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FEATURES OF THE AGE FORMATION OF CHILDREN AND ADOLESCENTS 11 - 16 YEARS OLD SPORTS

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Annotation
With the use of anthropometric methods, an assessment of the physical development of schoolchildren who go in for physical culture within the framework of the school curriculum and adolescents of pubertal age who go in for swimming at the age of 12 to 15 years has been carried out. A comparative analysis was carried out in the growth of indicators of total and partial sizes in the process of individual development. In the compared groups, differences were found not only in the increase in the parameters of the physique, but also in the timing of the intensification of “jump” growth processes.

Keywords: The researches are carried spent according to physical development of the schoolboys and swimmers physical conditions in dynamics (changes) from 12 till 15 years.

For the theory and practice of physical education and sports training, data on the patterns of individual development of a person is of interest. Most of the results of the studies carried out are based on a large experimental material and are devoted to the development of periods of postnatal ontogenesis, starting with the determination of age intervals for each period, the identification of sensitive and critical periods of development, the systematic formation of the most important morpho-functional systems (Kuzin, B.A. Nikityuk, 1996, V.K.Balsevich, 2000, Safarova D.D. 2015). This problem attracted the attention of researchers as a problem investigating the level of response of children of certain age periods to influences that develop a favorable development and improvement of their vital motor skills, skills and abilities (Lyakh V.I., 1990, A.G. Komkov, E. V. Antipova, 2003). In this regard, the provision of specialists working in children and youth sports with knowledge related to the individual characteristics of adolescents is a necessary condition for sports science.
Sports prospects are defined as an integral assessment of physical development, the type of an athlete's physique. The leading role in this is assigned to morpho - functional

indicators, 80 - 90% determined by heredity. In addition, among the model characteristics include indicators characterizing special working capacity, technical - tactical indicators and other indicators limiting the level of sports results. Most of the specialists working with children are still guided only by the development of physical qualities, not taking into account the type of variant of individual development, that is, they are based only on the ascertaining form of selection. Therefore, selecting adolescents for sports sections and conducting intraspecific orientation, as a rule, in the most difficult biological period from 10 to 15 years, the coach prepares an athlete for today's competitions, not taking into account his "adaptation" perspective. Based on the above, we can conclude that the early selection system needs new research confirming the need for a detailed comprehensive assessment of the abilities and capabilities of children and adolescents to achieve high results in the chosen sport.

The objective of this study was to study the characteristics of the age formation of children and adolescents (11-16 years old) engaged in swimming, taking into account gender and distance specialization based on anthropometric characteristics, reflecting the integral process of physical development relative to schoolchildren who are not involved in sports.

Research methods:

1. Anthropometry - determination of total body size in girls and boys of different age groups 11-16 years old, who in for swimming in children's sports schools, water pools. The control group consisted of a sample of students from school # 142 in Tashkent, who do not go in for sports.
2. Methods of mathematical statistics.

Results of the conducted research and their discussion.

In modern conditions, when the level of training and competitive loads is very high, it is more and more difficult for athletes and coaches to find reserves for increasing sports achievements. Therefore, experts increasingly pay attention to the technical readiness of an athlete, with which individual, most often morphological features are associated (Dorokhov R.N., 2002, O.I. Pavlova, 2003).

Model characteristics of athletes are important criteria in the management of athletes' training. Currently, not only the final, but also the stage model characteristics of athletes are widely used, which can change significantly with the growth of sportsmanship. To draw up a general morphological picture of athletes, one can limit

