

**PRRAEPGDA 2020****Personal and Regulatory Resources in Achieving Educational and Professional Goals in the Digital Age****COPING STRATEGIES OF UNIVERSITY TEACHING STAFF WITH DIFFICULTIES IN MANAGING REMOTE LEARNING UNDER LOCKDOWN-RELATED STRESS**

Anna Gennadyevna Samokhvalova (a)\*, Elena Viktorovna Tikhomirova (b), Dmitry Borisovich Vorontsov (c), Anna Valerevna Vorontsova (d), Oksana Nikolaevna Vishnevskaya (e)

\*Corresponding author

(a) Kostroma State University, 156005, Dzerzhinsky, 17, Kostroma, Russia, a\_samohvalova@ksu.edu.ru

(b) Kostroma State University, 156005, Dzerzhinsky, 17, Kostroma, Russia, tichomirowa82@mail.ru

(c) Kostroma State University, 156005, Dzerzhinsky, 17, Kostroma, Russia, d-vorontsov@ksu.edu.ru

(d) Kostroma State University, 156005, Dzerzhinsky, 17, Kostroma, Russia, annavorontsova@ksu.edu.ru

(e) Kostroma State University, 156005, Dzerzhinsky, 17, Kostroma, Russia, cherry14.88@mail.ru

***Abstract***

The paper describes difficulties faced by the university staff after the transfer to remote learning. The authors analyze the coping strategies and the connection between the psycho emotional state of university teachers working under lockdown-related stress and their self-effectiveness in their profession. Teaching staff of Russian higher educational institutions (n = 361) took part in the research. The findings of the research demonstrated a high level of psychological and teaching readiness of the teaching staff to use remote learning. However, the lockdown-related stress hinders the process. The majority of the teaching staff is characterized by situational anxiety, related to general uncertainty, the feeling of incompetence and worry about the results of teaching. The major stress-triggering factors are the increased workload, responsibility, restrictions on free movement and communication. The situation hits older staff (over 45 years old) harder. To cope with the stress caused by the forced transfer to remote learning, the staff use constructive behavioral strategies based on creative transformational activities, on rational thinking and on curbing negative emotions. Humor and the skill of seeing the funny side of negative things play a very important role as they minimize the psychological threat to personal well-being. The authors have concluded that despite a high level of adaptability and of high psychological and teaching readiness of the teaching staff to use remote learning, many members of staff require individual psychological assistance to develop the system of mental resources and find constructive ways of coping with the stress of lockdown.

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**Keywords:** A member of university teaching staff, lockdown-related stress, remote learning, readiness, difficulty, coping.



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## 1. Introduction

The system of higher education in the recent decades has undergone a variety of changes related to the need of meeting the demands of highly mobile, competitive reality packed with information. The new life paradigm is an open, multi-agent world with transparent borders. The main value in this world is freedom, and the main feature – high uncertainty and unpredictability of the future, which influences social institutions, including the system of education. The lifestyle of our contemporaries includes a high degree of involvement in virtual network communication (Romm & Romm, 2018) and the ability to use evolving technological tools (Andryukhina et al., 2020). They provide a wide range of opportunities for simultaneous forms of self-fulfilment, for the economy of personal financial resources, used to solve vital tasks. These tasks include, but are not limited to, gaining knowledge and development of competitive competencies

In the global network, the system of education can be seen as a condition for the personal adaptation to the intensively changing world. It is also an effective way of developing the skill of lifelong learning, which is a highly demanded skill these days (Polyakova, 2016). In this context, remote learning becomes especially needed, as it requires the use of digital IT that change paradigms of thinking and communication. The access to the rich information content, Internet communication tools enabling distant project work in teams, virtual scientific and professional communities make it easier for an individual to fulfil oneself, work out an individual development trajectory and ways of gaining competencies. (Grebennikova & Novikova, 2019).

Problems of remote learning and teaching are becoming the subject matter of substantial pedagogical and psychological research (Khasanova & Kotova, 2018; Pekker, 2015), because digital learning correlates to two major contemporary trends: advanced learning technologies and lifelong learning. At the same time, remote learning has a number of essential restrictions: there is no direct communication no influence of a charismatic teacher, on learners, the increase of mental and psychological load due to the monotony of work on front of the screen and the necessity of a high level of self-discipline. Often the balance between work and personal life is ruined (Tasnim et al., 2017), there appear chronic fatigue and burnout (Titova & Kuznetsova, 2019). To cope with those, a teacher needs a high level of information culture, and of teaching and psychological readiness for remote learning.

