

Известия Саратовского университета. Новая серия: Акмеология образования. Психология развития. 2022. Т. 11, вып. 2 (42). С. 133–140 *Izvestiya of Saratov University. Educational Acmeology. Developmental Psychology,* 2022, vol. 11, iss. 2 (42), pp. 133–140 https://doi.org/10.18500/2304-9790-2022-11-2-133-140

Article

Educational and developmental activity of high school students under COVID-19 restrictions

I. V. Arendachuk [™], N. V. Usova, M. A. Klenova

Saratov State University, 83 Astrakhanskaya St., Saratov 410012, Russia

Irina V. Arendachuk, arend-irina@yandex.ru, https://orcid.org/0000-0002-8378-2284

Natalia V. Usova, usova_natalia@mail.ru, https://orcid.org/0000-0003-3699-9170

Milena A. Klenova, milena_d@bk.ru, https://orcid.org/0000-0002-3900-1233

Abstract. Most studies analyse educational process specifics during the spread of Covid-19 using higher education as an example. There is insufficient amount of research devoted to the study of students' activity at different levels of school education. The *purpose* of the study is to identify the differences in terms of manifestation and determination of high school students' educational and developmental activity in normal life and under social isolation. *Hypothesis*: educational and developmental activity of high school students increases under the conditions of forced isolation. This activity is expressed in an intensified interest in self-development. It is compensatory in nature due to a reduced number of social contacts and opportunities for the implementation of other forms of social activity. The study was carried out on a sample of high school students (N = 169) aged from 16 to 18 years. Techniques: the author's questionnaire aimed at identifying the degree of manifestation of educational and developmental activity; "Assessment of mental activation, interest, emotional tone, tension and comfort" (L. A. Kurganskiy, T. A. Nemchin); "Quality of Life Index" (R. S. Eliot, in the adaptation of N. E. Vodopyanova). The study found that educational and developmental activity of high school students under conditions of self-isolation is higher than in normal life. In general, their education and self-development activity is conditioned by their personal psycho-emotional states. If students are less active during distance learning, their activity is more determined by their mental states. If educational and developmental activity of high school students is high, they are focused on personal achievements, satisfied with their health, communication and support from others, and less prone to negative emotions. The *results* of the study can be used in psychological and pedagogical work with high school students, who are forced to be under conditions of social isolation in order to increase their educational and

Keywords: high school students, COVID-19 pandemic, social restrictions, distance learning, educational and developmental activity, personal mental states

Acknowledgments. This work was supported by the Russian Science Foundation (project No. 18-18-00298 "Psychological mechanisms and factors of social activity of youth").

Information on the authors' contribution. I. V. Arendachuk worked out the research methodology, the concept and the design of the study, carried out the analysis of the data obtained, and wrote the text; N. V. Usova carried out the theoretical review of the material, analysed the data obtained, and wrote the text; M. A. Klenova analysed the data obtained, formulated the conclusions, and wrote the text.

For citation: Arendachuk I. V., Usova N. V., Klenova M. A. Educational and developmental activity of high school students under COVID-19 restrictions. *Izvestiya of Saratov University. Educational Acmeology. Developmental Psychology*, 2022, vol. 11, iss. 2 (42), pp. 133–140. https://doi.org/10.18500/2304-9790-2022-11-2-133-140

This is an open access article distributed under the terms of Creative Commons Attribution 4.0 International License (CC-BY 4.0)

УДК 316.62

Научная статья

Образовательно-развивающая активность старшеклассников в условиях ограничений в связи с пандемией COVID-19

И. В. Арендачук [™], Н. В. Усова, М. А. Кленова

Саратовский национальный исследовательский государственный университет имени Н. Г. Чернышевского, Россия, 410012, г. Саратов, ул. Астраханская, д. 83

Арендачук Ирина Васильевна, кандидат психологических наук, доцент, доцент кафедры социальной психологии образования и развития, arend-irina@yandex.ru, https://orcid.org/0000-0002-8378-2284

Усова Наталия Владимировна, кандидат психологических наук, доцент, доцент кафедры социальной психологии образования и развития, usova_natalia@mail.ru, https://orcid.org/0000-0003-3699-9170

