

# **Health Risks of Higher School Teachers**

Irina E. Nadutkina<sup>1</sup>, Tatyana N. Kameneva<sup>1, 2</sup>, Galina A. Elnikova<sup>1, 3</sup>, Natalya V. Prokazina<sup>1, 4</sup>, Yuriy V. Shmarion<sup>1, 5</sup>, Yulia A. Kuptsova<sup>1</sup>

1 – Belgorod State National Research University, 85 Pobedy St., Belgorod 308015 Russia 2 – Kursk State Medical University,

3- K. Marksa St., Kursk 30504 Russia, Belgorod University of Cooperation, Economics and Law, 116a Sadovaya St., Belgorod,308023 Russia

4 – Altai Branch of the Russian Academy of National Economy and Public Administration under the President of the Russian Federation, 187 Partizanskaya St., Altai Krai, Barnaul 656008 Russia

5 – Lipetsk State Pedagogical University, 42 Lenin St., Lipetsk region, Lipetsk 398020 Russia

The organization where this study was performed: Belgorod State University, Belgorod, Russia

Corresponding author: Irina E. Nadutkina, Belgorod State National Research University, Belgorod, Russia; e-mail: nadutkina@bsu.edu.ru

#### **Abstract**

Health preservation of higher school teachers is an important task in the individual perspective as well as in the public one. Difficult social conditions, the specifics of professional activity have an impact on the health of teachers. Sociocultural risks that characterize the modern reality can lead to both health disorders and, consequently, to problems in professional sphere. This paper attempts to analyze the impact of sociocultural risks on the health-oriented behavior and professional activity of higher school teachers on the basis of empirical research data.

The aim of the study was to analyze the attitude to the health of higher school teachers and identify the risks of health-saving behavior.

## Materials and Methods.

The concepts of risk society by W. Beck, E. Giddens, N. Luhmann and approaches to the sociocultural understanding of risk by A. Wildavsky, M. Douglas, and K. Dyck made it possible to identify sociocultural risks in the health sphere of higher school teachers. The social research was conducted among higher school teachers in Kursk and Belgorod universities, N=300, with the aim to study the impact of sociocultural risks on the health of higher education teachers. The research was conducted according to a specially developed questionnaire in September-October 2020 by means of the Internet survey.

## Results and Discussion.

Sociocultural health risks of teaching staff can be understood as the expectation of the occurrence of events generated by both environmental conditions and professional ones that affect the health itself and change the established practices of health-oriented behavior. Sociocultural risks include occupational risks, such as expectations of negative consequences of changes in the field of professional activity, which can lead to changes in the health sphere. According to 89% of teachers, the specifics of their professional activities increase the negative impact of environmental factors and can contribute to the development of diseases. Significant risk factors are environmental problems, heredity, the complexity of the requirements for teaching activities and the digitalization of the educational environment.

## Conclusions.

The impact of sociocultural risks on the health of higher school teachers is characterized by the complexity and can be expressed both in negative events and positive ones, contributing to the implementation of health-preserving behavior practices. Problems in the health sphere have an impact on the manifestation of subjectivity of teachers in the educational space.

**Keywords:** health; professional health of higher school teachers, sociocultural risks.

## Introduction.

Health is the most important social value, a resource that determines the life activity of a person in all spheres, it is a large, multifaceted concept that includes physical, mental, moral and social components. According to the WHO definition, health is a state of complete physical, mental and social well-being, and the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction as to race, religion, political opinion, economic or social condition [1]. The problems of preserving and maintaining health are important both for each individual and for the society as a whole. The complication of the epidemiological situation, which characterizes today's reality, has changed the usual course of people's lives and presented a threat to the health. Higher school teachers found themselves in ambiguous terms. The change in working hours, the increase in workload, combined with the need to quickly master new skills in the context of distance learning, could not but affect their health, both psychosomatic and social ones. Higher school teachers and students are the leading subjects of the educational space of a modern university. The state of teachers' health affects not only the result of their professional activities, but also the formation of students' attitude to their health. The health indicators of higher school teachers have remained low over the past few years. Thus, according to the results of the research, when assessing their health status, only 1/3 of teachers believe that they have no problems, and only 3% apply for a sick leave. Among the most common diseases, cardiovascular diseases, diseases of the musculoskeletal system and ENT organs were identified [2]. Not only factors directly related to professional activity have a negative impact on health, but also many others - the environmental situation, stress, as an integral component of modern life, family, lifestyle peculiar to each individual, heredity. The specifics of professional activity, saturated with both complexity and increased responsibility for the results of work, as well as emotional tension, low motor activity, create a danger to the health of teachers, which increases in the conditions of instability and uncertainty. The health of higher school teachers is influenced by a complex of risks caused by factors of professional activity and the environment, including heredity. In the context of a pandemic, economic, social, political instability and