The COVID-19 pandemic and the resulting lockdown in most countries, including the Russian Federation, have become a new challenge and a new threat to social well-being and required a quick, unplanned, spontaneous transfer of the whole educational system to remote learning, without any chance of blended learning (i.e. combining traditional classroom teaching with e-learning). It is also necessary to bear in mind the stress-triggering nature of the lockdown, during which the teaching staff had to cope with arising difficulties and to adapt to the new reality very quickly. Besides, the teachers found themselves excluded from the professional community that had previously facilitated their professional self-fulfilment (Noonan, 2018; Prenger et al., 2018). The competencies of working with a particular online tool is formed relatively quickly; however, the difficulties related to the low level of the psychological and teaching readiness of the staff are harder to cope with, and they often become a serious barrier for remote learning of high quality.

We understand psychological readiness as both a mental state and a trait of character, involving the awareness of a certain action and the constant determination to perform this action, which is characterised by mobilising labour resources to perform the task or activity in a short-term or long-term period (Kargapolitseva et al., 2016). It also means maintaining professional determination in stressful situations and crises (Goswami & Choudhury, 2016). The weakening or fully absent strict framework of remote learning sets stricter requirements to the teacher's self-organisation. Time management skills and self-management skills are essential components of the teacher's readiness to work remotely. Hindered conditions of self-development promote two life scenarios – life as achievement and life as fixed mindset (Khazova et al., 2017). It is extremely important that the life as achievement scenario should dominate in teachers' life in lockdown. It will enable them to perceive the lengthy stress as a challenge that makes self-development and the acquisition of competencies necessary.

Teaching readiness is understood as a complex integrative personal trait including the system of motives and attitudes. It enables a teacher to perform teaching activities based on knowledge, skills and competencies and includes concentration of resources on performing the set professional and pedagogical tasks (Nasyrova & Drozdova, 2015). Besides, a teacher has to be able to develop, stimulate and support motivation and activity in learners.

These theoretical definitions served as a basis of a complex diagnostic tool to assess the teaching and psychological readiness of a university teacher for remote learning, ways of self-organisation, coping with difficulties and stresses of lockdown.

## **2. Problem Statement**

The problem area of the research was determined by the contradiction between the necessity to transfer to remote digital learning in higher education and the stress related to the pandemic – what is the level of the psychological and teaching readiness to transfer to remote learning and how do staff members cope with arising difficulties in stressful lockdown?

## **3. Research Questions**

The research consisted of two stages:

- At the first stage of the research, the researchers studies emotional states and feelings, behavioural strategies and expectations of the university teaching staff in the conditions of remote learning; analysed the self-evaluation of the psychological and teaching readiness for this educational format; identified stress factors and difficulties of remote learning as well as coping-strategies, typical of teachers most of all.

- The second stage was used to test the hypothesis of a link between the mental and emotional states of the teaching staff and their self-effectiveness in the stressful situation of lockdown. In addition, the researchers tested the hypothesis of varied manifestations of difficulties related to remote learning and varied coping strategies used by teaching staff from a variety of Russian universities.

## **4. Purpose of the Study**

The objective of the research is the study of difficulties faced by university teaching staff during the previously mentioned transfer and of coping strategies used to overcome the difficulties.

## **5. Research Methods**

### **5.1. Samples and research base**

The research sample included 319 members of teaching staff of Kostroma State University (M = 46.8) and 42 university teachers from 15 other universities of the Russian Federation (M = 45.1). To compare the obtained results, 42 representatives of Kostroma State University were selected with the random sampling technique.

