

Substantiation of training loads in the annual training cycle of young football players

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Abstract

Objective of the study was to reveal the rational ratio of specific and non-specific means of training in the annual training cycle of 6–7-year-old football players.

Methods and structure of the study. As part of the experiment, a one-year pedagogical experiment was organized, in which two groups of 6–7-year-old football players participated, 16 people each. The experimental factor was the ratio of specific and non-specific means of training in the annual training cycle: group 1 - 25:75%; group 2 - 30:70%. In accordance with traditional approaches, exercises aimed at teaching the technique and tactics of the game, as well as bilateral games, were considered specific means. At the same time, exercises related to the development of motor qualities, exercises from other sports, outdoor games and relay races were classified as non-specific means.

Results and conclusions. The characteristics of indicators of physical, technical and psycho-physiological readiness of beginner football players are obtained, which must be relied upon when planning means of training in the annual cycle, and used to control various aspects of the preparedness of beginner football players.

Keywords: *annual cycle, loads, specific and non-specific, football players.*

Introduction. Football, as the most popular and spectacular among all sports on the planet, continues to be the focus of many researchers. At the same time, most of these studies are related to the development of leading provisions for the training of qualified and young football players. At the present stage, there is not enough evidence-based work that deals with the development of optimal approaches to building the training process of beginner players [1, 2]. On the one hand, the need to find effective training schemes for qualified and young football players is not denied, and on the other hand, one of the ways to optimize such training is to substantiate the effective structure of the training process for novice football players.

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ganized, in which two groups of 6–7-year-old football players participated, each of which included 16 people. At the beginning of the experiment, there were no significant differences between the indicators of physical, technical and psychophysiological readiness of beginner football players of the two groups.

The experimental factor was the following ratio of specific and non-specific means of training in the annual cycle of training: group 1 - 25:75%; group 2 - 30:70%. Such ratios of funds were due to the recommendations of specialists [1, 2]. In accordance with traditional approaches, exercises aimed at teaching the technique and tactics of the game, as well as bilateral games, were considered specific means. At the same time, exercises related to the development of motor qualities, exercises from other sports, outdoor games and relay races were classified as non-specific means.

Testing the level of motor qualities and technical readiness was carried out on the basis of control ex-



Indicators of physical, technical and psycho-physiological readiness of football players aged 6-7 at the end of a one-year experiment

Tests	Group 1 (n=16)		p	Group 2 (n=16)	
	\bar{X}	m		\bar{X}	m
Running 30 m from a high start, s	5,97	0,03	<0,05	6,21	0,02
Jump up from a place, see	26,92	0,49	<0,05	24,18	0,47
Shuttle run 4x9 m, with 3x10 m	10,82	0,04	<0,05	11,42	0,05
Brush strength (right), kg	12,14	0,04	<0,05	9,47	0,05
Hand strength (left), kg	11,08	0,05	<0,05	9,19	0,05
600 m run, min	2.58,8	0,51	<0,05	3.01,5	0,50
Balance test, s	6,75	0,04	<0,05	4,11	0,05
Juggling with a ball, times \cdot min ⁻¹	10,52	0,06	>0,05	10,81	0,06
Strikes at a distance, m	21,15	0,06	>0,05	20,87	0,07
Latent period of a simple visual-motor reaction, ms	294,5	4,18	<0,05	306,8	4,21
Latent period of the reaction of choosing one of the three stimuli, ms	449,2	5,02	<0,05	463,6	5,13
Latent period of the reaction of choosing two of three stimuli, ms	543,3	5,08	>0,05	554,8	5,15
Functional mobility of nervous processes, s	77,3	0,46	<0,05	79,4	0,49
The strength of nervous processes, signs in 5 minutes.	489,6	7,01	<0,05	468,9	6,98

ercises: 30 m run from a high start; jump up from a place; shuttle run 4x9 m; hand strength (right and left hand); 600 m run; balance test; latent period of a simple visual-motor reaction; latent period of the reaction of choosing one of three and two of three stimuli; functional mobility of nervous processes; strength of nervous processes.

Results of the study and their discussion. Testing the indicators of physical, technical and psycho-physiological readiness of beginner football players of two groups five months after the start of the year-long experiment showed an improvement in the studied characteristics in both groups. At the same time, there were no statistically significant differences between the indicators of the two groups. According to the testing, which was carried out at the end of the one-year experiment (see table), a significant advantage was recorded for the athletes of group 1, in which the ratio of specific and non-specific loads in the annual cycle was used, equal to 25:75%. Football players aged 6-7 from group 1 outperformed ($p < 0.05$) their peers from group 2 in the following tests: 30-meter run from a high start; jump up from a place; shuttle run 4x9 m; hand strength (right and left hand); 600 m run; strikes at a distance; balance test; latent period of a simple

visual-motor reaction; latent period of the reaction of choosing one of three and two of three stimuli; functional mobility of nervous processes; strength of nervous processes.

Conclusions. The ratio of specific and non-specific loads was substantiated experimentally, which is 25:75% in the annual macrocycle of training of 6-7-year-old football players.

In the course of the experiment, the characteristics of the indicators of physical, technical and psycho-physiological readiness of beginner football players were obtained, which must be relied upon in this planning of funds in the annual cycle, including those used to control various aspects of the preparedness of beginner football players.

Prospects for further research in this direction are related to the search for rational schemes for constructing annual training cycles for 8-10-year-old football players.

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