Кленова Милена Александровна, кандидат психологических наук, доцент кафедры социальной психологии образования и развития, milena_d@bk.ru, https://orcid.org/0000-0002-3900-1233

© Arendachuk I. V., Usova N. V., Klenova M. A., 2022

Аннотация. В большинстве исследований особенности образовательного процесса в условиях распространения коронавирусной инфекции анализируются на примере высшего образования. Отмечается недостаточность исследований, посвященных изучению активности учащихся на разных уровнях школьного образования. Цель: выявление различий в проявлении и детерминации образовательно-развивающей активности старшеклассников в обычной жизнедеятельности и в условиях социальной изоляции в связи с пандемией COVID-19. Гипотеза: в условиях вынужденной изоляции у старшеклассников имеет место повышение образовательно-развивающей активности, выраженной в росте их интереса к саморазвитию, которая носит компенсационный характер вследствие снижения социальных контактов и возможности реализации других форм социальной активности. Исследование выполнено на выборке старшеклассников (N = 169) в возрасте 16–18 лет (M = 17,4; SD = 0,73), из которых 71,6% – девушки. Примененные методики: авторская анкета, направленная на выявление степени выраженности образовательно-развивающей активности в разных условиях жизнедеятельности; методики «Оценка психической активации, интереса, эмоционального тонуса, напряжения и комфортности» (Л. А. Курганский, Т. А. Немчин), «Индекс качества жизни» (Р. С. Элиот, в адаптации Н. Е. Водопьяновой). Установлено, что в условиях самоизоляции образовательно-развивающая активность старшеклассников выше, чем в обычной жизнедеятельности. В целом их активность, направленная на образование и саморазвитие, обусловлена психоэмоциональным состоянием личности. Чем меньше учащиеся проявляют активность в условиях дистанционного обучения, тем больше она детерминирована их психическим состоянием (интересом, эмоциональным тонусом, комфортностью). При высокой образовательно-развивающей активности старшеклассники ориентированы на личные достижения, удовлетворены своим здоровьем, общением и поддержкой окружающих, менее подвержены негативным эмоциям. Результаты исследования могут быть использованы в психолого-педагогической работе со старшеклассниками, вынужденными находиться в условиях социальной изоляции (в связи с домашним обучением, длительной болезнью или возможными карантинными мероприятиями), направленной на повышение их образовательно-развивающей активности как важнейшего условия успешности их обучения.

Ключевые слова: старшеклассники, пандемия COVID-19, социальные ограничения, дистанционное обучение, образовательно-развивающая активность, психическое состояние личности

Благодарности и финансирование. Исследование выполнено при финансовой поддержке Российского научного фонда (проект № 18-18-00298 «Психологические механизмы и факторы социальной активности молодежи»).

Информация о вкладе каждого автора. И. В. Арендачук – методология, концепция и дизайн исследования, анализ полученных данных, написание текста; Н. В. Усова – теоретический обзор материала, анализ полученных данных, написание текста; М. А. Кленова – анализ полученных данных, формулирование выводов, написание текста.

Для цитирования: *Arendachuk I. V., Usova N. V., Klenova M. A.* Educational and developmental activity of high school students under COVID-19 restrictions [*Арендачук И. В., Усова Н. В., Кленова М. А.* Образовательно-развивающая активность старшеклассников в условиях ограничений в связи с пандемией COVID-19] // Известия Саратовского университета. Новая серия. Серия: Акмеология образования. Психология развития. 2022. Т. 11, вып. 2 (42). С. 133–140. https://doi.org/10.18500/2304-9790-2022-11-2-133-140

Статья опубликована на условиях лицензии Creative Commons Attribution 4.0 International (СС-ВҮ 4.0)

Introduction

Presently, the world is still faced with an unfavorable epidemiological situation caused by the spread of COVID. Therefore, it is still relevant to study issues related to peculiarities of the manifestation of young students' social activity in a situation of social isolation. Restrictive requirements during the pandemic significantly reduce students' ability to carry out educational and self-developmental activity, which is better manifested in the modern youth than other forms of social activity [1]. It is implemented through various types of educational and cognitive activity, as well as self-education activities aimed at satisfying one's educational interests and needs [2], searching for new hobbies and understanding the prospects for further selfdevelopment [3].

