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The effect of continuous descending hierarchical exercises in the development of the muscular strength of young quadrants for the ages under 20

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Abstract :

The introduction, which is that the game of weightlifting of individual games characterized by strength, art and will, there are many types of forms of load and used largely by trainers and influential in the development of force in its various forms and dependent on the exact change in the components of the training load or in one of them, hence the importance of research in the use of continuous descending pyramid load and the extent of its effect in the development of muscle force in its various forms and the goal of the research to identify the effect of the continuous hierarchical method in the development of the muscle weight supposing The existence of statistically significant differences between pre- post-tests in the continuous descending hierarchical method in the development of forms of muscle strength and in favor of post-tests, the methodology of the research, the researchers used the experimental method to suit the nature of the problem and the sample was selected in the method of intentional and consisting of 5 quadrants, where pre- and post-tests were conductedfor them after which the results were extracted through the statistical bag(sps),but the presentation of the results and analysis have shown the differences between the pre- and post-tests for the benefit and the benefit of The remote test.

Keywords: (Special exercises, continuous pyramidal style, muscular strength)

1- Introduction:

The game of weightlifting is one of the individual games characterized by strength, art and will and is one of the events that witnessed a great development in the field of training and indices and included this development weightlifting, and since there are multiple types of load and used largely by trainers and influential in the development of strength in its various forms and dependent on the exact change in the components of the training load or in one of them, hence the importance of research in the use of continuous descending downward load and the extent of its impact in the development of strength in its forms muscle forms The researchers worked hard to reach the best training methods and take time to improve the level of achievement, and the efforts of

researchers are focused in the same direction in a scientific attempt in order to raise the level of sports to the reality of weightlifting through the use of a new style of hierarchical training, which is continuous hierarchical training, which has been popular among professional bodybuilding players during the past 20 years through the use of high repetitions and high intensity, which the researchers try through their field experience using this method of hierarchical training and its impact on the development of Muscle strength in its forms on the one hand as well as its effect in the development ofpower liftingsfor quadrants on the other.

The problem of research is to try to overcome the slow development and temporary stoppage sought for the advanced quadrants in certain periods as a result of high physical effort, which leads to a halt in the development of the level of athletic achievement, and the neglect of this training method by many specialists in strength training, especially those working in the field of physical strength training for people with special needs, and that any appearance of positive results during this research will ensure that the effort and time spent by the quarter in training will not be wasted and will also put before the accredited scientific bases of the trainers. To overcome the cases of slow development and temporary stoppage in the young quartets, which in turn reflects negatively on the state of the general quadrants, which makes the training process of the trainer and quarterback more difficult and complex and on this basis the goal of the research to identify the effect of the continuous descending hierarchical method in the development of muscle strength in players and on the basis of the goal the researchers imposed to the existence of statistically significant differences between the pre- tests dimension in the continuous descending hierarchical method in the development of muscle strength forms and in favor of the post-tests.

2- Research methodology and field procedures:

2.1 Research methodology:

The researcher used the experimental method to suit the nature of the problem

2.2 Sample search:

The researchers selected the research sample in the deliberate manner of (5) quadrants at different weights and according to the law of the International Federation of Power Lifts starting with weight (48kg - ending +100kg) and males, representing five weights for the experimental sample, and the relative strength was used which is equal to (maximum strength divided by body weight)1 instead of maximum strength to avoid the difference of body weight which is reflected on the maximum strengthof the player, as represented by the sample ratio (50%) from the search community.

2-3 Asearchdat:

1- A special weightlifting terrace.

2- Weights of different sizes and weights are legal from (0.25 kg to 25 kg).

3. I saw a legal iron number.

3- Stopwatch (1).

2.4 Search procedures:

2.4.1 Tests used in the research:

The most important tests used in the research after reference to scientific sources in sports training, as well as scientific sources in weightlifting, were identified as the following tests were selected:

(Maximum arm strength test, arm speed strength test, power-table test)

2.4.2 Pre- Tests:

The researchers conducted pre- tests on 2/11/2020 in the weightlifting hall at Diyala Sports Club stadium at 10:00 a.m.

2.4.3 Post-tests:

After completing the training curriculum, the researchers conducted the after-examinations of the research sample on 2 January 2021 and took into account the temporal and spatial conditions, means and tools used by the same pre- tests as much as possible.

