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PSYCHOLOGICAL WELL-BEING OF RUSSIAN STUDENTS
UNDER CONDITIONS OF SELF-INSULATION MODE

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Abstract

The regime of self-insulation universally introduced in Russia in order to prevent the spread of coronavirus infection has made significant changes in the lifestyle of most social groups. In particular, the higher education system has switched to a distance learning format. The need to adapt to a changing life situation in conjunction with the deprivation of the ability to satisfy many significant needs negatively affected the psychological well-being of a large number of Russian students. The article presents the results of a survey of 1015 Russian students concerning their psychological well-being in self-insulation regime and the transition to a distance learning format. It was established that the students whose free time did not increase as a result of the transition to distance learning experience have the most difficult time during self-insulation. The factors that have the most negative effect on the psychological well-being of students are identified as follows: a decrease in physical activity and the need to spend a lot of time at the computer. The following proportion is noted in the attitude of students to the current situation: about 45% experience risk and note that their psychological well-being has worsened; a tenth, on the contrary, feels more comfortable than before, and the remaining 45% either say that their condition has not changed, or they cannot say for sure if there are more advantages or disadvantages in the self-insulation mode.

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Keywords: Distance learning, self-isolation mode, psychological well-being of students.



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1. Introduction

Extraordinary measures taken around the world to protect against the spread of COVID-19 lead to significant transformations of familiar practices (Caleo et al., 2018). This also applies to the education system, which in many countries, including Russia, has switched to work exclusively in a remote format. Such a sharp and at the same time cardinal fracture naturally affected all components of the system (Cava et al., 2005; Ivanov, 2019; Kapovsky, 2015).

1.1. Teachers

A large percentage of teachers who did not have previous experience of teaching in remote format experience difficulties associated with both the presentation of material to students and the control of academic work performed by students. It has been established that teachers over 50 do not have sufficient knowledge about distance learning technologies and do not see the benefits of using them (Sheludko, 2015; Tatarinov, 2019). Often there is one of two opposites in meaning situations. Teachers either let the educational process go by gravity, simply providing students with lecture notes and then testing, or literally overwhelm students with independent work, not realizing how long it takes to complete.

1.2. Students

In this situation, students' lifestyle has changed dramatically. They have to adapt to the influence of two related factors:

- self-isolation regime, which prevents the satisfaction of significant needs for social contacts, the usual organization of leisure and physical activity (Chertovikova, 2018; Sapozhnikova et al., 2019);
- the transition to a distance learning format, which entailed a sharp change in the structure of the teaching load, an increase in the amount of independent work that needs to be done while sitting at the computer.

A significant number of students (in some universities 50% or more) are nonresident and live in hostels. The measures taken by universities to prevent the spread of coronavirus infection include, among others, the resettlement of students from dormitories. The need to move to another place of residence, often not suitable for educational activities, is an additional stress factor for such students.

2. Problem Statement

The problem of this study can be described at several levels:

Firstly, this is the practical problem of the higher education system. The transition to a distance learning format without thorough organizational and methodological training entails not only risks of lowering the quality of education, but also risks associated with the psychological state of students. Students are forced to adapt to dramatically changing living and learning conditions. At least some of them, due to specific objective and / or subjective factors, may experience the changes that have occurred as a real psychological crisis. A wide range of possible negative psychological consequences of quarantine measures

is noted: “fear, apathy, stupor, emotional upset; depression, stress, bad mood; irritability, insomnia; symptoms of post-traumatic stress; anger and emotional exhaustion, decreased mood and irritability” (Fedosenko, 2020, p. 38).

Secondly, it is a social problem on a wider scale. The universally introduced regime of self-isolation is reflected in the psychological well-being of all population groups (Jeong et al., 2016; Maksimova et al., 2012; Oleynik, 2016). As noted by Golubeva et al. (2020), “a cardinal change in everyday lifestyle, “remote” work, forced isolation in the conditions of apartments, the threat of penalties for violations of the regime, these and other factors lead to a surge in family violence, increased conflict and the growth of social depression” (p. 36). To prevent and overcome the negative consequences of prolonged self-isolation, it is necessary to have scientifically based information on how exactly this situation is experienced by different age and social groups, including students (Filindash, 2016; Oleynik, 2016; Yadova, 2017). Research carried out at present can be of great benefit in the future in the event of such situations.