information redundancy, the intensity of risk manifestations began to increase. The risks expressed in the expectation of the occurrence of negative consequences of events [3], as well as the need to anticipate possible consequences, affect the behavior in the health sphere of higher school teachers. The relevance of the research lies in the need to analyze the complex of factors that contribute to the emergence of risks, the manifestation of their negative impact with the aim to minimize the negative consequences in the field of health preservation and the formation of a health-saving behavior culture of the leading subjects in the educational space.

#### Literature review.

The interpretations of risk proposed by W. Beck, E. Giddens, N. Lumanon, its sociocultural interpretations by A. Wildavsky, M. Douglas, and K. Dyck made it possible to identify sociocultural risks in the health sphere of higher school teachers. According to D. Lupton, risk is a consequence of socio-economic, socio-cultural and political processes and can lead to global social changes [4]. From the standpoint of the cultural concept of M. Douglas, D. Lupton and S. Lash, sociocultural risk is understood as social expectations of the ensuing of negative consequences that can change human behavior, including in the field of health. The effect of sociocultural risks increases during the period of instability and uncertainty, when a person finds himself in unusual conditions [3]. Therefore, health-oriented behavior in such conditions is associated with the assessment of health as the highest value that can be lost for the subject. And sociocultural health risks of higher school teachers can be understood as expectations of the ensuing of negative consequences of life and professional events that violate the usual way of life and suggest changes or transitional periods, both in professional activity and in life in general.

The works of N. P. Abaskalov, A. Yu. Zverkova [5], M. M. Bezrukikh [6], T. G. Glukhova [7], F. Zeer [8] are devoted to the consideration of the professional and personal health of the teacher, in which the definition of the concept of professional health as a unity of physical, mental, psychological, spiritual and moral health is proposed, which ensures high efficiency, performance efficacy and development of the teacher's personality, taking into account the preservation of his or her subjectivity, the consequences of professional health violations are described. The reasons and factors that have a negative impact on the teachers' health are considered

by V. E. Pakhalyan. They include the irregular working day which continues with the end of official working time and naturally generates constant overload and lack of time for rest, high levels of psychological tension and responsibility, the complexity of the requirements for teaching activities and low adaptability to them [9]. The relationship between the life difficulties of higher school teachers and the presence of chronic diseases is analyzed by T. N. Kameneva, E. V. Konishcheva, I. E. Nadutkina, M. V. Selyukov, N. P. Shalygina [10].

Issues related to the regulation of professional health of a higher school teacher are disclosed by S. D. Tsydypova. The dependence of health on the length of work at the university is revealed – health indicators are decreased with the increase in the duration of teaching activities. Attention is focused on the need for institutional regulation of occupational health. The author emphasizes that the issues related to the preservation and maintenance of health belong to the system of self-regulation [11].

The lack of well-developed regulatory mechanisms can lead to the loss of subjectivity of teachers under the influence of normativity in combination with external factors [12]. The role of the health-oriented policy of the university, which involves purposeful complex activities to preserve the health of all subjects of the educational process, is revealed in the works of O. N. Polukhin, I. N. Nikulin, V. N. Irkhin [13].

Professional risks and health of teachers are studied in the works of V. G. Kuroedov, V. Yu. Alabushev, L. O. Zerne. The interrelation of the main sources of risk for the professional health of a teacher is analyzed, the consequences are identified, recommendations for preserving and strengthening are proposed, and ways to preserve and strengthen the teachers' health are presented [14].

The analysis of the scientific development of problems shows the interdisciplinary of approaches to the study of problems and the need to study the impact of socio-cultural risks on the health of higher school teachers.