2-5 Statistical means:

After collecting the data, the researcher analyzed it statistically using the statistical system (spss)

3- Presenting and discussing the results:

3.1 Presentation and analysis of the results:

This section includes the presentation of the findings of the researchers and their analysis and discussion through the pre- and post-tests have been converted into tables and graphic forms as illustrative tools for research, and the analysis of information means the extraction of quantitative and qualitative scientific evidence and indicators, which demonstrate the answer to questions and confirm the acceptance of its imposition or non-acceptance (Hussein:1987: 376)

Table(1)

Shows the computational medium, the standard deviation, the average differences and the standard error of differences, the calculated value (t) and the level of significance of the experimental group in the pre- and post-tests of physical abilities.

Variables	Pre-Test		Post-test.		P	P.E.	Calculated	Level of significance
	A	STD	A	STD				
Relative strength of (1RM)	2.383	0.582	2.547	0.662	0.163	0.041	4.03	**sign**
Power at speed (70%) For 10 tha	8.2	0.836	9.8	0.447	1.6	0.51	3.13	**sign**
Power table (50%) To the end of fatigue.	17.6	0.548	23	0.707	5.4	0.4	13.50	**sign**

The scheduling score at the degree of freedom (4) and below the level of indication (0.05) is equal to (2.78).

When observing table (6) which shows the arithmetic medium, the standard deviation, the average differences and the standard error of the differences, the calculated value (t) and the level of significance of the experimental group in the pre- and post-tests, we find that the computational medium of the relative strength of(1RM)in the pre- test isas high as (2.383) and a standard deviation of (0.582) while the arithmetic medium in the post-test is as high as (2.5) (2.5) 47) With a standard deviation of (0.662), while the average differences of 0.163 and the standard difference error of 0.041 and the calculation of the value of (t) are found at a value of (4.03) higher than the table score of (2.78) at the degree of freedom (4) and below the level of significance (0.05), which means that the differenceis moral and in favour of the remotetest.

3.2 Discussion of the results:

"One of the basic rules used in the implementation of physical adjustment methods is the use of high stress at the beginning of the training unit and then decreases before the end of the training unit and this is what really happened when implementing the curriculum of the researcher and in accordance with the continuous descending hierarchy"*

"The more the load is as big as fatigue, the higher the strength, so the training of maximum strength must be purposeful and convincing, because it shows the optimal load gain quickly and resistance must be used below the maximum of 75% - 95% of the maximum 1RM and it is recommended that the repetition be from 1-8 per chain," he said.

The training intensity used by the researcher is directly related to the impact on sports results, but this does not mean that the training volume plays a less important role, and mentions (MuatassimGotov:1995:1092)"The mathematical results are achieved by identifying balanced ratios between training volume and training intensity."

The curriculum implemented by the researcherthat for a period of (10 weeks) and the average of three training units per week and the use of training stress in the curriculum in proportion to the ability of each player in the experimental group subjected to research has morally affected this physical ability in the post-test.

Ahmed This is what happened to the national team players with special needs, who were informed of these physical abilities before starting the training curriculum accordingly.

The researcher believesthat the transition in recruiting as many motor units as possible at the beginning of the exercise and then moving to less recruiting in the severity of the lower intensity gives a recovery period for the units recruited at the beginning of the exercise, making these units work more efficiently when moving to the second exercise.

The training method used in accordance with the continuous descending hierarchy has affected this physical ability and scientific sources indicate that there is a strong relationship between muscle strength and endurance (where the stronger muscle can exert longer than the weak muscle and therefore the most important methods of development of bearing of strength is the method that depends on the development of muscle strength) (Hussam al-Din: 1997: p. 195)

The method used (continuous descending hierarchy) and the apparent progression in carrying training through the curricula developed have led to the development of this physical capacity, the theories of sports training have indicated "the need to gradually train loads, as each increase in training load in terms of intensity and size is offset by an increase in the functional capacity of internal organs and organs to ensure the growth and development of the sports result".

4- Conclusion:

Through the results of the study and discussion, the researchers conclude the following:

The continuous descending hierarchical pattern has a positive impact on the development of relative power.

The strength of the speed and the range of strength of the research sample also showed the continuous descending hierarchical training style of momentum and desire of the experimental group during performance is higher than in the style used by the trainer.

In the light of the researcher's conclusions, he came up with a set of recommendations:

The need to rely on the continuous descending hierarchical method in training to develop forms of muscle strength and to achieve better results must increase the duration of the training method and the number of weekly units, as it is preferable not to use this type of training during the last month of competitions for the possibility of injuries sustained by the athlete as a result of excessive effort and instability of iron during the successive iron reduction by assistants during the performance of this type of training.

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