Thirdly, this is a purely scientific problem for social and educational psychology, determined by the contradiction between the situation that arises, requiring adaptation to changing conditions by students, and the lack of a clear understanding of how this adaptation proceeds, which factors can make it more or less successful.

3. Research Questions

The main question that prompted us to conduct the study is the following: how did the transition to the mode of self-isolation and the format of distance learning affect the psychological state of students?

We were also interested in the following:

- How does the long-term stay with other people in the same room, the limitation of social contacts and the usual ways of organizing leisure time outside the home, the decrease in physical activity and the need to spend a lot of time at the computer affect the psychological state of students?
- How do students assess changes in the structure of personal time in connection with the transition to distance learning?
- How do students evaluate distance learning compared to traditional?
- Are students a homogeneous group in their experience of self-isolation and transition to a distance learning format, or can subgroups significantly differ in this context be highlighted?
- What could be the reason for such differences?

4. Purpose of the Study

Thus, the aim of the study was to study the psychological consequences for students of the transition to a regime of self-isolation and the format of distance learning. Moreover, at this stage of the research work, we did not focus on a deep conceptual study of the very concept of “psychological well-being” and its logical structure. The task was rather to study the students' general assessment of their psychological well-being and the influence of a number of factors on it on a large and fairly differentiated sample of students from different regions of Russia.

5. Research Methods

The study was conducted in the form of an online survey based on the specialized platform GoogleForms. The questionnaire was distributed mainly on the VKontakte social network in the official communities of various universities. At the time of preparing the publication, 1015 students from 30 Russian cities took part in the survey. The most represented are 6 cities: Apatity, Gatchina, Yekaterinburg, Novosibirsk, Petrozavodsk and Shadrinsk - students make up 75.6% of the sample. The gender distribution is as follows: 76% are girls, 24% are boys. 653 people study undergraduate programs, 296 specialty programs, 67 people graduate. More than a third of respondents (35.6%) study in the 1st year, 21.4% in the second, 19.7% in the third, 10.5% in the fourth. The remaining 9% study either in senior courses of a specialty, or in a magistracy. Almost half (41.5%) of the study participants noted that they had to move out of the hostel after the introduction of a self-isolation regime. About 30% of participants say that the number of people living with them has changed, and in 19% of cases it has increased, and in 11% of cases it has decreased.

6. Findings

6.1. Students' attitude to the distance learning format in comparison with the traditional

Two questions were directed at revealing the students' attitude to the distance learning format: "How, in general, do you feel about the new (distance) learning format in comparison with the traditional?" and "Can you say that with a new way of life you have more free time than before?" Initially, we assumed that the transition to a distance learning format, the absence of the need to spend time on the road, would be factors due to which students have more free time. However, the results of the survey suggest that in most cases this is not so: 54.8% of respondents say that the amount of free time has not increased. The form of this question contained the ability to write your own answer. This opportunity was used by 6% of respondents. Here are their typical statements:

- *Yeah, of course, a ton of homework and a beveled back at the computer;*
- *Much more time began to go to study, mainly because of obscure material that you have to deal with yourself;*
- *There was no free time at all, because all materials now have to deal with itself; some teachers don't get in touch at all;*
- *"No, of course, have you seen your homework at all?" There you do one task for 4 hours, and 3-4 of them every day. This means that on average it takes 12 hours every day. This is crazy to go. But at home, there are duties and going to bed almost every day because of homework at one in the morning, or even later, is not very cool ...*

However, there are other answers in which students also complain about problems associated with a change in the structure of personal time:

- *There is nothing to be occupied with, so there is no sense in this time;*
- *Yes, there is more time, but I'm not happy about that;*
- *Time has appeared, but it's difficult to learn how to use it, because the uncomfortable mode of regular training under pressure literally reforaged all the rhythms for this year ...*

Figure 01 shows the distribution of answers to the question about the attitude of students to the distance learning format. Given the above data, it is not difficult to guess that most of them would return to the traditional format.

