The impact of the use of the two methods of training in the development and development of the capacity to withstand the enemy of 800 meters"

(Field study of the national team for the military 800 meters)

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<table>
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<th>ABSTRACT</th>
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| The main objective of this study is to investigate the impact of the combination of the two methods in the development of the force tolerance of 800 meters in the special physical preparation stage. The following question was raised: "To what extent are the two retroactive and repetitive training methods affected in the development of the force tolerance status of the 800 meter enemy?" To answer the question, the training program was implemented for an average of eight training weeks (6-9 training sessions per week) Sample A study of the national team of military athletics (first and second) is 800 meters. It has a total of 08 runners (A) with 40 runners and B squad with 40 runners. The sample of the study was divided into two conglomerates (control and experimental) the sample is 08 runners (age, height, weight, training age ...). This study was conducted at the level of the gathering and preparation of military sports teams in Benkounoun, Algiers, from 20 July 2015 to 20 September 2015. To determine all the variables, especially the confused ones and to put the appropriate tests the study was conducted on 60 regional military teams with a total of 40 runners in each area. The level of runners was very close. We found that there was a very large relationship after the first and second application (the method of application and return). We have relied on the experimental approach by applying a set of physiological and physiological tests as described in the study. The study found that the application of the repetitive training method alone was not effective at the required level, while the integration of the two repetitive and repetitive training methods into one training program has a positive impact on the development of Strength of the enemy 800 meters.

<table>
<thead>
<tr>
<th>KEYWORDS</th>
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<td>Repetitive Training Method, Infantry Training Method, Speeding, Hostile 800 Meters; Training Program.</td>
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</table>
INTRODUCTION

The modern sports training have undergone several stages until its features have crystallized in its modern scientific form, in addition to several disciplines such as athletics. The latter has gained considerable success in the development of the world in recent years, thanks to the use of advanced capabilities by developed countries. Technical and physical of the athlete in this area by good planning.

Among the disciplines of athletics is the 800 meter race, which is described as the men's killer, because the enemy cannot complete the race at the same speed, which requires him to develop the status of power and energy systems for this race, which is the type of race in the mixed system with the predominance of the anaerobic system. The 800m race has an important role to play, starting from the 80m to the 100m, which requires the athlete to resist fatigue by increasing his steps to the maximum possible level. HART, G., 1981, p66) that carrying the force of the most essential elements required in the training of S. Aq 800 meters to the side carrying speed to maintain the quality of the required intensity.

The researcher noted the fluctuation in the level of national achievement in the 800 meters compared to world figures, due to the poor planning of the programs and the random selection of methods and methods of training, which made him search in many references on the most important methods aimed at developing the tolerance of the force of the 800 meters, Thus, the two methods of retrofitting and repetitive training were integrated from the best ways to develop this trait in terms of the exchange of effort and comfort. The researcher prepared a training program applied during the period of physical preparation especially because of this period of intensity of pregnancy similar to the intensity of competition, J My way of training selected discriminate (see and recursively).

Thus, the problem of the study of the level of development of the ability to withstand the force of 800 meters using the two methods of training and repetition and repetition of special importance in the period of physical preparation special, and develop the status of strength in the 800 meters requires special attention by the coach and athlete in the implementation stages The training modules given to the athlete, because the development of the ability to bear power for this effectiveness is one of the main objectives in achieving good performance; it was noted that the hostility cannot continue to complete the race to the end of the required level, which indicates that there is a shortage of runners in the form of carrying power, it is necessary to address this problem by asking the following fundamental question: How the use of the methods of training in the periodic and repetitive in the development of the capacity to withstand the enemy of 800 meters?

1. Hypothesis Study:

2.1. General Hypothesis:

The use of retro and repetitive training methods in developing the force-bearing
characteristics of 800-meter antagonists has a positive effect.

2.2. Partial Hypotheses:

- There are statistically significant differences between the tribal and remote measurement in favor of the post-measurement of the control group using the repetitive training method;
- There are statistically significant differences between the tribal and the remote measurement in favor of the post-measurement of the experimental group using the retro and repetitive training methods;
- There were statistically significant differences in the improvement rate of the experimental group and the control group in favor of the experimental group using both retro and repetitive training methods.

