THE TECHNOLOGY OF THE EXPERIMENTAL CURRICULUM ELABORATION AIMING THE DRIVING RESISTENCE QUALITIES IN THE SPORTS TRAINING AT JUNIOR MIDDLE-DISTANCE RACE TESTS (AGED 14-15)

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Abstract
The planification capitalizes the information obtained through a clear evidence of the anterior activity, through the evaluation of each stage and period of training but it means the anticipation of the clues' growth of the sports girls in accordance with the training and performance objectives. The synthetizing of the decisions system is realised through the plan of training and which assures the regularity and the continuation in training.
Key words: *general physical training, planification, training means*

INTRODUCTION

The planification is a component, a condition and a coeficient of the trainings' programmation which divides time into functional units in which the means and the methods of their best function are repeated permanently and gradually, in accordance with the objectives of the competition subordinates preparation. The planification has been determined by the structure of the competitional calendar and it aimed the obtaining of some results in some levels of the yearor even dates established at the beginning of the training (Alexe N., and all, 1993). Only a correct planification of the trainings and the usage of the efforts specific to the level of the biodriving qualities, for the perfection of the performances proposed (Dragnea A., Teodoresc Mate S. The sports theory, 2002).

The base form of the planification was the training plan whose basic objective is the assurance of a high level of perfection at a specific moment, usually the main competition, on the basis of a guided evolution and attentively controlled. The number of trainings in one day, week or annual cycle is different on the basis of the test or level of training (Dragnea A., 1996; Ozolin N.G., 1972).

During the training week, the lessons were different on the level of difficulty one was easier than the other), running volume, cardiac frequency, the intensity of the effort and the training method.

The period was made of a total of levels. So, the period can be simple when there is only one objective or double when there are two objectives. In the case of middle distance race runnings, due to the indoor competitions, the division into periods is double (33,6).

The division into periods has had as an aim the participation of the competitors to both competitive seasons, one indoors and the other outdoors. The training has been structured on two periods of training, autumn-winter and spring-summer, two pre-competitive periods (winter and summer) and a period of transition in winter-spring.

THE HYPOTHESIS OF THE RESEARCH

It was supposed that the change of the effort from the mixt area into the aerobic effort area at this category of juniors does not influence negatively the results obtained during the competition but they will have as a result a better general physical training which can be a solid basis of training for the special training from the next training session.

SCIENTIFIC RESEARCH METHODS*:* the analysis and the generalization of the scientific literature methodologically based on the specialisation; the pedagogical observation;the measuring and testing method; the pedagogical experiment; the mathematical- statistic methods of collecting and interpretation of the data; the graphic and table method.

THE CONTENT OF THE EXPERIMENT:

Taking into account the objectives of the training process for the middle distance race at junior III runners in the initial training stage, the result of the opion test which took place with coaches from Romania and the dates obtained in the initial test process, we have elaborated an annual plan of improvement which has been applied to the experimental group in the overall pedagogical experiment.

To realise the experiment there have been proposed the following means to develop the aerobian effort capacity:

- Easy running 6-10 km in tempo; 4'50-5'10/km, F.C. 130-140 b/min.

- Long time running 8 -12 km tempo 4'30-4'20/km.
- Uniform tempo running 4'50-5'00/km; F.C. 150-160 b/min.

To develop the capacity of mixt effort the following methods were proposed:

- Long distance running 4'20-4'00/km; F.C. 160-170 b/min.
- Tempo running 4-8 km tempo 3'50-4'10/km, F.C.=160-170b/min.
- Running on a varied field 4-6 km; 150-160 b/min.
- Running in a varied tempo 8-12 km F.C. 150-190 b/min.
- Running in slope.
- Launched running.
- Repeated running on long distances, intensity 90-95%.

To develop the capacity of anaerobic effort the following methods were proposed:

- Repeated running on short distances (80-200m) intensity 95-100%.
- Running in checking and competitions.

After the research of the exercises that have been used by the two groups os sportsmen involved in the experiment, we can draw the following conclusion: the two groups of sportsmen use all the exercises types.

Both groups of sportsmen have had the same training conditions, meaning the place of doing the training sessions (the stadium, the park, the gym), school programme, effort upholders and means of realxing after the training and competition presence.