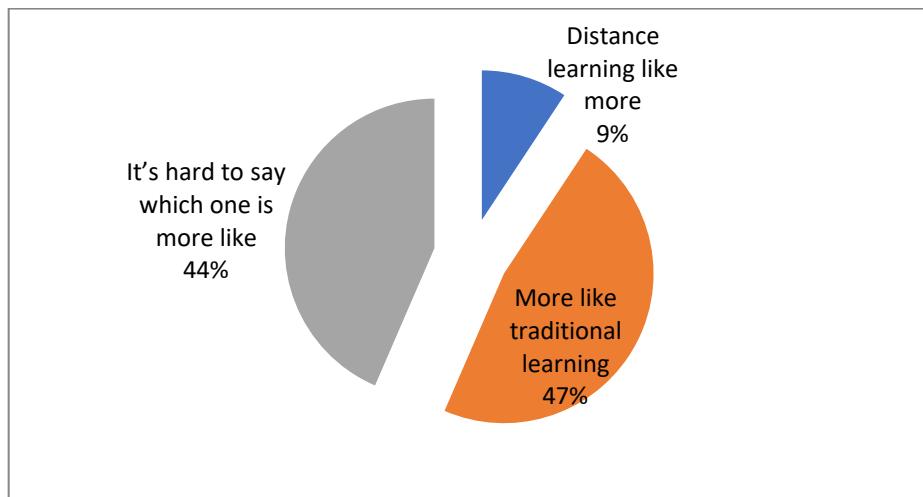


Figure 01. Students attitude to distance learning format

The greatest interest is caused by those 44% of students who at the moment cannot definitely say which training format they like more, because they find their pros and cons in each of them. The given distribution of answers can, in a sense, be regarded as evidence that the distance format is supported by a significant number of students: 53% of respondents say that this format of training has certain advantages. If we assume that all the above disadvantages of distance learning will be eliminated, then the number of its supporters will increase many times over.

It is important to note that the amount of free time and attitude to the distance learning format are closely related. So, among those who note an increase in the amount of free time, there are 4.3 times more supporters of the remote format than among those who have no more free time (15.9% versus 3.6%). In turn, the ratio of those who prefer the traditional format in the two subgroups is the opposite, although so pronounced (34.6% versus 57.9%).

6.2. The psychological consequences of self-isolation

The distribution of answers of the study participants to the question of how the self-isolation regime was reflected in their psychological state is shown in Figure 02.

As can be seen from the figure, almost half of the respondents (46%) noted a deterioration in their psychological well-being under the influence of the self-isolation regime. When answering this question, many of them are not limited to the choice of the appropriate option, but give emotional comments. For example:

- *The psychological state is extremely depressed;*
- *I became very nervous, I do not get enough sleep, I freak out and indignant a lot;*
- *Panic attacks appeared;*
- *Due to many tasks and system malfunctions, I had nervous breakdowns;*

- In the mode of self-isolation and in distance learning, I feel disgusting, nervous breakdowns and tantrums happen stably ...

