






Transformation of university teachers' working and employment conditions in the period of distance learning: socio-psychological aspects and risk assessment

Transformação das condições de trabalho e emprego de professores universitários no período de ensino à distância: aspectos sócio-psicológicos e avaliação de risco

Transformación de las condiciones laborales y laborales de los docentes universitarios en el período de la educación a distancia: aspectos sociopsicológicos y evaluación de riesgos

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ABSTRACT

The forced transition to distance learning during the pandemic has determined the development of new models of university teachers' professional activity. The results of the "first wave" show that the community of teachers was not prepared for distance learning not only due to the lack of necessary competencies and skills of working in the online environment but also psychologically. In particular, the psychological unpreparedness of teachers for the transition from traditional formats of interaction to the remote ones, the collapse of the familiar "live" models of communication with students and colleagues turned up to be a major difficulty. Based on the results of research, the key problems of the organization of teachers' remote work are determined and the socio-psychological consequences of remote employment are revealed. The main groups of risks faced by teachers due to the forced transition to remote employment are also identified. The impact of remote formats on the professional activities of teachers cannot be assessed unequivocally. On the one hand, in the time of remote work, teachers have developed new skills and competencies, mastered innovative online technologies, managed to overcome numerous psychological struggles, etc. On the other

hand, teachers are aware that the necessary process of transformation of education will not only substantially change their professional activity but will also lead to the emergence of fundamentally new social roles and models of professional behavior. There is a growing sense of unease and confusion in the teaching community and negative expectations associated with uncertainty in the professional labor market are developing.

Keywords: Distance learning at universities. Remote employment of teachers. Remote working conditions. University professors.

RESUMO

A transição forçada para o ensino à distância durante a pandemia determinou o desenvolvimento de novos modelos de atividade profissional dos professores universitários. Os resultados da “primeira onda” mostram que a comunidade de professores não estava preparada para a educação a distância não só pela falta de competências e habilidades necessárias para trabalhar no ambiente online, mas também psicologicamente. Em particular, o despreparo psicológico dos professores para a transição dos formatos tradicionais de interação para os remotos, o colapso dos modelos familiares “vivos” de comunicação com alunos e colegas revelou-se uma grande dificuldade. Com base nos resultados da pesquisa, os principais problemas da organização do trabalho remoto dos professores são determinados e as consequências sócio-psicológicas do emprego remoto são reveladas. Os principais grupos de riscos enfrentados pelos professores devido à transição forçada para empregos remotos também são identificados. O impacto dos formatos remotos nas atividades profissionais dos professores não pode ser avaliado de forma inequívoca. Por um lado, no tempo do trabalho remoto, os professores desenvolveram novas habilidades e competências, dominaram tecnologias online inovadoras, conseguiram superar inúmeras lutas psicológicas, etc. Por outro lado, os professores estão cientes de que o necessário processo de transformação da educação não apenas mudará substancialmente sua atividade profissional, mas também levará ao surgimento de papéis sociais e modelos de comportamento profissional fundamentalmente novos. Há um sentimento crescente de mal-estar e confusão na comunidade de ensino e as expectativas negativas associadas à incerteza no mercado de trabalho profissional estão se desenvolvendo.

Palavras-chave: Ensino à distância nas universidades. Emprego remoto de professores. Condições de trabalho remoto. Professores universitários.

RESUMEN

La transición forzada a la educación a distancia durante la pandemia ha determinado el desarrollo de nuevos modelos de actividad profesional del profesorado universitario. Los resultados de la “primera ola” muestran que la comunidad de profesores no estaba preparada para la educación a distancia no solo por la falta de competencias y habilidades necesarias para trabajar en el entorno en línea sino también psicológicamente. En particular, la falta de preparación psicológica de los docentes para la transición de los formatos tradicionales de interacción a los remotos, el colapso de los modelos familiares de comunicación “en vivo” con estudiantes y colegas resultó ser una gran dificultad. Sobre la base de los resultados de la investigación, se determinan los problemas clave de la organización del trabajo a distancia de los profesores y se revelan las consecuencias sociopsicológicas del empleo a distancia. También se identifican los principales grupos de riesgos a los que se enfrentan los docentes debido a la transición forzada al empleo a distancia. El impacto de los formatos remotos en las actividades profesionales de los profesores no puede evaluarse de forma inequívoca. Por un lado, en la época del trabajo a distancia, los docentes han desarrollado nuevas habilidades y competencias, dominado tecnologías innovadoras en línea, logrado superar numerosas luchas psicológicas, etc. Por otro lado, los docentes son conscientes de que el proceso necesario de transformación de la educación no solo cambiará sustancialmente su actividad profesional, sino que también conducirá al surgimiento de roles sociales y modelos de

comportamiento profesional fundamentalmente nuevos. Existe una creciente sensación de malestar y confusión en la comunidad docente y se están desarrollando expectativas negativas asociadas con la incertidumbre en el mercado laboral profesional..

