

SCTCMG 2019
**International Scientific Conference «Social and Cultural
Transformations in the Context of Modern Globalism»**

**FORMATION OF HEALTH-SAVING BEHAVIOR OF MODERN
UNIVERSITY STUDENTS**

Liliya Goryunova (a)*, Nikita Zavodny (b), Vladimir Mareev (c)

*Corresponding author

(a) Southern Federal University, 105/42, Bolshaia Sadovaia Str., Rostov-on-Don, Russia
lvoryunova@sfedu.ru, +79094041380

(b) Don State Technical University, 1, Gagarin Av., Rostov-on-Don, Russia
zavodnyy@gmail.com, +79185555923

(c) Southern Federal University, 105/42, Bolshaia Sadovaia Str., Rostov-on-Don, Russia
mareev@sfedu.ru, +79614209030

Abstract

The authors of the article substantiate the need to form the health-saving behavior of university students and propose a model of this process. The purpose of the work is to prepare students for the development and implementation of personalized life-to-health projects, focused on the needs of a particular student. During the course of the study, the authors concluded that the psycho-physiological characteristics of boys and girls should be taken into account when organizing the process of the formation of health-saving behavior. However, universalization based on partnership relations is necessary. Gender-oriented formation of health-saving behavior of students is intended to achieve a maximum in the implementation of gender in health and to designate a universal model. In the framework of the experimental work, the authors carried out approbation of the developed model of the formation of health-saving behavior of students under the conditions of a modern university. The results of experiment showed that during the research the majority of students of experimental groups changed the gender type of personality to androgynal, which determined the stability of their movement along the health protection route. Based on the study, the authors developed the algorithm for the design and adaption of a model for the formation of health-saving behavior of students at a higher educational institution, consisting of three stages. The experimental data presented in the article convincingly proves that the proposed algorithm can be used to form health-saving behavior of students under the conditions of institutions of both higher and secondary education.

© 2019 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Health-saving behavior, educational environment, university.



1. Introduction

Nowadays in the Russian Federation great attention is paid to the problems of saving and strengthening the health of the nation, especially the younger generation. According to the Constitution of the Russian Federation, every citizen of the Russian Federation has the right to protect their health (Article 41). The enjoyment of this right is guaranteed by the legislation of the Russian Federation. The upbringing and development of a healthy personality is a priority of the state policy in the field of education and upbringing of children and young people. The analysis of the value orientations of students showed that values relating to their own life, health, and safety are priorities for young people (Martynenko & Korotina, 2016). The main focus of the educational system in universities is the motivation of students to a healthy lifestyle (Abutalipova & Suliaev, 2015), so it is possible to say that the system performs a health-forming function (Naumenko, 2007). It is necessary to note that the majority of student youth (46.1%) have a high level of health literacy, but this does not significantly increase their commitment to healthy behavior (Zelionko, Luchkevich, Avdeeva, & Filatov, 2017). The results of a number of studies showed that by the age of 18 the inclination level and the number of students to alcohol dependence and psychoactive substances is increasing (Lebedev, Aizman, Subotyalov, Gerasev, & Aizman, 2017).

It is necessary to note that, despite the large number of methods for disseminating knowledge on the theory of healthy lifestyles among students, there is insufficient attention to such an important aspect as the development of their health-saving behavior (Demkina, 2016). Preventive behavior of people (Wadhwa & Zhang, 2019), which becomes a part of health-saving behavior is also of great importance. According to the World Health Organization, health is for 50-55% determined by the lifestyle of a person, for 20% dependent on heredity, for 20-25% on the environment and for 8-12% on the work of health system. The statistics show that lifestyle plays a dominant role in human health. Therefore, the leading vector of formation and health promotion is the focus on a healthy lifestyle. Therefore, it is necessary to form a lifestyle in health, the state of which largely determines the quality of human life. The quality of human life is largely determined by the social environment, level of education, material well-being, individual, including gender, peculiarities. Therefore, the relevance of the problem of health saving is reasoned by the need to ensure the life of the younger generation in health, taking into account gender differences, leveling the role stereotyping and forming a culture of relationships based on partnership.

2. Problem Statement

Human health is understood as sociocultural education in the structure of the personality of a modern person (Naumenko, 2007). During each period of life, a person feels a number of factors affecting health, which determines the need to form health-saving behavior among different population groups involving family, educational and other resources (Zelionko et al., 2017). The formation of health-saving behavior of students is possible by means of education (Naumenko, 2007).

