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Original article

ANALYSIS OF EFFORT DYNAMICS IN THE 1500 M JOURNAL OF JUNIORS II

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Abstract*

Aim. In recent years, due to the very high performance and rivalry of very close-minded athletes, semifondue runs are among the most spectacular athletics, and they are one of the attractions of the major athletic competitions.

Methods. The increasing trend of obtaining valuable sports results in various sporting disciplines has led to a practical change, especially as regards the training of athletes and their participation in competitions. This change also characterizes the training in the field of athletics, and implicitly that of the semifond samples, the change of methodical orientation which was determined by the presence, in a proportion of 46%, of the evidence in which the dominant motor quality is the resistance in the program of any competition.

Results. Achieving value performance in semifond samples involves athletes an exemplary training from all points of view (physical, technical, tactical, and especially psychic). We have proposed in this paper to carry out a research on the aspects related to the dynamics of the effort in the 1500 m test for juniors II.

Conclusions. The junior age II is the most appropriate stage for improving the technique, tactics, for 1500m specialization, and for training tasks where the volume and intensity dynamics take into account the athletes' particularities and the number of competitions.

Keywords: athletes, training, competition, semifond.

Introduction

Athletics is the sport that over time has developed a distinct development from all aspects, from evidence, competitions, practices, to the evolution of equipment and athletes of the iontals (Gevat, Larion, 2003).

From the point of view of the effort, the specialty literature highlights the average duration of resistance, as it is specific to the semifond samples, especially the 1500 m. Within a training cycle, the specialized literature emphasizes the dynamics of the effort that takes place in the various stages of preparation for the achievement of the proposed objective, dynamically manifested by the alternation of the work volume and the intensity in the preparation of the objective competition.

According to Mike Poehlein (Human Kinetics, 2000), in addition to physical fitness, in the 1500m test, the "mental force to run at high speeds throughout the race" is essential.

The increase in performance in the 1500m sample demonstrated that the human body possesses energy reserves, rationally used and dosed according to scientific training methods, to ensure success in this test.

The treatment of average durability from the perspective of several sciences, as a form of demonstration of the resistance encountered in the

1500 m sample, has been the subject of numerous specialized studies. Authors such as Alexe, Alexandrescu, Novicov, Matveev, Zatorski, Rogers, Demeter, Bota, Harre, Dragnea, Siclovan, Manno, etc. have highlighted the average durability as a type of resistance that characterizes athletic samples whose duration exceeds 2 minutes and reaches 7-8 minutes, where the oxygen burden occurs.

It should be noted that in the category of semifonds, together with the samples of 1500 m and 1 mil, although not exceeding the 2 minute threshold in men's competitions, the literature included the 800 m sample (for over 60 years, the performances at men are well below the 2-minute boundary). However, the women's and junior performances at 800 m (although sometimes surpassing the 2-minute limit) fit perfectly around the 2-minute performance.

According to the literature, the dominant feature of semifond runs and hence the 1500 m running is that the technique allows the athlete to achieve the movements with efficiency and economy, which in turn allows the distance to travel at a speed high.

For a better understanding of what is the dynamics of the effort, it is necessary to clarify the notion of "dynamics." According to the Dictionary of Modern Romanian Language (quoted by Hantan,

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2005), the term "dynamic" expresses "a process that unfolds, ", " An ongoing process, transformation, evolution ". The dynamics of the training effort presupposes, according to Hantău (2005), the continuous development of the training process, aiming at a constant evolution of it through the continuous and gradual increase of all its parameters, always aiming at their maximum values, which at the level they are in constant evolution.

According to the specialized literature, the dynamics of the effort implies an increase of its parameters, related to the final effects of the training process, during it, however, increases and decreases of the different parameters of the effort imposed by the objectives of different lessons, macrocycles or longer stages of training, ultimately determined by the laws governing the physiological, biochemical, psychological and anatomical aspects of adaptation processes. in accordance with the laws of sport training (the dynamics of the training efforts implies a judicious combination of the continuity of the effort, in the direction of its gradual growth and discontinuity, materialized through the moments of maximum effort to achieve the leaps in the adaptation processes, or through the moments (the lessons) which increase the effort decreases or even interrupts).