Palabras clave: Educación a distancia en universidades. Empleo a distancia de profesores. Condiciones de trabajo a distancia. Profesores universitarios.

INTRODUCTION

The relevant problems of the higher education system transformation traditionally draw the attention of not only specialists but also the wide public. The strategic objectives, the mechanisms of higher education reformation, as well as the socio-economic effectiveness of the transformations under the conditions of the educational system modernization, are being actively discussed (Abramov, 2020; Gleason, 2018; Gostev et al., 2020; Ilna et al., 2018).

The pandemic has significantly altered all spheres of public life including higher education. Experts have previously been discussing the use of various distance learning models (Zaborova et al., 2017; Fadeev, 2017; Demchenko et al., 2018) and in the context of the pandemic, this discussion has taken on a special character. The issues of ensuring high quality of education, the active introduction of the latest Internet technologies in the educational process, and many other pressing problems of universities in the context of the pandemic are widely discussed (Zabolotska et al., 2021; Lokanath et al.; 2020 Frolova et al., 2020). New approaches to the development of education as "a sphere of free and individualized forms of knowledge transfer" are being actively developed (Prepodavатели высказали свое мнение.., 2020). The wide range of the problems under consideration partially covers the problem of the transformation of a teacher's activity. Most commonly, the discussed issues are the forms of teachers' adaptation to the changed conditions and the improvement of teachers' skills of working in the online environment (Ivanova, 2020; Denden et al., 2021; Denisova et al., 2020; Letyagina, 2020). Researchers are concerned with methodological issues of communication with students, the use of new pedagogical technologies allowing to increase student involvement in the educational process, etc. (Shmurygina, 2020; Jacques et al. 2021; Habib et al. 2021; Murzina, 2021). However, the range of problems university teachers have recently come into contact with is much wider. The present study attempts to address some understudied aspects of the distance employment of teachers.

The study aims to reveal the main problems of teachers' remote work, the socio-psychological consequences of remote employment, and the real and potential risks of the forced transition to distance employment and the further perspectives of the university system transformation.

METHODS

A comprehensive analysis of labor and employment problems in university teachers under the conditions of the pandemic is based on a wide range of scientific research methods. In particular, we use economic and sociological methods, as well as such general scientific methods as synthesis, induction, and typological and comparative analysis.

The mechanism for evaluating the impact of distance forms of education on university teachers' working and employment conditions is based on the analysis, synthesis, and systematization of the existing approaches to evaluating distance learning in universities. The deployed methods include observation, interviews, expert survey data, and psychological testing. Monitoring of arrays of text on the problems of distance learning from various Internet resources is conducted. The foundation of the study is formed by data from a survey of university teaching staff conducted by the Ministry of Science and Higher Education of Russia together with the Institute for Social Analysis and Forecasting of the Russian Academy of Sciences during the "first" wave the

sample of which includes over 33,000 teachers of Russian universities. The empirical basis of the study also consists of the results of sociological surveys and formalized and informalized interviews with teachers at several Russian universities conducted during the "second" wave of remote work in November and December of 2020; the sample includes 120 people.

The study of the problems of remote employment of teachers used information obtained from the analysis of Internet arrays, social networks, and websites of professional teaching communities.

The collection, accumulation, and synthesis of information reflecting the dynamics of working conditions and employment of university teachers allow us to create a basis for further in-depth analysis of the problems of modernization of higher education under the conditions of the pandemic and in the period of liquidation of its consequences.

DISTANCE LEARNING IN HIGHER EDUCATION: TRENDS IN THE "FIRST" AND THE "SECOND" WAVE

Under the conditions of forced transition of the entire higher education system to distance learning, both teachers and students have encountered fundamentally new models of educational process organization. The Internet was flooded with feedback and discussions of distance learning problems. A few months later, the first results of sociological research on various aspects of the adaptation of universities to the new conditions appeared (Rogozin, 2020).