### **5.2. Diagnostic toolkit**

To assess the degree of psychological and teaching readiness of the teaching staff to use remote learning, we made a questionnaire. The results were processed with the help of content analysis. The questionnaire consisted of four sections. The first section assesses the behavioural strategies used by the teaching staff to get used to remote learning (empirical references: acceptance/rejection of the situation; activity / passivity; positive/negative / neutral emotions; presence / absence of difficulties of the transition to remote learning). The second section covers the specifics of the staff's perception of remote learning peculiarities (empirical references: their own assessment of their readiness for remote learning; readiness of colleagues and students; worries related to remote learning and their nature; assessment of the teachers' functionality; assessment of their own competencies related to remote learning; forecasting of the organisation's effectiveness in the new format and the readiness to continue with remote learning or its elements after the lockdown is lifted). The third section covers the assessment of the teachers' emotional state during the stressful period, the identification of difficulties and strategies of coping with those (the coping strategies from *The Coping Behaviour in Stressful Situations* by Endler and Parker (1990) in the adaptation by Kryukova (2010) were used as empirical references.

SPSS 17.0 pack (Mann-Whitney U test and Spearman correlation analysis) was used for the statistical processing of the findings.

## **6. Findings**

The analysis of the obtained data showed the following tendencies.

The first stage included the analysis of the questionnaire results obtained from teaching staff of Russian universities (n = 351). The aggregate sample showed that slightly more than 20 % of the university staff taking part in the research manifested clearly seen protests and indignation at the necessity to use remote learning due to the epidemiological situation. At the same time, around 50 % of the respondents took the situation as it was and did not feel any internal opposition, did not express protest, tried to think rationally and positively about the situation. The other 27 % of the respondents thought about the situation ambivalently. On the one hand, teachers of all age groups feel the necessity to master the use of remote tools and meet the requirements and challenges. On the other hand, they are worried

about the possible decrease in the quality of education, about the considerable change in the personal workload, the lack of live communication with students and about the imperfection of the existing university systems of distance learning. 30 % of the respondents showed no negative thoughts and irritation related to remote learning whatsoever. Around 40 % of the respondents say that the internal tension related to work is occasional.

Despite a vivid manifestation of negative emotions and ambivalent feelings, related to the necessity to transfer the educational activities online, only 15 % of the respondents preferred to wait and did not attempt to overcome difficulties when faced with those. In the adaptation period, the staff displayed the behavioural strategies that can be characterised as constructive, involving an active search and introduction of new methods. 88 % of the respondents tried to update their knowledge of remote learning management. 86.7 % actively created and filled their courses in the Simple DirectMedia Layer (SDL). 69 % attempted to cope with arising difficulties with the help of the manager or administrator. 45.6 % sought colleagues' help. 61.2 % looked for new forms of working with students. 53.2 % experimented with the possibilities offered by the SDL. 33 % of the respondents offered methodological help to their colleagues.

University teaching staff assess students' readiness for remote learning mainly in a positive way. It is possible that positive forecasting is a resource of adaptation to the current situation and of coping with stress. Thus, 59.5 % of the teaching staff assess students' readiness positively. 53.2 % of the respondents give a positive assessment of the colleagues' readiness for effective remote teaching. Approximately the same percentage of the respondents (57 %) give a relatively high estimate of their own psychological and teaching readiness: they are ready to work on their own, learn from guidelines and other content, and assist their colleagues. Around 26 % of the respondents doubt their own competence and 19 % fear remote learning. The latter group consists mainly of the respondents aged 55 and above. 15 % of the respondents understand and share the feelings of the colleagues who resist the introduction of remote learning, i.e. they are familiar with these feelings. 90 % of the respondents are not ready to work remotely on the permanent basis; around 60 % would like to use some forms of e-learning in the future.

The teaching staff speak of negative effects and difficulties of remote learning in lockdown. Thus, 24 % of the respondents manifested distress indicators while answering open-ended questions. The respondents noticed a high degree of situational anxiety, which, as they think, results from uncertainty, their own incompetence, and worries about learning results. The high level of exhaustion, in their opinion, is caused by the increase in workload, responsibility, restrictions of free movement and communication. 7 % speak separately about the stress of constant deadlines. Many respondents describe their emotional state as distressed and frustrated; they have lost interest in what they do, pleasure from work, and decrease in personal involvement.

The most common stress factors are the increase in workload and lack of time, causing problems related to distributing time between family and work (19 % of the indicators); the shortage of live communication (eye-to-eye contact, emotional response, communication barriers in using means of communication) – 17 % of the indicators; the deterioration of the functional state and health resulting from lack of fresh air, sedentary life and a long time in front of the screen (hypertensive crisis, spinal

problems, deterioration of eyesight, attention and memory) –16 % of the indicators; the increase in personal responsibility – 8 % of the indicators.