## Material and Methods.

The transformation of the global educational space, the transition to digital reality and complex socio-cultural conditions produce risks that affect all spheres of life. The uncertainty of the ways of further development of the institute of education is perceived by teachers, the leading subjects of the educational space, as an increase in risks and has a negative impact on the state of psychosomatic and social health. According to E.

Giddens and W. Beck, risks are inherent in the very process of transformation that generates them, introducing uncertainty into every cell of society. E. Giddens believes that dangers are associated with risk, which is to a greater extent an important indicator of modernization processes in society [15, 16]. In complex epidemiological situations, a person risks their health and, therefore, recognizes the danger. The analysis of risks through the categories "danger" and "threats" is carried out in the works of Yu. I. Matveenko [17]. The relationship between the concepts of risk and vulnerability is shown in the works of S. A. Kravchenko. Vulnerability is a subjective component of risk, which is expressed in the strengthening of social fears, the loss of the mechanism of adaptation to new conditions [18]. According to N. Luman, risk belongs to the sphere of the subject who actively makes decisions and transforms the world, and the attitude to risk depends on the person. At the same time, the danger is rather a product of the environment, the action of specific factors that destabilize functioning of a system [19]. From this point of view, the current living conditions, the Covid 19 pandemic are the dangers, the threats that humanity has faced. Health risks reflect the attitude to existing dangers and threats, their expectation, combined with negative consequences in the future, which affects the state of health. At the same time, the danger, as a rule, arises in external conditions that are inevitable and objective for the subject, but the threat can be created by own ideas and perceptions of danger and be subjective. Therefore, danger can be understood as a risk factor that increases the likelihood of violations in health-saving behavior.

Health risks are associated with the choice of an action method in uncertain situations. The choice in uncertain conditions is accompanied by a high degree of risk, which is connected with the dangers associated with health-preserving behavior. In this case, a person can be inherent in two positions: active, aimed at preserving health, and passive, characterized by inactivity.

Teaching staff of the higher education system represent a special socio-professional group, their health is most exposed to risks.

Sociocultural health risks of teaching staff can be understood as an expectation of the occurrence of events generated by both environmental conditions and professional ones that affect the health itself and change the established practices of health-oriented behavior. Sociocultural risks include occupational risks, such as expectations of negative consequences of changes in the field of professional activity, which can lead to changes in the field of health.

Sociotechnical risks generated by environmental conditions can be understood as the expectation of negative consequences of a violation of the physiological state as a result of the influence of the technosphere dangers.

The social research was conducted with the aim to study the impact of sociocultural risks on the health of higher school teachers.

The respondents were higher school teachers of Kursk and Belgorod universities, N=300. The research was conducted according to the specially developed questionnaire in September-October 2020 by means of the Internet survey. The questionnaires were sent directly to the universities, which allowed to minimize the possible self-selection effects typical of online questionnaires. **The aim of the research** was to measure empirically the attitude to the health of higher school teachers, on the basis of which it was assumed that the risks were identified.

The research uses the results of earlier sociological monitoring of the state of teachers' health. In statistical processing, the software packages for statistical analysis Statistica 12.0 and MS Excel 2010 were used, which implement the functions of data analysis and visualization using statistical methods.

## Results.

The analysis of the obtained empirical data showed that the majority of teachers rated their state of health as satisfactory (76%), and among those who noted the presence of chronic diseases, there were more representatives of the age groups from 26 to 30 years and older 55 years. The presence of chronic diseases among young teachers confirms the data on the decline in health indicators, and in older age groups the deterioration of health due to age. The negative impact of distance education on health was noted by 78% of the survey participants, who, as a rule, were aged 41 years and older. Younger teachers were less likely to associate health problems with the changed form of work. The positive effect of distance education for their health were the following: "they became less ill", "less nervous", "the opportunity to have a snack" was noted by 29 % of teachers. As a Table 1

rule, these were 68% men aged 25 to 40 years, who do not have an academic degree (71%). Stress at work as the main source of diseases was identified by 67% of respondents. The opinion that health is primarily necessary for professional success and self-realization was held by 82%, regardless of gender and age, and 66% of respondents agreed with the statement "health is the greatest happiness", most of whom were women (57%), aged 25 to 40 years. It can be assumed that for teachers of older age groups, health is an instrumental value, lost health does not allow them to achieve the desired professional results, and for younger teachers, who assume that due to their age they have a lot of chances to fulfill their professional aspirations, but also realize the undeniable importance of health is a terminal value.