Surveys demonstrate that the insufficient readiness of teachers for online work became one of the main problems of remote work. The lack of the basic skills of working with Skype and Zoom platforms made the realization of professional functions and even simple communication with students significantly more difficult. An unexpected problem emerged – it was not a teacher's professional skills and knowledge of the subject that were evaluated but only their technical competencies and the level of readiness to work in an online environment. The greatest impact of this factor was on older teachers.

As evidenced by the results of the "first" wave of distance learning, university teachers were not ready for remote work not only in terms of technical knowledge and skills but also psychologically. In particular, a significant problem was the psychological unpreparedness of teachers for the transition from traditional to distance formats, the destruction of the familiar "live" models of communication with students.

Summarizing the outcomes of the "first" wave of distance learning, teachers have identified the following risks of distance education (Prepodavateli vyskazali svoe mnenie..., 2020):

- a decline in students' motivation to learn;
- the lack of skills of maintaining self-discipline and diligence in students;
- emotional breakdowns in both students and teachers;
- increased workload for teachers;
- the inability to control the level of knowledge;
- the distance transfer of knowledge being restricted in several areas (primarily technical and mathematical);
- formalization of educational processes, a tendency to formulaic solutions.

Over time, most of the technical and organizational problems at both the faculty and university levels have been solved. According to the results of research conducted during the "second" wave, the degree of panic associated with teachers' digital incompetence has dropped significantly. In the fall of 2020, university teachers were prepared to work in a variety of distance formats and use the latest Internet technologies to improve the effectiveness of the educational process. Many training courses were adapted to distance learning and a new system of interaction with students began to form.

In both the "first" and "second" waves of distance learning, there was an active discussion of the prospects for the transformation of the higher education system after the pandemic (Vysshee

obrazovanie: uroki pandemii., 2020; Zernov et al., 2020; Markova, 2020). One of the most widely discussed issues is the possibility of introducing new blended learning formats. The opinions of the teaching community on this issue are mixed. There are both supporters of preserving the classical model of learning (with the use of certain elements of distance learning being minimized) and those convinced of the need to use a variety of online technologies as a priority. Initially, in the “first” wave, a significant factor in the differentiation of teachers' positions on this issue was the degree of mastery of Internet technologies and the readiness to master the online environment. Later, teachers have significantly “leveled” in terms of technical literacy. Consequently, the gap in the level of acceptance or unacceptance of distance formats as effective educational tools and, therefore, in the assessment of the prospects of higher education reduced. This context brings forward the problems of teachers' social security aggravated by the situation in the professional labor market being unstable (Lobova, 2020; Kamarova, 2020; Patutina, 2020)..

THE CONDITIONS OF REMOTE WORK OF UNIVERSITY TEACHERS

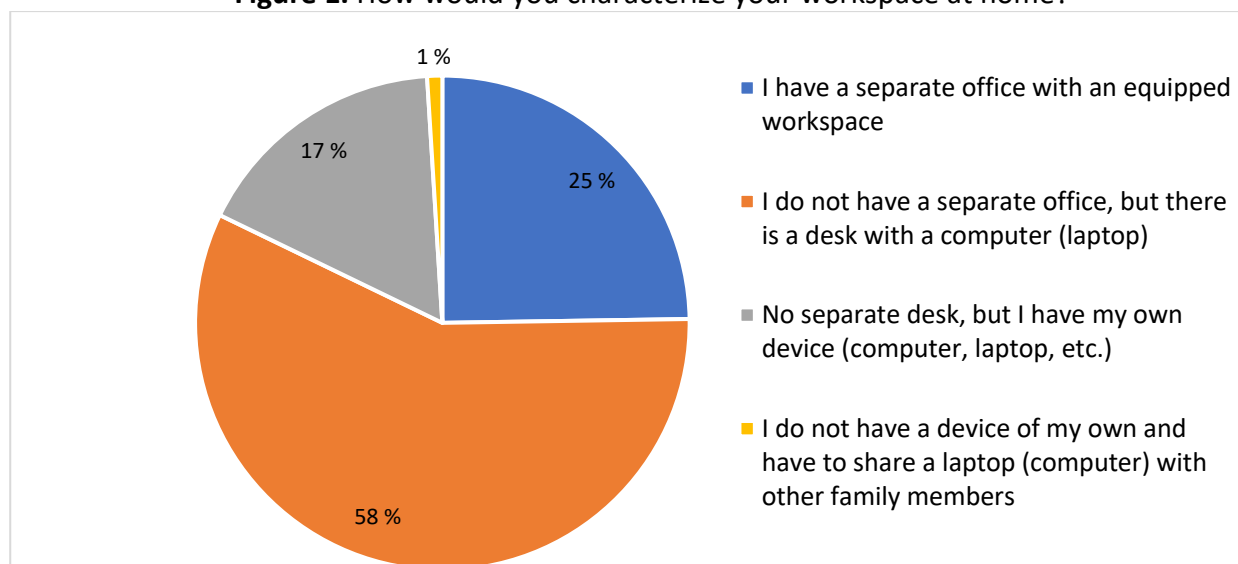
The general problems of organizing teachers' labor are revealed in a survey of university teaching staff conducted during the “first” wave of distance learning (Prepodavateli vyskazali svoje mnenie., 2020):