Analysing the data from table 1 we can say the following:

- The easy running is dominant in a percentage of 54% in the macro cycle of autumn-winter and of 46% in the macro cycle of spring-summer.
- Long term running 4'50-4'20/km is dominant in a percentage of 57,60% in the macro cycle of autumn-winter and of 42,40% in the macro cycle of spring-summer.
- Long term running 4'20-4'00/km is dominant in a percentage of 57,69% in the macro cycle of autumn-winter and of 42,31% in the macro cycle of spring-summer.
- Tempo running 43,25% in the first macro cycle and 56,75% in the second macro cycle.
- Running on a various ground 64,74% in the first macro cycle and 35,26% in the second macro cycle.
- Running in varied tempo 74,73% in the first macro cycle and 25,26% in the second macro cycle.
- Running in slope 52,72% in the first macro cycle and 47,38% in the second macro cycle.
- Launched running 46,06% in the first macro cycle and 53,94% in the second macro cycle.
- Special exercises of running and jumping 46,94% in the first macro cycle and 53,06% in the second macro cycle.
- Short distances (80-500m) 47,86% in the first macro cycle and 52,13% in the second macro cycle.
- Long distances (600- 2000 m) 36,66% in the first macro cycle and 63,34% in the second macrocycle.
- P.F.G. 53, 65% in the first macro cycle and 46,35% in the second macro cycle.

The experimental group has done trainings after the annual plan we have elaborated in which we underlined the development of the resistence in the aerobic mood, on a higher number of hours for P.F.G., as well as the continuum improvement of the running technique so as it allows us the fulfillment of the competition distance (800m, 1500m), as uniformly as possible and the appearance of the tiredness as late as possible.

The trainings developed by the witness group have taken place on a traditional ground which refers to the general and specific physics training and a correct running technique recommended by The Romanian Athletics Federation, by specialists for the sportsmen from the special athletics classes from the sports high schools .

The evaluation of the training level of the running sportsgirls of junior III middle distance race runners took place in the following order:

- At the beginning of the training period of autumn-winter (15th-30th September 2003).
- At the end of the competitional period of spring-summer (1st-15th July 2004).

The changes that have been taken make reference to the content of the training, as mentioned above, the capacities of aerobic capacities and the the growth of the classes for general physical training being underlined, most of them using unspecified means of athletics, whici, in our opinion, do not influence negatively tje positive result but it makes a solid base for the next perform ances (table 2, fig. 1, 2, 3).

If we analyse the value of the effort volume for the means used to train the junior middle distance race runners III, we can notice that at the experimental group the number of trainings and the number of hours for the physical training have grown as well as the volume of the effort in the aerobic area and the volume of the effort in the mixt area has decreased.

The process of training of the middle distance race runners aims both the general and the specific physical training along the annual training period and, for this reason, various possibilities depending on the training level in which the sportsgirl is.

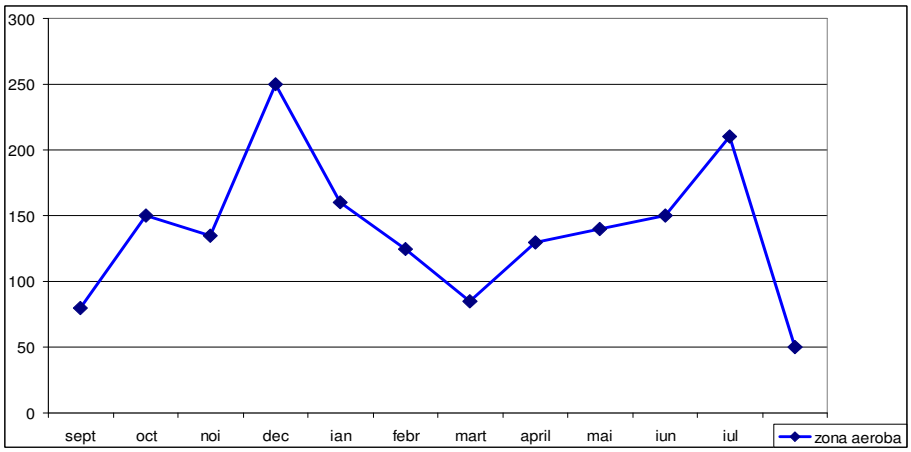

Fig. 1. The distribution of the effort from the aerobic area in an annual cycle of trainings for the middle race runners, the experimental group

