Readiness of adolescents for self-preservation of health in the information educational space

UDC 796.011.3

PhD, Associate Professor **I.I. Kapalygina**[1]
Dr. Hab., Professor **L.N. Voloshin**[2]
Dr. Hab., Professor **V.L. Kondakov**[2]
PhD, Associate Professor **E.N. Kopeikin**[2]
[1]Yanka Kupala State University of Grodno , Grodno
Belgorod State National Research University, Belgorod

Corresponding author: voloshina_l@bsu.edu.ru

Abstract
Objective of the study was to identifying the level of readiness of schoolchildren to maintain health in the information and educational space.
Methods and structure of the study. Pedagogical research (stating stage) was conducted on the basis of schools in Grodno (Republic of Belarus), which was attended by 324 schoolchildren aged 14-15 years. Research methods: theoretical analysis and generalization of scientific data; empirical methods (survey, questioning); methods of mathematical statistics (correlation analysis).
Results and conclusions. Analysis of self-assessment of the level of readiness of students aged 14-15 for self-preservation of health (cognitive and activity components) in the information and educational space indicates the presence of serious problems. Namely, more than half of adolescents have an insufficient level of knowledge about information hygiene, security, and a healthy speech environment. 2/3 of the respondents confirm that they are not ready to take meaningful actions to use knowledge about maintaining health. At the same time, correlations were established between the cognitive and activity components, which indicate the influence of the level of knowledge in the field of health preservation, information hygiene and security on the further behavior of adolescents in the information educational space.

Keywords: health, information and educational space, adolescents, readiness, information hygiene, information security.

Introduction. The modern information space, along with a huge developmental, educational, communicative potential, carries a number of negative influences that contribute to the violation of both mental and physical health. Therefore, the problem of self-preservation of the health of students when immersed in the information educational space requires special attention. A number of modern domestic and foreign studies are devoted to its study [5–7].

In the works of D.A. Bogdanova reveals the problems of the influence of information on young people. In the works of D.A. Bogdanova reveals the problems of the influence of information on young people and offers options for situations of information security support [1]. A.N. Safronova, N.O. Verbitskaya, N.A. Molchanov, considering the problems of self-preservation of the health of students in the digital space, point to the need to create a

virtual educational environment in each educational organization [4].

The collective monograph edited by I.F. Kefeli, R.M. Yusupova [2]. In their study, E. Segers and T. Kleemans studied the influence of the digital environment and communication style in the family on the speech behavior and literacy of students [8].

We believe that adolescents' understanding of the social and personal significance of self-preservation of health to a certain extent depends on the totality of knowledge and ideas about the health risks of the digital environment and the ability to apply this knowledge in specific situations.

All this forms the basis of a teenager's readiness to maintain health in the information educational space. In our study, we consider readiness as the ability to productively implement health protection actions based on existing knowledge and skills. Readiness

includes motivational-value, cognitive, activity and reflective components. Earlier, in our studies, we presented the level of formation of the motivational-value component [3].

Objective of the study was to identifying the level of readiness of schoolchildren to maintain health in the information and educational space (cognitive, activity components).

Methods and structure of the study. Pedagogical research was conducted on the basis of city schools. Grodno (Republic of Belarus), which was attended by 324 schoolchildren aged 14-15 years. During the survey, the respondents were asked to give self-assessment of knowledge and skills in the field of health, information hygiene and security on a 3-point scale: the optimal level (3 points) - I have a complete understanding, I have full knowledge in the field of health, information hygiene and security to the extent of their ability to apply in the information and educational space; insufficient level (2 points) - I have partial ideas and knowledge, I do not fully possess the skills to apply them in the information and educational

space; low level (1 point) - I do not have knowledge, ideas in the field of health, information hygiene and security, I do not possess the skills of safe behavior in the information and educational space. Next, the sum of the points received was determined, and the level of readiness of students for self-preservation of health in the information space was assessed: 50-60 points - optimal; 35-49 points - insufficient; up to 34 points - low.

Results of the study and their discussion. As the results showed, information hygiene turned out to be a problematic field for modern adolescents aged 14-15 (see table). It can be stated that today it is not realized by schoolchildren. According to self-assessment, only 15.8% of schoolchildren have knowledge of information hygiene. Students are even less interested in information security. When working on the Internet, teenagers do not think about their own safety. Only 10.9% of schoolchildren have knowledge of "information security".

Such concepts as "computer addiction" and "gaming addiction" are familiar to schoolchildren. 28.6%

The level of readiness of adolescents aged 14-15 years to self-preservation of health (cognitive and activity components) in the information and educational space, %

Content of key views and knowledge		Level		
		Optimal	**Insufficient**	**Low**
Kognitivnyy komponent	Information hygiene	15,8	34,7	49,5
	Information Security	10,9	24,5	64,6
	Healthy speech environment	18,9	44,7	36,4
	Secure communication	13,2	25,6	61,2
	Information safe space	20,9	20,6	58,5
	Computer addiction	28,6	32,3	39,1
	Gambling addiction	39,8	44,7	15,5
	Ideas about the relationship between information and health	8,2	34,6	57,2
	Ideas about the relationship between information and human behavior	5,8	17,5	76,7
	Ideas about the relationship between network information and human image	21,2	32,2	46,6
Skill Mastery		**Level**		
		Optimal	**Insufficient**	**Low**
Activity Component	Choose the form of speech on the Internet	24,4	27,4	48,2
	Observe information hygiene	11,4	29,8	58,8
	Comply with information security	8,6	20,8	70,6
	Resist computer addiction	20,7	22,2	57,1
	Engage in secure communication	12,3	19,6	68,1
	Fight gambling addiction	25,6	33,6	40,8
	Get out of the conflict created in the social network in the process of communication	24,3	16,5	59,2
	Plan work with information	6,8	28,7	64,5
	Handle the flow of information on the Internet	7,8	23,4	68,8
	Maintain a healthy speech environment	21,3	39,6	39,1

and 39.8% of students have knowledge about these dependencies, respectively. However, 20.7% and 25.6% of students, respectively, cannot resist computer and game addiction. This problem requires new approaches to the education of such personal qualities of adolescents as responsibility for their own health, self-control and self-regulation.

