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Students' Motivation of 7-8 Grades To the Gymnastic Exercises

Abstract. Purpose: to study the influence of individual psychological characteristics of athletes to the reliability of their competitive activities. **Objectives:** 1) to identify level of technical and psychological preparedness of gymnasts 10-13 years old to competitive activity; 2) to identify the relationship between competitive reliability and the psychological features of athletes. **Material and Methods:** The study involved eight gymnasts. Individual characteristics of the psychological reliability and emotional states in the conditions of competitive stress were determined by three questionnaires such as a test for assessment of mental reliability, HAM method and "Thermometer" method. Technics of performance of competitive exercise with hoop was estimated with the help of method of expert assessment. **The results:** it is determined that the artistry is manifested better in the young athletes in the competitive condition. The assessment of the technique body work and equipment in the competition is lower than in training. The assessment of competitive exercise is closely linked with the mental state of young gymnasts. **Conclusions:** competitive reliability is linked with mood, motivational-energetic characteristics of gymnasts ($r = -0,8$; $r = -0,7$). The largest number of relationships is obtained by the rapid "Thermometer" method: the mood of athletes ($r = -0,7$); satisfaction of training process, emotional stability, preparedness to compete, attitude to teammates ($r = -0,6$).

Keywords: artistic gymnastics, competition results, the reliability of the mental and emotional state.

Introduction. The transition to a new type of humanistic and innovative education was provided in the national doctrine of development of Ukrainian education [5] providing a high growth of intellectual, cultural, spiritual and moral potential of the individual and society. The orientation of physical culture's subject was determined in this document. Personal orientation, desire to lead a healthy way of life are the basis for the formation of personal physical culture.

Experts point out, that the specificity of physical education is based on the fact that the taken information becomes a motivational incentive for doing physical exercises, using natural factors and formation of lifestyle aimed at achieving goals of your own and the social [1, 2, 3].

The inner motivators of individual's activity are motifs (ideals, interests, moral feelings, awareness of the need, etc.) [3, 4]. Motives are also formed in the process of education. Personal positive attitude to the lessons of physical culture; the authority of the teacher; availability of jobs; knowledge about the usefulness of exercise for health promotion; positive attitude to the sport in the microsphere (comrade, "Street"), the impact of own activities in this direction are factors that influence the motivation of children and teenagers to physical exercise.

Curriculum for physical education for grades 5-11 has been built by modular system since 2009 and consists of two invariant modules (theoretical and methodological knowledge and general physical training) and variable modules (football, volleyball, athletics, gymnastics, swimming, ski training, basketball, badminton, table tennis, handball). Educational material of the program corresponds to the age and sex characteristics of students, takes into consideration the interests of students and logistical provision, staffing of school [7, 9].

As a matter of fact, gymnastics forms movements, harmoniously develops physical qualities, positively effects on all body systems and create a foundation for further activity in various kinds of sports [8]. Exclusion of gymnastics in life of children and teenagers, no doubt, negatively affects their physical development and the formation of personal physical culture.

The connection between work and scientific themes. Research is carried out in the framework of the scientific project "Theoretical and methodological principles of formation of personal physical culture of children and young people as the basis of their health" (state registration number: 0113U001205).

The aim of research: to identify the ways to improve personal physical culture of pupils of 7-8 grades by involving them in gymnastic exercises.

Research objectives: 1) to identify the level of formation of personal physical culture of pupils of 7-8 grades; 2) to determine the teenagers' attitude to gymnastic kinds of sports; 3) study the organizational conditions for conducting gymnastic lessons in the school.

Material and methods. The research involved 87 pupils of 7-8 grades of school № 38 and school № 63, Frunze district, Kharkov, Ukraine. A survey was the method of the research. The questionnaire consisted of two parts and included questions to obtain information in a wide range of established theme. Availability and the uniqueness of the questions provided the objective of answers. The attitude of students to the lessons of physical culture in the school was considered in the first part of the questionnaire, the attitude of students to the gymnastic kind of sports was considered in the second part of questionnaire. Blocks of questionnaire correspond to factors that affect the formation of physical culture of personality, revealed awareness of the usefulness of physical culture for health and physical development of teenagers, determined the level of physical activity. Separate blocks revealed priority areas in the physical activity of pupils of 7-8 grades, revealed the influence of the communicative environment, studied the teenagers' attitude to gymnastic kind of sports and individual experience of doing gymnastic exercises.

