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## PHYSICAL CULTURE AND HEALTH-IMPROVING TECHNOLOGIES AS A MEAN TO IMPROVE STRESS RESISTANCE OF STUDENTS

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**Key words:** health-improving technologies, motor activity, health-improving physical culture, students.

Annotation. This article analyzes the popularity and application of physical culture and health-improving technologies when organizing students' motor activity. Monitoring the stress resistance of students will make it possible to recommend to the younger generation an excellent alternative on how to cope with ever-increasing emotional and intellectual loads. The comparison was carried out between students of physical culture and other specialties in universities of Barnaul. An important criterion for increasing stress resistance is the assumption that the negative reaction to stress in this category of students would inexorably decrease in case of offering them optimal and systematic physical activity.

**Introduction.** One of relevant directions in organizing non-academic activity of students is application of physical culture and health-improving technologies when supporting motor activity of students at universities [1-2]. In order to implement personal potential, students have a need in creating a comfortable social sphere in every respect, which will allow future experts to self-develop and express their creativity. In some authors' opinion, in case of changing social conditions, when a pupil becomes a student, they have serious problems with adaptation. They need to get used to the new environment, to increasing emotional and intellectual loads [3-4]. In this respect, Altaj universities arrange events of educational and health-improving direction. Their purpose is to bring together students, acquaint them with academic teaching staff of educational institutions, addiction prevention and formation of an active attitude to a healthy lifestyle, revival of family and ethnic values. However, these events are of non-systemic nature in most cases [5]. The systemic approach in implementing events, especially of physical culture and health-improving direction, will allow students to develop and preserve an active attitude to a healthy lifestyle, increase their mental immunity and adapt to intellectual environment with less losses. This includes not only 1-year students, since the modern system of higher education constantly improves constantly and makes high requirements to students from one year to another [6-7]. According to

A.N. Shadrin (2018), forming, cultivating and implementing abilities of the younger generation is a multifaceted task that requires thinking and patient effort. Its solution begins in a family, at the stage of pre-school education and continues in school, at university and within surrounding living environment [8]. It means that in case of teaching highly qualified experts in any field of professional activity, the main purpose is going to be a formation of competencies and an ability to implement them in any life situation [9-12].

Taking the aforementioned into account, the aim of our study was identifying an appropriate use of physical culture and health-improving technologies when organizing motor activity of students. In order to fulfill the set purpose, we were solving following tasks:

- 1. To reveal the most popular directions of physical culture and health-improving technologies of male students of physical culture and other specialties;
- 2. To identify features of experiencing stress among students of physical culture and other specialties;
- 3. To define appropriate mode of motor activity for male students who study at Altaj State Pedagogical University and Altaj State University.

Methods and organization. In order to solve the set tasks, we used analysis of scientific and methodological literature, questionnaire and mathematical statistics methods. The study was carried out in 2021. It involved 75 male students aged 20-21 years. 45 students studied at the Altaj State Pedagogical University (ASPU, Institute of Physical Culture and Sports), 30 of them studies at the Altai State University (ASU, other specialty). There were all 2-year students. Interpretation of the questionnaire's results was carried out after automated processing of the obtained data in the STATISTICA package (factor analysis).

**Results and discussion.** As a result, we received the following data. At the first stage of the study, aside from the analysis of scientific and methodological literature, we conducted a sociological study for revealing the most popular types of physical culture and health-improving technologies among 2-year students who study at physical culture and other departments of Barnaul's universities.

For example, when answering to the question "Do you think that engaging in physical culture is important for your health?", 60% of students from the other specialty replied affirmatively. When analyzing answers from students of physical culture, we revealed that all respondents think that engaging in physical culture is important for their health (fig. 1).

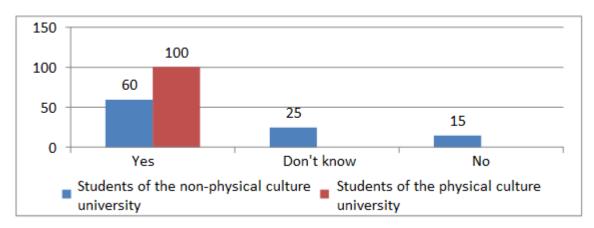


Fig. 1. Analysis of the questionnaire of 2-year male students of physical culture and non-physical culture specialties (question: "Do you think that engaging in physical culture is important for your health?", %)

When examining the asked questions further, we revealed ambiguous distribution of questions. For example, when answering to the question "What are the most popular types of physical culture and health-improving technologies that you consider as acceptable for students in the mode of academic/non-academic classes?" (fig. 2), young men responded the following: the most popular activity for students of non-physical culture specialty is working out in a gym (65%). Students, who study at the physical culture university, prefer classes in sports clubs (40%).

