Feartures of selection of children for occupations by artistic gymnastics in modern Kurdistan

Abstract. Purpose: to study the organizational and pedagogical conditions of selection of children for occupations existing in the republic Kurdistan artistic gymnastics. Material and methods: questioning of 24 trainers on artistic gymnastics and experts in physical culture of the republic Kurdistan was carried out. The general questions of selection and methodical features of selection of children for occupations by artistic gymnastics in Kurdistan were studied. Results: questioning revealed absence of the general approved tests and scientific recommendations concerning their use, dependence of quality of selection on experience of the trainer. Conclusions: experts in the field of physical culture and sport consider inefficient the existing system of selection of children for occupations artistic gymnastics in Kurdistan; gymnastics coaches consider necessary testing’s at children of a level of development of flexibility, dexterity, abilities to manifestation of dynamic force and preservation of dynamic balance.

Keywords: artistic gymnastics, sports selection, physical qualities, abilities.

Statement to a problem. In the social transformations happening in the autonomous Kurdish republic which is a part of Iraq, the special place is allocated for the solution of welfare tasks, cultural and educational policy of a humanistic orientation, education of the younger generation making more than a half of all population of the republic. In this process the physical culture is considered as the most important means of strengthening of health of children and youth, development in them of moral and strong-willed qualities, education of their public activity, the responsible relation to study and work [2, 12]. In this regard the gymnastics role, as historically developed set of specific means and methods of harmonious physical training of children and youth increases [6, 7]. System of artistic gymnastics in the republic Kurdistan are now in a formation phase that will actualize need of studying of a problem of selection of children and teenagers to occupations by this sport.

Analysis of the last researches and publications. Leading experts in area of physical culture and sport [4, 10] consider that selection for occupations for children this or that sport represents the system of organized and methodical actions of complex character including pedagogical, sociological, psychological and medico biological methods of research on the basis of which use inclinations and abilities of children and teenagers for sports activities come to light. In artistic gymnastics at a stage of initial selection by means of complex supervision and control tests abilities of children to occupations are defined by this sport. Leading experts on artistic gymnastics [3, 5, 8] consider that in the course of training of gymnasts it is necessary to define a state of health engaged, to consider dynamics of indicators of their physical development, ability to training of equipment of the chosen sport.

Communication of work with scientific subjects. Research is carried out within the complex scientific project “The Teoretiko - metodologichesky Principles of Formation of Personal Physical Culture at Children and Youth as Bases of Their Health” (number of the state registration: 0113U001205).

Research objective. To study the organizational and pedagogical conditions of selection of children for occupations existing in the republic Kurdistan artistic gymnastics.0113U001205).

Research problems.
1. To study the general questions of selection of children for occupations by artistic gymnastics in the republic Kurdistan.
2. To study methodical features of selection of children for occupations by artistic gymnastics in the republic Kurdistan.

Material and methods of research. 24 leading experts in area of physical culture and sport of the republic Kurdistan took part in research. Questioning was carried out with gymnastics coaches, teachers of physical culture at high schools, with gymnastics teachers at three universities (, Which, Mr. Erbile, Mr. Sulimaniya). Besides the secretary of federation of gymnastics of Kurdistan, the judge of the Iraqi union of gymnastics took part in questioning the head of the Union on gymnastics of Mr. Erbil. Directors of managements of physical culture and sport of also took part in our research. Which and Mr. Erbil, director of the center of youth sport and children of. Which, responsible in the Ministry of Education of the republic Kurdistan for the organization of sports competitions at schools, three doctors of science, and also young teachers and the teacher of physical culture in academies and schools.

Questions of the questionnaire affected the general condition of system of selection of children for occupations by artistic gymnastics in Kurdistan, opened methodical bases of implementation of process of selection in artistic gymnastics, allowed to point out the existing defects of control of training of gymnasts [1, 7, 13].