Authors of modern papers on the problem of social restrictions and distance learning of students due to the Covid-19 pandemic point out both negative and positive impact on people's activity, as they are forced to change their life and educational plans during the pandemic. However, most of the studies devoted to the educational problems (psychologi-

cal, pedagogical, organizational) were carried out based on the university materials and were devoted to university students, while school-level education remained understudied [4]. We have to point out that there are still unresolved issues regarding the differences in the manifestation of the educational and developmental activity of school students in normal life and under conditions of social isolation, as well as its relationship with personal mental states.

Educational and developmental activity of the modern student youth can be viewed as a necessary condition for individual development and self-development. It is implemented not only through various types of educational and cognitive activities within the framework of education process, but also through self-education activities aimed at satisfying individual educational interests and needs. Its manifestation in adolescence is determined by young people's increased need to gain new knowledge, to search for new hobbies that can help them realize their personal and career growth prospects [5]. That is why informal educational forms (i. e. master classes, video lectures, webinars, interactive educational resources, distance learning courses, etc.) are so popular among student



youth. They give students more freedom in terms of self-organization of their educational activities, increase the awareness of their place in the modern world, allow them to explore themselves and their relationships with others, determine the direction of further self-development and long-term life plans [3]. Researchers study individual activity aimed at education and self-development in the context of this individual's cognitive activity in relation to the surrounding world, which combines the processes of self-regulation of cognitive activity, cognitive motives and ways of carrying out educational and cognitive activities and solving educational problems [6].

The emergence and spread of COVID-19 condition transformation of the educational and developmental activity of young people due to the restrictions that have affected all spheres of their life. Transformation of the format of learning in general and education in particular into the on-line format has changed the nature of educational and cognitive activity, as well as the entire lifestyle of modern school students. A significant increase in the amount of academic and extracurricular workload online not only reduces the efficiency of understanding the educational material and requires significant time spent on homework, but also causes stress that has a negative impact on the mental and physiological state of school students [7].

Analysis of research that has already been carried out makes it possible to highlight the negative impact of the forced restrictions, that are caused by the Covid-19 pandemic, on the educational and developmental activity of the student youth. The studies point out the complexity and emotional intensity of their lives, the rejection of many habitual forms of behavior and activities [8], the change in the communication features in the form of transition to the media space, leaving no room for the usual public, group and personal interactions [9]. Researchers explain the decrease in the educational activity of young people by their unpreparedness for innovations and transformations, which act as additional factors of frustration [10] and adversely affect the psychophysical and psycho-emotional state of the children and youth [11, 12]. Particularly, there has been an increase in anxiety and negative emotional experiences of schoolchildren, a decrease in the overall level of their psychological well-being [10, 13], a decrease in the physical activity of schoolchildren, a significant increase in the amount of visual information they are subjected to and the emergence of problems associated with it [14, 15]. High school students (8-11 grades) also point out the unreasonable increase in the number

of homework assignments and loss of the sense in learning, which reduce their motivation and learning activity, and lower the level of their mental and physical well-being [16].

At the same time, researchers have pointed out positive consequences of distance learning during the period of social isolation [17]. The removal of temporal and space restrictions has contributed to active social maturation of high school students. They had more time to rethink their development program and habitual patterns of behavior, to read books relevant to their interests; new forms of communication with classmates have emerged; they have understood the value of time and the need for its reasonable organization [9, 14]. There has been a positive attitude of students to overcome difficulties in mastering a new form of education, an orientation of young people to form positively meaningful groups, an increase in their subjective well-being due to the focus on social contacts, which made it possible to use their internal and external resources [18].

Thus, the research results show that social restrictions and the associated transition to learning process using distance information technologies affect not only the mental and psychological health of students, but also their activity in education and self-development.

Methodology

The purpose of the study is to identify educational and developmental activity features in high school students under conditions of forced social restrictions. The study objectives are: 1) to study the differences in the manifestation of educational and developmental activity of high school students in normal life and under conditions of social restrictions due to the Covid-19 pandemic; 2) to identify psychological determinants that define the educational and developmental activity of high school students with varying degrees of its manifestation.

