

## THE CONTENT'S PLANNING THE PHYSICAL AND TECHNICAL PREPARATION IN SPORT TRAINING OF 14-16 YEAR CYCLISTS FROM THE CYCLING CLUB GALATI

Gabriel GHEORGHIU, Liliana NANU

*„Dunărea de Jos” University of Galati, Romania*

### Abstract

*In modern society's life the mechanic means of transport, the larger increase of careers characterized by intellectuals work in confined spaces, the different means of culture and fun such as: lecture, cinema, theatre, television and computer reduce more and more the movement and the physical effort which finally subjects the man to sedentary. One of the most affordable means of combating the unfavorable effects of sedentary, oversteering and stress is cycling. Practiced as well as, a mean of locomotion and, as a development of the level of physical training of different persons, the cycling is on of those sports which has particular effects in growing the physical and moral assets, by offering the possibility of movement in open-air, and the possibility of mental relaxation. The accommodation function of the organism to the environmental changes are so less required in daily activity; they are put in the situation to manifest in full progress with the occasion of the cycling practice, on windy days or sunny days, or even on cold days and warm days, to the plain or to the hills and to the mountains, it has evident repercussion on the increasing of the resistance to fatigue and to illness. It also has positive effects on mental recreation, by contributing, at the same time, to the recovery of the nervous potential, which is so much required in the professional activity (Dragnea, A., Mate-Teodorescu, S., 2002).*

**Key words:** *cycling, physical and technical preparation, Cycling Club of Galati*

### INTRODUCTION

In addition, cycling constitutes a good way to invigorate the arm's muscles, the feet thighs and the vestal's muscles; simultaneously, it contributes to the cellulite control. Another advantage, good to know, is that the practice of the cycling has healthy effects on the immune system, more precisely, on the cardiovascular and respiratory system. In this way, they help the heart's activity and the circulatory system's operation (Bompa, T., 2001).

**THE PURPOSE of this work** is that to determine the level of the physical and technical training of the 14-16 year cyclists, the teenagers who activate in the Cycling Club of Galati. At the same time, the purpose of this work consists in paying attention to the content's planning of these factors of sports training for the subjects included in this study.

**THE RESEARCH'S** – measuring, recording and analyzing the parameters of the physical and technical training of the 14-16 year teen girls who practice cycling in Galati's Club.

### MATERIAL AND METHODS

The experimental study took part during March 15 – June 30, 2013 (3 months), in four different areas of Galati: the Danube Promenade, The Mc Donald's Park, the Hunters' Lake area and Gârboavele Forest with an effective of 8 subjects, including 6 boys and 2 girls, aged 14 to 16 year old.

### RATED PARAMETERS

Initial and final tests on the level of the **physical training**, the log jump from a take off point (S), dorsal position – lifting in crouch position (A), a number of reiteration against time 30", lying position the back with the pace up-back extension of the arms and legs (T) to the fixed bar, push-ups in the arms (F) standing - bending and stretching the legs – genuflexions (G), against time 30", running speed 50 m (V), running resistance on 1000m (R).

Initial and final test on the level of **technical training**: resistance to pedaling, resistance index and resistance coefficient – test distance 1000m, standard distance – 200m, pedaling speed -200m released, timing the following path: Mc Donald's Park – 800m length, with 25m difference of the level, timing ascension to the hill Hunters' Lake – 7m length, which has 40m difference of the level.

**Statistical methods** were used on the investigated pattern, by using the indicators: the sum of the results on each task applied the arithmetical average, the average deviation and the progress between the two tests.

The recorded **results**, on the level of physical training, were statistically processed on the computer by using the application Microsoft Excel, and they have revealed that the result averages obtained by boys are superior to those obtained by girls. Thus, boys obtained to the task on the long

jump from a take off point the average 208,1cm compared to girls who marked only the average 169,5cm. By numeric comparison of the recorded data from the test of ventral strength, average's deviation is 3,3 repetitions, where boys recorded 19,5 repetitions. The average of the recorded

repetitions to the testing of the back muscles strength was 27,3 repetitions for boys in comparison with girls repetitions' averages that were 19,5 – Table 1.