Between the two parameters, the ratio is inversely proportional but does not exclude stages in which both volume and intensity will increase or decrease (Negrea, 2016). In the first stage of training beginners or even advanced athletes (in the first period of an annual cycle), the dynamics of the efforts is characterized by a gradual increase of both volume and intensity. The emphasis will be on the increase of the volume, the intensity being increased only insofar as they "do not interfere with the increase of the general volume of effort until the next stage of training" (Mateev, cited by Hantău 2005).

Most of the specialists in different fields, analyzing the 1500 m sample, referred to several essential aspects: the technique of proof, the tactic of the test, but especially the physical and mental training.

From the point of view of the specific effort of the 1500 m sample, at different ages, analyzing the bio-physiological and biochemical aspects specific to semifinders, authors such as Demeter 1981, Dragan, Bota 1997, Hăuică, etc. have highlighted the importance of knowledge by sports practitioners trainers, athletes) of the effects of certain training methods on athletes in preparation, the effects of volume alternation with intensity, the effects of performance sports on athletes at certain ages, etc.

It is known that a good semi-finisher, notably 1500 m, can not be formed if we do not first create a complex multilateral physical training base at the age of the junior, base corresponding to the requirements of the subsequent specialization for the 1500 m .

Physiologically, the internal functions of the body at the age of junior II are sufficiently developed to support the application of the specific resistance efforts encountered in the 1500 m sample.

According to the literature, in order to achieve value results with 20-22 year olds in semifond samples, it is necessary that their activity be organized and scientifically guided for a period of 5-6 years, which means that in order to have results it is necessary for the seniors to start systematic and correctly organized training from the junior age II.

In the training of junior athletes, especially the Junior junior for the 1500 m test, it is necessary to find the optimal training solutions, solutions that require efficient correlations and appropriate dosing between the training means and the methods oriented towards the development of medium durability. The effectiveness of training in semifond samples depends not only on the volume of effort but also on the work intensity and the optimal ratio between intensity and volume in the various preparatory stages. Pliometrics exercises and the difficulty to match driving skills acquired. Variety of these exercises will help prevent boredom and fatigue that can occur during, exercise (Negrea, Negrea, Teodor, 2010).

According to Bompa, (2002) any physical activity determines anatomical, physiological, biochemical and psychological changes. Physical activity efficiency results from the elements that characterize it: duration, distance and repeats (volume), load and speed (intensity), and frequency of performance (density). When planning the dynamics of sports training, these aspects, also called training variables, should be considered. They are shaped according to the functional and psychological characteristics of the competition. It is necessary to determine the component of the focus to achieve the planned performance objective throughout the preparatory stages preceding the competition. As a rule, the focus is on intensity, speed and power sports and volume in resistance sports. Finally, in sports based on the complexity of skills, diversity in training is paramount.

According to Alexe (1993), volume of effort is the total amount of mechanical work performed (the term is synonymous with total labor in physics). In order to appreciate the effort volume, all the



efforts made by the athlete in the training and in the competition must be noted in practice.

After Bompa (2002, Theory and Methodology of Training - periodization) as the first component of the training, volume is the prerequisite of a quantitative order for high technical, tactical and physical achievements. The volume of training, sometimes incorrectly referred to as the length of training, includes the following distinct parts:

- time or duration of training;
- the distance covered or the weight in the unit of time;
- Repeats of an exercise or technical item that the athlete performs at a given time.

According to the same author, the volume implies the total amount of effort made in preparation. Volume also refers to total effort within a lesson or preparation phase. When we refer to the volume of a training phase, we must specify, according to the author, the number of training lessons and the number of training hours and days.

Performance improves by increasing the number of training lessons and the amount of effort put into each lesson in all sports. Recovery is accelerated as soon as the athlete adapts to an increased amount of effort. The increase in volume is based on individual and sporting characteristics.

