

# PERFECTION OF PRIMARY CHILDREN'S SELECTION FOR SPORT GYMNASTIC TRAINING IN KURDISTAN

Abdulvahid Dlshad Nihad Kharkov State Academy of Physical Culture

**Abstract.** *Purpose:* to find ways of perfection of primary children's selection for sport gymnastic training in Kurdistan. *Material:* questioning of specialized physical culture HEEs' students in Ukraine and Kurdistan (n=120, n=120). Physical condition and physical qualities of 7 years' age boys of Ukraine and Kurdistan (n=56, n=52) were assessed. *Results:* only 10 Kurdistan students had opportunity to start specialized sport trainings by recommendations of professional coach. Ineffective influence of mass media in involvement of youth in sport trainings was noted. Physical condition level of children corresponds to standards. In most of motor tests Ukrainian children showed better results that their peers from Kurdistan. *Conclusions:* in Ukraine 42% of children join sports practicing owing to parents' wish. In Kurdistan 25% of children join sports practicing by recommendations of physical culture teachers. The next by importance factor is example of peers (21% and 33%). In nine from twelve motor tests Kurdistan children yield to their Ukrainian peers. In 20 meters' run and in shuttle run results of Kurdistan children are better. Confident distinctions were found in quantity of chin ups in lying position.

Key words: physical condition, physical fitness, gymnasts, boys, students, indices, Ukraine, Kurdistan.

## Introduction

Reformations in autonomous Kurd republic (Iraq) regards physical education and sports as the most important mean of children's and youth's health strengthening, As involvement of them in healthy life style and creation of conditions for opening embedded by nature child's individual abilities [17, 19, 23, 26]. Leading specialists in physical culture and sports think that selection of children for practicing any kind of sports is a system of organizational-methodic measures of complex character. This system includes pedagogic, social, psychological and medical-biological methods of research. On the base of their application children's bents and abilities for functioning in sports are detected [3, 6, 7, 9, and 10].

In specialized children's sport schools of Ukraine the process of preparation of masters of sports in sport gymnastic takes from five to seven years. High complexity of modern competition programs in sport gymnastic is possible only as result of careful professional selection of trainees. It actualizes demand in studying of problem of children's selection for practicing this kind of sports [8, 18, and 21]. System of sport gymnastic in Kurdistan republic is now at the stage of formation. In our previous works we determined that specialists in physical culture and sports of Kurdistan consider the existing system of children's selection for sport gymnastic practicing in Kurdistan to be ineffective. They also point at absence of common, reliable tests and scientific recommendations on their usage [1, 30].

Specialists in sport gymnastic [4, 5, 22] think that in the process of gymnasts' training it is necessary to control health condition of trainees, consider dynamic of their physical condition indicators, abilities for mastering technique the chosen kind of sports. Primary selection consists of two stages: preliminary and main. This stage determines suitability of novices for sport gymnastic training. At preliminary stage external characteristics of trainees are assessed, their bents and abilities are tested [6, 7].

The problem of national Arabian physical education was elucidated in works of well-known Arabian scientists. They found [2, 15, and 27], that formation of sport training system is influenced by many factors: historical traditions, preaching religion, social and cultural values, demographic characteristics. In this context we shall regard involvement of seven years' age boys in sport gymnastic training in Kurdistan.

### Purpose, tasks of the work, material and methods

*The purpose of the research:* is to find ways of perfection of primary children's selection for sport gymnastic training in Kurdistan.

*Hypothesis:* studying and implementation of children's selection for sport gymnastic training in Ukraine will facilitate preparation of highly qualified gymnasts in Kurdistan.

<sup>©</sup> Abdulvahid Dlshad Nihad, 2015

http://dx.doi.org/10.15561/18189172.2015.1201



*The tasks of the research:* 1) to analyze trends in children's and adolescents' involvement in sports practicing in Ukraine and Kurdistan; 2) to conduct comparative analysis of physical condition and motor fitness levels of seven years' age Ukrainian and Kurdistan boys.

*Material and methods of research:* we carried out questioning of physical culture institute in Koya town (autonomous republic Kurdistan, Iraq) and students of physical culture academy in Kharkov (Ukraine). In total 120 persons from every HEE participated in the questioning. The questioning was used for analyzing of wide spectrum of reasons, which facilitate children's and adolescents' involvement in sports practicing [2, 13, and 25]. The questionnaire offered ready answers, opening of different reasons for starting sport practicing. Uniformity of answers was conditioned by possibility of choosing of only one answer among all. For assessment of confidentiality of answers percent difference (Ukrainian and Kurdistan) we used method of study of parts' significance [11].