Hypothesis: educational and developmental activity of high school students increases under the conditions of forced isolation. This activity is expressed in an intensifi ed interest in self-development. It is compensatory in nature due to a reduced number of social contacts and opportunities for the implementation of other forms of social activity.

Participants. The study involved 169 high school students of from general education schools in Saratov (Russia) aged from 16 to 18 years (M = 17.4; SD = 0.73); 71.6% of them were girls and 28.4% of them were boys. The study was conducted between April and May 2021, high

school students and their parents were informed about its purpose. Participation in the study was voluntary and free of charge; confidentiality was ensured by anonymous participation. Questionnaires and test techniques were available online via Google Forms.

Techniques. We used the author's questionnaire to study socio-demographic characteristics and to identify the degree of manifestation of the personal educational and developmental activity. The respondents were asked to rate their level of emotional comfort under COVID-19 restrictions in points: low (1–3 points), medium (4–6 points), high (7–9 points), very high (10 points); they were also asked to rate their educational and developmental activity under normal life conditions and during the period of social isolation (on a scale from 1 to 5 according to the Likert scale). The content of educational and developmental activity was described through the following activities: doing school work; participation in subject Olympiads; competitions; scientific conferences; projects and research; self-education; attending developmental trainings, public lectures, webinars, master classes and other events aimed at personal development and acquisition of new skills (scales were checked for consistency and showed an acceptable reliability level: α Cronbach = 0.814).

High school students assessed their mental state and satisfaction with life under conditions of COVID-19 social restrictions using the following techniques:

- "Assessment of mental activation, interest, emotional tone, tension and comfort" (L. A. Kur-

ganskiy, T. A. Nemchin) [19] (all scales of the technique have an acceptable level of reliability: α Cronbach = 0.894);

– "Quality of Life Index" (R. S. Eliot, in the adaptation of N. E. Vodopyanova) [20]; we used the technique scales to identify mental tension areas caused by the quality of life (personal achievements, health, communication with close people, support) and characteristics of a person's satisfaction with his/her individual life (optimism, tension, self-control, negative emotions) (the reliability of the scales is high: α Cronbach = 0.925).

Statistical methods. The descriptive statistics methods, Cronbach' α and Kolmogorov – Smirnov' coefficients, Spearman rank correlation analysis were used for processing the data. Statistical analysis was conducted with the aid of the Statistical Package for the Social Sciences (SPSS 22.0).

Results

To carry out the comparative study of the educational and developmental activity manifestation in high school students under different conditions (in normal life and during social isolation), we used the sample of high school students, where we singled out two groups of students with a low (n=74; M=1.65; SD=0.48) and a high (n=44; M=4.39; SD=0.49) degree of manifestation of this activity, which they showed under normal conditions of life. Based on the obtained data (Table 1), we observed a significant increase in this form of activity in high school students with a low degree of its manifestation during the period of social isolation.

Table 1

Educational and developmental activity of high school students under different conditions of life

Manifestation conditions	Educational and developmental act		
	low (n = 74)	high (n = 44)	<i>p</i> -value
In normal life	1.65 ± 0.48	4.39 ± 0.49	p < 0.001
During social isolation	3.17 ± 1.32	4.18 ± 0.89	p < 0.001
<i>p</i> -value	p < 0.001	p > 0,05	-

Note. M – average value; SD – standard deviation; *p*-value – level of significance of differences between groups according to the Kolmogorov – Smirnov test for comparing two empirical samples.

Analysis of the dynamics of changes in the manifestation of educational and developmental activity in high school students revealed a trend towards its increase. In case of forced social isolation, we observed a decrease in the number of high school students in groups with a low and medium degree of activity (by 2.6 and 1.3 times, respectively) and a significant increase (by 2.3 times) in the number

of students with a high degree of its manifestation (Table 2). Interestingly, activity aimed at education and self-development did not change for 32.4% of students with a low degree of its manifestation, for 29.4% of students with a medium degree of its manifestation, and for 44.4% of students with a high degree of its manifestation (the percentage is taken from their total number in these groups). Only 7.1%



Table 2
Educational and developmental activity of high school students in terms of degree of its manifestation under different conditions

Degree of educational and developmental activity	In normal life		During social isolation	
	people	%	people	%
Low	74	43.8	28	16.6
Medium	51	30.2	39	23.1
High	44	26.0	102	60.3

of the entire sample of high school students showed a decrease in this activity under the influence of conditions associated with social restrictions.