Research method of significance parts differences [6] was used to assess the reliability of the percentage difference of responses. Z coefficient was calculated by the formula:

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

, where v_1, v_2 are percentage results of the two samples,

$$\sigma = \sqrt{v(1-v) \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}, \quad v = \frac{v_1 n_1 + v_2 n_2}{n_1 + n_2}$$

Critical values of z: for $p = 0,05$

Results and discussion. In the result of survey it was determined that the vast majority of students (84%) attend lessons of physical culture. Missing lessons were identified in 16 per cent of students which are slightly less than the presence of a negative attitude towards these lessons (21%). Students like the game kinds of sports (from 26% to 37%). 63 per cent of students believe that the tasks on the lessons for them are readily available, others 37 per cent of the children have difficulties in carrying out this tasks. It was detected the alarming fact, 31 per cent of students have not have experienced in practice and have not realized the importance of physical activity for improving their health yet. Analyzed contingent have potential abilities to sports activity. Thus, 93 per cent of students have the opportunity to walk in the fresh air and spend their leisure time with friends (49%).

Training in sports clubs (25%), going to the gym (9%) and independent doing exercise (14%) are the high rate of personal physical culture level of the studied contingent (Table 1).

Table 1

The ratio of students to sports activities

Nº	questions	Results %, n=87
1.	Do you visit the lessons of physical culture in school?	
1.1	Yes, I do	84
1.2.	NO, I do not	5
1.3.	Not always	8
1.4.	I miss a lot of of lessons	3
2.	Do you like physical culture lessons at school?	
2.1.	Yes, I do	79
2.2.	NO, I do not	8
2.3.	Not all	13
3.	What kind of activities do you like most of all at the physical culture lessons?	
3.1.	physical exercise	6
3.2.	gymnastics	3
3.3.	football	26
3.4.	basketball	37
3.5.	volleyball	31
3.6.	athletics	1
3.7.	outdoor games	7
3.8.	Other (write)	7
4.	Is it hard to you to do exercises on physical culture lessons?	
4.1.	It is impossible to do exercises	8
4.2.	Partially	23
4.3.	During doing exercises I am very tired	6
4.4.	It is possible to do exercises	63
5.	Do the physical culture and sport help strengthen your health	
5.1.	Yes, they do	69
5.2.	No, they do not	10
5.3.	I do not know	21
6.	How often do you walk in the fresh air?	
6.1.	Everyday	70
6.2.	Sometimes	23
6.3.	I do not have free time to walk	7
7.	How do you spend your free time?	
7.1.	I go to the sports clubs	25
7.2.	I go to the gym	9
7.3.	I do physical exercises independently	14
7.4.	I walk with my friends	49
7.5.	I play computer	5

7.6.	Other (write)	15
8.	Do you watch sports sites, TV shows?	
8.1.	Yes, I do	40
8.2.	No, I do not	20
8.3.	Sometimes	40
9.	What is your friends attitude to sport	
9.1.	Positive	76
9.2.	Negative	5
9.3.	Indifferent	4
9.4.	I do not know	15
10.	Do you visit sports events as spectator? With whom?	
10.1.	I visit by myself	13
10.2.	I visit with my parents	8
10.3.	I visit with my friends	51
10.4.	I do not visit	34
11.	Do you go in for sport	
11.1.	Yes, I do (what kind of sport)	29
11.2.	No, I do not	52
11.3.	irregularly	19
12.	Do you visit visiting sports and recreational complexes?	
12.1.	Yes, i do it with my parents	11
12.2.	Yes, I do it with my friends	18
12.3.	Yes, I do	16
12.4.	No, I do not	54

It must be noted that the school number 38 and school number 63 are located near to the active sports facilities of Kharkiv. The children in this district have the opportunity to go in for sports acrobatics, swimming, wrestling, track and field, volleyball and basketball, trampolining, football, table tennis, to attend gyms.