Methods

In order to correctly assess the volume in preparation, a unit of measure must be chosen. In some sports or sporting events (such as the 1500m sample), the right unit seems to be the space or distance traveled.

In preparation at 1500m, we can calculate two types of volume:

- Relative volume refers to the total time that an athlete dedicates to training in a specific training or preparation phase. Relatively rarely value is of value to the individual athlete. Which means that although the coach knows the total duration of the training, he does not have information about the amount of effort of each athlete in the time unit (Bompa 2002).

- The absolute volume measures, after Bompa, T., the amount of effort deployed by an individual athlete in the time unit and is expressed, as a rule, in minutes. It represents a much better appreciation of the volume of training made by athletes.

INTENSITY - represents, after Alexe (1993), the amount of effort (mechanical work) performed in a time unit. To determine the intensity of the effort, it

is necessary to know both the mechanical work to be performed and the time it was performed.

With regard to the 1500m test, effort intensity refers to the athlete's speed (space / time). After Bompa (2002), intensity is a qualitative component of the performance of a performance athlete over a given period of time. The more an athlete puts more effort into the unit of time, the higher the intensity. Intensity is a function of the nerve impulse force that the athlete uses in training. The strength of a stimulus depends on the load, the speed of performance and the variation of intervals or breaks between repetitions. Finally, according to the same author, an important element of intensity is the psychological request of an exercise. Muscle exercise and CNS involvement by maximum concentration determine intensity in training or competition. It is important to recognize the psychological element of an exercise and to admit that certain sports where physical effort is low (eg shooting, archery, chess) have a certain level of intensity.

The intensity can be measured by the type of exercise. The exercises involving speed are measured in meters / second (m / s) or rate / minute of a movement.

According to the literature, in exercises against resistance or in exercises that develop the speed, a percentage of the maximum intensity is used, where 100% is the best performance. In a 1500 m flat race, best performance means average speed over the given distance (ie m / s).

An alternative method of intensity assessment is based on the energy system used in the activity. This classification (Astrand and Saltin, 1961; Farfel, 1960; Margaria, Ceretelli, Aghemo and Sassi, 1963; Mathews and Fox, 1971) is the best for cyclical sports

After Bompa, the exercise involves, as a rule, both quantity and quality; therefore, it is difficult to differentiate between them in preparation. For example, when a 1500m sportsman runs, the distance and sample time is the volume and the speed of performance indicates the intensity. A relatively different importance given to these components in preparation leads to different effects on adaptation and training. The higher the intensity and the longer it lasts, the higher the energy requirements and the stress on the CNS and the psyche of the athlete.

Long distances can be run if the intensity is small, but the athlete may not maintain the maximum speed beyond the distance. Of course, such a drastic increase in volume will not predominate in an endurance athlete (1500m runner) if the intensity



drops from its maximum, since it already indicates low values on the absolute scale. After Bompa (2002), in order to facilitate an equivalent increase in volume (400% -500%), we must determine a 40% reduction in the highest supermaximal load intensity that an athlete can withstand.

The dynamics of the volume along the stages of training varies according to the sport and its ergogenesis, the training objectives, the needs of the athlete and the competition timetable.

The dynamics of the effort parameters evolution is directed, in particular, at the volume and intensity of the effort. According to this principle, the maximum values of one correspond, as a rule, to low values of the other, never coinciding with the maximum or minimum values of the two parameters. This contradiction occurs in all stages of preparation, regardless of their length (small, medium or large).

Throughout the competitive stages, the inversely proportional ratio between the increase of the intensity and the volume of the effort is increasingly evident, in the sense of the gradual decrease of the work volume due to its increase in intensity (Hantau, 2005).

In the process of adaptation, the nature of the fatigue is also important, not only its depth. Therefore, increasing the volume can not become an end in

Results

Mainly, the training of the investigated subjects was achieved by applying sport training lessons structured on three parts:

- introductory part (preparatory) - includes organizational aspects and preparation for effort (warming);

- the fundamental part - in which it is attempted to achieve the scheduled lessons, by specific means. This part was standardized according to the prepared sample (1500m, 800m, 3000m), the level of training, environment, but also individualized, depending on the possibilities of the athletes;

- Ending part (recovery) - measures necessary to restore the normal functions of the body after the effort.