We carried out the study of psychological factors that determine educational and developmental activity of high school students during social isolation due to COVID-19 pandemic using the comparative analysis, for which we selected groups of respondents with a low (n = 28; M = 1.64; SD = 0.49) and a high (n = 102; M = 4.48; SD = 0.50) degree of its manifestation. The study found that during social isolation high school students

with low educational and developmental activity defined by mental states associated with high levels of manifestation of interest, emotional tone and comfort. The values of "life tension", "self-control" and "negative emotions", "personal achievements", "health", "communication with close people" and "support" parameters in this group of students indicate their significantly lower satisfaction level with these spheres of life as compared with their peers, who are characterized by a high degree of involvement in activities aimed at education and development (Table 3).

Table 3

Psychological factors of the educational and developmental activity of high school students under conditions of social restrictions

Parameters	Educational and de M	Results of the comparative analysis							
	low (n = 28)	High (n = 102)	U	р					
Personal mental states:									
Level of emotional comfort during social isolation	6.86 ± 2.56	6.64 ± 2.13	1353.5	0.615					
Mental activation	14.21 ± 4.59	12.39 ± 4.30	1108.0	0.060					
Interest	12.07 ± 4.15	9.59 ± 3.98	954.0	0.006					
Emotional tone	12.04 ± 3.83	9.64 ± 4.35	977.0	0.009					
Tension	11.11 ± 4.61	10.80 ± 3.66	1272.5	0.339					
Comfort	13.32 ± 4.38	11.20 ± 4.11	1047.5	0.026					
Factors of satisfaction with the quality of life:									
Optimism	24.50 ± 5.49	24.75 ± 6.17	1485.0	0.809					
Tension	21.46 ± 7.34	27.87 ± 7.35	2134.5	0.001					
Self-control	21.11 ± 6.52	25.25 ± 6.25	2011.5	0.001					
Negative emotions	21.57 ± 6.98	25.17 ± 7.32	1954.0	0.004					
Personal achievements	25.68 ± 5.65	29.13 ± 7.31	1939.0	0.005					
Health	22.71 ± 7.02	28.43 ± 7.92	2067.5	0.001					
Communication with close ones	25.11 ± 5.21	28.20 ± 6.51	1900.0	0.010					
Support (internal and external)	22.21 ± 5.04	27.66 ± 7.36	2156.0	0.001					

Note. M – average value; SD – standard deviation; U – value of the Mann – Whitney U test; p – level of significance.

We studied the peculiarities of correlation between the manifestation of educational and developmental activity of high school students, their personal mental states and the factors of satisfaction with the quality of life under conditions of forced self-isolation using the correlation analysis (according to C. Spearman's rank correlation coefficient; n = 169). Based on its results and understanding of determination as the interdependence of factors, their active and mobile interaction [21], we can assume that the determinants of the educational and developmental activity of high school students under conditions of social restrictions are the mental states, i.e. interest (r = -0.203; p < 0.05), emotional tone (r = -0.207; p < 0.05), comfort (r = -0.169; p < 0.05), an increase in the level of which reduces educational and developmental activity, and the factors of satisfaction with the quality of life, i. e. tension (r = 0.296; p < 0.001), self-control (r = 0.291; p < 0.001), negative emotions (r = 0.219; p < 0.05); personal achievements (r = 0.243; p < 0.01), health (r = 0.287; p < 0.01), support (external and internal) (r = 0.256; p < 0.01), an increase in the manifestation of which also increases educational and developmental activity.

Discussion

Our study showed an increase in the educational and developmental activity of high school students during the period of social isolation due to the COVID-19 pandemic, which was observed even among those students who showed low activity related to education and self-development in their normal life. This trend can be explained both by the need to fulfill a greatly increased academic load with an increased self-study time [6], and the new opportunity for students to devote more time to interesting subjects or subjects necessary for their future, which was not always possible during their regular academic process [14]. An increase in the educational and developmental activity of students is also indirectly evidenced by the improvement in their academic success, which manifested itself through higher final grades at the end of the year, than during the period before the lockdown [22].