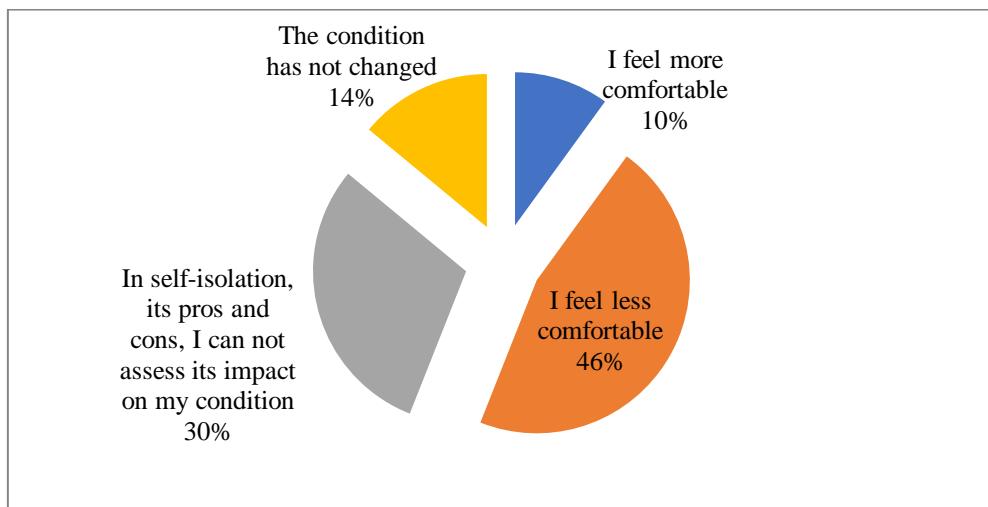


Figure 02. The psychological state of students in self-isolation mode

It can be noted that in most such statements, shortcomings in the distance learning format rather than self-isolation as such are noted. The most common - a large amount of homework has to be done on the computer. Thus, it can be assumed that these two different, but closely related events: self-isolation and transfer to remote learning format in the minds of students are not differentiated and are perceived as an integral whole in the context of the current situation. This is confirmed by the consistency of the assessments that students give to the distance learning format and the influence of the self-isolation regime on their psychological state (see Figure 3).

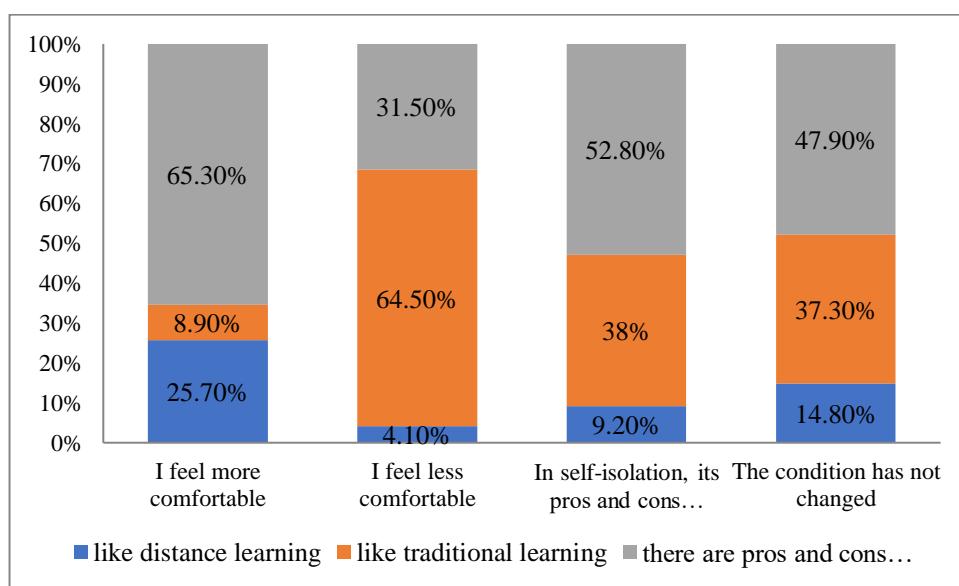


Figure 03. Attitude towards distant learning in students who are differently experiencing self-isolation

The statistical significance of the differences in relation to distance learning in students who are differently experiencing a regime of self-isolation, according to the Pearson χ^2 criterion, has the highest level - $p < 0.001$. As can be seen from the figure, among students who feel comfortable in self-isolation mode, the percentage of those who are positive about distance learning is several times larger than among those who feel uncomfortable in self-isolation. The opposite is also true: among those who feel uncomfortable in self-isolation, the percentage of students who unequivocally prefer traditional education is 7 times higher than among those for whom self-isolation is comfortable.

6.3. Factors affecting the psychological well-being of students in conditions of self-isolation and distance learning format

In the course of the survey, we also asked students to evaluate on a 5-point scale the influence of individual factors acting on them during the regime of self-isolation and distance learning. These factors included the following:

- the need for a long joint stay in the same room with other people;
- limiting the number of social contacts "in real life";
- decrease in physical activity;
- inability to engage in usual leisure outside the home - to attend circles, sections, etc.;
- need to spend a long time at the computer.