For an assessment of reliability of a percentage difference of answers of respondents the method was used researches of the importance of a difference of parts [9]. Counted z coefficient on a formula:

$$z = \frac{|v_1 - v_2|}{s},$$

$v_1, v_2$ – percentage results of two selections.
\[ s = \sqrt{v(1-v)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)} \quad v = \frac{v_1n_1 + v_2n_2}{n_1 + n_2} \]

Critical values \( z \): for \( p=0,05 \) \( z_{cr} = 1,96 \); for \( p=0,01 \) \( z_{cr} = 2,58 \). Coherence of experts decided on the help of coefficient of a conformation of Kendal (\( w \)) which was calculated by drawing up tables of ranks. Statistical data processing was carried out on the personal computer with use of a spreadsheet of "EXCEL" and universal statistical STATISTICA package.

**Content of the main material.** For the analysis of the received results of questioning answers of respondents are submitted as a percentage. The percentage ratio for experts in gymnastics and for the respondents who don’t have specialized experience on gymnastics was calculated and also the percentage ratio for all questionnaires was calculated. Results of researches are presented in table 1, in the table the results indicating lack of a reliable difference between opinions of trainers on gymnastics and experts in physical culture (tab. 1) are highlighted in bold type.

| №   | Questionnaire questions                                                                 | Results (%)                   | Reliability assessment |
|-----|----------------------------------------------------------------------------------------|-------------------------------|------------------------|
|     |                                                                                       | gymnastics coaches (n=14)     | experts on F.K (n=10)  | all respondents (n=24) | Z       | P       |
| 1   | Whether the system of selection existing now in Kurdistan in artistic gymnastics is effective? |                                |                        |                        |         |         |
| a   | yes                                                                                    | 7,1                           | 4,2                    | 10,7                   | P<0,01  |         |
| b   | no                                                                                    | 92,9                          | 100                    | 95,8                   | 0,4     | P>0,05  |
| 2   | Specify shortcomings of the existing system of selection:                               |                                |                        |                        |         |         |
| a   | absence of the general approved tests and scientific recommendations concerning their use | 100                           | 90                     | 95,8                   | 0,57    | P>0,05  |
| b   | dependence of quality of selection generally from experience, an initiative, responsibility of the trainer who makes selection | 50                            | 60                     | 54,2                   | 1,01    | P>0,05  |
| c   | low informational content of the used tests                                           | 28,6                          | 70                     | 45,8                   | 4,95    | P<0,01  |
| d   | uses of outdated tests                                                                | 28,6                          | 50                     | 37,5                   | 3,14    | P<0,01  |
| e   | Lack of system of selection as that                                                   | 35,7                          | 70                     | 50                     | 3,76    | P<0,01  |
| f   | Your option                                                                           | 21,4                          | 10                     | 16,7                   | 3,83    | P<0,01  |
| g   | At selection of children for occupations by artistic gymnastics on what first of all you turn attention: |                                |                        |                        |         |         |
| h   | state of health                                                                       | 28,6                          | 50                     | 45,8                   | 3,14    | P<0,01  |
| i   | physical development and features of a constitution                                   | 78,6                          | 35,7                   | 66,7                   | 3,86    | P<0,01  |
| j   | on the level of their physical fitness                                                | 57,1                          | 50                     | 62,5                   | 0,72    | P>0,05  |
| k   | psychophysiological features                                                          | 42,9                          | 28,6                   | 41,7                   | 2,13    | P<0,05  |
| l   | personal behavioural features                                                         | 50                            | 50                     | 58,3                   | 0,0     | P>0,05  |

As a result of questioning came to light that the vast majority of respondents consider inefficient the existing system of selection of children for occupations to artistic gymnastics in Kurdistan (95,8%). Essential shortcomings of system of selection, according to respondents, it is considered: absence of the general approved tests and scientific recommendations concerning their use (95,8%), dependence of quality of selection generally from experience, an initiative, responsibility of the trainer who makes selection (54,2%). They also noted that at selection of children for occupations by artistic gymnastics first of all it is necessary to pay attention to the level of physical fitness (62,5%) and to personal behavioural features engaged (50%).