Psycho-emotional states and satisfaction of high school students with the quality of life during the period of social restrictions differ depending on the degree of manifestation of their educational and developmental activity. Thus, students with low activity levels showed greater interest in life, were characterized by better general emotional well-being, accompanied by a state of psychological comfort. High school students with high activity levels aimed at education and self-development were more satisfied with their personal achievements and the intensity of their lives (due to having the well-developed ability to organize their

time and feeling relatively safe). They were characterized by self-control and responsibility, experiencing negative emotions (guilt, shame, resentment, anger at themselves and others) in a less stressful manner, were satisfied with their communication with close people and friends, their moral and emotional support, and felt the strength and resources for active life.

Based on the results of the study, we can assume that during forced social isolation the educational and developmental activity of high school students is, on the one hand, conditioned by their mental states, and, on the other hand, influences their change. In particular, an increase in the activity of high school students under the conditions of an increase in the academic load during distance learning reduces their interest in the information received and their enthusiasm for solving educational problems, as well as their emotional tone (characterizing involvement in the activities) and psychological comfort (associated with the experience of peace and satisfaction of needs during the activities). The revealed trends partially correlate to the results of research devoted to the study of mental and emotional states of students in the process of adaptation to a new social environment [23] and while studying during the period of self-isolation [24]. The decrease in the educational and developmental activity of high school students can be explained by the decrease in their satisfaction with the quality of their lives. This can manifest itself at a psychological level through an increase in tension in the perception of the environment and in the weakening of the ability to demonstrate self-control and suppress negative emotions. There is a likely loss of interest in personal achievements and in a student's own health and dissatisfaction with support from others at the level of relationships. A correlation of the results already available and those obtained in this study shows that a decrease in educational activity is accompanied by dissatisfaction with a student's own health (due to the transition to a sedentary lifestyle and limited opportunities for active forms of recreation and physical activity; sleep disturbances and unusual pain syndromes), personal achievements, communication with close people (studies show an increased number of conflicts with parents, tension in the perception of interpersonal communication with peers) and their support (school students point out lack of support from the family, low level of positive feedback from teachers, especially when difficulties in completing tasks or mastering new material occur) [7, 14, 16, 25].

At the same time, satisfaction with the quality of students' own lives, especially in terms of personal achievements and interpersonal interactions, contributes to an increase in the educational and developmental activity of high school students, even if it was not high before social restrictions.



Conclusion

Educational and developmental activity of school students is manifested through the implementation of educational activities; it is also implemented in a broader cognitive activity (both educational and extracurricular), which is aimed at revealing an individual's abilities for self-development.

The empirical study of educational and developmental activity's peculiarities under conditions of COVID-19 social isolation revealed a trend describing its increase among the majority of high school students. At the same time, students with a low degree of manifestation of this activity turned out to be more sensitive to changes in learning conditions than their highly active peers.

The psychological determinants of educational and developmental activity of high school students include such stable emotional states as interest, emotional tone, comfort, tension and negative emotions, which, in case of an increased degree of manifestation, block its manifestations for students with a low degree of manifestation. Satisfaction with personal achievements, ability to demonstrate self-control, skills that help to lead a healthy lifestyle and to communicate with close people, their moral and emotional support, and the ability to use their own resources correctly are factors that increase high school students' activity aimed at obtaining education and self-development.

Theoretical significance of the study is associated with obtaining new, scientifically substantiated knowledge regarding the psychological determinants of educational and developmental activity of high school students under conditions of social restrictions. It seems important, in practical terms, to conclude that psychological and pedagogical support of high school students who are forced to be in social isolation for any reason (home schooling, disabilities, quarantine measures, etc.) should be aimed at creating an emotionally comfortable environment, leveling the complexity of distance learning in order to increase the level of students' educational activity, as well as the number of opportunities for their self-development.