The results of the nationwide survey were as follows:

- 66% of teachers report not liking work from home;
- 34% of teachers do not have a place comfortable for teaching classes at home;
- 85.7% of teachers have less free time and experience an increased workload;
- 87.8% of teachers believe that they should teach in person.

The results of the November-December 2020 survey and interviews of university teachers allow specifying the problems faced by teachers in organizing their work at home.

Figure 1. How would you characterize your workspace at home?

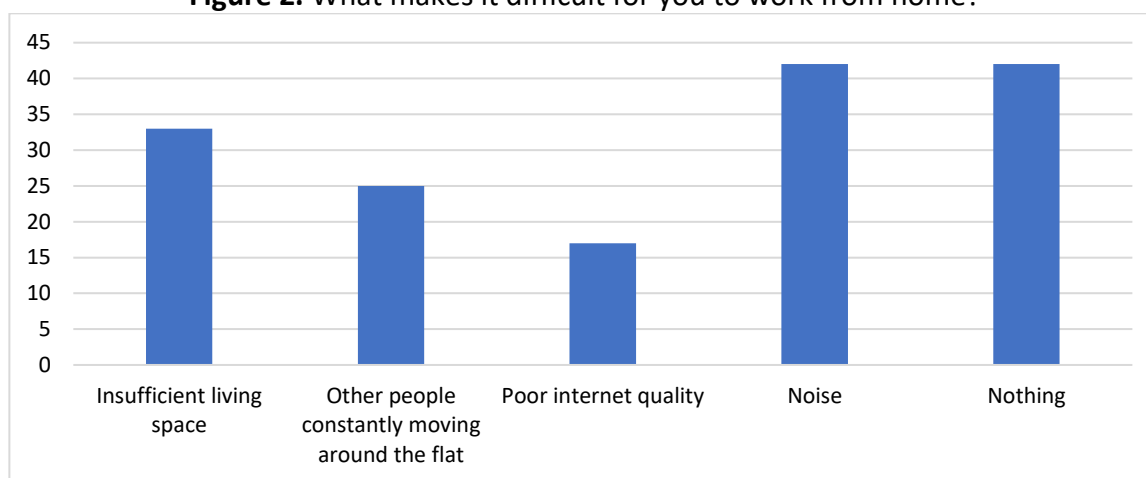


One of the most common problems was indeed related to organizing one's workspace. Only one in four surveyed teachers has a fully organized workspace at home, i.e., a separate office with an equipped workstation. Almost 3/5 of the respondents say that they do not have a separate office but there is a desk with a computer (laptop). 16% of teachers are in an even more difficult situation – they do not have a separate desk but do have their own equipment (computer, laptop, etc.). Many

teachers report simply not having enough space in the apartment for a completely organized workspace (33.3%).

One of the main problems faced by teachers during remote work is technical failures. Half of the respondents indicated a decrease in labor productivity due to technical problems, primarily due to problems with the Internet connection (16.7%). However, some respondents note a positive dynamic in this regard. After the first wave which was very difficult in technical terms, some teachers (8.3%) upgraded their equipment and switched to more expensive home Internet plans which allowed them to partially reduce technical risks. Meanwhile, more than half of the surveyed teachers report positive dynamics in their skills in the online environment – during the “second”, the share of those afraid to disrupt the lesson because of their insufficient distance learning skills substantially dropped. Nevertheless, some technical risks remain – in November and December, most teachers did face situations when they were unable to teach classes due to failures in Skype or Zoom.