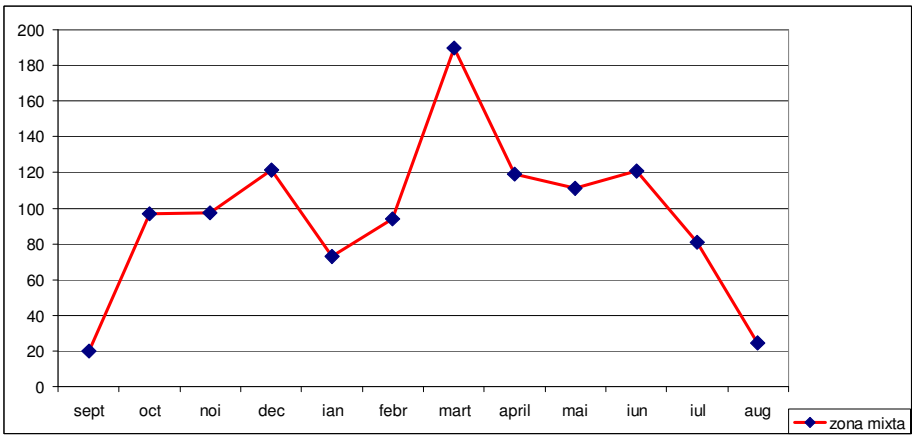

Fig. 2. The distribution of the effort from the mixt area in an annual cycle of trainings for the middle race runners, the experimental group

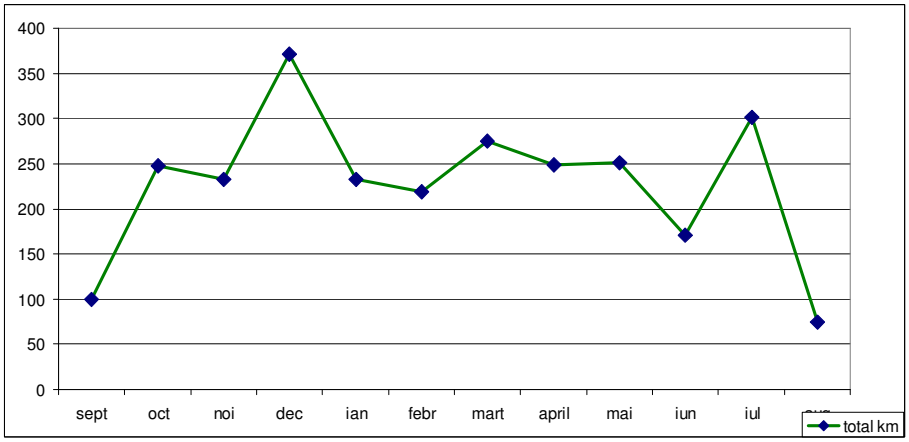

Fig.3. The distribution of the total volume of km in an annual training cycle for the middle race runners, the experimental group

In the first period of training, mainly in November and a part from December, the necessary volume of running will be fulfilled and the level of development of the cardiovascular and breathing systems will grow.

Table 1 The structure of the annual macro cycle of training at the middle distance runner , the experimental group n=15

Nr. crt.	The effort area	Means of training	The months of the annual cycle												Annual total
			9	10	11	12	1	2	3	4	5	6	7	8	
1.	Aerobic	Easy running (km)	40	40	40	65	60	65	50	40	60	50	60	30	600
2		Long term running (km) 4'50-4'20/km	120	110	95	185	100	60	35	90	80	100	150	30	1155
	Total aerobic area km		140	150	135	250	160	125	85	130	140	150	210	60	1755
3.	Mixt	Long term running (km) 4'20-4'00/km	-	15	21	48	15	6	4	35	9	9	18	-	180
4		Tempo running (km)	-	4	6.5	7.5	4	4	25	3	9	12	11	-	86
5.		Running on a various ground (km)	10	10	20	20	20	10	10	20	20	8	8	-	166
6		Running in varied tempo (km)	-	8	20	21	8	8.5	16	16	12	10	-	-	119.5
7		Running in slope (km)	-	10	8.5	12	5	3	10	8	10	12	4	-	82.5
8		Launched running (km)	5	15	16.5	8	11	15.5	12.5	13	18	16	16	8.5	155
9		Special exercises of running and jumping (km)	5	6	5	10	10	10	7.5	12	13	13	7	8	106.5
10		Long distances (km) (300-1000m)	-	-	-	7	7	6.5	3	7	6	6.5	9.5	7	59.5
	Total mixt area km		20	68	97.5	133.5	80	63.5	88	114	97	86.5	73.5	23.5	945
11	Anaerobic	Short distances (km) (80-200m)	-	-	4	12	12	10	6	12	10	8	6	-	80
	Total km		180	229	232.5	395.5	252	210.5	225	268.5	257.5	253.5	252.5	84.5	2780
	Compensatory effort		10	20	30	40	30	30	30	30	30	30	30	30	340
12	P.F.G. (hours)		10	8	8	8	6	6	8	8	8	6	6	2	84