Communicative environment affects the awareness of young people the values of physical culture. Most of students watch sports programs, browse sports websites (80%), actively attend sporting events (71%). Most of peers (76%) have a positive attitude to sport and often visit sports events together. 29 per cent of the studied contingent involved in sports activity and dancing, some of them attend sports and recreation centers (23%).

The attitude of teenagers to gymnastic kinds of sports and experience of doing gymnastic exercises were considered in the second part of the questionnaire in detail. Students' answers of the 38th and 63th schools were counted individually, for first school has the objective conditions for the gymnastic lessons, the second one doesn't have such conditions. Naturally, that 86% of children from the 38th school responded affirmatively to the question about the presence of gymnastics lessons at school. 20 students from 52 ones of school №53 (38%) also answered affirmatively about the presence of gymnastic lessons. (table 2)

Table 2
Student's attitude to gymnastics

№	Questions	Results, %		evaluation reliability	
		n=35	n=52	Z	P
1.	Do you have gymnastic lessons at school?				
1.1.	Yes, I do	86	38	4,37	P<0,01
1.2.	No, do not	14	62	4,37	P<0,01
2.	Do you like gymnastic lessons at school?				
2.1.	Yes, I do	54	37	1,64	P>0,05
2.2.	No, do not	14	52	3,57	P<0,01
2.3.	partially	31	12	2,29	P<0,05
3.	What gymnastic exercises do you like most of all?				
3.1.	Exercises on gymnastic apparatus	23	8	2,01	P<0,05
3.2.	Acrobatic exercises	9	10	0,17	P>0,05
3.3.	Exercises for development of flexibility	17	2	2,56	P<0,05
3.4.	Exercises for development of strength	34	12	2,57	P<0,05
3.5.	Exercises for development of agility	9	8	0,15	
3.6.	Exercises with items (sticks, balls, skipping ropes, etc.)	11	4	1,37	P>0,05

3.7.	Exercises without items (in the place in motion, in a column, ranks, circle, in pairs)	11	2	1,87	P>0,05
4.	Do you like to do exercises on gymnastic apparatus?				
4.1.	Yes, on the balance beam (gymnastic bench)	14	2	2,23	P<0,05
4.2.	Yes, like to jumping through a vaulting horse	29	12	2,01	P<0,05
4.3.	Yes, like to do exercises on a crossbeam	6	10	0,66	P>0,05
4.4.	Yes, like climbing on a rope	49	15	3,35	P<0,01
4.5.	Other (write)	3	12	1,46	P>0,05
5.	Are you able to do gymnastic exercises?				
5.1.	No, a am not	11	10	0,27	P>0,05
5.2.	Partially	46	12	4,32	P<0,01
5.3.	During doing exercises I am very tired	0	9	1,45	P>0,05
5.4.	Yes, I am	34	23	2,05	P<0,05
6.	Do you think that gymnastics exercises are helpful for your health?				
6.1.	Yes, do	69	65	0,31	P>0,05
6.2.	No, I do not	6	17	1,6	P>0,05
6.3.	I do not know	26	17	0,95	P>0,05
7.	Do you do physical exercises by yourself?				
7.1.	Yes, i do flexibility exercises	11	12	0,02	P>0,05
7.2.	Yes, I do strength exercises	23	23	0,02	P>0,05
7.3.	I spend my free time actively (run, jump, play)	46	33	1,23	P>0,05
8.	Do you go in for street kinds of sport?				
8.1.	Parkour	34	19	1,58	P>0,05
8.2.	Breaking	9	8	0,15	P>0,05
8.3.	Workout	6	8	0,36	P>0,05
8.4.	Other (write)	34	21	1,36	P>0,05
9.	Do you go in for gymnastic kinds of sport?				
9.1.	No, I do not	69	77	0,87	P>0,05
9.2.	Yes, gymnastics	9	2	1,45	P>0,05
9.3.	Yes, artistic gymnastics	6	4	0,41	P>0,05
9.4.	Yes, acrobatic	3	4	0,25	P>0,05
9.5.	Yes, Trampolining	6	6	0,01	P>0,05
9.6.	Other (write)	9	8	0,15	P>0,05
10.	Do you have a sports rank?				
10.1	No, I do not	80	88	1,45	P>0,05
10.2	Yes, I do (what kind of sport, rank)?	20	12	0,41	P>0,05
11.	Did you go in for gymnastic kinds of sport early?				
11.1.	Yes, I do	43	37	0,59	P>0,05
11.2	No, I do not	57	63	0,59	P>0,05
12.	What is the reason you stopped going in for sport?				
12.1	Injury	9	2	1,45	P>0,05
12.2	I switched on other kind of sport	20	13	0,81	P>0,05
12.3	It is hard	3	6	0,64	P>0,05
12.4	It is not interesting	6	8	0,36	P>0,05
12.5	Other (write)	6	8	0,36	P>0,05
13.	Would you like to have gymnastic lessons at your school?				
13.1	Yes, I would	73	49	0,94	P<0,05
13.2	No, would not	13	31	1,12	P>0,05
13.3.	I do not know	14	31	0,07	P>0,05