Coefficient *z* was calculated by formula:

$$z = \frac{|v_1 - v_2|}{\sigma}$$

Where  $v_1, v_2$  – percent results of two samples,

$$\sigma = \sqrt{\nu(1-\nu)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}, \ \nu = \frac{\nu_1 n_1 + \nu_2 n_2}{n_1 + n_2}.$$

Critical values of z: for  $p=0.05 z_{cr}=1.96$ ; for  $p=0.01 z_{cr}=2.58$ .

For comparative analysis of physical conditions and physical fitness of Ukrainian and Kurdistan boys we tested 56 and 52 boys respectively. With the help of different indices we determined type of body composition. Kettle's index was calculated as relation of child's body mass to square body length (in meters). Erisman's index was calculated as difference of chest circumference and half of height indicator. Brugsh's index was found by calculation of chest circumference relation to body height. The following physical qualities were assessed: strength, quickness, flexibility, dexterity, speed-power abilities, and Ruffle's index [3, 4, 12, and 20].

#### **Results of the research**

It was determined that in Ukraine 17% of physical culture academy students started their sport practicing by proposition of coach. In Kurdistan only 8% of physical culture institute students started their sports practicing after proposition of coach. The highest differences between reasons of children's involvement in sports practicing were found in offers of physical culture teachers and parents' wishes (P<0.01).

Not high amount (n=10.8%) of physical culture institute (Koya) had opportunity to start specialized sports trainings by recommendations of professional coach. It is explained by the fact that at present system of sports training is in phase of active formation in Kurdistan [1, 29].

Great number of sportsmen started sports practicing by offer of physical culture teacher (25%). It is explained by specific features of children's leisure organization in Kurdistan. For example, in summer vacations (from May 15<sup>th</sup> to September 15<sup>th</sup>) all, who wish, can visit centers of children's creativity. In these centers trainings in all kinds of arts are conducted (painting, music, dances and etc.) as well as sports trainings. All lessons are free of charge and 400-500 children visit these centers simultaneously. Sports trainings are conducted by coaches and physical culture teachers [16, 23].

In Ukraine high percentage (42%) of children join sport circles' trainings basing on their wishes and possibilities. It should be noted that in system of children's and adolescents' physical education in Ukraine and Kurdistan too little competitions are conducted (8% and 11%). Mass media also pay little attention to involvement of youth in sports practicing (4% and 8%), (see table1).



problems of physical training and sports

Table1. Reasons, which facilitate starting of sports practicing by specialized HEEs students of Ukraine and Kurdistan

Nº	Variants of answers	Results, %	Confidentiality		
		Ukrainian	Kurdistan		
		students	students n=	z	Р
		n=120	120		
1.	Offer of coach	17	8	1.95	P>0.05
2.	Offer of physical culture teacher	8	25	3.46	P<0.01
3.	Parents' wish	42	14	4.75	P<0.01
4.	Example of peers	21	33	2.18	P<0.05
5.	Participation in sport competitions	8	11	0.66	P>0.05
6.	Mass media means (TV, internet and etc.)	4	8	1.33	P>0.05

It is of common knowledge that body sizes and proportions are of substantial prognostic significance and influence on efficiency of sport functioning in different kinds of sports. We analyzed morphological functional characteristics of 7 years' age boys of Ukraine and Kurdistan. Mean values of body mass and body length did not differ confidentially and correspond to international standards of world health protection organization (WHPO) [4, 5, 6, and 14]. However, mean results of Ukrainian boys are higher than indicators of their Kurdistan peers. Less anthropometric indicators of Kurdistan children correspond to requirements of sport gymnastic. Body composition type of children was determined visually and with the help of indices of Kettle, Erisman and Brugsh. It should be noted that by indices of Erisman and Brugsh the received results of Ukrainian and Kurdistan boys yield to standards (see table 2).

		Results	Results				
N⁰	Parameters	Ukraine,	Ukraine, n=56		an,	Standards	Student's criterion
		$\overline{X}$	v	$\overline{X}$	v		(t <sub>κp</sub> -2.0)
1	Body mass	26.79	17	24.5	16	20-26.4 <sup>2</sup>	0.25
		20.79				21.1-24	
2	Body length, cm	126.02	26.03 5	120.0	4	116.4-127.0 <sup>3</sup>	0.07
Z	Body length, chi	120.05				117.5-123.5	
3	Chest circumference, cm	62.2	6	60.4	10	59 – 62.5	0.09
4	Kettle's index, kg/ m <sup>2</sup>	16.6	11	17.01	12	15.0 – 18.5	0.15
5	Erisman's index, cm	-0.95	10	0.4	13	+2 +4	0.12
6	Index of Brugsh,%	49	9	50.3	10	53-63	0.06

## Table 2. Morphological functional indicators of 7 years' age Ukrainian and Kurdistan boys

Testing of boys' physical fitness was conducted in compliance with normative on general physical fitness of primary (first-second years) training by academic program for children's sport schools of Ukraine [12, 24].

