

MOTIVATION FOR PHYSICAL CULTURE AS FACTOR OF STUDENTS' FUNCTIONAL STATE OPTIMIZATION

Lachno O.G.

Prydniprov'ska State Academy of Civil Engineering and Architecture

Abstract. *Purpose:* to analyze students' attitude to physical education classes; to compare motivation for physical education of 1st and 4th year students. *Material:* 100 students of 17 – 22 years' age participated in the research. All they were questioned. *Results:* In the whole, boys have positive attitude to sport practicing but some of them can have harmful habits. The attitude to sport practicing of most of girls changes with age. It was found that biological age of students significantly exceeds passport age. Biological age of senior students it reduces to some extent, in comparison with junior students. It was also found that in process of studying at HEE students' motivation for sport practicing changes to positive side. It witnesses about formation of student positive attitude to physical education in general. *Conclusions:* we have shown that there is a demand in strengthening of motivation for physical culture classes and further formation positive attitude to them with increasing of students' knowledge about physical education.

Key words: student, health, biological age, physical education.

Introduction

Health is main indicators of physical culture in society [1; 2; 3; 4]. Mechanisms of human motor functioning and health are open in researches by T.Yu. Krutsevych (2005) [18], V.A. Kashuba, S.M. Futornoy, Yt.V. Andreyeva (2012) [12], G.L. Apanasenko (2003) [2]. Motor functioning is biological demand of every living organism, integral part of healthy life style, one of the most important social-biological factors. Such factors form human organism, ensure balance between organism and environment; facilitate perfection of regulation mechanisms of metabolic adaptation processes [7; 8; 9; 10; 11].

Youth's health was analyzed in a number of works of such scientists as F.I. Sopianin, V.I. Bocharov, I.A. Kulikov (2011) [19]; R. Podstavka, D. Zvolynska, R. Urbanska-Gyzynska, D. Novoselska- Svadba (2013) [20]; Carlos Eduardo Da Costa, Vinicius Barroso Hirota, Ademir De Marco. (2015) [25]; David Hortigüela-Alcalá, Ángel Pérez-Pueyo, José Moncada-Jiménez (2015) [26]. They found that most of HEEs students have unsatisfactory health due to wrong regime of labor and rest, negative habits and against the background of physical inactivity.

Clear interconnection between health and motor regime, organization and methodic of physical education specialists has been proved [21; 22; 23; 29; 32; 33]. Most of students have unsatisfactory health due to wrong regime of works and rest, using of alcohol, nicotine and drugs, against the background of restricted motor functioning [24; 30; 31; 35]. Scientific-technical progress, mechanization and automation of production, development of transport servicing of population sharply decreased muscular functioning of person on the one hand and significantly increased nervous-psyche loads on the other hand [2; 3; 36]. Practicing of physical exercises, outdoor and sport games strengthen nervous system [13; 14; 34], release tension, create cheerful mood. It facilitates increasing of workability [15; 16; 17; 36].

That is why physical training of students is one of main tasks of higher educational establishments.

However, many authors noticed deficit of motivation for physical exercises' healthy life style practicing [21; 33; 35]. In this connection it is rather important to reveal dependences between education progress in physical culture and level of students' functional state. It would permit to substantiate need in increasing students' knowledge of theoretical principles of physical education and increase their motivation for physical culture.

Purpose, tasks of the work, material and methods

The purpose of the research is to analyze students' attitude to physical education classes; to compare motivation for physical education of 1st and 4th year students.

The methods of the research: analysis of scientific, methodic literature; questioning, determination of biological age as level of health. In questioning 100 respondents participated - 50% of boys and 50% of girls. By

their age they were: up to 19 years old – 25 boys and 25 girls of 1st year; from 20 to 22 years old – also 25 boys and 25 girls of 4th year.

Results of the researches

Students' questioning showed that 17% of students have high progress, 69% - average and 14% have low level of progress. Surely, the questioning data can not be generalized for all youth of Dnepropetrovsk, but they permit to find general characteristics of students' attitude to sports.