Figure 2. What makes it difficult for you to work from home?

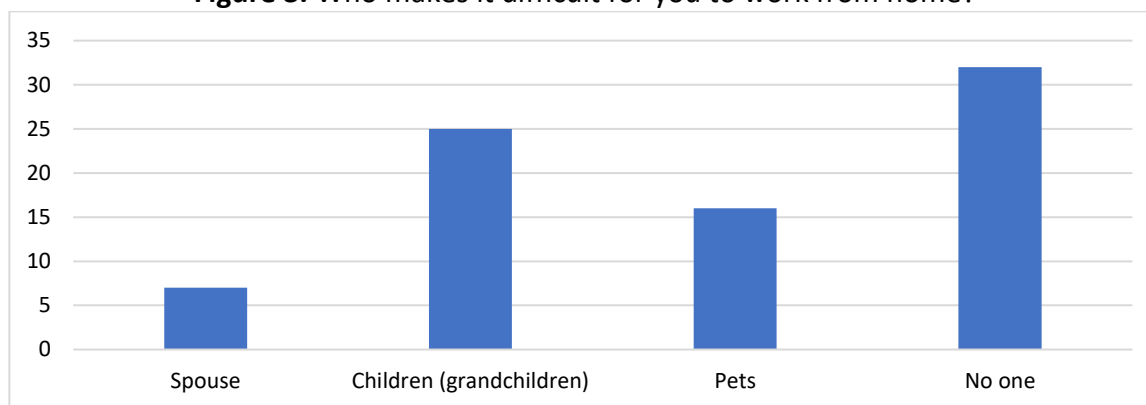


Another major problem in the organization of distance learning is due to the specifics of work from home. More than 2 in 5 surveyed teachers report being unable to concentrate and work properly due to many distractions. Most of the time, classes are disrupted by noise (41.7 %) due to various reasons. For example, one in ten respondents experienced problems because of noisy neighbors. A huge and practically unresolvable problem present for some teachers was the renovations suddenly started by their neighbors. A seemingly regular everyday situation resulted in disrupted classes and problems at work.

“In spring, I had problems with Internet connection several times, my classes were disrupted. I had to justify myself to my superiors and spend a lot of time and energy to compensate for the missed classes. I felt like a bad truant.”

“Whatever happens (bad Internet connection, problems with Zoom, miscommunications with students, etc.) – it is always the teacher’s fault. Before every class, I am haunted by fear – what if something happens and the class does not take place...”

The teachers most often not children or grandchildren interfering with them teaching classes – this factor is reported by every second respondent. Some people are distracted by other family members and 16% of teachers cannot teach classes properly because of their pets.

Figure 3. Who makes it difficult for you to work from home?

Thus, despite the increase in technical literacy in most teachers in the past six months, concerns about providing uninterrupted, high-quality classes from home are still prevalent. The risks caused by both technical difficulties and domestic circumstances remain.