However, on some questions the opinion of experts was significantly shared. Gymnastics coaches consider that the system of selection after all exists as they participate in this process, make a maximum of efforts, use informative tests (35,7% and 70%; P ≤0,01). At selection of children for gymnastic activity of 50% of experts in physical culture consider, an essential factor a state of health of children (P ≤0,01), 78,6% of trainers on gymnastics first of all consider physical development and features of a constitution of athletes (P ≤0,01). It is also necessary to note that four respondents pointed to lack of system of preparation of trainer’s shots on artistic gymnastics in Kurdistan (16,7%).
was estimated by respondents on five-point system [7, 13]. For the analysis of results average values of the importance of each physical quality, coefficient of a variation and an average rank (tab. 2) were calculated.

| Physical qualities and motive abilities | Gymnastics coaches n=14 | Experts in physical culture n=10 | All experts n=24 |
|----------------------------------------|-------------------------|-------------------------------|-----------------|
|                                        | So-so value (X)         | variation factor (%)          | So-so value (X) | variation factor (%) | So-so value (X) | variation factor (%) |
| 1. Flexibility                         | 4.5                     | 16.9                          | 9.5             | 4.5                   | 15.7              | 10                | 4.5 | 16.1 | 9.71 |
| 2. Dynamic force                       | 4.46                    | 9.2                           | 9.39            | 4.7                   | 14.4              | 10.55             | 4.58 | 11.4 | 9.92 |
| 3. Reaction speed                      | 4                       | 25.9                          | 7.93            | 3.5                   | 37.4              | 5.9               | 3.54 | 29.8 | 7.08 |
| 4. Maximum force                       | 3.93                    | 35.2                          | 7.64            | 3.7                   | 33.4              | 6.85              | 3.69 | 34   | 7.31 |
| 5. Dexterity                           | 3.82                    | 23.4                          | 7.5             | 3.9                   | 28.2              | 8.25              | 3.85 | 25   | 7.79 |
| 6. Dynamic balance                     | 3.82                    | 25.5                          | 7.43            | 4.1                   | 22.6              | 7.65              | 3.79 | 23.7 | 7.52 |
| 7. Softness and plasticity             | 3.61                    | 23.4                          | 6.79            | 3.8                   | 31.1              | 6.45              | 3.4  | 25.7 | 6.65 |
| 8. Endurance                           | 3.39                    | 28.9                          | 6.11            | 3.5                   | 37.4              | 5.7               | 3.19 | 31.4 | 5.94 |
| 9. Spring ability                      | 3.25                    | 41.9                          | 6.11            | 3.3                   | 21.2              | 5.8               | 3.17 | 34.7 | 5.98 |
| 10. Static balance                     | 3.25                    | 40.2                          | 5.93            | 3.6                   | 35.6              | 5.45              | 3   | 37.7 | 5.73 |
| 11. Speed                              | 3.21                    | 42.6                          | 6.04            | 3.3                   | 36.7              | 6.15              | 3.15 | 39.5 | 6.08 |
| 12. Static force                       | 2.64                    | 40.2                          | 4.54            | 2.7                   | 31.9              | 5.85              | 2.67 | 39.4 | 5.06 |

Table 2

The importance of physical qualities of athletes at selection in artistic gymnastics

Was defined that gymnastics coaches consider the most significant physical qualities and abilities at selection of children flexibility of 16,9% (X=4.5 points) and dynamic force (X=4.46 point). Experts in physical culture estimated importance of flexibility also at 4.5 points, but they estimated the importance of dynamic force slightly above, at 4.7 points. Opinion of all experts in the importance of these physical qualities in artistic gymnastics are coordinated, variation coefficient from 9,2% to 16,9%.