During the training for the 2016/2017 competition season, the training took place in the form of several types of lessons. Thus, we used:

- general physical training training (increased volume from September to December);
- special physical training training lessons (or lessons for the pre-competitive period of junior II);

itself; it is necessary to obtain the necessary value of the body's response changes. The factors that characterize the resistance effort are:

- intensity - 70-90% of the maximum athletes' possibilities or more than 90%;
- length of working time -
- pause character is active (light running)
- the number of repetitions is organized in series after the athlete can.

The dynamics of the effort parameters in the sport training for the 1500m sample requires the best ratio between volume and intensity of effort, a ratio to be appreciated both in a training lesson and in longer preparation stages.

According to the literature, over a longer period of time the effort is quantified by summing up all the efforts from the stages in the subdivision. The effort parameter, which in the years of the athlete's attitude knows only relative limits, is the intensity. It always grows from stage to stage, from year to year, until the age begins to act limitless on adaptation processes. Unlike intensity, the volume is much more limited by a number of social factors, such as professional obligations, school and other activities for which time is becoming more and more important.

- training lessons for learning and strengthening the technique;

- Training lessons for speed training (In these lessons, intensity was the factor that interested coaches, especially January and February 2017);

- Training lessons for the development of specific resistance (January and February 2017), etc.;

The main means and methods used in preparing the subjects of this paper (according to the discussions with the coaches and observing the training plans) were:

A. The method of continuous efforts has evolved into sports practice in the form of two methodical methods: the marathon method and the fartlek method. The marathon method, initiated by New Zealand's Lydiard, is long-distance running, without breaks, at an affordable, uniform or varied pace, for a long time. The duration of this effort was included in the juniors II investigated within 20 minutes. and 40 min, depending on the level of training (in the subject A.C., being at the beginning of the category and training at J.II, the duration was slightly lower than the other three), the travel speed and the training period. This method was the basic method used at the beginning of the preparatory



period (October to November), but also during the other periods (precompetitive and competitive).

In practice, this method is based on running the run in the form of the following variants:

□ Easy run - uniform tempo with a heart rate of 130 - 150 beats per minute. In the preparation of the investigated subjects it used 3-4 times, per week, at different distances.

□ Long run has been used to increase aerobic effort. This type of running was carried out at a sustained pace, producing a small oxygen load, which led to the increase in the aerobic and anaerobic effort required for the 1500m test at juniors II. It was used 1 - 3 times a week;

□ The long-term run in varied tempo has been applied both to increase the aerobic effort capacity and to increase the anaerobic effort capacity after the adaptation period in the second part of the preparatory period. He followed the race in uniform with a F.C. of 140-150 bpm, to which accelerations were added over distances of 800-2000 m, during which F.C. to climb to 170-180 bpm. It was executed 2-3 times a week.

The Fartlek method (initiator Swedish Homer, but its development was done within the Australian semifond school). This method was used as a means of training in order to develop aerobic and anaerobic exercise capacity, following the alternation of different tremors without being determined in advance. It was performed on flat terrain and on varied terrain. The duration of this effort was set between 30 minutes and 1 hour, depending on the level of adaptation of the subjects being watched.

The dynamics of the volume and intensity of the fartlek method used in the investigated subjects was established as follows: in October and November, acceleration distances with a lower intensity were used, and in precompetitive periods (the second half of December and early January) and competitive (January, February, March) turned to short distances with high intensities. It was used once a week.

B. The Interval Running Method - Founded by W. Ghershler and physiologist H. Reindell - considers intercourse training the "key" of the training system for semifond and fund samples.

This method was used in the investigated subjects by passing a medium or maximum distance alternating with a rest interval. Rest periods were either active or passive, and did not last until the body returned. Rhythmic alternations of return times requests contribute to the development of anaerobic effort when they are running at a pulse of more than

180 beats per minute. and aerobic exercise (mixed) exercise capacity when they are performed at a heart rate of 150-170 bpm.