Initially, we assumed that the most negative impact on students is exerted by those factors that can be called social, that is, a long joint time with the same people on the one hand and the limitation of the number of social contacts on the other. However, the results of the survey show something else: the most negative impact on the psychological state of students is exerted by factors that we conventionally called physical — the restriction of physical activity and the need to work a lot at the computer (see Table 01).

As can be seen from the table, the average value of each of the factors is below 3. This says that all of them can be designated as factors that negatively affect the psychological well-being of students. However, the degree of this effect is significantly different for different factors. So the need for a long joint stay in the same room with other people is negative for only a third of students, while the effect of a decrease in physical activity is negatively assessed by 2/3 of the respondents.

Table 01. Factors that influence the psychological state of students

Influencing Factors	Assessment and its content (in%)					Mean
	1 (extremely negative impact)	2 (negative impact)	3 (no effect)	4 (positive effect)	5 (very positive effect)	
Decreased physical activity	43.5	23.7	25.7	4.1	2.9	1.99
A lot of time at the computer	44.2	22.4	24.5	5.1	3.7	2.01
Inability to attend circles, sections	35.7	19.8	37.1	2.6	4.8	2.21

Limit social contacts	31.5	30.7	24.3	8.6	4.8	2.24
Long stay in the same room with other people	11.3	23.1	37.9	19.5	8.2	2.90

By the strength of the negative impact, the considered factors can be divided into 3 groups. The first group - factors that have the most negative impact (decreased physical activity and the need to spend a lot of time at the computer). Factors that have a moderate negative impact (inability to organize leisure activities outside the home and limiting the number of social contacts). Only one factor can be assigned to the third group of conditionally neutral factors - a long stay in the same room with other people.

7. Conclusion

The regime of self-isolation and the transition to distance learning format negatively affected the psychological well-being of almost half of the students participating in the study. At the same time, those students who are most experiencing self-isolation are those who, as a result of the transition to distance learning, did not increase their free time. This relationship between the amount of free time and the psychological well-being of students should be taken into account by university management in the future, when there is a need for a widespread transition to distance learning. The educational process in a remote format must be planned so that the load of students who are already deprived of the opportunity to satisfy many significant needs is not excessive.

The most destructive factors of the self-isolation regime for students are reduced physical activity and the need to spend a lot of time at the computer. Accordingly, measures aimed at correcting the psychological well-being of students should be associated with overcoming the negative impact, primarily of these 2 factors. However, if physical activity is in the center of attention of many universities that organize online flash mobs, challenges and other similar events aimed at increasing it, then the problem of excessive "computerization" of students' lifestyles does not receive proper coverage.

At the same time, it should be noted that all the considered negative psychological consequences of the regime of self-isolation and distance learning are not total. About 10% of students positively assess the distance learning format and the effect of self-isolation on their psychological well-being and at least 30% find quite significant advantages in the new way of life that completely compensate for them the influence of negative factors.

References

- Cava, M., Fay, K. E, Beanlands, H. J, McCay, E. A., & Wignall, R. (2005). The experience of quarantine for individuals affected by SARS in Toronto. *Public Health Nurs*, 22(5), 398-406.
- Caleo, G., Duncombe, J., Jephcott, F., Lokuge, K., Mills, C., Looijen, E., Theoharaki, F., Kremer, R., Kleijer, K., Squire, J., Lamin, M., Stringer, B., Weiss, H. A., Culli, D., Di Tanna G. L., & Greig, J. (2018). The factors affecting household transmission dynamics and community compliance with Ebola control measures: a mixed-methods study in a rural village in Sierra Leone. *BMC Public Health*, 18(1), 248. <https://doi.org/10.1186/s12889-018-5158-6>
- Chertovikova, A. S. (2018). Psikhotravmiruyushchiye faktory v usloviyakh izolyatsii. [Psychotraumatic factors in isolation]. *Problems of modern teacher education*, 60(1), 485-489. [in Rus]