Most of trainers on gymnastics the motive abilities following on importance allocated reaction speed point; % V-25,9). At selection of children for gymnastic activity trainers ambiguously treated importance of the maximum force.

Gymnastics coaches estimated the importance of dexterity and ability to keep dynamic balance at 3.82 points, however more coordinated opinions of trainers were on the importance of dexterity (% V-23,4 against 25,5%). Softness and plasticity, according to most of trainers, are also necessary for successful occupations (% V-4 allocated reaction speed point; % V-25,9). At selection of children for gymnastic activity trainers ambiguously treated importance of the maximum force.

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Estimates by trainers of importance for gymnastic activity of a spring ability, static balance, speed and static force are non-uniform variation coefficients from 40,2% to 41,9%. Experts in physical culture slightly above trainers estimated dynamic force (% V-3,9, gymnastics 61 points; % V-23,4). Experts in gymnastics defined identical average ranks for endurance and a spring ability (r=6,11). Estimates by trainers of importance for gymnastic activity of a spring ability, static balance, speed and static force are non-uniform variation coefficients from 40,2% to 41,9%. Experts in physical culture slightly above trainers estimated dynamic force (% X=4.7 point), dexterity 9 points) and static force pointHigh coefficients of a variation on the majority of the received average results of an assessment of physical qualities caused the necessity to carry out the analysis of coherence of expert estimates on the matter. By means of a universal statistical STATISTICA package coefficients Kendall’s konkordation for coaches on the gymnast (W-0,162), for experts in physical culture (W-0,214) and the general for all experts were calculated.
(0,167). Points the received coefficients to the low level of coherence of experts in determination of the importance of 12 physical qualities and abilities at selection of children in artistic gymnastics. Thus, experts showed coherence only in an assessment of the importance of flexibility and dynamic force, including them “leaders” (an average rank from 9,39 to 10; % V≤16,9) at selection of children for occupations by artistic gymnastics. Experts determined by important quality for gymnastic activity dexterity (r=7,79) and ability to preservation of dynamic balance (r=7,52) (fig. 1). (X - 2,7 point, dexterity 9 points) and static force pointHigh coefficients of a variation on the majority of the received average results of an assessment of physical qualities caused the necessity to carry out the analysis of coherence of expert estimates on the matter. By means of a universal statistical STATISTICA package coefficients Kendall’s konkordation for coaches on the gymnast (W=0,162), for experts in physical culture (W=0,214) and the general for all experts were calculated (0,167). Points the received coefficients to the low level of coherence of experts in determination of the importance of 12 physical qualities and abilities at selection of children in artistic gymnastics. Thus, experts showed coherence only in an assessment of the importance of flexibility and dynamic force, including them “leaders” (an average rank from 9,39 to 10; % V≤16,9) at selection of children for occupations by artistic gymnastics. Experts determined by important quality for gymnastic activity dexterity (r=7,79) and ability to preservation of dynamic balance (r=7,52) (fig. 1).). point), dexterity 9 points) and static force pointHigh coefficients of a variation on the majority of the received average results of an assessment of physical qualities caused the necessity to carry out the analysis of coherence of expert estimates on the matter. By means of a universal statistical STATISTICA package coefficients Kendall’s konkordation for coaches on the gymnast (W=0,162), for experts in physical culture (W=0,214) and the general for all experts were calculated (0,167). Points the received coefficients to the low level of coherence of experts in determination of the importance of 12 physical qualities and abilities at selection of children in artistic gymnastics. Thus, experts showed coherence only in an assessment of the importance of flexibility and dynamic force, including them “leaders” (an average rank from 9,39 to 10; % V≤16,9) at selection of children for occupations by artistic gymnastics. Experts determined by important quality for gymnastic activity dexterity (r=7,79) and ability to preservation of dynamic balance (r=7,52) (fig. 1).