Acceleration distances for juniors II were in the range of 600-2000 m, aiming at the development of mixed effort capacity.

This intermittent method was performed in several variants that depended on: the length of the high speed running distances, the speed of the distances, the number of repetitions, the duration of the resting intervals and the character of the resting intervals. According to the literature, if one of the mentioned factors changes, there are several variants of the interval training:

□ The short-range or interval-sprint method is used to develop the anaerobic exercise capacity especially during precompetitive and competitive periods at a time interval of 12-14 days. The number of iterations is determined by the length of the contest, the aggregate must not exceed 1.5 of the length of the contest distance. The break between repetitions may be passive for advanced athletes and may be active for high performance athletes and last for 60 to 90 seconds. Repeats can also be performed in 2 to 3 series with breaks between 3 to 5 minutes.

□ Medium Range Method - is used to develop an aerobic effort (mixed) effort throughout the year, once a week. 200 to 400 m running runs are used, with a 90-second rest pause which can be increased if the pulse does not drop to 120 - 130 rpm. The total number of reps must not exceed 2-3 times the contest distance;

□ Long-range method - contributes to the development of an aerobic effort (mixed) effort especially during preparatory and pre-competitive periods. Running runs of 1200 - 3000 m are used, in 2-3 series, with a rest rest of 2-3 minutes to ensure the pulse returns to 120-130 bpm. It is used 1-2 times a week, especially at the end of the preparatory period and during the precompetitive period.

C. Repeat method

In preparing the subjects of this paper, it was mainly used to develop anaerobic exercise capacity. This method is based on repeated running of running distances with a maximum and submaximal speed in which heart rate records values between 180-190 bpm. with recovery pauses that ensure complete restoration. The distances were chosen according to the training period, the objective pursued and the level of training of the juniors II analyzed.



D. Competitive method

The coaches with whom I have discussed have mentioned that they use this method at junior level II as a means of training - running under competitive conditions in the form of control samples, proofs in checking competitions and in objective competitions. Running distances were equal, smaller or larger than the 1500m. The displacement speed was the maximum or near the maximum at that time.

According to the literature, in the modern training methodology two guidelines for the training of the resistance runners are used:

- The oldest and oldest approach is to develop aerobic exercise capacity in the first 2-3 months of training, after which the aerobic anaerobic exercise capacity and the anaerobic exercise capacity are developed. It is often used in the training of beginners and runners of fund and big fund.
- A second orientation and most frequently used lately provides for the parallel development of aerobic exercise capacity, anaerobic effort and mixed effort. This orientation, due to the higher intensity used in training, provides a smaller amount of training and is usually used in the training of semifinders and high performance athletes.

According to the prepared training plans, the total workload at different times, the gradual increase of the effort in the juniors' training II was achieved both in each training lesson and in micro cycles, stages or longer training periods. In longer periods of time the effort is quantified by summing up all the efforts in the smaller stages.

According to the specialists, the effort parameter, which in the age of the athlete's attitude knows only relative limits, is the intensity.

In our founding research, the intensity began to grow, starting with the junior age of II, from stage to stage, from the training season to another, which was visible by comparing the training provided by the 3 juniors born in 1999 and Junior II, in the first year of the category, born in 2000.

In table no. 1 and 2 show the total running volumes achieved by each of the four juniors II surveyed during the 6 months analyzed (October-March) both in the competitive year 2015-2016 and in 2016-2017. We mention that from the talks with the coaches we have detached some aspects of the small difference between the values of the total running volumes given that the tests performed by the juniors are the same except for the VT subject, which instead of 3000 m practice, in addition to 1500 m sample 800m.