According to the majority of the survey participants (89%), the specifics of their professional activities increase the negative impact of environmental factors, which can contribute to the development of diseases. To a greater extent, this opinion was held by women aged 41 to 60 years who have an academic degree.

Due to the variety of factors affecting the teachers' health, an attempt was made to differentiate the spheres of influence. The methodological approach to assessing the health of teachers proposed by S. D. Tsydypova allowed us to determine the individual sphere, reflecting the basic medical and biological indicators; the personal sphere, reflecting the development of potential opportunities and the activity sphere reflecting the resulting indicators of professional health. It can be assumed that sociocultural risks are localized mainly in a certain area [11].

In the course of the research, respondents were asked to assess the degree of influence of environmental phenomena and professional activity on health, taking into account the specifics of their teaching work (the standard deviation was calculated using the following

formula: 
$$s = \sqrt{\frac{\sum (x - \overline{x})^2}{n - 1}}$$
, where  $\overline{x}$  is the sample

average, and n is the sample size).

Assessment of the level of influence of environmental influences on the state of health on a 10-point scale

Sphere of	Violations of biomedical	Health disorders affecting	Loss of professional
influence	health indicators (individual)	potential opportunities	health (activity)
		(personal)	
Risk factors			
	point ± standard deviation		
Economic	$6.8 \pm 1.0$	$8.9 \pm 1.2$	$8.9 \pm 1.4$

instability			
Environmental	$9.2 \pm 1.8$	$9.3 \pm 1.6$	$8.9 \pm 1.2$
problems			
Problems in the	$8.9 \pm 1.1$	$9.9 \pm 0.3$	$9.8 \pm 0.6$
family			
Changes in the	$9.2 \pm 1.0$	$9.9 \pm 1.8$	9.8± 1.7
epidemiological			
situation			
Hereditary factors	$9.2 \pm 1.4$	$9.0 \pm 1.3$	$9.7 \pm 0.6$

Among the significant risk factors, the respondents identified environmental problems that manifest themselves in the individual and personal spheres, family difficulties that affect mainly the personal and Table 2

activity spheres. Hereditary problems and currently updated changes in the epidemiological situation, according to teachers, affected all areas of professional health.

Assessment of the level of influence of the professional environment on the state of health on a 10-point scale

Sphere of influence	Violations of biomedical health indicators (individual)	Health disorders affecting potential opportunities	Loss of professional health (activity)
		(personal)	
Risk factors			
	point ± standard deviation		
Digitalization	$9.8 \pm 1.0$	$9.2 \pm 1.2$	$9.9 \pm 1.0$
Administrative and	$8.9 \pm 1.2$	$9.2 \pm 1.8$	$9.3 \pm 1.6$
regulatory			
regulation			
Mass formation	$8.9 \pm 1.1$	$8.7 \pm 0.3$	$7.5 \pm 0.6$
Information	$9.0 \pm 1.0$	$8.9 \pm 1.8$	8.8± 1.7
overload			
Complication of	$9.2 \pm 1.4$	$9.0 \pm 1.3$	$9.8 \pm 1.2$
requirements for			
pedagogical activity			
Threats of job loss	$9.0 \pm 1.2$	$7.5 \pm 1.6$	$8.7 \pm 1.9$

The most significant negative impacts of the professional sphere for teachers were the complication of the requirements for teaching activities and the digitalization of the educational environment, they affected all areas of health. Fear of job loss and an increase in professionally-oriented information, according to the study participants, could rather lead to violations in the individual sphere. Administrative and regulatory regulation affected the personal and activity spheres of the respondents. Spontaneity in this area, the intensification of processes of this type of regulation can lead to the loss of subjectivity of teachers.

However, according to respondents, difficult risky conditions do not always have a negative impact on their health, but on the contrary, can encourage a more attentive attitude to it.

## Conclusion.

The analysis conducted will allow us to assume that, in general, the state of health of teaching staff is

satisfactory. Remote work had an impact on the health of teachers, but also allowed them to maintain it in difficult epidemiological conditions. Health is an important factor of professional success, and the pedagogical activity itself contributes to the strengthening of the negative impact of environmental factors on health. Socio-cultural risks, having a localization area, have a complex impact on the health of higher school teachers, which is expressed both in negative events and positive ones, forming health-preserving practices in the health-oriented behavior. Problems in the health shpere, deviations in health-oriented behavior affect the degree of subjectivity of teachers in the educational space.