Artistic gymnastics experts determined by the following physical qualities and abilities, significant on a rank, for occupations the maximum force (an average rank from 6,85 to 7,64), reaction speed (an average rank from 5,9 to 7,93), softness and plasticity (an average rank from 6,45 to 6,65). Important quality noted speed (average ranks ≥ 6,04). A spring ability and endurance gymnastics coaches defined a high rank (r=6,11). Experts in physical culture don’t consider important for gymnasts a spring ability and endurance. Were noted by all experts insignificant for selection of children in artistic gymnastics of high level of manifestation of static balance and static force (r≤5,93).

Conclusions.
1. Results of research showed that experts in the field of physical culture and sport consider inefficient the existing system of selection of children for occupations artistic gymnastics in Kurdistan (95,8%). Essential shortcomings of system of selection is absence of the general approved tests and scientific recommendations concerning their use (95,8%).
2. At selection of children for occupations by artistic gymnastics first of all it is necessary to pay attention to the level of their physical fitness (62,5%). Gymnastics coaches in the practical activities consider predictive models of features of a constitution of athletes (78,6%).
3. The most significant physical qualities at selection of children for occupations of the sports Gymnastic experts consider the dynamic force and flexibility point and point respectively). Gymnastics coaches in achievement of reliability of selection in this sport consider necessary testings at children of a level of development of flexibility, dexterity,
abilities to manifestation of dynamic force and preservation of dynamic balance. Prospects of further researches the low level of coherence of trainers on republic Kurdistan gymnastics in an assessment of the importance of physical qualities at selection of children for occupations by artistic gymnastics assume enrichment of system of selection by experience of those countries in which such work has deep traditions. (X-4.58 experts consider the dynamic force and flexibility point and point point respectively). Gymnastics coaches in achievement of reliability of selection in this sport consider necessary testings at children of a level of development of flexibility, dexterity, abilities to manifestation of dynamic force and preservation of dynamic balance. Prospects of further researches the low level of coherence of trainers on republic Kurdistan gymnastics in an assessment of the importance of physical qualities at selection of children for occupations by artistic gymnastics assume enrichment of system of selection by experience of those countries in which such work has deep traditions. (X-4.58 experts consider the dynamic force and flexibility point and point point respectively). Gymnastics coaches in achievement of reliability of selection in this sport consider necessary testings at children of a level of development of flexibility, dexterity, abilities to manifestation of dynamic force and preservation of dynamic balance. Prospects of further researches the low level of coherence of trainers on republic Kurdistan gymnastics in an assessment of the importance of physical qualities at selection of children for occupations by artistic gymnastics assume enrichment of system of selection by experience of those countries in which such work has deep traditions. (max-5 experts consider the dynamic force and flexibility point and point point respectively). Gymnastics coaches in achievement of reliability of selection in this sport consider necessary testings at children of a level of development of flexibility, dexterity, abilities to manifestation of dynamic force and preservation of dynamic balance.

**Prospects of further researches**

The low level of coherence of trainers on republic Kurdistan gymnastics in an assessment of the importance of physical qualities at selection of children for occupations by artistic gymnastics assume enrichment of system of selection by experience of those countries in which such work has deep traditions. (V-11.4% and V-16.1% - experts consider the dynamic force and flexibility point and point point respectively). Gymnastics coaches in achievement of reliability of selection in this sport consider necessary testings at children of a level of development of flexibility, dexterity, abilities to manifestation of dynamic force and preservation of dynamic balance. Prospects of further researches the low level of coherence of trainers on republic Kurdistan gymnastics in an assessment of the importance of physical qualities at selection of children for occupations by artistic gymnastics assume enrichment of system of selection by experience of those countries in which such work has deep traditions. (V-11.4% experts consider the dynamic force and flexibility point and point point respectively). Gymnastics coaches in achievement of reliability of selection in this sport consider necessary testings at children of a level of development of flexibility, dexterity, abilities to manifestation of dynamic force and preservation of dynamic balance.

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