Slightly more than half, 54 per cent of pupils in one school and 37per cent of pupils of another one chose a definite answer about what they like gymnastics lessons ($P > 0,05$). But in both schools students (14% and 52%) chose negative answer. 23 per cent of students like doing exercises on gymnastic apparatus, 17 per cent of students like doing exercises for development of flexibility and 34 per cent of students like doing exercises for development of strength, ($P < 0,05$). Students, who study at schools where there are not enough conditions for regular gymnastic lessons, like doing exercises for development of strength (12%) but they do not like to do the exercises on the gymnastic apparatus (8%), ($P < 0,05$). What about exercises on gymnastic apparatus, students like climbing on a rope (49% and 15%), like to jumping through a

vaulting horse (29% and 12%), ($P < 0,01$; $P < 0,05$). 35 students are able to do or partially to do all gymnastics exercises in one school (80%) and 52 students in another one (35%). It tells about reliable difference at the level: $P < 0,01$ и $P < 0,05$.

The following questions, there was no significant difference between the two categories of respondents. More than half of children realize that gymnastics are good for health. Teens actively spend their leisure time and are able to independently do various exercises (from 11% to 46%) and 80%, go in for street kinds of gymnastics: 49% and 35% in total. Indicators of learned experience of sports kinds of gymnastics insignificantly depend on availability of regular gymnastic lessons. School № 38 have more gymnasts than school № 63 (43% and 37%). Students from the school where they have more gymnastic experience wish to have physical culture lessons ($P < 0,05$).

79 per cent of students like the lessons of physical culture. Only 44 per cent of students like gymnastic lessons, no doubt, gymnastics is not popular, 37 per cent of students do not like gymnastics, 20 per cent of students do not like all aspects of gymnastic lessons. With regard to physical culture teenagers are not so categorical: 7 per cent – «no, I do not»; 11 per cent – «not all». But, it should be mentioned that these indexes have significant differences among schools. Answers of the respondents where gymnastics is conducted occasionally negatively affected the overall results of attitude to gymnastics. It should be mentioned that some students have a feeling of extreme fatigue at physical culture lessons (5%) than at gymnastic lessons (3%). Inability to do gymnastic exercises is higher than doing other kinds of sports activity (10% and 7%). 25 per cent of students are able to partially do exercises at gymnastic lessons. Such result coincides with other kinds of sports activity. 28 per cent of students are able to do all gymnastic exercises. 55 per cent of students are not able to do all gymnastic exercises. Answers are contradictory (and reliable) to the last two questions, because students of 38th school answered that they were able to partially do gymnastic exercises in general but students of 63th school answered that they were able to do all exercises.