Tabel 2. The main indices of the groups from the experiment

The training indices	The experiment group	The witness group
Number of trainings (no.)	337	330
Aerobic effort (km)/%	1755 63.12%	1535 56.22%
Mixt effort (km)/%	945 33.99%	1235 45.23%
Anaerobic effort (km)/%	80 2.94%	85 3.11%
Total volume (km)	2780	2730
P.F.G (hours)	82	74

During this period, 6 lessons a week are used in which the number of hours of P.F.G. , the volume of running in the aerobic style, the total volume being of 90-100% from the maximum, the following means of training being used: long term running, running on various ground, running in uniform tempo.

In the second part of the period of winter training, called the development period, mainly in december and a part of January, the intensity of the efforts is raised by introducing the trainings in the weekly cycles of trainigs being used the repetitions on long distances, the running in various tempo and the farletck.

The total volume of running is 75-95% from the maximum, the level of the effort in the mixt cycle is reduced and the anaerobic style is introduced in the effort, through the repetative running on short distances.

In the winter competitive period, from February till March, the sportsgirls take part at the indoors competitions, a check of the training level of the functional and neuromuscle systems being taken.

At this level, besides the weekly sessions of training, the precompetitional sessions are introduced, having as a purpose the training of the sportsgirl for the competition, where the total volume of running is 45-65%from the maximum, the volume of the aerobic effort decreasing while the volume of the anaerobic effort increases due to the repetitive runnings on short distances and of running from checkings and competitions.

In the spring period of training, 19th March- 15th May, the volume of the training decreases but the intensity will grow due to the running in slope growth and of repetitions on short distances.

In this period all the body systems develop and the qualities of power grow through the running in slope volume growth and those of jumpings.

The weekly cycles used during this period have a great volume of working and the frequently means of trainig used are: long term running, running in slope and running on long distances.

In the precompetitive summer stage the special competition training is underlined, based on the growth and mentainance the capacity of anaerobic effort. The means used in this period are: long term running, repeated running on short distances, repeated running on long distances.

The volume of the effort with anaerobic character reaches maximum values of 25% from the total volume and the used means are running on short distances.

In the special training of the middle distance race runners, secondary means are used:

- Easy running for warming, ending as a jogged along running during the periods between distances.
- Running in slope used in the second period of the training to develop the muscle power of the legs.
- Running on soft groung, sand, snow which is a useful means to warm the muscles and the ligamentsused in the second period of training.
- Special exercises of running and jumping which are used along the year with a higher volume in the training period.

As supplimentary means of training,except the means of running, sports games are used as well as other sports such as swimming, cycling and the exercises of general physics development , used along the whole year both for the general physical training and the active rest.

Depending on the level of physical training and the level of training, the volume of these means is strictly individualised depending on the level in which the sportsgirl is, to improve the running technique as well as doing a correct volume of effort.

CONCLUSIONS AND PROPOSALS

1. The planification values the information obtained through a clear evidence of the previous activity, through the evaluation of each period of training but it also meant the anticipation of the training signs of the sportsgirls in accordance with the objectives of the training and those of performance. The system of decisions syntetization is realised through the training plan which assures in the same time the rhythmicity and continuacy in training for the experiment group. Tha annual cycle for the experiment group had 52 weeks, having 8 structures, each one having different methodological orientations.
2. The training process of the junnior middle distance race runners III aims both the general physic training and the specific one, with different levels of importance, based on the level of training in which the sportsgirl is.
3. From the analyses of the usedexercises volumes , we can notice growths in the total number of kilometres , the diference being of 50km. Regarding the aerobic level of running it has also been noticed a growth of 63,125 at the experimental group compared to the 56,22% at the witness group as in the same time the effort volume from the mixt area for the experimental group has decreased (33,99% besides 45,23%) compared to the witness group. A growth in the number of general physical training at the experimental group has been noticed.
4. The pedagogical experiment showed that the changing of the accent towards the direction of using the training methods for the general physics training with a different influence compared to those with limited specialisation in training the junior middle race runnersIII (14-15 years old) is benefic not only to mentain the optim dynamic of growing the sports ability but it will allow the avoidance of the forced training at this level of multiannual training.
5. The process of training of the junior middle distance runners III has an individual character, the physical and psyhical characters being necessary to be taken into account, as well as the volume and the intensity of the means of training which has to be connected to the training period. The results of the experiment were conclusive (the experiment group), the

necessity of general physical training adapted to each sportsman and the high level of each motric quality being underlined.

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