The following indicators of students' activity were chosen as the main:

- Social activity (participation in mass-sport measures of HEE);
- Conditions for practicing of physical culture in HEE;
- Influence of student's surrounding on his attitude to physical culture;
- Students' assessment of their way of life;
- Students' belonging to sports;
- Students' awareness about usefulness of physical culture.

Questioning about students' involvement in mass-sport work showed that majority of students ignore such measures. Only little part participates in them. The least quantity is members of HEE combined team. Quantity of boys, involved in sport measures, is bigger than quantity of girls. Students with average level of educational progress are the most interested in mass-sport measures.

It was found that one third of students consider themselves to be people of healthy life style. The fourth part of students think that they practice healthy life style. The second one third can not answer this question. There are much more girls (in contrast to boys), who consider themselves to be practicing healthy life style. Dependence of progress level on life style showed that students with high and average progress think that their way of life is favorable for health.

Only one fourth part of the questioned practices a kind of sports (17%). This is the percentage of students, who got the highest mark. And the biggest amount of these students is boys.

Analysis of physical culture classes' attendance and conditions of studying at HEEs showed the following: 86% of students attend physical culture classes systematically. These students can compose morning exercises' complex, choose place for morning exercises, can practice physical exercises independently. Questioning of 1st year boy students showed that most of them (68%) got mark "good", 20% - got mark "average" and 12% - "excellent". It witnesses that great number of boys (more than half of the questioned) practice physical exercises and in general have positive attitude to sports. These students have general knowledge of physical education and valueology, but they did not get the highest mark due to presence of harmful habits.

"Average" mark was received by 20% of the questioned. It means that they have some minimal knowledge in the field of physical education. Their attendance of physical culture trainings is not regular. 12% of 1st year boy students got "excellent" mark. They regularly practice physical exercises or some kind of sports. Such students have deep knowledge of their organism.

Besides, we found that the highest percentage of the questioned 1st year girl students got "good" mark (60%). It witnesses about their, in the whole, positive attitude to physical culture and about their having basic knowledge of hygiene, healthy eating and physical functioning.

32% of girls received "average" mark. It witnesses about insufficient knowledge in physical culture and valueology field as well as about possible harmful habits or dismissive attitude to physical culture.

Only 8% of 1st year girl students received "excellent" mark. They attend physical culture classes regularly; have correct eating and no harmful habits; they have theoretical knowledge of physical culture and sports principles.

Comparison of boys' and girls' questioning results permitted to state: boys have better knowledge and are more involved in physical education. It can be connected with girls' less interest in sport games, which are usually practiced in HEE.

In comparison with 1st year girl students, 4th year girls received much better marks. From it we can conclude that they have better knowledge of physical culture and valueology. It can be explained by the fact that with age girls' attitude to their health becomes more serious.

Only 4% of respondents received the worst marks. “Good” marks were got by 80% of the questioned. It is more than half of 4th year girl students. Most of them have knowledge of valueology, do not miss physical culture classes and understand significance of healthy life style.

“Excellent” was received by 16% of 4th year girl students. These girls have the most complete knowledge of valueology, do not miss physical culture classes; practice healthy life style and some kind of sports.

4th year boy students showed the best indicators of all 4 groups of the questioned. It can be explained by the fact that with age boys’ attitude to their health becomes more responsible and they practice sports more often. 68% of 4th year boy students received “good” mark. It can witness that in general boys are more interested in sports than girls.

32% of 4th year boy students received “excellent” marks. Such big percentage witnesses about their profound knowledge in sphere of physical culture and valueology as well as about absence of harmful habits. Besides, we can note that all 4th year boy students with mark “excellent” practice some kind of sports by their choice.

Analyzing general data of 1st year students (boys and girls), we received the following results: 26% received “average” mark, 64% - “good” and 10% - “excellent”. General indicators of 4th year students are much better. “Excellent” was received by 24% by students, “good” – by 74%, “average” – only by 2% of the questioned senior students. Comparison of questioning results of junior and senior students showed that with age there appears positive dynamic of increase of students’ knowledge in physical culture and valueology field. It was found that at 4th year of studying less percentage of students have harmful habits, higher percentage practice some certain kind of sports; senior students have higher awareness about healthy life style.