**Table 1. The recorded results to the initial tests on the level of physical training**

Nr. Crt.	Sex	Tasks of control							
		S (cm)	A (rep.)	E (rep.)	T (rep.)	F (rep.)	G (rep.)	V (sec)	R (min,sec)
1	B	214	21	30	6	20	25	7.3	3'41"
2		205	17	26	5	18	22	7.5	3'46"
3		211	19	25	6	21	24	7.5	3'48"
4		209	19	27	4	16	20	7.7	3'43"
5		207	20	28	5	21	23	7.7	3'47"
6		203	21	28	4	18	21	7.9	4'03"
x		208,1	19,5	27,3	5	19	22,5	7.6	3'54"
7	F	168	12	19	2	11	14	8.9	4'24"
8		171	14	20	3	13	17	8.6	4'06"
x		169,5	13	19,5	2,5	12	15,5	8,7	4'15"
<i>x±m</i>		<i>188,8±19,3</i>	<i>16,2±3,3</i>	<i>23,4±3,9</i>	<i>3,7±1,3</i>	<i>15,5±3,5</i>	<i>19±7</i>	<i>8,1±0,5</i>	<i>3'84"±0,3</i>

By comparing the medium values to the test of running speed 50m, boys' recorded average was of 7,6" and girls' recorded average was 8,7", where as to the test of running endurance on 1000m, boys' average recorded was 3'44", compared to girls' average recorded, that was 4'15".

The elaboration and the application of the experimental syllabus in order to increase the number of the performances in teen cyclists' sport, took place during March 18 – June 22, 2013 (3 months). These were, totally, 45 lessons, in the form of the specific and non-specific cycling workouts, organized 3 or 4 times a week – Table 2.

**Table 2. The training planning of 14 – 16 year cyclists / March 18 – June 20, 2013**

Week	Month	Day													
		Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
1	March	18	V1	19	-	20	VF	21	-	22	R1	23	VF	24	-
2		25	-	26	R2	27	V2	28	-	29	C	30	VF	31	-
3	April	1	F	2	-	3	RV1	4	-	5	F	6	-	7	-
4		8	VF	9	-	10	F	11	-	12	RV2	13	-	14	-
5		15	F	16	-	17	VFi	18	-	19	F	20	-	21	-
6		22	RV3	23	-	24	F	25	-	26	C	27	-	28	-
		29	PR	30	-										
	May					1	-	2	-	3	-	4	-	5	-
		6	-	7	-	8	-	9	-	10	-	11	-	12	-
7		13	-	14	PR	15	RV1	16	-	17	V1	18	PR	19	-
8		20	RV2	21	-	22	V2	23	-	24	F	25	PR	26	-
9		27	RV3	28	F	29	-	30	C	31	VFi				
	June											1	-	2	-
10		3	R1	4	-	5	F	6	-	7	R2	8	PR	9	-
11		10	F	11	-	12	V	13	-	14	F	15	PR	16	-
12		17	RV1	18	-	19	RV2	20	-	21	RV3	22	PR	23	-

After the application of the experimental syllabus on the contents of the physical and technical training of the teenagers cyclists from the Cycling Club of Galati, it was evident that was ameliorated their physical performances, especially, in the task on arms' tractions to the fixed bar, where the progress was situated between 40-50% in the case of boys whereas the progress value of girls indicates 33,3% - 50%. In genuflexions' task, it was achieved an increase of the performances rated between 31,8% - 40% in the case of boys and between 35,2% - 42,8% in the case of girls.

It was also recorded to the applied tests by determining the level of technical training and the significant progress after the fact that they applied the experimental syllabus of training – Table 3.