In 2009 with the introduction of a modular system, the teacher was given the right to independently plan 3-6 modules per school year. Therefore, in many schools of Kharkiv gymnastic lessons are not planned. In general, such schools have athletics, sports games (volleyball, soccer, handball, basketball). first of all, it is connected with the material base of schools, sports traditions and individual specialty of teacher of physical culture. Not all schools of Kharkiv have gymnastic equipment. Some schools have gymnastic equipment partially. Also, the teachers of physical culture do not wish to carry on gymnastic lessons, as this type of activity can lead to high injuries at the lessons. The survey of 35 teachers of physical culture determined that only 15 schools from 35 have gymnastic lessons and not all classes have such lessons. Teachers attribute this to the physiological characteristics of children: the smaller the child, the easier it is to do gymnastic exercises and it is easier for teacher to help them to do exercises. Also, the use of gymnastic lessons depends on the participation of the school in competitions that require skills of gymnastic exercises. As a rule such involve students from junior and secondary school.

2012-2013 and 2014 school years the student physical culture Olympiad which was attended by students of 11 classes was held. The program of the Olympiad consisted of two parts: theoretical and methodological and practical ones. Practical competitive tests included athletics, volleyball, basketball, handball, football, gymnastics and tourism. The competition in gymnastics boys and girls were doing acrobatic combination, consisting of more than 10 relatively complex exercises for students. It should be mentioned that the absolute winners of the final stage of the Ukrainian student's physical culture Olympiad among boys and girls were the representatives of the Kharkiv region: Igor Ostroverh and Anastasia Yakovleva. Student competition held for 2 years in a row, so all schools in Kharkiv and the region partially had gymnastic lessons at least in preparation for the Olympiad where acrobatic lessons were used. It should be noted, according to the minutes of city and regional stage of student Olympiad, 63% of students (boys and girls) showed medium and high level of doing acrobatic combinations.

At the present time, student physical culture Olympiad is not conducted. This fact significantly affects the choice of modules, which are planned by the teacher on physical culture lessons. Lessons gymnastics became not relevant, for motivation to their conduct had gone. Today, more and more rarely, we can find school in which gymnastic lessons are conducted.

But in spite of this fact, 65% of pupils of 87 surveyed want to go in for gymnastics at physical culture lessons, attend sports clubs, independently do gymnastic exercises at home and are aware of it usefulness.

According to the letter of MES of Ukraine from May 22, 2015 № 1/9 - 253 "About the structure of the school year 2015/2016 and the curricula of secondary schools" part of the training load can be used to study specific subjects, which provide physical activity of students (choreography, rhythm, swimming, etc.).

For example, in this academic year, the choreography with elements of acrobatics has been introduced by the third lesson a week for 1-5-graders in the school №38. Also on the basis of the school in the 2014-2015 academic year, according to the Agreement about cooperation in the 5-8-graders technology creating a culture of physical activity was implemented by use of the main gym, designed by senior teacher of gymnastics of HSAPC Alfiya Deyneko in her dissertation work. Thus, the continuity of the educational material from elementary school to middle has been preserved and the formation of the students' culture of physical activity has been continued

Conclusions. It was found that 84 per cent of pupils attend physical culture lessons, 31 per cent of students do not realize the importance of physical activity to improve their health. 80% of students browse sports websites and watch sports programs. 25 per cent of students attend sports clubs, 9 per cent of students go to gym, 14 per cent of students do physical exercises by themselves.

The absence of gymnastics lessons at school negatively affects attitude to gymnastics: 14 per cent in school where gymnastic lessons are conducted and 52 per cent in school where gymnastic lessons are not conducted ($P < 0,01$); 23 per cent of students like to do exercises on gymnastic apparatus, 8 per cent of students do not like to do it ($P < 0,05$). As for gymnastic apparatus, students like to climb rope (49% and 15%), to do the vault (29% and 12%) ($P < 0,01$; $P < 0,05$).

3 per cent of students have feeling very tired at the gymnastic lessons, 5 per cent of students have feeling very tired during another kinds of physical activity, 10 per cent of students are not able to do exercises at gymnastic lessons, 7 per cent of students are not able to do exercises during another kinds of physical activity.

Teens devote their leisure time to independent doing of various exercises (from 11% to 46%) go in for street kinds of gymnastics (40%). 16 students go in for sports kinds of gymnastics. That is why, there are a lot of actively working sports establishments in the district. 43 per cent of students wish to start doing gymnastic exercises.

Prospects for future research is to use the results of the study of relations of teenagers to gymnastic sports in order to improve their personal physical culture.

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