In order to assess health and functional state of students we used methodic by V.P. Voytenko [5; 6].

Table 1. Indicators of 1st year students’ physical condition

No	Indicators		\bar{x}	$\pm S$	V%
1	Passport age	girls	17.6	0.69	3.9
		boys	17.4	0.59	3.3
2	Biological age	girls	35.2	5.78	17.4
		boys	33.1	7.4	10.2
3	Systolic blood pressure	girls	107.5	9.2	8.6
		boys	118.9	7.9	7.1
4	Diastolic blood pressure	girls	61.5	8.2	13.3
		boys	72.4	6.2	9.4
5	Pulse blood pressure	girls	46	12.4	26.9
		boys	57	7.4	8.3
6	Body mass	girls	54.5	3.2	5.9
		boys	62.8	5.4	7.8

Analysis of students' biological age showed that only 2% of the tested group's girls have blood pressure corresponding to age standard. This indicator of boys is much better (60%). We connect this fact with the fact that girls of this age group are more bent to hypotension.

Table 2. Indicators of 4th year students' physical condition

No	Indicators		\bar{x}	$\pm S$	V %
1	Passport age	girls	21.6	0.63	3.4
		boys	21.4	0.76	2.8
2	Biological age	girls	34.5	6.13	20.1
		boys	32.3	5.34	18.2
3	Systolic blood pressure	girls	109.5	6.9	6.3
		boys	116.7	6.3	5.2
4	Diastolic blood pressure	girls	63	6.7	10.6
		boys	72	5.9	8.9
5	Pulse blood pressure	girls	47	12.5	26.6
		boys	60	6.2	7.8
6	Body mass	girls	54.5	3.2	5.9
		boys	63.0	5.9	7.1

Discussion

Results of our researches confirmed the data of other authors about interconnection of students' somatic health and physical condition (G.L. Apanasenko et al., 2003 [2]; L.N. Barybina et al., 2012 [4]; Iermakov S.S. et al., 2012 [7]). The received by us results also supplement our previous research [11].

Analyzing 4th year students' indicators we can note positive age dynamic. Though blood pressure did not changed noticeably, biological age reduced to some extent. We connect this fact with more fair attitude to physical education and own health in the whole.

It would be logical to assume that rising of 4th year students' progress in physical education, in comparison with 1st year students, is connected with increasing of their motivation for physical culture. The received results witness about effectiveness of organizational work on physical education in the researched HEE. Strengthening of motivation for physical culture indirectly influences on students' functional state. For increasing of students' motivation for physical culture it is purposeful to apply modern informational technologies, that is described in the works of Al-Ravashdeh Abdel Baset, Kozina Zh.L., Kramskoy S.I., Bazilyuk T.A. (2015) [21]; Ilnitskaya A.S. Kozina Zh.L., Korobejnik V.A., Ilnickiy S.V., Cieślicka Mirosława, Stankiewicz Błażej, Pilewska Wiesława (2014) [35].

Conclusions

1. The questioning revealed that most of 1st year (68%) and 4th year (68%) boy students received "good" mark and practice physical exercises, however, they can have harmful habits. In the whole, boys have positive attitude to sports. Attitude to sport's practicing of most of girls change with age. "Good" mark was received by 60% of 1st year girl students and 80% of 4th year girl students.

2. It was found that students' biological age significantly exceeds passport age. Concerning senior students, in comparison with junior students, it reduces to some extent.

3. In the process of studying students' motivation for physical education changes in positive side. It witnesses about formation of students' positive attitude to sports in the whole.

The prospects of further researches imply working out of technologies for increasing of students' motivation for physical culture.

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Conflict of interests

The author declares that there is no conflict of interests.

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Information about the author:

Lachno O.G.; <http://orcid.org/0000-0002-5845-5337>;
lahnushechka@rambler.ru; Prydniprovs'ka State Academy of
Civil Engineering and Architecture; Chernyshevsky, 24a,
Dnipropetrovsk. 49600, Ukraine.

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