The level of schoolchildren's ideas that information, health and human behavior can be interconnected is low. 8.2% and 5.8% of students have such ideas. However, the relationship between network information and a person's image seems possible to 21.2% of students.

The concept of "healthy speech environment" is not included in the knowledge content of 36.4% of schoolchildren. This can be explained by the lack of positive examples of verbal behavior in society. As a result of this, 13.2% of students have knowledge of safe communication in the information space.

The indicator of the ability to enter into safe communication as a whole does not have high results: 68.1% of students do not possess this ability. 48.2% of adolescents have a low level of the indicator "choose the form of expression on the Internet". Only 24.3% can get out of the conflict that has arisen in the social network in the process of communication. The majority of schoolchildren have not formed such significant indicators as "planning work with information" - 64.5% and "ability to cope with the flow of information on the Internet" - 68.8%.

All these problems are directly related to the readiness for self-preservation of health, its social potential in the information educational space and indicates its low level.

To identify the relationship between the cognitive and activity components, a correlation analysis was carried out. Strong relationships were found between most of the studied parameters. This confirms our assumption that the low level of knowledge in the field of maintaining health, information hygiene and safety in the information and educational space (cognitive component) inevitably leads to a low level of formation of the activity component.

The results obtained are compared with other studies. So, for example, Millan Ghisleri E., & Caro Samada C. in their study analyze some personal development strategies for adolescents aimed at eliminating the phenomena of virtual aggressiveness. Online aggressiveness, in their opinion, arises from a combination of individual and environmental factors. The latter include the family environment, the environment in which a teenager acquires the skills necessary for so-

cialization and personal maturity [7]. This once again emphasizes the relevance of the search for effective educational influences.

Conclusions. Analysis of self-assessment of the level of readiness of students aged 14-15 for self-preservation of health (cognitive and activity components) in the information and educational space indicates the presence of serious problems. Namely, more than half of adolescents have an insufficient level of knowledge about information hygiene, security, and a healthy speech environment.

2/3 of the respondents confirm that they are not ready to take meaningful actions to use knowledge about maintaining health.

At the same time, correlations were established between the cognitive and activity components, which indicate the influence of the level of knowledge in the field of health preservation, information hygiene and security on the further behavior of adolescents in the information educational space.

All of the above indicates the need to build a pedagogical system of interaction "children-parents-teachers", which ensures the harmonization of the processes of education, the upbringing of informatization and the preservation of the health of the younger generation.

References

1. Bogdanova D.A., Brovka N.V. Druzhestvennyy internet: kakim yego vidyat britanskiye shkolniki [Friendly Internet: how British schoolchildren see it]. Informatika i obrazovaniye. 2017. No. 10 (289). pp. 54-59.
2. Kefeli I.F., Yusupov R.M. [ed.] Informatsionno-psikhologicheskaya i kognitivnaya bezopasnost [Information-psychological and cognitive security]. Petropolis publ., St. Petersburg, 2017. 300 p.
3. Kapalygina I.I. Stanovleniye cheloveka: nravstvennyye tsennosti v kontekste lichnostnogo zdorovya [Formation of a person: moral values in the context of personal health]. Narodnaya asveta. 2013. No. 7. pp. 51-54.
4. Levushkin S.P., Zhukov O.F. Ispolzovaniye kompyuternykh tekhnologiy v fizicheskom vospitanii shkolnikov [The use of computer technologies in the physical education of schoolchildren]. Teoriya i praktika fiz. kultury. 2021. No. 1. pp. 49-51.
5. Safronova A.N., Verbitskaya N.O., Molchanov N.A. Vospitaniye v tsifrovom prostranstve: sa-

mosokhraneniye zdorovya [Education in digital space: self-preservation of health]. Sovremennyye problemy nauki i obrazovaniya. 2018. No. 6. Available at: https://science-education.ru/ru/article/view?id=28368 (date of access: 29.01.2022).

6. Kondakov, V.L., Kopeikina, E.N., Voloshina, I.G., & Usatov, A.N. (2019). Main directions digitalization in the higher education in the world and Russia (based on the example of physical culture and sports). Universal Journal of Educational Research, 7(10B): 47-52. DOI: 10.13189 / ujer.2019.07181

7. Millan Ghisleri, E., & Caro Samada, C. (2021). Prevención de la violencia y el acoso en la red en adolescentes: estrategias familiares de crecimiento personal. Teoría De La Educación. Revista Interuniversitaria, 34(1), 105–124. https://doi.org/10.14201/teri.26157.

8. Segers E. and Kleemans T. (2020) The Impact of the Digital Home Environment on Kindergartners' Language and Early Literacy. Front. Psychol. 11:538584. doi: 10.3389/fpsyg.2020.538584.