#### **References:**

1. Constitution of the world health organization. 19 June to 22 July 1946. Available from:

https://www.who.int/governance/eb/who\_constitution \_en.pdf

2. Grosheva, E.S., Popova, O.A., Kartysheva, S.I. (2016) Teacher's health as a professional value. Eurasian Union of Scientists, 3 (24): 108 - 109. Available from:

https://cyberleninka.ru/article/n/zdorovie-pedagogakak-professionalnaya-tsennost/viewer (in Russ.)

- 3. Kameneva, T.N., Zotov, V.V. (2017) Development of proactive familistic model of public health as a condition for the realization of the state family policy. Theories and Problems of Political Studies, 6 (6): 173 179 Available http://publishingfrom: vak.ru/file/archive-politology-2017-6/16-kamenevazotov.pdf (in Russ.)
- 4. Lupton, D. (1999) Risk. Routledge, London.
- 5. Abaskalova, N.P., Zverkova, A.Y. (2015) Contemporary technologies of developing a program of health in the educational organization. Research result. Pedagogy and psychology of education, 2 (4): 42 47. Available from: https://cyberleninka.ru/article/n/sovremennyetehnologii-razrabotki-programmy-zdorovya-vobrazovatelnoy-organizatsii (in Russ.)
- 6. Bezrukikh, M.M. (2012) Health-saving educational environment and factors preventing it. Man and 10 - 16. Available education, (2): https://cyberleninka.ru/article/n/zdoroviesberegayusch aya-obrazovatelnaya-sreda-i-faktoryprepyatstvuyuschie-ee-sozdaniyu. (in Russ.)
- 7. Glukhova, T.G. (2015) Art-Therapeutic Training as a Means of Updating Teachers' Perception of Their Professional Health. Science and Culture of Russia, (1): 303 307. Available from: https://www.elibrary.ru/item.asp?id=25052679 (in Russ.)
- 8. Zeer, E.F. (2003) Psychology of professions. Academic project. Moscow Lupton D. Risk. London, Routledge, 330 p. (in Russ.)
- 9. Pakhalyan, V.E. (2006) Development and psychological health. Preschool and school age. St. Petersburg: Peter, 240 p.: 31 (in Russ.)
- 10. Kameneva, T.N., Konishcheva, E.V., Nadutkina I.E., Selyukov M.V., Shalygina N.P. (2020) Impact of life difficulties on health of teachers of higher school. Problems of social hygiene, public health and history of medicine, Russian journal, 28 (S): 748 – 753. doi: 10.32687/0869-866X-2020-28-s1-748-753. [PubMed] 11. Tsydypova, S.D. (2013) Regulatory Function of Productive Self-evaluation of Professional Health of Higher School Educators. Izvestia. Herzen University Journal of Humanities & Sciences, (160): 257 - 262.

Available from: https://cyberleninka.ru/article/n/regulyativnayafunktsiya-produktivnoy-samootsenkiprofessionalnogo-zdorovya-pedagoga-vysshey-shkoly (in Russ.)