References

- 1. Bocharova E. E. Regulatory and Worldview Factors of Various Forms of Social Activity of Young People. *Izvestiya of Saratov University. Educational Acmeology. Developmental Psychology*, 2018, vol. 7, iss. 4, pp. 333–345 (in Russian). https://doi.org/10.18500/2304-9790-2018-7-4-333-345
- 2. Arendachiuk I. V. Subject and activity-related determinants of the student youth's educational and developmental activity. *Education and Self Development*, 2020, vol. 15, no. 2, pp. 103–199 (in Russian). https://doi.org/10.26907/esd15.2.09

- 3. Chouhan J., Banford Z., Munro K. What is it that we want to educate young people about? *Journal of International Scientific Publications: Educational Alternatives*, 2017, vol. 15, pp. 354–370.
- Radina N. K., Balakina J. V. Challenges for Education during the Pandemic: An Overview of Literature. *Educational Studies Moscow*, 2021, vol. 1, pp. 178–194 (in Russian). https://doi.org/10.17323/1814-9545-2021-1-178-194
- 5. Tallon R., Milligan A., Wood B. Moving beyond fundraising and into ... What? Youth transitions into higher education and citizenship identity formation. *Policy & Practice. A Development Education Review*, 2016, vol. 22, pp. 96–109.
- 6. Ivanova N. V. The development of human educational activity as a theoretical and pedagogical problem. *Vestnik of Yaroslav the Wise Novgorod State University*, 2008, no. 48, pp. 20–22 (in Russian).
- Bezrukikh M. M., Makarova L. V., Paranicheva T. M., Sokolova L. V., Vasiliev O. S., Tyurina, E. V. Physiological and hygienic aspects of the organization of distance learning during the pandemic COVID-19 (based on the results of a survey of parents and school children). *New Research*, 2021, no. 1 (65), pp. 33–49 (in Russian). https://doi.org/10.46742/2072-8840-2021-65-1-33-49
- 8. Demkowicz O., Hanley T., Ashworth E., O'Neill A., Pert K. Teenagers' experiences of life in lockdown: Implications for college and university support. *University and College Counselling*, 2021, vol. 9, pp. 22–26. Available at: http://researchonline.ljmu.ac.uk/id/eprint/14563/(accessed 14 February 2022)
- 9. Sharkov F. I., Potapchuk V. A. The online life: the version of Moscow students. *Communicology*, 2021, vol. 9, no. 2, pp. 156–168 (in Russian). https://doi.org/10.21453/2311-3065-2021-9-2-156-168
- Cao W., Fang Z., Hou G., Han M., Xu X., Dong J., Zheng J. The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 2020, vol. 287, article ID 112934. https://doi.org/10.1016/j. psychres.2020.112934
- Bates L. C., Zieff G., Stanford K., Moore J. B., Ker, Z. Y., Hanson E. D., Gibbs B. B., Kline C. E., Stoner L. COVID-19 impact on behaviors across the 24-hour day in children and adolescents: physical activity, sedentary behavior, and sleep. *Children*, 2020, vol. 7, no. 9, pp. 138. https://doi.org/10.3390/children7090138
- Lee J. Mental health effects of school closures during COVID-19. Lancet Child Adolesc. Health, 2020, vol. 4, no. 6, pp. 421. https://doi.org/10.1016/S2352-4642(20)30109-7
- 13. Bulycheva E. V., Zhdanova O. M. Psycho-emotional wellbeing and lifestyle of urban and rural schoolchildren during distance learning. *Journal of New Medical Technologies*, 2021, vol. 28, no. 4, pp. 15–20 (in Russian). https://doi.org/10.24412/1609-2163-2021-4-15-20
- 14. Vetlitsyna O. V., Aleksanyan K. K., Kucherova A. A., Moskaleva D. A., Peresetskaya O. V. Distance learning: the view of a schoolboy, parents, doctor. *Smolenskiy me*-