By mean values of pressing ups in lying position Kurdistan boys yield to their Ukrainian peers (6 times and 5 times). In this test the highest variation coefficients were 96% and 93%, minimal quantity -1 time and maximal -23 times. However, mean indicators of hanging on bent arms were high in both groups and exceed normative (12.4 sec. and 12.6 sec.). Ten Kurdistan boys could not fulfill chin ups in lying position. Mean result of this test of Ukrainian children was 10 times. It corresponds to normative. This test was difficult for the tested in respect to coordination (V - 92%; V - 55%), (see table 3).

<sup>&</sup>lt;sup>2</sup> WHOP standards

<sup>&</sup>lt;sup>3</sup> WHOP standards

	Parameters	Results					Student's
Nº		Ukraine	Ukraine, n=56		n, n=52	Normative	criterion
		$\overline{X}$	v	$\overline{X}$	v		(t <sub>κp</sub> -2,0)
1	Pressing ups in lying position, times	6.5	96	5.4	93	7-15	0.78
2	Hanging on bent arms, sec.	12.4	52	12.6	54	9-11	0.23
3	Chin ups in lying position, times	10.2	55	2.0	92	8-16	2.15
4	Torso rising in sitting position during 1 minute, times	24.0	20	16.05	36	22-30	1.03
5	Long jump from the spot, cm	121.0	14	103.56	18	100-110	0.27
6	High jump from the spot, cm	18.2	43	17.27	37	22-30	0.23
7	20 meters' run, sec.	5.5	8	5.33	34	4,6-4,3	0.06
8	Shuttle run 4X9 m, sec.	15.6	10	14.14	26	14,8-13,6	0.37
9	Legs' rising up to 90° angle in hanging position, times	9.2	73	8.81	60	3-6	0.49
10	Forward bending in sitting position, cm	3.5	42	3.3	79	1-4	0.79
11	Bridge, points	3.6	13	3.2	17	4-5	0.19
12	Ruffiet's index, conv. un.	12.5	18	11.75	19	6-16	0.05

#### Table 3. Physical fitness level of 7 years' age boys from Ukraine and Kurdistan

In fulfillment of torso rising in sitting position during one minute Kurdistan boys showed mean result 16 times (below average). Long jump from the spot was executed by both groups of children at rather high level (121 cm and 103.56 cm). In high jump from the spot the results were below normative. When fulfilling this test children faced coordination difficulties. Kurdistan children fulfilled shuttle run better than their Ukrainian peers (14.14 sec. and 15.6 sec.). In test for flexibility Kurdistan boys showed results a little lower that Ukrainian. Cardio-vascular system was tested with Ruffiet's test. The received mean values of Ruffiet's index (12.5 conv.un. and 11.75 conv.un.) correspond to standard for this age. Individual results of children were in the range from 7.2 conv.un. to 15.2 conv.un. They also correspond to standard.

Thus, morphological-functional characteristics of seven years' age Kurdistan and Ukrainian boys do not differ substantially. Mean height-weight indicators of Kurdistan children were a little less but it is more suitable for sport gymnastic. Indices of children's physical condition (indices of Brugsh and Erisman) were lower than standard. Cardio vascular system's condition by Ruffiet's index also was normal. In nine from twelve motor tests Kurdistan boys yield to their Ukrainian peers. In shuttle run and in 20 meters' run results of Kurdistan children were better.

We registered some better mean motor tests' results of Ukrainian children. It would be correct to think that children of both tested groups do not differ significantly by physical condition and motor fitness (t gr.-2.0; P>0.05). Only in one test (chin ups in lying position differences were confident: t -2.15; P<0.05.

## Discussion

The received results confirm literature data about influence of certain social organization on system of sport trainings and sport selection [1, 7, 8]. Abdulvahid D.N. [2], Ahmad M. K [22] point at common character of physical culture laws' functioning in different countries.

Results of questioning, conducted by us, confirm validity of studying of common mechanisms of youth's involvement in healthy life style through sports' practicing. In further works we shall consider Kurdistan family traditions and demographic characteristics [26, 27].

