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Health-saving technologies in training future artists of traditional arts and crafts (prevention of professional diseases)

Annotation. The article substantiates the problem of the necessity of health-saving technologies to prevent professional diseases of artists of traditional arts and crafts and their success in professional activity. The terms “health”, “human capital”, “health-saving technology” are disclosed. The types of health-saving educational technologies are singled out and the technology of physical culture and health-improving type is characterized. The most common diseases of the spinal column are described, the necessity of performing special sets of exercises is justified, which will positively affect the results of educational and professional activities.

Keywords: Artist of traditional applied art, human capital, health-saving educational technologies, prevention of occupational diseases, posture, spine, «healthy back», correction, exercises.

The success of a future artist's career in traditional applied arts largely depends on their health status. Career and health are closely interrelated: *on the one hand*, good health serves as the foundation for quality professional preparation and ensures successful work over many years; *on the other hand*, career success acts as an essential source of positive emotions and increasing confidence in one's skills, providing resources for creative self-realization. Despite their apparent nature, these arguments are significant for understanding the specifics of professional activity and careers in traditional applied arts, thus requiring scientific elaboration and consideration in educational technologies to give them a health-saving and health-building orientation.

The term "human capital" is currently positioned as the leading factor in economic and social development of a modern state, society, and family. Human capital, considered fundamental to the formation and functioning of the Russian economy, is examined at three levels: 1) individual human capital; 2) socio-economic human capital of a certain organization, including various traditional crafts; 3) national human capital [6, p. 39]. Therefore, the issue of preserving and strengthening the health of artists engaged in traditional crafts can be viewed through the lens of maintaining and enhancing human capital. It should be noted that the profession of a traditional applied arts artist is linked to all levels of human capital, hence the immense responsibility of someone choosing this profession. An artist bears responsibility before the entire nation and future generations for preserving Russia's historical and cultural heritage and further developing traditional crafts. For

this, besides undeniable talent and specialized competencies, robust health is indispensable.

This article explores the problem of finding solutions to overcome the acute contradiction between the state's and society's demands for improving the health of traditional applied arts artists, who are tasked with preserving Russia's historical and cultural heritage, and the lack of health-saving technologies that would enable maintaining students' health and preventing occupational diseases.

To address this issue, it is necessary to first clarify the key term "health." The most current and universal definition comes from the World Health Organization, which defines health as "a state of complete physical, mental, and social well-being of an individual" [8]. Well-being, in turn, is understood as a dynamic state of consciousness and self-awareness in which harmony is established between physical, psycho-emotional, intellectual, socio-communicative, functional, and other aspects of life in diverse interactions with the surrounding world [10, p. 14].

Health as a state of harmonized well-being implies achieving balance between the individual and the environment [11, pp. 39-40]. The specificity of the profession of a traditional applied arts artist is such that maintaining a balance between the individual and the environment (natural, socio-cultural, economic) is critical not only for preserving personal health and creative self-realization but also for ensuring the stable future of traditional artistic crafts in the Russian Federation.

According to the requirements of the Federal State Educational Standard for higher education, graduates must possess the following competencies: a) general cultural competence (OK 11) – capable of forming healthy lifestyle habits and designing a safe educational environment [1, p. 240]; b) general educational competence (OPE 12) – able to use health-saving technologies in professional activities.

All of the above allows us to position health as a fundamental component in the structure of professional training for students of the Institute of Traditional Applied Arts (ITPI), determining their readiness and ability to engage in labor and successfully realize themselves in all spheres of life. Therefore, it is extremely important to cultivate in students not only specific healthy lifestyle skills but, foremost, a value-based attitude toward health.