1. Research Objectives:

- The main objective of this study is to identify the effect of the use of retro and repetitive training methods in the development of the tolerance of force in the enemy of 800 meters in the stages of physical preparation of the special;
- To compare and evaluate the ratios between the pre-test and the post-test of the study variables using the retro and repetitive training methods;
- Comparison and evaluation of the method of training adopted in previous years (repetitive training method) represented by the control sample and the retro and repetitive training methods (the combination of the two methods) represented by the experimental sample.

2. Search Terms:

4.1. Training Program:

The search for maximum performance refers to a long-term vision, where anybody modification requires important work, so it is necessary to organize it in accordance with simple but fundamental principles, and non-compliance with one of these principles systematically reduces expected performance." (Jean-Luc Cayla, Rémy Lacrampe, 2007, p. 226)

So when looking after a high level athlete. It is quickly necessary to set very precise business objectives, and the reasons are simple. Often, the necessities of competition and recuperation make the time available for training very small (in short, there is always a shortage of time) programmed for training.

4.2. Method of the Monthly Training:

The method of training the infant from the training methods characterized by successive exchange of effort and rest, due to this name relative to the period of rest
between each and every exercise. (Clark M., 2006, p.163).

The distance training is relatively fast and the distance of the enemy is relatively short, with only half the distance of competition, relatively low load, frequent repetitions and short interruptions (45-180 seconds). Intensity and repetition.

4.3. Recurrent Training Method:

This method is characterized by resistance or high speed of exercise, which is similar to the infantry training in the exchange of performance and rest, but differs from the length of the exercise and intensity of the exercise ..., as well as the number of repetitions and recovery period between the repetitions (Malfois, C, 2009, p. 111). This method is characterized by extreme intensity during performance performed very close to competition in terms of distance and intensity (Harre, D., 1976, p.156). High intensity ". (Weineck, J., 1997, p.133)

The repetitive training method is characterized by a slightly lower speed of competition, more than two-thirds of the race distance, a higher gestational load, fewer repetitions than the womb and relatively long resting periods (3-45 minutes)

4.4. Power Bearing:

Endurance is the component or component that contains two very different but closely related components, namely, "cyclic endurance and muscular endurance". Each contributes directly to endurance, and both differ in importance and degree in different athletes and sport type. (Jean-Luc Cayla, Rémy Lacrampe, 2007, p. 92)

We conclude that endurance in mathematical fields means the periodic "skin" of the respiratory system. It is therefore an important physical physiological component of the basic physical elements such as strength, speed, flexibility and agility. It is highly related to these abilities, whether it is related to the element of strength and speed and the resulting elements (Short, medium or long term) and speed as important qualities, each of which plays a large role in the training of many different sporting events and events, and thus endurance is associated with its various forms and divisions with all those effective Sports and sports in varying proportions, which show their importance in each.

3. Research Methodology and Field Procedures:

5.1. Scientific Methodology:

In order to solve the problem of the study, the researcher used the experimental method. It represents the most precise types of scientific curricula that can affect the relationship of the independent variable and the dependent variable in the experiment. We have formulated a experimental design in two groups, one control group and one experimental group.
5.2. Research Community:

The original community of the study consists of the antagonists of the race 800 meters class of the most senior class of males belonging to the Ministry of National Defense, the number of 24 runners representing the six military aspects, each hand has (04) runners in addition to (08) runners of the national military team at the gathering and preparation team (B); a total of (32) runners are the study community.

5.3. The Research Sample:

The sample of the study was chosen in a deliberate manner. All the enemies of the national team for the 800m race included the category of the Akbar class, the number of which was (08) hostility, ie (25%) of the study society. The military compared to other military aspects (the best choice).

6.1. Physical Tests:

- the test of the hippocampus for a minute (alternating with the two men); see the following reference: Isabelle (Gaubert, Olivier, Beraguas, Véronique, Bonnitent, 2014, p.249)
- Test the enemy for a distance of 800 meters.

6.1.1. Physiological Tests:

- Test of lactate in the blood before the performance of enemy 800 meters;
- Test of lactate in the blood after the performance of enemy 800 meters.