Our work confirms the data of Tair R.X. M.M. [26] and Xabdul Salam M.M [30] about physical condition of Kurdistan children in respect to normative, worked out for sport gymnastic departments of Ukrainian children sport school [13]. Results of the research permitted to speak about absence of confident distinctions in physical condition and physical fitness of Ukrainian and Kurdistan 7 years' age boys. It gives ground for further application of Ukrainian system of children's primary selection for sport gymnastic in Kurdistan.

#### Conclusions

1. The highest quantity of Ukrainian children (42%) starts sports practicing owing to parents' wish. In Kurdistan the highest quantity of children (25%) starts sports practicing by recommendation of physical culture teachers. Second by significance for Ukrainian and Kurdistan children was peers' example (21% and 33%).

2. Mean indicators of Ukrainian and Kurdistan 7 years' age boys' physical condition correspond to standard. There were no confident differences by anthropometric data between the tested groups of children.

3. In tests for motor fitness seven years' age Ukrainian and Kurdistan boys showed the following results: pressing ups in lying position – 6 times and 5 times; hanging on bent arms – 12 sec.; chin ups in lying position – 10 times and 2 times; torso rising in sitting position during 1 minute – 24 times and 16 times; long jump from the spot - 121 cm and 103 cm; 20 meter' run – 5 sec.; shuttle run – 16 sec. and 14 sec.; legs' rising in hanging position – 9 times; Forward bending in sitting position – 3 cm; gymnastic bridge – 3 points.

Both tested groups do not confidently differ by indicators of tests for motor fitness. Exclusion was quantity of chin ups in lying position: t -2.15; P<0.05.

*The prospects of further researches* imply perfection of children's primary selection process for sport gymnastic practicing in Kurdistan at the account of existing Ukrainian methodic of sport selection.

### Acknowledgements

The research has been fulfilled in the frames of complex scientific project "Theoretical-methodological principle of personal physical culture formation in children and youth as the basis of their health" (state registration number 0113U001205).

## **Conflict of interests**

The author declares that there is no conflict of interests.

## **References:**

- Abdulvakhid DN. Osobennosti otbora detej dlia zaniatij sportivnoj gimnastikoj v sovremennom Kurdistane [Selection of children for sport gymnastic trainings in modern Kurdistan]. Slobozhans'kij naukovo-sportivnij visnik 2015;5(49):7–12. (in Russian)
- Abdulvakhid DN. Osobennosti formirovaniia deiatel'nostnoj sostavliaiushchej lichnosti uchenikov mladshej, srednej, starshej shkoly i studentov instituta fizicheskoj kul'tury v respublike Kurdistan [Formation of activities' component of primary, secondary and supreme pupils' and physical culture institute students' personalities in Kurdistan republic]. *Naukovo-pedagogichni problemi fizichnoi kul'turi* 2015;10(65,15):5-10. (in Russian)
- Ancyperov VV. Sistema nachal'nogo obucheniia iunykh gimnastov tekhnike dvigatel'nykh dejstvij. Doct. Diss. [System of junior gymnasts' primary training to motor actions' technique. Doct. Diss.], Volgograd; 2008. (in Russian)
- 4. Apanasenko GL, Kozakevich VK, Korovina LD. Uroven' somaticheskogo zdorov'ia, ego sviaz' s fizicheskim razvitiem i prognozirovanie zabolevaemosti podrostkov [Level of somatic health, its connection with physical condition and prognostication of adolescents' morbidity]. *Valeologiia* 2003;1:19–24. (in Russian)
- 5. Bar-Or O. Zdorov'e detej i dvigatel'naia aktivnost' [Children's health and motor functioning], Kiev: Olympic Literature; 2009. (in Russian)
- Botiaev VL. Analiz sootvetstviia perspektivno-prognosticheskim modeliam koordinacionnoj podgotovlennosti iunykh gimnastok, zanimaiushchikhsia na nachal'nom etape specializirovannoj podgotovki [Analysis of junior girl-gymnasts coordination fitness to perspective prognostic models at primary stage of specialized training]. *Teoriia i praktika fizicheskoj kul'tury* 2014;10:94–97. (in Russian)
- 7. Gaverdovskij IuK. *Teoriia i metodika sportivnoj gimnastiki* [Theory and methodic of sport gymnastic]. Moscow: Soviet sport; 2014:1. (in Russian)
- 8. Gaverdovskij IuK. *Teoriia i metodika sportivnoj gimnastiki* [Theory and methodic of sport gymnastic]. Moscow: Soviet sport; 2014:2. (in Russian)
- 9. Platonov VN. *Obshchaia teoriia podgotovki sportsmenov v Olimpijskom sporte* [A general theory of preparation of sportsmen in Olympic sport], Kiev: Olympic Literature; 1997. (in Russian)
- Kazimezh Kokhanovich, Andzhej Kokhanovich. Somaticheskie priznaki iunykh gimnastov v sisteme special'noj sportivnoj podgotovki [Somatic symptoms of junior gymnasts in system of special sport training]. *Teoriia i* praktika fizicheskoj kul'tury 2014;5:31 -34. (in Russian)