The achievements in pedagogical science, made by scientists on certain aspects of health saving in education, do not provide a sufficiently complete picture of the process of the formation of health-saving behavior of university students. It can be explained by insufficient disclosure of scientifically-based ways to use the potential of a gender approach in the formation of health-saving behavior, ensuring the

development of consciousness and active positive attitudes to a healthy lifestyle, the formation of behavioral strategies necessary to assess, maintain and strengthen health, the education of the younger generation of health-saving culture. The educational environment of a higher education institution determines the level of the formation of health-saving behavior (Merkulova, Mezhybetskaya, Klygina, Ponomareva, & Zagorodneva, 2017). In this regard, there is a need to justify the need for the formation of health-saving behavior of students in a modern university, which determined the problem of the research, the solution of which is aimed at determining the basis for the organization of the process of health-saving behavior formation of students in a modern university.

3. Research Questions

The process of formation of health-saving behavior of university students is the main subject of research. The model of the process of the formation of the health-saving behavior of university students developed in the course of the research is represented by theoretical and technological components. The theoretical component is determined by the paradigm characteristics, which are reasoned by the unifying methodology of the gender approach as a non-linear renewable system, which operates within the framework of a specific socio-cultural reality (Zavodnyi, 2015). The technological component complements the theoretical component by expanding the gender regime in the context of health based on interconnections and interdependencies of subject-object factors in terms of the achievement a real result of health protection in comparison with the possible ideal one (Zavodnyi, 2015). The ideal result is a cultural symbol defined by the type of the existing socio-cultural reality, regarded as a value-normative education of culture, designed to serve as a standing point for human life. A common integrative symbol is the semantic content of the concept of “life in health”. During the research, the vector orientation (Zavodnyi, 2012) of the projected model was determined, consisting of gender perspectives of the value attitude to health, the determination of the gender type of personality, the levels of physical health and adaptation potential of an organism of youngsters as indicators of health: behavioral repertoire in the aspect of educational, sports and recreational types of physical culture.

4. Purpose of the Study

The purpose of the research is to prepare students for the development and implementation of personalized life-to-health projects, focused on the needs of a particular student. Successfully implemented personalized student life-to-health projects (personalized practices of health-saving behavior) determine the content of the health-saving environment of student community as a whole. In the modern university, the resource provision of health care should be created. It can be represented by health-saving technologies and personalized practices of health-saving behavior in accordance with the needs and demands of students.

5. Research Methods

In order to determine the gender type of personality, a complex of complementary research methods was used: a method of the psychological sex determination of a personality; a questionnaire “Who Am I?”;

a method of diagnosing personal relationships; a method of “Scales of psychological well-being of an individual” by Riff (2005); a methodology for studying value orientations.

6. Findings

The health-saving behavior of students is individualized and designed taking into account both general trends and factors of health saving, and personal characteristics of students. Health-saving behavior of students in terms of their physical (motor) activity is gender-oriented (Zavodnyi, 2012). However, in the aspect of the formation of relationships between an individual and a society, gender differences are leveled, defining interpersonal partnerships as a basic model. The creation of health-saving infrastructure of an educational organization is one of the directions of its change towards the creation of the conditions for the formation of health-saving behavior of students (Naumenko, 2007). The authors proposed a system-synergistic approach to structuring a health-saving environment in the university. The environment is organized as a non-linear system that includes health-saving behavior of students, implemented through personalized life-to-health projects that require adaptation, necessary adjustments, taking into account health monitoring data.

The analysis of the results is presented in the portfolio of students, which shows the ideal result and the progress of its achievement. Thus, the environment is characterized by the real state of health of students and the prognostic, advanced, visualizing its purpose, as life in health (Zavodnyi, 2012). The project activity of students is organized by teachers of physical education and sports. Physical culture and sports in high school is not only a path to the health of young people, but also an important component in the preparation of a modern qualified specialist sought-after at labor market (Kramskoi & Amelchenko, 2014). Health portfolio is made by a student. The formation of health-saving behavior of a student is gender-oriented, but in the aspect of socialization of an individual, young men and women are supposed to work together in relationships formation in specific situations based on partnership, taking into account the androgynal, masculine or feminine personality type of boys and girls. Compromise and cooperation are effective ways to resolve interpersonal contradictions in a partnership model of relationships. In this case, the leading role is played by the dialogue that occurs between partners in the process of joint activities. Such behavior leads to the reconciliation of conflicting opinions and the achievement of common interests. Consequently, during the formation of health-saving behavior of students, it is necessary to take into account the psychophysiological characteristics of boys and girls, but ultimately, universalization based on partnership relationships is necessary. Gender-oriented formation of health-saving behavior of students is intended to achieve a maximum in the realization of gender in health and to designate a universal model - androgynal, the purpose of which is the development of personality regardless of gender differences.