Several responses include such difficulties as monotony, the necessity to look for additional resources, financial problems, the change in the usual lifestyle, technical problems and difficulties related to mastering new activities.

It is interesting that a relatively large number of the respondents consider lockdown to be the resourceful time that has influenced their lives in a positive way. They have become more organised, disciplined, interested; they have time to master new software and other activities (the state of effective search), time to do sports and time to rethink the role of professional activities in their lives.

26 % of the respondents consider that lockdown and remote work have not changed their lifestyle or their attitude to employment.

The respondents use the following coping strategies most often:

- take active steps and other actions to overcome difficulties arising from using the SDL and from related negative emotions – 41.4 %;
- seek advice, support and information from more competent people – 40.1 %;
- start rethinking the situation, make a plan of action that reduces the negative emotions – 35.1 %;
- refrain from hasty, impulsive actions and reactions /try to rethink the current situation in a positive way – 24.1 %;
- switch over to other activities – 22.3 %;
- make jokes about the situation, treat it with humour – 20.7 %;
- seek emotional support – 9.7 %;
- use sedatives – 3.4 %;
- deny reality, do not accept it – 1.6 %.

Thus, the teaching staff usually resorted to the coping strategies that involved finding the solution to the problem, its rational re-thinking, the search for resources to minimise negative consequences. The second most popular strategy is emotion-oriented coping, enabling teachers to use their social capital as a coping resource. Only few respondents avoided coping with the emerging difficulties by denying that those exist and using the avoidance strategy.

At the second stage of the research two groups of respondents were formed. The first group included 42 representatives of Kostroma State University; the second – 42 members of teaching staff from other universities of the Russian Federation. The general sample (n = 84) was used to prove the hypothesis of a link between the mental and emotional states of the teaching staff and their self-effectiveness in the stressful situation of lockdown (Table 1).

**Table 1.** The link between the mental and emotional states of the university teaching staff and their self-effectiveness (based on Spearman’s correlation analysis, n = 84).

Indicators of the mental and emotional state	Competence in remote learning	Indicators of teacher’s effectiveness		
		Readiness for remote work during lockdown	Effectiveness of professional activities performed online	Readiness for remote work after lockdown
Motivated inclusion	0.483**			
Positive emotions	0.415*	0.448*	0.369*	0.565**
Acceptance of the situation	0.392*	0.576**	0.285*	0.485**
Activeness				0.259*
Seeing the situation as a resource of self-development	0.443*			
Feeling transition difficulties		- 0.404*		
Anxiety	- 0.332*		- 0.302*	- 0.465**
Fears and worries	- 0.362*	- 0.266*	- 0.244*	

Note: \* –  $p \leq 0.05$ ; \*\* –  $p \leq 0.01$

It was found that the higher teachers assess their own competence of remote teaching, as well as skills, and readiness to use various forms of remote learning (videoconferences, lectures, tests, online presentations, etc.), the easier and more positively they accept these activities, the more motivated they are to work with students remotely, the more quickly they adapt to the current situation and accept it not only as a necessity, but also as the new interesting reality. This reality, on the one hand, requires the update of the resources, and, on the other hand, serves as a source of self-development. In their turn, the acceptance of the situation of the forced remote learning, activeness and positive emotions of teachers are directly related to the teachers’ readiness to use some forms of remote learning in the future and upgrade their skills further.

It is worth mentioning that the competence of teachers in remote learning is reversely related to anxiety, fears and worries. The more sure of themselves teachers are, the more varied are their teaching toolkits; the calmer and more psychologically stable they are under the stress of lockdown.

Besides, the researchers found that the more active teachers are more ready to search for and implement new forms of teaching and forecast the students’ readiness for successful work online ( $R = 0.3$ ,  $p = 0.01$ ). The researchers observed the constructive transferential relationship that enables teachers in the current situation not to look down upon students but set adequate balanced requirements. The teacher in this situation is oriented at serious work and is ready to work with students one-to-one. Teachers are motivated to master the ways of the “subject”– to –“subject” relationship with students. However, there is a risk of setting too high requirements to students and, as a result, a substantial increase in the students’ workload.