- 11. Paniotto VI, Maksimenko VS. *Kolichestvennye metody v sociologicheskikh issledovaniiakh* [Quantitative methods in sociological researches], Kiev; 2003. (in Russian)
- 12. Eretik AA, Tereshchenko IA, Dobrovol'skij E. Sportivna gimnastika [Sport gymnastic], Kiev; 2003. (in Ukrainian)
- Sutula VO, Sutula AV, Golik AS, Abdulvahid DN. Features of formation of the individual students in secondary and high school. *Pedagogics, psychology, medical-biological problems of physical training and sports* 2014;3:70-74. http://dx.doi.org/10.6084/m9.figshare.936986
- 14. Spirin VK. *Myshechnaia aktivnost' i zdorov'e detej* [Muscular functioning and children's health], Great Luke; 2001. (in Russian)
- 15. Abdel MB. *The proposed approach to the study of physical education at the elementary school in Iraq*, November; 2003.
- 16. Aboud Hussein Kamel al-Azzawi. Building a measure of the strength of the psychological endurance to the players first class for some 30 individual games in Iraq Kurdustan, March; 2004.
- 17. Ahmad MK, Abdulshwan SH. System of physical education and health of man. Alexandria; 2007. (in Arabic language)
- 18. Chasr A. Gemnastics coach and athletic. Cyprus: Golden gem; 2009.
- 19. Development strategy of sport in the Iraqi Olympic Committee. Alsumaria News. Baghdad, the global organization of solidarity. Available at: http://www.alsumaria.tv/news/61116/alsumaria-news/ar (accessed 06.08.2012).
- 20. Dr. Hussein Ali Knbar. Iraq Academy Sports. The development of physical and technical skills and tactical and psychological athletes, College of Basic Education: gamah Mustansiriya; 2013.
- 21. Habas CS. The curriculum and its impact on the development of certain motor skills in child gymnast. 1423; 2002.
- 22. Khantush MZ, ilal SX, Mrad A. *Technical instruction and guideline principlles gymnastics and physical exercise*. Musl: Universitiet Musl; 2013.
- 23. Khusen D. Development of physical internalss, tactical and psychological skills of sportsmen College of base formation. Mustarsria: Academy of sport of Iraq is University of Mustarsria; 2013.
- 24. Resan Khuraibet. Strength training theories Maaov Thanon Hantoush and others: technical, educational principles of gymnastics and physical exercise, University of Mosul; 2012.
- 25. Saeb aR. *Scientific bases of the training exercises on the faculties of physical education*. Baghdad ;news Baghdad University; 1979.
- 26. Tair RX. An effect of curriculum is in development of some physical attributes and motor skills, necessary for the students of backward students. *SUMARIA* 2002;8(11):4-21.
- 27. Mahmoud Daoud. The development of Iraqi sport in the light of the overall quality administration. 2008.
- 28. Vose Jacob, Adel Abdul Basir. Scientific theories and Basis of training in gymnastics. Dar thought; 2012.
- 29. Ammar al-Hakim, Jassim MD. Ways of development of sports in Iraq. *Newspaper pratha*. Available at: http://burathanews.com/news/171314.html (accessed 01.10.201)
- 30. Xabdul Salam MM. Gymnastics for beginners. Askandaria: Universittet Sulemania; 2002.



#### Information about the author:

Abdulvahid Dlshad Nihad; http://orcid.org/0000-0002-3749-1842; dlshad\_dubai@mail.ru; Kharkov State Academy of Physical Culture; Klochkovskaya str. 99, Kharkov, 61022, Ukraine.

**Cite this article as:** Abdulvahid Dlshad Nihad. Perfection of primary children's selection for sport gymnastic training in Kurdistan. *Pedagogics, psychology, medical-biological problems of physical training and sports*, 2015;12:4–10. http://dx.doi.org/10.15561/18189172.2015.1201

The electronic version of this article is the complete one and can be found online at: http://www.sportpedagogy.org.ua/html/arhive-e.html

This is an Open Access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited (http://creativecommons.org/licenses/by/4.0/deed.en).

Received: 22.08.2015 Accepted: 29.08.2015; Published: 10.09.2015