Sportiv/ Luna	X 2016	XI 2016	XII 2016	I 2017	II 2017	III 2017	Total Running Volume
I.R.	356 km	424km	450km	475 km	400 km	400km	2505km
I.G.	344 km	423km	446km	495 km	397 km	380km	2485km
V.Ț.	308 km	380km	430km	445 km	386 km	380km	2329km
A.C.	296 km	374km	400km	418 km	378 km	340km	2206km

Table 1 - Total volume of training in October 2016-March 2017

Sportiv/ Luna	X 2015	XI 2015	XII 2015	I 2016	II 2016	III 2016	Total Running Volume
I.R.	318 km	410km	432km	465 km	400 km	360km	2385km
I.G.	314km	400km	438km	482 km	390 km	365km	2389km
V.Ț.	320 km	390km	422km	430 km	370 km	352km	2284km
A.C.	280 km	350km	368km	390 km	366 km	320km	2074km

Table 2 - Total volume of training in October 2015-March 2016

It can be seen from Tables 1 and 2 that in all 4 subjects compared to the winter competition season 2015-2016 the total running volume increased. This is due to two factors:

- Increase and accumulation with one more year of practical experience and adaptation to effort, all subjects adding 1 year of preparation to the winter season last year;

- increasing the number of competitions that led to a longer period of competition and maintaining a slightly higher workload than last year.

However, the total workload of the competitive season in the winter of 2016-2017 is not too high compared to the winter season 2015-2016, considering that all 4 juniors have added 1 year of training. that if the total volume of running did not increase very much, this is explained by the fact that the number of competitions increased and so the



coaches had to maintain a certain level of volume, the competitive period being increased and the intensity of the effort being at the forefront, of course without neglecting the volume.

The first two shows the best results of the juniors II analyzed and because they have been practicing for more than 1500m, the other two specializing shortly on semifond. However, between the first two juniors analyzed there is a difference in total running volumes. At junior I.R. a volume of over 20km less than GI is observed in January, but higher in February and March, which was explained by his coach in that IR also pursued participation in the National Cross Country Championship beginning of April 2017. Thus, its volume dynamics slightly varied from the IG topic, due to a larger number of contests that it participated in January, February and March (5 contests from the FRA's official timetable IG who participated in only 3 competitions, except for both juniors and county or local control competitions).

We have noticed that in all 4 subjects, the highest proportion of the total training volume, according to the training plan and the training sessions of the athletes, is of lasting running, which has been used in the training of each month with intensities and volume different, depending on the pre-competitive or competitive training period.

From the calculation of the light running run used to prepare the juniors II analyzed, the 1500m sample trainees, we have reached an average of 58 km / month. A larger volume of light running was observed in October and November when the body recovers to the required effort.

Other means used:

□ Launched running (average value 41.4 km in the analyzed period from October 2015 to the

cross-country championship in April 2016, V.T., due to the fact that practice 800m instead of 3000m, has a value of 54 km run run during the analyzed period);

□ Special exercises (with an average monthly volume of 30.5 km)

□ Various tempo runs have been used especially during the winter autumn preparatory season as well as during the pre-competitive winter season. The highest volumes of varied tread volumes were recorded in December (62 km) and January (59 km);

❖ Uniform tempo runs higher in the three juniors II who practice the samples of 1500m-3000m (average 74 km / month) compared to the one who specialized on samples of 1500m - 800m (average 68km / month)

• Running with intervals, often used by the investigated subjects, shows high values in January and February, months before the national championships in March. According to the training plan set up by coaches, workloads were about 85% in January and February, so that the intensity will increase to 90-95% by the end of February and early March 2017;

It should be noted that the preparation of all 4 subjects presented in this paper was subordinated to the achievement of the objectives proposed at the beginning of the training period and the new competitive season (Table 3).

Sport junior II	year birth	Sample	Goal Point proposed Season Hall	Goal Point proposed Season Hall
I.R.	1999	1500m	Locul I-III,	4'00" - 4'10"
		3000m	Locul I-III,	8'50" - 8'55"
I.G.	1999	1500m	Locul I-III,	3'58" - 4'05"
		3000m	Locul I-III,	8'45" - 8'55"
V.Ț.	1999	1500m	Locul I-VI,	4'10" - 4'20"
		800m	Locul I-VI,	2'00" - 2'05"
A.C.	2000	1500m	Locul I-VI,	4'10" - 4'20"
		3000m	Locul I-VI,	9'05" - 9'15"

Table 3 - The proposed objectives for the 4 topics



Athlete I.R. has participated in 5 official competitions, accumulating 9 races (4 races in the 1500m test, 4 in the 3000m test and a cross-country cross-country race).