Thus, the formation of health-saving behavior of students in the presented research is possible through the project activities of students working on a personalized life-to-health project, the purpose of which is to save and accumulate a health resource. As a part of the experimental work, the authors identified experimental and control groups of students of the 1st to the 3rd year who studied at the Southern Federal University and the Don State Technological University. During the study, the authors came to the conclusion that in order to determine the effectiveness of the formation of health-saving behavior of students, it is necessary to choose an objective criterion that clearly shows the dynamics of physical health.

As such a criterion, the authors have determined the minimum oxygen consumption (MOC) (Zavodnyi, 2015). People with a maximum oxygen intake level of 42 ml / min / kg and more do not suffer from chronic diseases and have arterial blood pressure within the normal range. A close relation between the value of the maximum oxygen consumption and the risk factors for coronary heart disease was established: the higher the level of aerobic capacity (MOC), the better the blood pressure, cholesterol metabolism and body mass. The minimum limit value of the maximum oxygen consumption for men is 42 ml / min / kg, for women - 35 ml / min / kg, which is designated as the safe level of the somatic health of a person.

Depending on the size of MOC, there are 5 levels of physical health. Also, as the criteria for the assessment of the formation of health-saving behavior, the authors determined the following aspects: the stability of movement along a chosen health-saving route; the rapprochement of an ideal and real result (descriptive factor - "what I would like" and "what I have achieved"); the dynamics of the gender type of a personality of a student. As ideal for health-saving behavior of a gender type, the authors identified androgynal one as the most mobile, stress-resistant and adaptable to rapidly changing conditions of society and environment. All the work of students of experimental groups in the course of the experiment was divided into several conditional stages: the first diagnostic stage, in which all students underwent diagnostics. At the first stage of experimental work, the level of physical health of first-year students was studied and their belonging to gender personality types was determined. The total number of students participating in the experimental work was 304 people, of which 153 were experimental groups, 151 were control ones.

The representatives of all the groups were about the same age (20-22 years) and gender composition (60-65% of boys and 35-40% of girls). Gender typification of participants in the experimental work was as follows. In the control and experimental groups, the students showed approximately the same distribution by type of gender. On average for men within 5% a feminine type was typical, for 17% - masculine, for 31% - androgynal, 47% had indefinite gender type of personality. For females, gender typing by the feminine type is characteristic of 35% of the participants in the experiment, approximately 8% showed masculine type, 48% - androgynous, 9% - unspecified. Taking into account the fact that physical education classes were initially focused on saving and strengthening the health of students, the work of a physical education teacher with students of control groups was carried out as usual without attracting additional means of work.

For the students of experimental groups, a teacher played the role of a consultant, accompanying them in the process of movement along individual routes of formation of health-saving behavior, the implementation of which was recorded in health portfolio. The work of students of experimental groups in the course of experimental work continued in the following stages: the second stage of self-assessment of health status based on diagnostic results; at the third stage, students determined the ideal (desired) result (level of health); the fourth stage was devoted to the choice of orientation towards the formation of health-saving behavior as a strategy for the achievement of the ideal (desired) result; the fifth stage was related to the planning an individual route to the ideal (desired) result; at the sixth stage, students were moving along an individual route (tracked by a teacher).

It is necessary to note that active participation of a physical education teacher in this work as an aid and mentorship is necessary only in the first, fifth, sixth and seventh stages. The formation of health-saving

behavior of students is represented by the following components: diagnostic; variable models of sports and physical activity; communicative; corrective. The diagnostic component allows determining the state of health of students; physical activity allows increasing the health resource; communicative component correlate with the phenomenon of social health (or life in society); corrective allows comparing the real state of health compared with previous experience and making the necessary changes to the program plan of a student. Variable models of sports and physical activity in the framework of the formative experiment are presented: for girls - aqua aerobics, dance therapy, cheerleading, healthy walking (running), rhythmic gymnastics, "Hatha Yoga" system gymnastics, swimming, tourism, football, boxing, shooting, etc.; for young men - swimming, tourism, boxing, shooting, athletic gymnastics, team sports (football, hockey, volleyball), jogging, etc.

The communicative component is realized with the participation of a psychologist in a competitive environment, designing and implementing role-playing games that simulate, above all, conflict situations in order to develop partner communication skills. The basis of a healthy lifestyle is presented by a complex of biological and social principles. The biological principles include age, energy, strengthening, rhythm and moderation. Social principles include aesthetics, morality, self-regulation and self-limitation. The improvement of a person depends on the complex correspondence of the directions that make up its basis: harmony with the outside world, the Universe and self; comfortable state of mind; mental and physical health strengthening; the expansion of consciousness for the purpose of self-realization.

