low load and high repetition. from the in the upper body maximum workout session include exercises Bench press, barbell shoulder, barbell curl, barbell row, Romanian deadlift, close grip bench press, barbell good morning, dumbbell bench press and hanging knee raise exercises in this training program maximum effort workout focused high intensity and low repetition. And lower body maximum effort exercises include Barbell front and back squat, half squat and lunges with barbell and deadlift exercises were given with high intensity and low repetition.

Procedure of the study

The researcher assembled all the subjects and given to them instruction about the need, importance description of the experiment and explanation of back full squat 1RM, standing broad jump and core sit-ups tests and experimental group implement eight weeks maximum efforts training program selected a total number of 10 boys tug of war players in the age group under 18 years old with the help of simple random sampling technique. The selected subjects were pre-test by above selected tests for experimental group, after the implemented training program conduct post tests for data collection.

Statistical Tools

After collection of pre-test & post-test data of treatment group after used paired sample test & interpretation was drawn. The significance level was kept at 0.05 to test the hypothesis.

Results of the study:

The obtained results are present in the following table which represents the results of descriptive analysis and paired sample t-test to compare the mean of experimental group.

Table no 1. Descriptive statistics and comparison to gain the strength

Test	Group	N	Mean	Mean Diff	't'	Sig (2 tail)
1RM Back Full Squat	Pre	10	85.0	0.45	7.47	0.001
	Post	10	87.5			
Standing Broad Jump	Pre	10	7.11	0.68	6.89	0.002
	Post	10	8.14			
Core Sit-ups	Pre	10	18	1.05	5.89	0.001
	Post	10	22			

Discussion of the findings:

Discussion on the results of 1RM back full squat, standing broad jump and core sit-ups tests performance; It was observed from the finding that the effect of maximum efforts training program on upper and lower body strength of tug of war players from table No. 1, shows that there was a significant effect between pre-test and post-test of subjects regarding to the all test items. This indicates that maximum efforts training program had positive effect on 1RM back full squat, standing broad jump and core sit-ups of experimental group. Therefore the set hypothesis that there was significant effect of maximum efforts training program on 1RM back full squat, standing broad jump and core sit-ups of tug of war players was accepted.

Sankaran (2000) conducted a study on the effect of weight training exercises on the performance of scooping in hockey on sixty hockey players of Sivagangai District. Six weeks weight training was given to the students. During the six weeks training period, the subjects of experimental group were given weight training with the bar bells. They were also asked to do the skill scooping. The result showed a highly significant improvement in the subjects of the experimental group after six weeks of training with specific weight training and exercises.

Conclusion:

On the basis of the result obtained in the study the researcher made the concluded that eight weeks maximum efforts training program was significantly effective to the 1RM back full squat, standing broad jump and core sit-ups of tug

of war players which indicate the improve the upper and lower body strength also the findings of this study may be helpful to the tug of war players to implement regular practice of maximum efforts in training session to improve the strength.

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