As for the age, the staff up to 45 years old are more likely to accept the situation of the forced transfer to remote learning ( $U = 657$ ,  $p = 0.04$ ). The older members of staff, the more they are nervous, worried, and distressed in the current situation ( $R = 0.3$ ,  $p = 0.05$ ). The researchers found a reverse

relationship between the age of the respondents and the forecasting of work results ( $R = -0.38$ ,  $p = 0.01$ ) and activeness of teaching staff in remote learning ( $R = -0.53$ ,  $p = 0.003$ ). Older people find it harder to adapt to new technologies. They require more time and mental and emotional resources to cope with stress; they do not believe in their effectiveness online. To support teaching staff of older age and raise their productivity in the new situation, it is necessary to create a flexible system of psychological and teaching support.

The comparison between the groups in Mann-Whitney U-test showed the absence of statistically considerable differences in modality, the degree of manifestation of difficulties related to remote learning and the ways of overcoming those. Therefore, psychological and teaching difficulties and the strategies of coping with them in the stressful situation of lockdown can be considered identical for the teaching staff of all Russian universities.

As for considerable difficulties, the statistical analysis showed the following. The teaching staff of Kostroma State University displays much higher degree of activity in lockdown ( $U = 656.5$ ,  $p = 0.04$ ) and the readiness to use the system of distant learning in the future ( $U = 642$ ,  $p = 0.04$ ). It may be caused by the fact that there is an SDL in Kostroma State University, and that before lockdown, the university organised a short course for the staff to help them transfer to remote learning easily.

## 7. Conclusion

University teaching staff, in general, showed a relatively high degree of psychological and teaching readiness to switch over to remote learning. However, the stress of lockdown hindered this process. The larger part of the teaching staff is characterized by a high level of situational anxiety, related to uncertainty, the feeling of their own incompetence and worries about learning results. The major factors, causing stress, are the increased workload, responsibility, restriction of free movement and communication. The staff of the older age group (45 and above) find it more difficult to adapt. Teachers of various Russian universities have, in general, similar difficulties related to remote education.

In the situation of the forced transfer to remote learning due to lockdown, university teaching staff members use mostly constructive behavioural strategies, related to creative and research activities, self-education, rationalisation and curbing negative emotions. Humour is a very important coping mechanism in this stressful situation. University staff are characterised by higher adaptability to the current situation due to their psychological and teaching readiness.

There is a link between the mental and emotional state of the teaching staff in the stressful situation of lockdown and their self-effectiveness in their professional activities. The belief in own abilities, optimism, inner acceptance of the current situation, the ability to see resources for self-development in the current conditions are becoming extremely important in raising the professional competence of university teaching staff and in developing the psychological and teaching readiness for innovations.

At the same time, some staff members require individual psychological support to develop mental resources and make ways of coping with lockdown stress more constructive.