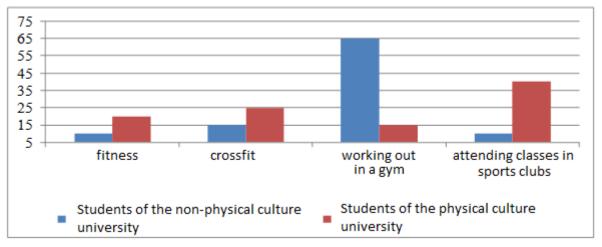


Fig. 2. Analysis of the most popular physical culture and health-improving technologies among 2-year male students of physical culture and non-physical culture specialties (question: "What are the most popular types of physical culture and health improving technologies that you consider as acceptable for students in the mode of academic/non-academic classes?", %)

In order to solve the second task, i.e. revealing features of experiencing stress among students of physical culture and other specialty, we conducted another questionnaire. The purpose of this questionnaire was to identify features of stress situations' influence on the state of male students. It included 9 questions

[9], assessment of answers was in the form of points, and interpretation of results by the questionnaire's developer was comprehensive, which contributed to easy processing of received results.

Distribution of the questionnaire's results also was ambiguous. For example, among students of the non-physical culture specialty, 80% of respondents answered affirmatively to the statement "When I look at myself in the mirror, I notice signs of tiredness and fatigue on my face", 15% of students of the physical culture specialty also agreed with that statement. The results of the "I'm worried about the future" statement also aroused interest. 85% of students of the other specialty agreed, 15% of physical culture students are worried about their future after their graduation.

Other tendency can be seen in answers to the statement "Changes around me make my head spin. It would be nice, if everything did not change so quickly". 60% of physical culture students aged 20-21 years describe their student life as eventful. However, due to the fact that intellectual loads are replaced with physical ones, and these loads are of systemic and multifaceted nature, students of the physical culture have a high level of self-regulation in stressful situations. In case of this situation, a person acts reserved and is able to control their own emotions. As a rule, these people do not get irritated and blame others for events that are happening. Data from the analysis of the whole questionnaire for diagnosing stress state, which was developed by A.O. Prokhorov, serves as evidence for that [9].

A number of points that was gained by students of the non-physical culture specialty, was within limits of 6 to 9 points, according to the questionnaire's results, which complies to average and weak level of stress resistance. Young men do not always act accordingly and adequately in stressful situations. They sometimes are not able to control themselves. There are also cases, when insignificant events disturb their emotional balance (they lose their temper). Such number of points from 8-9 evidences a high degree of exhaustion and fatigue. It is possible that with such level of stress, students of the non-physical culture specialty cannot control themselves in stressful situations. Such people need to develop skills of self-regulation in case of stress. In our opinion, a good way to control stress is systematic engagement in physical culture and sports. It is not a secret that large-scale work is being carried out in Barnaul for physical culture and health-improving activity, according to the place of residence [11]. However, an issue of media coverage on physical culture and health-improving technologies and their accessibility for students often does not cover the whole contingent of students at universities. It can be one of prospective directions of our study.

Organizing of recreational physical culture, function of health groups, general physical fitness, artistic gymnastics, health-improving gymnastics and

other physical culture and health-improving technologies will help to improve quality of life of students and increase their stress resistance naturally, in order to successfully develop physical culture and sports according to the place of residence and education [3, 4, 10, 11].

For example, the Academic Scientific Research Laboratory "Health-Improving Types of Physical Culture", under the leadership of S.I. Suprunov, is engaged in arrangement of non-academic physical culture and health-improving activity of students in the Altaj Pedagogical University. In our opinion, it is one of the factors that physical culture students of the ASPU who participated in our study have a possibility to choose an appropriate type of motor activity and engage in it regularly. Consequently, they have a high level of control in stressful situations, based on the questionnaire's results.

**Conclusion.** Therefore, the analysis of students' motor activity allowed us to recommend systematic classes of different types of physical culture and health-improving technologies on a regular basis for optimizing this process. Systematic physical education classes will allow the younger generation to improve the qualitative characteristics of their lives and increase their stress resistance.

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