During the experimental work, the movement of students along individual routes for the formation of health-saving behavior was monitored. At the seventh stage of the work of students of experimental groups, the assessment of the result of movement along an individual route (re-diagnosis) was made: the re-diagnosis of the level of physical health of students according to the MOC indicator and the gender typification of the experiment participants was studied. According to the results of the work of students of experimental groups (regardless of gender), the level of physical health reached a high value. The indicators of the level of physical health of students in the control group for boys and girls in general were below average. By the end of the third year, the stability of movement along the route of health saving among students of experimental groups reached 100%. For the comparison, in the first year, it was 55% for girls, 61% for boys, and 74% and 76% for the students of the second year, respectively. The indicator of the convergence of the ideal and real results increased significantly by the end of the experimental work (from 43% to 78% among young men, from 52% to 86% among girls). In this case, the authors note the following fact: the growth rate of the convergence of the ideal and real result directly depends on the dynamics of the gender type of a personality of a student.

7. Conclusion

The results of experiment showed that during the research the majority of students of experimental groups changed the gender type of personality to androgynal, which determined the stability of their movement along the health protection route, regardless of personal and social circumstances. On the basis of the study, the authors developed an algorithm for designing and adapting a model for the formation of health-saving behavior of students in higher educational institutions, which consists of the following stages: *The first stage* is monitoring of health saving, including: multifactorial diagnostics of the health status of

boys and girls (physical, psycho-emotional, intellectual, social components); the values preferences of boys and girls in terms of health; the resource provision of health care in university; the relationship of personality and society; the prospects for self-realization of boys and girls in terms of the formation of health-saving potential, i.e. the design strategies for personalized health saving practices.

The second stage: the development and implementation of health-saving technologies in the education and life of students; the formation and manifestation of health-saving behavior of students (with possible correction) through the implementation of personalized social projects; the structuring of individual practices of health-saving behavior of students as components of the health-saving environment of the life of young men and women. *The third stage:* the diagnostics of the formation of health-saving behavior of university students in terms of designing an ideal result, its achievement and determining the variables of coincidence and discrepancy between the desired and the actual results; the annual analysis of the results, the design of the health portfolio of girls and boys; the expansion of resource support for the formation of health-saving behavior in accordance with the needs and demands of students. Experimental data convincingly proves that the proposed algorithm can be used to form health-saving behavior of students in institutions of both higher and secondary education.

References

- Abutalipova, L. N., & Suliaev, N. I. (2015). Modern youth policy in high school. *Higher education in Russia*, 86–90.
- Demkina, E. P. (2016). Formation of a healthy lifestyle of students: how not to miss the most important thing? *Higher education in Russia*, 5, 50–55.
- Kramskoi, S. I., & Amelchenko, I. A. (2014). On the implementation of the health program in a technical university. *Higher education in Russia*, 3, 93–98.
- Lebedev, A. V., Aizman, N. I., Subotyalov, M. A., Gerasev, A. D., & Aizman, R. I. (2017). Assessment of addictions to psychosocial addictions among students aged 17–18 years in Novosibirsk. *Integration of education*, 4(21), 695–708.
- Martynenko, O. O., & Korotina, O. A. (2016). Value orientations of student youth. *Higher education in Russia*, 8–9(204), 22–29.
- Merkulova, T., Mezhybetskaya, I., Klygina, I., Ponomareva, L., & Zagorodneva, O. (2017). Characteristics of health-saving behavior among students. *International Scientific and Practical Conference "World Science"*, 8(24), 66–68.
- Naumenko, Yu. V. (2007). Modeling of health-forming education. *Issues of education*, 2, 140–160.
- Riff, K. (2005). Scales of psychological well-being of an individual. Retrieved from: <http://dip-psi.ru/psikhologicheskiye-testy/post/oprosnik-shkala-psihologicheskogo-blagopoluchiya-k-riff-adaptaciya-t-d-shevelenkovej-p-p-fesenko>
- Wadhwa, M., & Zhang, K. (2019). When numbers make you feel: Impact of round versus precise numbers on preventive health behaviors. *Organizational Behavior and Human Decision Processes*, 150, 101–111.
- Zavodnyi, N. A. (2012). The vector orientation of the gender technology module of behavioral health practices in higher education. *Science*, 4. Retrieved from: <https://naukovedenie.ru/PDF/17prgsu412.pdf>
- Zavodnyi, N. A. (2015). Gender-oriented model of the formation of health-saving behavior of university students. *Concept*, 8, 201–205. Retrieved from: <http://e-koncept.ru/2015/15297.htm>
- Zelionko, A. V., Luchkevich, V. S., Avdeeva, M. V., & Filatov, V. N. (2017). Principles of formation of health-saving behavior among the population based on the competence-activity approach. *Bulletin of Northwestern State Medical University*, 2(9), 97–102.