Juniorul I.G. he participated in 3 official competitions (the 2 stages of the Grand Prix in Bucharest and the national championship in Bacau), accumulating only 4 races (2 at 1500m, 2 at 3000m).

V.Ț. he participated in 5 competitions (2 in Bacau, one Grand Prix stage, the national championship in Bacau and the cross-country championship), accumulating 7 races (of which 3 at 1500m, 1 at 3000m, 2 at 800m, one at the cross).

Juniorul A.C. (the smallest of the 4 juniors) participated in only three competitions (a Grand Prix stage in Bucharest, the national junior championship II in Bacau, the cross-country championship), accumulating 4 races (2 at 3000m, 1 at 1500m , 1 at the cross).

In the preparation of the four juniors, the dynamics of the effort parameters in the training were determined to establish the best ratio between the volume and intensity of the effort.

Discussion

Both the practice and the theory of sports training (Dragnea 2005, Alexandrescu 1987, Șiclovan 1977, 1997) support the idea of achieving adequate training at the age of junior in semifond samples (800m, 1500m), training that must achieve an optimal correlation between the two parameters Principles of effort: volume and intensity. Knowing the dynamics of the main parameters of the effort requires (in the annual cycles or mid cycles and microcycles to prepare) the programming of the means so as to lead to changes in volume and intensity values.

According to Mihăilescu, 2001, the dominant feature of semifond runs, and hence the 1500 m running, is that the technique allows the athlete to achieve the movements with efficiency and economy, which in turn allows the distance to travel at a speed higher.

Conclusions

The junior age II is the most appropriate stage for improving the technique, tactics, for 1500m specialization and for training tasks where the volume and intensity dynamics take into account the athletes' specificities and the number of competitions.

At 1500m, as in semifonds, the volume is based on the distance covered in the training, and the intensity is expressed by the speed at which the athlete evolves over that distance.

The increase in the number of competitions determines an oscillatory curve of volume and intensity, but with the maintenance of the values of these two parameters at a high level;

At the junior age of 2, when the 1500m test performance starts, particular attention is needed in terms of training training of sample resistance and establishing a fair balance between work intensity and volume, a ratio that must be strictly individualized character;

□ From the two main parameters of the effort (volume and intensity), the one that will guide and direct the activity at juniors II, to obtain a specific resistance at 1500m, is the intensity, properly metered according to the level of training, and the number of competitions.

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References

- Alexandrescu, D, 1987, Antrenamentul în probele de atletism, Ed. Sport Turism, București.
- Alexe N, 1993, Antrenamentul sportiv modern, Editis, București.
- Bota C, 1997, Fiziologia educației fizice și sportului, Ed. Antim Ivireanu, Râmnicu Vâlcea.
- Bompa T, 2002, Teoria și metodologia antrenamentului. Periodizarea, ED. Ex Ponto.
- Demeter A, 1981, Bazele fiziologice și biochimice ale calităților fizice, Ed. Sport-Turism, București.
- Dragnea A, 2005, Teoria antrenamentului sportiv, Ed. FEST, București.
- Gevat, C, Larion A, 2003, Ilie Floroiu, Ovidius University Press, Constanta.
- Hantău I, 2005, Teoria și Metodica judoului, București.
- Mihăilescu LM, 2001, Atletism. Tehnica probelor., Ed. Universității din Pitești, Pitești.
- Negrea V, Negrea M, Teodor D, 2010, Influence of physical training pliometrics exercises the fifth graders, Ovidius University Annals, Series Physical Education and Sport/“Science, Movement and Health”, Vol. 10, Issue 2, Supplement, 2010, ISSN 1224-7359: 729-731.
- Negrea V, 2016, Metodica jocului de baschet, Ed. Ovidius University Press, Constanța.
- Șiclovan I, 1977, Teoria antrenamentului sportiv, Ed. Sport Turism, București.