6.1.2. Means Used:

- A device (LACTATE +) with all its functions to detect the concentration of lactic acid in the blood;
- FINISH CAMERA PHOTO;

6.2. Statistical Methods Used:

To obtain accurate results, the most appropriate statistical methods were used: percentage, arithmetic mean, standard deviation, variance analysis index, test for T-student difference and calculation of improvement ratio between experimental and control groups.

In light of the research objectives and hypotheses, the researcher presents the results of the statistical analysis and then discusses them in the light of theoretical framework and previous studies.

In line with the regulatory and logical aspect, the results are presented and discussed according to the sequence of study objectives. Here is a detailed presentation of the tribal and post-test tests of the study variables.
7.1. View, analyze, discuss and interpret the results of the first hypothesis (control group):

<table>
<thead>
<tr>
<th>The study sample</th>
<th>Executed tests</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Significance</strong></td>
<td><strong>The value (ta) calculated</strong></td>
</tr>
<tr>
<td><strong>Control group</strong></td>
<td><strong>Physical tests:</strong></td>
</tr>
<tr>
<td>Function</td>
<td>Test the hatch for a minute (rotation with two legs)</td>
</tr>
<tr>
<td>Not a function</td>
<td>Test the enemy for a distance of 800 meters</td>
</tr>
<tr>
<td><strong>Physiological tests:</strong></td>
<td></td>
</tr>
<tr>
<td>Function</td>
<td>Test the lactate in the blood before performing an enemy 800 meters</td>
</tr>
<tr>
<td>Function</td>
<td>Test lactate in the blood after the performance of an enemy 800 meters</td>
</tr>
</tbody>
</table>
From the above we conclude that there is a relationship between the training to withstand the force and variables study that the nature of the 800 meters race performance requires a high speed at the beginning of the race and to take power in the middle of a very important special bearing at the end, so you should focus when training on this event on exercises with High intensity, which was derived through the post-test in the development of study variables, indicating the impact of these variables in the race of 800 meters if used well.

The results of the control group are consistent with the results of the following study:-

A study by the researcher: Abdul Ghani Muthar 2012, which emphasizes the need to use the method of repetitive training by trainers to improve the anaerobic threshold in the players of the long-distance.

Through the presentation, analysis, debate and interpretation of the results of the first hypothesis and in the light of the tests listed and applied to the control group and the application of the program port training in a manner iterative and in light of the evolution of all test results in varying proportions, and through all the above-mentioned circumstances, which contributed to the embodiment of the validity of this hypothesis put forward Finally, we can confirm the validity of the first hypothesis, which states that there are statistically significant differences between the tribal and remote measurement, and in favor of the post-measurement of the control group by applying the repetitive training method through a training program.

7.2. View, analyze, discuss and interpret the results of the second hypothesis (experimental group):

<table>
<thead>
<tr>
<th>Significance</th>
<th>The value (t) calculated</th>
<th>The difference between the two</th>
<th>Remtest</th>
<th>Standard deviation</th>
<th>SMA</th>
<th>Standard deviation</th>
<th>TSA</th>
<th>Measuring unit</th>
<th>Executed tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>J2</td>
<td>16.696</td>
<td>49.75</td>
<td>4.35</td>
<td>240.9</td>
<td>200</td>
<td>45.80</td>
<td>200</td>
<td>245.0</td>
<td>Test the hatch for a minute (rotation with two legs)</td>
</tr>
<tr>
<td>J2</td>
<td>7.354</td>
<td>3.710</td>
<td>0.140</td>
<td>92.000</td>
<td>85.0</td>
<td>3.910</td>
<td>85.0</td>
<td>92.000</td>
<td>Test the enemy for a distance of 800 meters</td>
</tr>
<tr>
<td>J2</td>
<td>14.438</td>
<td>3.710</td>
<td>1.168</td>
<td>1.628</td>
<td>1.168</td>
<td>2.600</td>
<td>1.168</td>
<td>3.710</td>
<td>Test the lactate in the blood before performing an enemy 800 meters</td>
</tr>
<tr>
<td>J2</td>
<td>14.438</td>
<td>3.710</td>
<td>4.172</td>
<td>2.980</td>
<td>1.168</td>
<td>8.528</td>
<td>1.168</td>
<td>12.700</td>
<td>Test lactate in the blood after the performance of an enemy 800 meters</td>
</tr>
</tbody>
</table>
The results of the experimental group converge with the results of the following studies:

- Study of the researcher (Neuhof, S., 1978) on how to develop anaerobic capacity in the 800m race. The body must be stressed and the load increased during the training modules to learn how to deal with it, and must increase the speed of repeated exercises in an advanced manner, and may be necessary physiologically and psychologically to make the maximum number of repetitions in the early period of the season. Repeat the enemy for a distance of 800 meters in training, and also vary the speed of this run depending on the time of the season and the state of hostility, and must be specific training and the body is accustomed to the special requirements of the distance of the 800 meters.

- The study of the researcher (Muhammad Muayad et al., 2005). The result was the effectiveness of both high frequency and high frequency training methods in the development of muscle strength of the muscles of the two men.

- The study of the researcher (Rahim Rweih Habib, 2006). The researcher concluded that the lactic load training had a significant impact on the development of the tolerance of the force and led to the ability to tolerate the increase of accumulation of lactic acid in the blood for the longest period during performance, 800 meters away.

By analyzing, discussing and interpreting the results of the second hypothesis and in the light of the tests included and applied to the experimental group and in application of the program implemented in the method of periodic and repetitive training and in light of the development of all the results of the tests in varying proportions, and through all the above conditions, which contributed to the embodiment of the validity of this hypothesis Finally, we can confirm the validity of the second hypothesis, which states that there are statistically significant differences between the tribal and the telemetry, and for the sake of telemetry.
These results converge with the results of the following studies and researches:

- Study of the researcher (Wesal Sabih Karim, 2006), in which she confirmed that when conducting special speed tolerance training, the frequency of repetitions should be increased with the high degree of endurance, which should be appropriate with the volume of training or repetitions; (75-90%) or (90-100%) of the player's maximum ability, which contributes to the outcome of the development of speed bearing, and stressed the importance.

- The study of the researcher (Al-Mousa Ali et al., 2006). The researcher concluded that the method of the infant training had a better effect than the repetitive training method in the development of the force characteristic of the speed of the arms of the arms. The repetitive training method had a significant effect. High strength in the development of strength characteristic of the speed of the muscles of the two men.

### Table: Improvement Rate between the Two Groups

<table>
<thead>
<tr>
<th>Average Improvement Rate (%)</th>
<th>Percentage Improvement</th>
<th>SMA Post Test</th>
<th>Trib al Test</th>
<th>Measuring Unit</th>
<th>Executed Tests</th>
<th>Study Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.40</td>
<td></td>
<td>13.93</td>
<td>273.43</td>
<td>240</td>
<td>Test the hatch for a minute (rotation with two legs)</td>
<td>Control group</td>
</tr>
<tr>
<td></td>
<td></td>
<td>02.80</td>
<td>98.36</td>
<td>100.78</td>
<td>Test the enemy for a distance of 800 meters</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>13.31</td>
<td>2.28</td>
<td>2.63</td>
<td>Test the lactate in the blood before performing an enemy 800 meters</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>11.18</td>
<td>13.03</td>
<td>14.76</td>
<td>Test lactate in the blood after the performance of an enemy 800 meters</td>
<td></td>
</tr>
<tr>
<td>28.48</td>
<td></td>
<td>30.81</td>
<td>320.49</td>
<td>245</td>
<td>Test the hatch for a minute (rotation with two legs)</td>
<td>Experimental group</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12.99</td>
<td>92.00</td>
<td>102.87</td>
<td>Test the enemy for a distance of 800 meters</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>37.31</td>
<td>1.63</td>
<td>2.60</td>
<td>Test the lactate in the blood before performing an enemy 800 meters</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>32.83</td>
<td>8.53</td>
<td>12.70</td>
<td>Test lactate in the blood after the performance of an enemy 800 meters</td>
<td></td>
</tr>
</tbody>
</table>
The study of the researcher (Gaffney, S., 1991), in which he stressed that the training of the performance of the ideal to be based largely on the development of the anaerobic energy system, and the system of power generation anaerobic of the lactic is the most important system to generate energy in the 800 meters, Special ability to endure, speed and special strength are the most important aspects that must be developed in order to achieve the highest performance, and these components from the perspective of the researcher represent the factors affecting the 800-meter race, but should not overlook some of the key factors such as speed and general endurance and public strength, Although there is no effect Direct to the 800-meter race. It is linked to the overall preparation of 800-meter annual runner-up programs and long-term programs.