ourselves to the following features: length and weight, weight - height indicator - these are the most important characteristics for assessing the physique of children and adolescents, therefore, in our studies, we limited ourselves to the indicated anthropometric indicators. These characteristics have a predictive value at the initial stages of a long-term training process and retain their information content as sportsmanship grows. This approach allows for the initial selection not to carry out laborious and cumbersome research and can be quickly used in the practice of sports. The study of the dynamics of the physical development of children and young swimmers 11-16 years old revealed that the values of anthropometric indicators are higher than those of their peers who are in identical conditions, but do not go in for sports. These differences also increase with age. According to the results of observations, it was highlighted that such anthropometric indicators of the body as weight and length of the body are the most variable and are influenced by training and determine the specific characteristics of each athlete. Young swimmers showed an earlier onset of the period of intensive growth of the main anthropometric indicators than schoolchildren. In our study, the maximum weight gain in girls-swimmers is observed between 14-15 years. If girls at 14 years old weigh 52.7 kg, then 15 years old 57.5 kg, then by the age of 16 a sharp jump was noted and the weight gain was 7.5 kg. The increase in body weight coincides with the increase in body length. However, in girls, the increase in body length annually stably averages 3-4 cm from 11 to 13 years old, then boys are ahead of girls in terms of development rate.

Comparative assessment of the physical development of schoolchildren and young swimmers 11-15 years old, engaged in swimming - Table 1.

Age	Static indicators	**Boys**					
		Body length (cm)		Bodyweight (okg)		Weightandheightindex	
Pupils	Valid differences	Swimmers	Pupils	Swimmers	Pupils	swimmers	Pupils
11 years	n	10		10	10	10	10
	x	150,5	140, 6	37,9	35.40,2	0,248	0,263
	Sx	1,094	1,211	1,108	0,834	0,0055	0,0063
12 years	n	12	10	12	10	12	10
	x	155,8	143.9	46,4	40.4	0,291	0,286
	Sx	1,438	1,775	1,379	1,016	0,0075	0,0091
	by t criterion	0,001	0,001	0,001	0,001	0,001	0,001
13 years	N	16	15	16	15	16	16
	X	165,0	150.9	50,2	40,3	0,308	0,298

	Sx	0,995	1,053	6,938	1,943	0,0073	0,0067
	by t criterion	0,001	0,001	0,001	0,001	0,001	0,001
14 years	n	20	15	20	15	20	15
	x	169,4	157,4	56,3	47,7	0,332	0,317
	Sx	0,653	1,059	0,656	0,853	0,0088	0,0057
	by t criterion	0,001	0,001	0,001	0,001	0,001	0,001
15 years	N	16	16	16	16	16	16
	X	171,7	163.5	60,5	54.6	0,350	0,353
	Sx	0,850	2,232	0,880	1,590	0,0079	0,0085
	by t criterion	0,001	0,001	0,001	0,001	0,001	0,001
16 years	n	17	19	17	19	17	19
	X	177,6	169, 3	65,0	60,1	0,369	0,367
	Sx	0,868	1,920	0,901	1,530	0,081	0,0095
	Worthy of distinction. by t criterion	0,001	0,001	0,001	0,001	0,001	0,001

For adolescent children who are not involved in sports, the following indicators are given in the scientific literature:in boys, by the beginning of adolescence, puberty is just beginning, on the contrary, in girls it largely captures even in the previous period. During this period, there is a further increase in the growth rates of the pubertal jump, which applies to all body sizes. The greatest gains in body length in girls occur between 11 and 12 years, throughout the body - between 12 and 13 years; in boys, respectively, between 13 and 14 and 15 years old. The growth rates of most sizes in boys are especially high, as a result of which at 13.5-14 years old they overtake girls in body length (II cross of growth curves). By the end of adolescence, body sizes are 90-97% of their final size. During adolescence, there is a restructuring of the main physiological systems of the body (muscular, circulatory, respiratory, etc.). By the end of the period, the main functional characteristics of adolescents approach those of an adult organism. In boys at this time, the muscular system is developing especially intensively (B.A. Nikityuk, V.P. Chtetsov, 1990). In the studies of D.A. Dyatlov et al., 2003, it is shown that regular sports swimming in children of 8-10 years old improves the indicators of the cardiovascular system.