The development of competencies and the establishment of a value-oriented approach to health are facilitated by health-saving educational technologies, which have been increasingly developed and implemented in recent years in the training of specialists in various fields, including traditional folk artisans. *A health-saving technology is pedagogically designed and implemented in the educational process as a set of measures aimed at preserving and promoting students' health, focusing on forming an emotionally-valued relationship towards health as a fundamental factor of human capital and a condition for a successful professional career* (definition formulated by A.Sh. Kereselidze and I.A. Lykova during a scientific discussion on the problem raised in this article).

In the unified educational space of the Russian Federation, several types of health-saving technologies have gained widespread recognition: pedagogical, medical-hygienic, therapeutic-recreational, and physical culture-recreational [1; 3;

5]. Considering the specifics of the Institute of Traditional Applied Arts – the Moscow branch of the Higher School of Folk Arts (academy) – the model of a health-saving technology of the physical culture-recreational type has been chosen for further scientific study. This technology focuses on maintaining, supporting, and strengthening students' health and physical well-being through physical culture and various forms of motor activity, while minimizing the risks of developing occupational diseases [2; 4; 6]. The structure of any technology, including the physical culture-recreational one, includes four interconnected components: motivational-value; organizational; activity-related; evaluative [1; 2].

At the initial stage of the research, theoretical aspects of the problem are studied, the structure of the health-saving physical culture-recreational technology is developed, and a baseline assessment is made to identify students' perceptions of health and its connection to career success, as well as measurements of the health status of students at the Institute of Traditional Applied Arts.

Analysis of empirical data confirmed the hypothesis that among traditional craft students, the spine experiences the greatest strain due to the static nature of artistic work. According to medical records, students admitted to the Institute of Traditional Applied Arts in 2024 suffer from scoliosis (58%), with 4% having fourth-stage damage, 8% third-stage, 14% second-stage, and 30% having mild deviations from normal. Students often complain of back pain and note experiencing fatigue, dizziness, weakness, etc., after classes.

To objectively assess the views of future artists on health, including spinal health in relation to professional success, a survey was conducted among first-year students of the Institute of Traditional Applied Arts. The questionnaire included the following questions:

1. What is health?
2. What occupational diseases do artists in the field of traditional applied arts encounter?
3. Why does a traditional applied arts artist need a strong, healthy back?
4. What helps maintain spinal health?
5. Which exercises are most effective for strengthening the back?
6. Which exercises are most effective for relaxing (and resting) the back after tension?
7. Do you ever experience back strain? How often? How do you cope with this condition?
8. Do physical education and sports help prevent occupational diseases? What are their real benefits?

Analysis of the responses revealed that students:

- Competently define the term "health" (86%);
- Are aware of possible occupational diseases among traditional craft artists (78%);
- Understand the need for performing special physical exercises that contribute to the improvement of the musculoskeletal system (72%);
- Answer positively to the question: "Do physical education activities help prevent occupational diseases in future traditional applied arts artists?" (94%).

However, students face difficulties:

- In assessing their overall health status (64%);
- In distinguishing between conditions related to fatigue and back disease (56%);
- In selecting specific exercises aimed at strengthening the back (48%) and relaxing, i.e., resting the back after prolonged tension (56%).

Based on the obtained empirical data and considering the characteristic academic-production load at the Institute of Traditional Applied Arts, there is a need to increase student motivation to deepen their understanding of health and the professional risks of its deterioration. To achieve this, preventive conversations and consultations are conducted, supported by demonstrations of special exercises.

Through individual and group discussions, students come to understand that good health cannot exist without a healthy back. According to the World Health Organization, up to 75% of people have deviations from the norm regarding spinal health. One of the most common causes of back diseases is a sedentary lifestyle. Without physical activity, muscles become less flexible and lose tone, and vertebral mobility decreases. The back, or more specifically, the spinal column, is referred to as the foundation of all moving processes in the human body, the basis of health. Due to the nature of their profession, they often sit in unnatural positions, leaning over drawings or embroidering another masterpiece. When sitting, the load on the spine increases by 15-18%. The human skeletal system is built upon the spinal column, whose main tasks include movement, support, and protection of the body. Remarkably, the properties of the spinal column include flexibility, sufficient rigidity of the entire structure, mobility, strength, and reliability. However, even this perfect mechanism created by nature can malfunction, and the cause may be numerous diseases, including improper or delayed use of correction mechanisms to prevent spinal health deviations.