By presenting, analyzing, discussing and interpreting the results of the third hypothesis and in the light of the tests included and applied to the control and experimental groups and in light of the evolution of all the results of the tests in varying percentages. Through all the above conditions, which contributed to the embodiment of the validity of this hypothesis we can finally make sure On the validity of the third hypothesis, which states that there are statistically significant differences between the improvement rate of the experimental group and the control group in favor of the experimental group using both retro and repetitive training methods.

### Conclusion

The 800-meter race is a difficult race that requires a top speed at the beginning and a special bearing in the middle and a very important special at the end. Therefore, the researcher was instructed to develop a training program in the form of retro and repetitive training in order to develop the ability to withstand the enemy 800 meters, They have the advantage of a training load - a researcher - suitable for the development of the trait of this type of runner, based on a set of theories and trends (Black's theory in hostile description 800 meters sufferers, modern trends in the mathematical preparation of Platonov) Of the program For training, and then presented to a group of experts and specialists to arbitration on its effectiveness in the development of a recipe carrying power of a hostile enemy 800 meters.

The development of the ability to bear power makes the enemy able to maintain its speed very high throughout the race, and resistance to fatigue due to the accumulation of high amounts of lactic acid in the muscles and concentration in the blood, so development of this attribute is linked to determine the appropriate training distances and training in the enemy of 800 meters.

After the implementation of the training program on the experimental sample, we noticed the development achieved through the timing of the enemy 800 meters, and this development was the result of several factors, including the use of scientific methods in training in terms of rationing training loads (intensity, size, comfort) and the use of training methods appropriate to
physical requirements (Both retro and repetitive training methods), as well as the dependence on physiological variables as an indicator of the use of training loads and the regulation of rest periods, especially the concentration of lactic acid in the blood while working on the development of energy systems.

In light of the objectives, hypotheses and variables of the study, and based on the theoretical data, the study was conducted in the field to search for the answer to the questions raised, and through the results obtained after the necessary statistical processing of data and analysis of the components systematically, the researcher reached the following conclusions:

- The rate of development of the two samples (control and experimental) varied in the study variables;
- The training program using the repetitive training method has a positive effect in the development of the capacity to withstand the enemy of 800 meters, but by up to 10.30%;
- The training program using both retro and repetitive training methods achieved the best results in the development of the capacity of the enemy of 800 meters, which reached 28.48%;
- The sample of the study (control and experimental) achieved a development in the status of strength, but the preference for the experimental group;
- The training program of the experimental group contributed to increasing the ability to tolerate the concentration of lactic acid in the blood for the longest period during performance than the training program of the control group;
- The training program of the experimental group led to the development of an enemy 800 meters.

From the above, it is possible to directly answer the main question of the study that the two methods of retrofitting and repetitive training have a positive effect on the development of the force characteristics of the enemies of 800 meters. Based on the results achieved in the study, the researcher recommends the following:

- The need to formulate training programs based on modern training trends;
- Emphasize the use of more than one method of training in the development of physical characteristics, public and private during the various periods of physical preparation;
- The need to include training methods in training programs;
- The need to combine the methods and methods of training in the preparation of runners;
- The level of tolerance and speed of force must be developed because of the close relationship between them in achieving an enemy of 800 meters;
- When performing strength training, be sure to increase the frequency of repetitions with the high degree of load intensity appropriate for the size of the training;
- 800-meter enemy trainers need to pay attention to lactic training to increase the ability of the enemy to tolerate lactic acid concentration in muscles for as long as possible during performance.

**Sources and references:**