- Fedosenko, E.V. (2020). Zhizn' posle karantina: psikhologiya smyslov i koronavirus COVID-19. [Life after quarantine: the psychology of meanings and the coronavirus COVID-19]. *Psychological problems of the meaning of life and acme*, XXV, 34-47. <https://doi.org/10.24411/9999-042A-2020-00040>
- Filindash, E. V. (2016). Fenomenologicheskiy podkhod k izucheniyu sotsial'no-psikhologicheskogo odinochestva v srede studencheskoy molodezhi. [A phenomenological approach to the study of socio-psychological loneliness among students]. *University Newsletter*, 7-8, 283-289. [in Rus]
- Golubeva N. V., Ivanov D. W., & Trinity M. S. (2020). Panicheskiye rasstroystva vo vnutrisemeynykh otnosheniyakh, kak posledstviya vozdeystviya koronavirusnoy infektsii (obzor literatury). [Panic disorders in family relationships, as consequences of exposure to coronavirus infection (literature review)]. *Bulletin of new medical technologies. Electronic Edition*, 14(2), 32-38. [in Rus]
- Ivanov A. V. (2019). Problemy i perspektivy distantsionnogo obrazovaniya. [Problems and prospects of distance education]. *Chief Physician of the South of Russia*, 5(69), 67-70. [in Rus]
- Jeong, H., Yim, H., Song, Y.-J., Ki, M., Min, J.-Ah., Cho, J., & Chae, J.-H. (2016). Mental health status of the quarantined people due to Middle East Respiratory Syndrome (MERS). *Epidemiology and Health*, 38, e2016048. <https://doi.org/10.4178/epih.e2016048>
- Kapovsky, V. L. (2015). Distantsionnoye obrazovaniye: mirovoy opyt [Distance education: world experience]. *Bulletin of the Adygeya State University. Series 3: Pedagogy and Psychology*, 1(157), 24-30.
- Maksimova, A. A., Kamneva, A. V., Egorov, K. P., Zuev, A. S., Karpesh, E. A., Ivanova, T.D., Sergina, E. P., & Egorova, E. E. (2012). K voprosu izucheniya sostoyaniya psikhologicheskogo diskomforta u studentov vuza [To the question of studying the state of psychological discomfort among university students]. *Bulletin of Medical Internet Conferences*, 2(6), 476. [in Rus]
- Oleynik, N.O. (2016). Teoreticheskaya model' perezhivaniya odinochestva. [The theoretical model of experiencing loneliness. Bulletin of Perm University]. *Philosophy. Psychology. Sociology*, 2(26), 104-110. [in Rus]
- Sapožnikova, O. V., Sheshenina A. V., & Shevnina D. S. (2019). Vliyaniye zanyatiy fizicheskoy kul'turoy na psikhologicheskoye sostoyaniye studenta vuza. [The effect of physical education on the psychological state of a university student]. *Physical Culture. Sport. Tourism. Motor Recreation*, 4(1), 115-117. [in Rus]
- Sheludko, U. E. (2015). Otnosheniye prepodavateley raznykh vozrastnykh grupp k distantsionnomu obucheniyu kak faktor, vliyayushchiy na uspeshnost' yego vnedreniya v uchebnyy protsess. [The attitude of teachers of different age groups to distance learning as a factor affecting the success of its implementation in the educational process]. *Bulletin of V.P. Astafiev Krasnoyarsk State Pedagogical University*, 4(34), 158-164. [in Rus]
- Tatarinov, K. A. (2019). Didakticheskiye printsipy distantsionnogo obrazovaniya. [Didactic principles of distance education]. *Baltic Humanitarian Journal*, 8, 1(26), 293-296. [in Rus]
- Yadova, M. A. (2017). Khikikomori i NEET: osobennosti sotsial'noy samoizolyatsii v molodezhnoy srede. (svodnyy Referat). [Hikikomori and NEET: features of social self-isolation in a youth environment. (Summary Abstract)]. *Social and human sciences. Domestic and foreign literature. Ser. 11, Sociology: Abstract Journal*, 4, 118-124. [in Rus]