## References

- Andryukhina, L. M., Sadovnikova, N. O., Utkina, S. N., & Mirzaakhmedov, A. M. (2020). Tsifrovizatsiya professional'nogo obrazovaniya: perspektivy i nezrimye bar'ery [Digitalisation of professional education: prospects and invisible barriers]. *Obrazovanie i nauka* [Education and Science], 22(3), 116-147. <https://elibrary.ru/item.asp?id=42863831>
- Endler, N. S., & Parker, J. D. A. (1990). *Coping Inventory for Stressful Situations (CISS): Manual*. Multi-Health Systems.
- Grebennikova, V. M., & Novikova, T. V. (2019). K voprosu o tsifrovizatsii obrazovaniya [On the issue of digitalisation in education]. *Istoricheskaya i Sotsial'no-obrazovatel'naya Mysl'* [Historic, Social and Educational Thought], 11(5), 158-164. <https://cyberleninka.ru/article/n/k-voprosu-o-tsifrovizatsii-obrazovaniya>
- Kryukova, T. L. (2010). *Metody izucheniya sovladayushchego povedeniya: tri koping - shkaly* [Methods of studying coping behaviour: three coping scales]. Kostroma State University. <http://www.coping-kostroma.com/index.php/content/books/40-methods>
- Nasyrova, E. F., & Drozdova, A. A. (2015). Metodicheskaya gotovnost' kak sostavlyayushchaya professional'noy kompetentnosti bakalavrov professional'no-pedagogicheskogo obrazovaniya [Methodological readiness as a component of professional competence of bachelors of vocational and pedagogical education]. *Russian Journal of Education and Psychology*, 6, 279-289. <https://cyberleninka.ru/article/n/metodicheskaya-gotovnost-kak-sostavlyayushchaya-professionalnoy-kompetentnosti-bakalavrov-professionalno-pedagogicheskogo>
- Pekker, P. L. (2015). Distantionnoe obuchenie: opyt universitetov [Remote learning: university experience]. *Gumanitarnye, Sotsial'no-ekonomicheskie i Obshchestvennyye Nauki* [Humanities, Socioeconomic and Social Sciences], (6-2), 88-93. <https://cyberleninka.ru/article/n/distantionnoe-obuchenie-opyt-universitetov>
- Polyakova, V. A. (2016). Obzor nauchnykh issledovaniy v sfere informatizatsii obrazovaniya v usloviyakh global'noy kommunikatsii i setevogo vzaimodeystviya [The review of research in digitalisation of education under global communication and networking.]. *Scientific Review. Pedagogical Sciences*, 3, 86-97. <https://science-pedagogy.ru/ru/article/view?id=1499>
- Romm, T. A., & Romm, M. V. (2018). Setevye gorizonty teorii vospitatel'nykh sistem [Network horizons; theories of educational systems]. *Otechestvennaya i zarubezhnaya pedagogika* [Domestic and Overseas Pedagogics], 1(4), 54-56. <https://cyberleninka.ru/article/n/setevye-gorizonty-teorii-vospitatelnyh-sistem>
- Khazova, S. A., Adeeva, T. N., & Tikhonova, I. V. (2017). Varianty zhizni v zatrudnennykh usloviyakh razvitiya [Life scenarios in difficult developmental situations]. *Vestnik Kostromskogo gosudarstvennogo universiteta. Seriya: Pedagogika. Psikhologiya. Sotsiokinetika* [Kostroma State University Bulletin: Pedagogics. Psychology. Sociokinetics], 23(4), 178-183. <https://cyberleninka.ru/article/n/varianty-zhizni-v-zatrudnennykh-usloviyah-razvitiya>
- Khasanova, I. I., & Kotova, S. S. (2018). Psychological readiness of secondary vocational education teachers for mastering new activities in the context of professional reorientation. *The Education and Science Journal*, 20(7), 147-167. <https://doi.org/10.17853/1994-5639-2018-7-147-167>
- Goswami, D., & Choudhury, G. (2016). A Study on Professional Commitment of Teacher Educators in Relation to Institutional Climate. *The International Journal of Humanities & Social Studies*, 4(5), 177-180. <http://internationaljournalcorner.com/index.php/theijhss/article/view/126658>
- Kargapol'tseva, N. A., Samokhvalova, A. G., Dneprov, S. A., & Kuznetsov, V. V. (2016). Management security of personality: the pedagogical aspect. *International Review of Management and Marketing*, 6(2), 370-375. <https://www.econjournals.com/index.php/irmm/issue/view/72>
- Noonan, J. (2018). An affinity for learning: teacher identity and powerful professional development. *Journal of Teacher Education*, 70(5), 526-537. <https://doi.org/10.1177/0022487118788838>
- Prenger, R., Poortman, C. L., & Handelzalts, A. (2018). The effects of networked professional learning communities. *Journal of Teacher Education*, 70(5), 441-452. <https://doi.org/10.1177/0022487117753574>

- Tasnim, M., Hossain, M. Z., & Enam, F. (2017). Work-Life Balance: Reality Check for the Working Women of Bangladesh. *Journal of Human Resource and Sustainability Studies*, 5(1), 75-86. <https://doi.org/10.4236/jhrss.2017.51008>
- Titova, M., & Kuznetsova, A. (2019). Burnout syndrome and chronic fatigue prevention by means of human functional states' self-regulation. *European psychiatry*, 56(S), 657. <https://doi.org/10.26226/morressier.5c643dcc9ae8fb00131f8e62>