The authors revealed physiologically and clinically adequate response of the main hemodynamic parameters, reflecting the oscillatory process of outflow and flow of blood to the heart in boys and girls 8-10 years old, swimming in relation to the control

group. The noted pattern was more significant in 10-year-old boys and girls who regularly go in for swimming, while remaining within the age physiological norms. According to N.Zh.Bulgakova, T.S.Morozova, 2003 swimming lessons, along with gymnastics in children, contribute to the development of correct body posture. Schoolchildren who studied according to the developed program at the end of the academic year had a positive increase in the indicator of the state of posture by 3.5 points. In the control group, schoolchildren's posture worsened - 2.3.

The specificity of the impact of various orientations has also been established, in particular, specialization at various distance distances has a specific effect on the age-related development of the main morphological signs of children. The minimization of the values of almost all anthropometric signs, both in body length and in weight, was revealed in young athletes specializing in long distances.

Conclusions

1. Growth rates of children and adolescents 11-16 years old correspond, in general, to the standard developed indicators of physical development. However, for the young swimmers we examined, there are shifts in the timing of the onset of pubertal leaps in girls and boys. The greatest gains in body length in girls who do not go in for sports take place between 11 and 12 years old, in body weight between 12-13 years. In the surveyed sample of girls engaged in swimming, it was not possible to identify a pubertal jump in body length. The annual increase in body length ranged from 3 to 4 cm. However, the jump in body weight, identified between 14 and 16 years, should be noted.
2. Normally, in boys, an increase in growth rates is noted between 13 and 14 and 14 and 15 years. In the boys of childhood and adolescence we examined, a pubertal jump was noted between 13 and 14 years old, and then between 15-16 years, both in body length and in body weight, that is, a shift in the time of the second pubertal jump was noted.
3. There are differences in weight and body length between young athletes specializing in short and long distance. In general, there is a minimization of indicators in terms of weight and body length in athletes specializing in long distances relative to athletes specializing in short distances.

Literature

1. Balsevich - Human Ontokinesiology, M: // “Theory and practice. Physical cult ", 2000 - 275 pages.
2. Bulgakova T.S. Morozova - Method of visual diagnostics of the state of posture of schoolchildren and correction of pre-pathological states of posture by means of recreational swimming. Vii. Int. scientific. Congress "Modern sport and sport for all", Moscow 2003, pp. 22 - 23. 3.
3. Dorokhov R.N. - Foundations and perspectives of age-related somatotyping. "Theory and practice.physical cult ", 2000, No. 9, pp. 11-12.
4. Dyatlov D.A. et al. - Study of the state of the arch of the foot of students from the Gomel region. Vii. Int. scientific. Congress "Modern sport and sport for all", Moscow 2003, pp. 53 - 54.
5. V.I. Lyakh - Sensitive periods of the development of coordination abilities of children at school age. // "Theory and practice. Physical cult ", M., 1990, No. 3, pp. 15-18.
6. A.G. Komkov, E.V. Antipova - Formation of physical activity of children and adolescents as a social - pedagogical problem. // "Theory and practice. Physical cult ", M: 2003, No. 3, pp. 5-8.
7. Kuzin V.V., Nikityuk B.A. - Integrative biosocial anthropology. "Physical culture, education and science", Moscow, 1996
8. Nikityuk B.A., Kogan B.I. - Adaptation of the skeleton of athletes. Kiev "Health", 1989, pp. 32 - 59.
9. Nikityuk B.A., Chtetsov V.P. - Human morphology, Moscow: Moscow State University, 1990, pp. 15 - 36, pp. 158 - 171.
10. Pavlova OI - Influence of running track and field athletics, morphological status and functional development of adolescents, boys and girls. Vii. Int. scientific. Congress "Modern sport and sport for all", Moscow 2003, pp. 131 - 132.
11. Safarova D.D. Sport morphology / darslik Tashkent Izhod Print Publishing House, 199s.