- 12. Mitina, L.M. (2012) Psychology of professional activity of a teacher: a systematic personal-developing approach. The Moscow University Bulletin. Series 20. Pedagogical Education, (3): 48 – 64. Available from: https://cyberleninka.ru/article/n/psihologiyaprofessionalnoy-devatelnosti-pedagoga-sistemnyy-
- lichnostno-razvivayuschiy-podhod (in Russ.)
- 13. Polukhin, O.N., Nikulin, I.N., Irkhin, V.N., Nikulina, T.V. (2016) Health-promoting policy in Belgorod State National Research University. Theory and Practice of Physical Culture, (1): Available from: https://cyberleninka.ru/article/n/zdorovieorientirovann aya-politika-belgorodskogo-gosudarstvennogonatsionalnogo-issledovatelskogo-universiteta (in Russ.)
- 14. Kuroedov, V.G., Alabushev, V.Yu., Zirne, L.O. (2016) Professional risks and teacher's health. Meteor.ru Unified education portal. Available from: http://me-po.ru/articles/717-professionalnye-riski-izdorove-pedagoga.html (in Russ.)
- 15. Giddens, E. (1994) Fate, risk and safety .THESIS, (5): 107 - 134.
- 16. Ragozin, N. (2010) Conceptual Frames for «Risk Society». The Journal of Philosophy and Social Sciences, 4 11. Available (2): from: http://ea.donntu.org:8080/bitstream/123456789/9231/ 1/%D0%A0%D0%B0%D0%B3%D0%BE%D0%B7 %D0%B8%D0%BD%20%D0%9A%D0%BE%D0% BD%D1%86%D0%B5%D0%BF%D1%82%20%D1 %80%D0%B0%D0%BC%D0%BA%D0%B8%20%D 0%B0%D0%BD%D0%B0%D0%BB%D0%B8%D0%B7%D0%B0%20%D0%BE%D0%B1%D1%89%D 0%B5%D1%81%D1%82%D0%B2%D0%B0%20%D1%80%D0%B8%D1%81%D0%BA%D0%B0.pdf (in Russ.)
- 17. Matveenko, Yu.I. (2012) Modern approaches to the study of risk Bulletin of Tula State University. Film Humanities, (1): 165 – 173. Available from: https://cyberleninka.ru/article/n/sovremennyepodhody-k-izucheniyu-riska (in Russ.)
- 18. Kravchenko, S.A. (2013) The problem of the new vulnerabilities of the russian society. MGIMO Review of International Relations, 4 (31): 282 - 290. Available from: https://vestnik.mgimo.ru/jour/article/view/1307/1048 (in Russ.)

19. Luhman, N. (1994) The concept of risk. THESIS, Scopus Author ID: 56922083300 (5): 135 – 160.

#### Conflict of interest is not declared.

#### INFORMATION FOR THE RSCI

Irina E. Nadutkina - Cand. of Social Sciences, Associate Professor, Associate Professor of the Department of Social Technologies and Public Service, Belgorod State National Research University

85 Pobedy St., Belgorod, 308015

e-mail: nadutkina@bsu.edu.ru

Tatyana N. Kameneva - Doctor of Social Sciences, Associate Professor, Head of the Department of Public Health and Public Health, Kursk State Medical University

3 K. Marx St., Kursk, 305041

e-mail:kalibri0304@yandex.ru,

Galina A. Yelnikova - Doctor of Social Sciences, Professor, Department of Humanities and Socio-Economic Sciences, Belgorod University of Cooperation, Economics and Law 116a Sadovaya St., room 102 a, Belgorod, 308023

e-mail: elnikova.galina@gmail.com

Natalia V. Prokazina - Doctor of Social Sciences, Professor, Head of the Department of Psychology and Sociology of Management, Altai Branch of the Russian Presidential Academy of National Economy and Public Administration 187 Partizanskaya St., Barnaul, 656008

e-mail: nvprokazina@mail.ru

Yuri V. Shmarion - Doctor of Social Sciences, Professor, Professor of the Department of Philosophy, Sociology and Theology, Semenov-Tyan-Shansky Lipetsk State Pedagogical University

42 Lenin St., Lipetsk, 398020

e-mail: jbshmarion@mail.ru

Yulia A. Kuptsova – Senior Professor of the Department of English Philology and Cross-Cultural Communication, Belgorod State National Research University

85 Pobedy St., Belgorod, 308015

e-mail: kuptsova@bsu.edu.ru

#### **ORCHID**

Irina E. Nadutkina. – ORCID https://orcid.org/0000-0003-4416-9126

ResearcherID: AAP-4694-2020 Scopus Author ID: 67190877622

Tatyana N. Kameneva – ORCID https://orcid.org/0000-0002-0250-2421

ResearcherID: F-9288-2017

Scopus Author ID: 57211958966

Natalia V. Prokazina - ORCID https://orcid.org/0000-0002-

1677-5324

ResearcherID: AAD-2677-2020 Scopus Author ID: 37115960600

Yuri V. Shmarion — ORCID https://orcid.org/0000-0002-0960-4770

Scopus Author ID: 57218380058

 $Yulia\ A.\ Kuptsova-ORCID\ https://orcid.org/0000-0001-6319-8147$