- ditsinskiy al'manakh [Smolensk Medical Almanac], 2021, no. 2, pp. 53–56 (in Russian). https://doi.org/10.37903/SMA.2021.2.11
- Moore S. A., Faulkner G., Rhodes R. E., Brussoni M., Chulak-Bozzer T., Ferguson L. J., Mitra R., Norm O'Reilly N., Spence J. C., Leigh M., Vanderloo L. M., Tremblay M. S. Impact of the COVID-19 virus outbreak on movement and play behaviours of Canadian children and youth: a national survey. *International Journal of Behavioral Nutrition and Physical Activity*, 2020, vol. 17, no 1, pp. 85. https://doi.org/10.1186/s12966-020-00987-8
- 16. Sunnatova R. I., Mdivani M. O., Lidskaya E. V. Personal resource of students as a condition self-organization of life during the pandemic. In: Morosanova V. I., Zinchenko Yu. P., eds. *Psikhologiya samoregulyatsii v aktual'nosti zadach obrazovaniya (k 90-letiyu so dnya rozhdeniya O. A. Konopkina)* [Psychology of Self-Regulation in the Context of Actual Problems of Education (to the 90th Anniversary of the Birth of O. A. Konopkin)]. Moscow, Psychological Institute of RAO Publ., 2021, pp. 175–181 (in Russian, trans. from English).
- 17. Kuchma V. R., Sedova A. S., Sokolova S. B., Rapoport I. K., Stepanova M. I., Laponova E. D., Polenova M. A., Chubarovsky V. V., Tikashkina O. V. Pandemic COVID-19 in Russia: medical and social problems of the digital educational environment. *National Health Care*, 2021, vol. 2, no. 1, pp. 21–31 (in Russian). https://doi. org/10.47093/2713-069X.2021.2.1.21-31
- 18. Yaremtchuk S. V., Bakina A. V. Subjective Well-Being in Early Adulthood and Psychological Distance to the Objects of the Socio-Psychological Space during COVID-19 Pandemic. Social Psychology and Society, 2021, vol. 12, no. 1, pp 26–43 (in Russian). https://doi.org/10.17759/ sps.2021120103

- 19. Prokhorov O. A. *Metodiki diagnostiki i izmereniya psikhicheskikh sostoyaniy lichnosti* [Methods of Diagnosis and Changes in Mental States of the Individual]. Moscow, Per Se Publ., 2004. 176 p. (in Russian).
- 20. Vodopyanova N. E. Assessment of the level of satisfaction with the quality of life]. In: Nikiforov G. S., ed. *Praktikum po psikhologii zdorovya* [Practicum on the Psychology of Health]. St. Petersburg, Piter Publ., 2005, pp. 148–155 (in Russian, trans. from English).
- 21. Galanina N. V. Understanding the determination of the philosophical analysis. *Vestnik Moskovskogo universiteta MVD Rossii* [Bulletin of the Moscow University of the Ministry of Internal Affairs of Russia], 2016, no. 2, pp. 21–23 (in Russian).
- 22. Doz D. Students' Mathematics Achievements: A Comparison between Pre- and Post-COVID-19 Pandemic. *Education and Self Development*, 2021, vol. 16, no. 4, pp. 36–47. https://doi.org/10.26907/esd.16.4.04
- 23. Komolkina O. I., Chernetskaya N. I. Mental States of First Year Students of the Medical College. *The Bulletin of Irkutsk State University. Series «Psychology»*, 2018, vol. 23, pp. 59–67 (in Russian)
- 24. Zabolotskikh N. V., Vyrodova E. Y., Dorosheva A. O., Semerdzhian M. A., Simonian N. E., Shamaeva M. V., Artyushkova, A. R. Impact of distance learning on psycho-emotional state in schoolchildren in Krasnodar. *Kuban Scientific Medical Bulletin*, 2020, vol. 27, no. 6, pp. 109–122 (in Russian). https://doi.org/10.25207/1608-6228-2020-27-6-109-122
- 25. Ippolitova M. F., Kononova T. A., Stradymov F. I. Study of the psychoemotional state of adolescents in a stressforming situation of the spread of a new coronavirus infection. *Pediatric and Adolescent Reproductive Health*, 2021, vol. 17, no. 2, pp. 65–76 (in Russian). https://doi.org/10.33029/1816-2134-2021-17-2-65-76

Поступила в редакцию 23.03.2022; одобрена после рецензирования 07.04.2022; принята к публикации 10.04.2022 The article was submitted 23.03.2022; approved after reviewing 07.04.2022; accepted for publication 10.04.2022