These conversations and consultations help convey to students information about the most common factors that negatively affect back health:

- Excess weight;
- Heavy physical labor;
- Untreated spinal injuries;
- Metabolic disorders;
- Lack of vitamins and minerals;
- Poor posture;
- Improperly selected footwear.

Preserving and strengthening students' health, as well as their awareness of the value of a healthy lifestyle, is impossible without creating a health-saving environment [2, p. 185]. Among the health-improving methods, physical culture exercises play a crucial role [3, p. 279]. Learning how to use these tools to counteract negative processes affecting spinal health is a priority for students at the Institute of Traditional Applied Arts. Table 1 presents the system for organizing the educational-training process as a component of the developed health-saving technology. An example of a set of exercises for maintaining spinal health is provided in the Appendix.

Table 1

Educational and Training Schedule

Types of Activities Exercise Training	Physical Activity Planning and Classes by Days of the Week						
	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.
Physical Education Classes	–	2 h.	–	2 h..	–	–	–
Additional Breaktime Sessions	–	–	5-10 min	–	5-10 min	–	–
Homework	<i>General Physical Exercises</i>	–	–	<i>General Physical Exercises</i>	–	–	<i>Total Physical Preparation</i>
Independent Work	–	–	–	–	–	45 min	–
Initial Stage of Training Lasts Two to Three Weeks	–	–	–	–	–	–	–

Preserving the health of Russian citizens is one of the key objectives of the state and a prerequisite for the development and prosperity of Russian society. Therefore, taking care of students' health is a top priority for the administration and faculty of the Institute of traditional applied arts. To achieve this, it is essential to develop health-saving technologies, which sets the immediate focus of our ongoing research.

Appendix

Exercise Cycle for Strengthening the Back

Exercise №1: Back Massage. Leaning against a ball placed between your back and the wall, squat down and stand up, rolling the ball along your spine. Repeat 10-12 times [9].

Exercise №2: Lotus Pose. Sitting on the floor with crossed legs ("Lotus pose"), perform side-to-side bends with alternating arm extensions upwards (pendulum) relative to the torso. Repeat 10-12 times per side [12].

Exercise №3: Pyramid. Perform trunk bends forward, placing hands on the floor. Then, squat onto heels, extend arms forward along the floor, and stretch yourself towards your hands. Return to starting position. Repeat 10-12 times [12].

Exercise №4: Cat. On all fours, inhale deeply, round your back, and lower your head. Hold the position for 5 seconds. Exhale and relax your back. Repeat 10-12 times [12].

Exercise №5: Swimmer (lying on stomach). Legs and arms extended. Raise left leg and right leg alternately with a pause upward. Cross and slowly lower. Then raise left leg and right arm. Repeat 10-12 times [12].

Exercise №6: Spine Stretch. On all fours, extend right arm and left leg parallel to the floor, alternating left arm and right leg. Breathing coincides with the movement cycle. Repeat 10-12 times [12].

Exercise №7: Plank. Support yourself on forearms. Extend evenly without arching and hold for 20-30 seconds. Perform 3 sets [12].

Exercise №8: Cobra. From lying on stomach position, lift torso on straight arms, arch back, hold for 8-10 seconds, return to starting position. Repeat 5-6 times [12].

Exercise №9: Ball Dynamics. Seated position, feet lifted to 30°. Holding a ball in hands, pass the ball from hands to feet and back dynamically. Repeat 10-12 times [12].

Exercise №10: Finishing. Performed from a supine position. Bend the right knee, bring it to the left side, assisted by the left hand. Repeat on the opposite side. Repeat 5-8 times [12].

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