The most significant progress, in testing of the level of the technical training of the 14-16 year cyclists, was recorded in the task of pedaling speed – 1000m with 200m standard where the progress of the boys was rated between 13,35% - 17,83%. As well as, to the task of pedaling speed on 7m with 40m difference of the level, where boys' progress was between 14,85% and 16,44%, whereas girls' progress was rated over 15%.

**Table 3. The recorded progress among the initial and final tests to the evaluation to the level of technical training of 14 – 16 year cyclists**

Subjects	Test results / progress	Tests			
		Progress speeds			
		1000 m	200 m	800 m	700 m
1	TI	25,71	32,66	17,82	22,79
	TF	21,82	30,25	15,91	19,84
	P	17,83%	7,97%	12,01%	14,87%
2	TI	24,75	32,13	17,28	21,82
	TF	21,30	30	15,40	18,95
	P	16,2%	7,1%	12,21%	15,15%
3	TI	23,81	31,73	16,52	20,11
	TF	20,93	29,75	14,77	17,38
	P	13,76%	6,66%	11,85%	15,71%
4	TI	25,06	32,28	17,44	22,43
	TF	21,43	30	15,57	19,53
	P	16,94	7,6%	12,01%	14,85%
5	TI	22,42	30,43	15,79	18,79
	TF	19,78	28,57	14,19	16,15
	P	13,35%	6,51%	11,28%	16,35%
6	TI	21,09	28,43	13,68	17,78
	TF	18,56	26,66	12,20	15,27
	P	13,63%	6,64%	12,13%	16,44%
7	TI	18,77	25,33	9,72	16,03
	TF	16,51	23,68	8,47	13,92
	P	13,69%	6,97%	14,75%	15,16%
8	TF	19,46	25,52	10,75	17,18
	TI	17,06	24	9,44	14,82
	P	14,07%	6,33%	13,87%	15,92%

## CONCLUSIONS

1. After the processing and approaching of the data reprinted from the comparison of the recorded results to the testing of the level of physical and technical training of teen boys and girls, the practitioners from the Cycling Club of Galati, it is confirmed the hypothesis of work, according to which, if in the process of training of teen cyclists are used syllabuses and metrical rational structures in their preparation, therefore it can be recorded superior value to testing the level of the physical and technical training of tested

children and, implicitly, the growing of the performances in sports.

2. To all, physical and technical tasks applied, the results of boys were superior to the results recorded by girls.

3. The specific means used in the sport training of the 14-16 year cyclists had a considerable function on the harmonies and physical growth, as well as, on toning of the executors' muscles, in bio-metrical advancement qualities, in restraining a great varieties of ingenuities and manners of the specific movement,

and also, to the amelioration of execution's procedure of pedaling on different lands.

#### REFERERENCES

1. Bompa, T., (2001). Dezvoltarea calităților biomotrice, Editura Ex Ponto, București.
2. Cîrstea, G., (2000) Teoria și metodică educativei fizice și sportului, Editura AN-DA, București.
3. Dragnea, A., Mate-Teodorescu, S., (2002). Teoria antrenamentului, Editura FEST, București.
4. Drăgan, I., (1996). Selecția și orientarea medico-sportivă, Editura Didactică și Pedagogică, București, 1996.
5. Epuran, M., (2005). Metodologia cercetării activităților corporale - Exerciții fizice - Sport – Fitness, Editura FEST, Ediția 2, București.
6. Horghidan, V., (2000). Problematika psihomotricității, Editura Globus, București.
7. Nanu, L., Drăgan, T.M., (2010). Manual de gimnastică, Editura GUP, Galați.
8. Tudor, V., (1999). Capacitățile condiționale, coordinative și intermediare – componente ale capacității motrice, Editura RAI, Imprimeria Coresi, București.
9. Verza, E., (2000). Repere psihogenetice și psihodinamice în cunoașterea și evaluarea copilului, Editura Pro Humanitate, București.
10. Zbenghe, T., (2002). Kinesiologie. Știința mișcării, Editura Medicală, București.