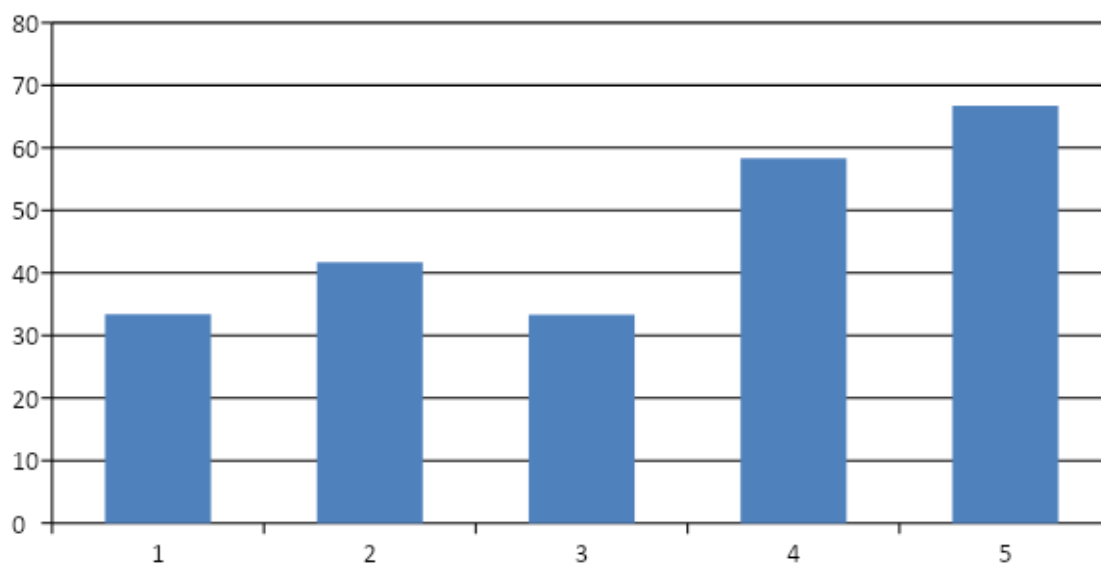
SOCIO-PSYCHOLOGICAL CONSEQUENCES OF REMOTE WORK OF UNIVERSITY TEACHERS

University teachers' professional activity is associated with numerous risks, stressors, and emotional burnout problems (Isaeva et al., 2016, Shmantsar, 2019). During the pandemic, the situation worsened (Bogdan, 2020). In the spring of 2020, university professors, like the majority of workers who had been under severe quarantine for several months, faced many negative social and psychological consequences of such self-isolation. However, in contrast to the situation of some other workers, the months spent in self-isolation by teachers were filled with intensive work. It can be hypothesized that the effortful work helped most teachers reduce their anxiety, avoid focusing on negative information, and generally minimize the consequences of the experienced stressful situation.

The results of the conducted study allow identifying the most important socio-psychological consequences of university teachers' remote employment.

The main positive outcome of remote work, according to teachers, is the mastery of new technologies – 2/3 of the respondents indicate the importance of this aspect. This result is predictable and quite obvious. The second most common consequence of working remotely has a completely different, unexpected nature. Over 58% of teachers are concerned with gaining excess weight after a long period of remote work and having to get rid of it. Many respondents confess that they are making significant efforts to get back in shape but are not yet unsuccessful in solving this problem.

For many respondents, the negative consequences of remote employment are associated with the inability to solve everyday work problems. More than 2/5 of the respondents faced such problems due to the lack of direct contact with colleagues and managers and believe that the situation will not improve until the usual format of interaction is restored.

Figure 4. What are the consequences of working remotely for you personally?

1. The usual work and rest mode is disturbed
2. Work problems have arisen due to the lack of direct contact with colleagues and supervisors
3. Increased anxiety, worsened emotional state
4. Weight gain to get rid of
5. New Internet technologies have been mastered

Overall, the shortage of communication with colleagues and students presents a serious problem for most surveyed teachers. (as interestingly concluded by one of the teachers, *“It turns out that charisma does not transfer through the screen”*). Over half of them also indicate severely missing the usual working atmosphere, the “energy” of the university.

In evaluating their emotional state, the respondents especially stress the problem of the lines between personal and work time blurring:

“For me personally, the most unpleasant feeling I get from working remotely is a sort of excessive openness, insecurity in front of colleagues and supervisors, no personal space left. Work time does not end”.

“The managers act like slave owners as if they can order us around all day long. All kinds of briefings and Skype meetings are scheduled suddenly, almost at any time. My personal plans, household chores, and problems are not taken into account”.

One in three respondents noted experiencing an increase in overall anxiety and a deterioration in the emotional state during the period of distant employment. Many people feel that the endless work on the computer results in professional deformation and even degradation. There is no time or opportunity left to read the relevant information on one’s subject or collect information for a scientific paper.

At the same time, most teachers admit having experienced the “second” wave of distance learning much better than the “first” one. The most difficult moments (episodes of panic, despair, fear) were left behind, in the “first” wave of distance learning. The psychological state of teachers during the “second wave” can be characterized as more stable.

DISTANCE EMPLOYMENT OF UNIVERSITY TEACHERS: THE MAIN RISKS

In the context of the pandemic, the overwhelming majority of teachers are afraid of getting coronavirus themselves or infecting their loved ones. Although teachers perceive many of the everyday life limitations and forced lifestyle changes negatively, they recognize the necessity and

validity of the transition to distance learning. The danger of being infected with coronavirus is viewed as the main predominant risk during the pandemic.

However, teachers are also concerned with many other problems – from everyday work situations to the strategies for the development of higher education in the post-pandemic era. Below, we identify several typical groups of risks.

1. Extremely common are the risks associated with ensuring the quality of learning in a distance format, the realization of professional functions, maintaining students' motivation, etc. Despite all efforts, one in four teachers admits that their productivity has declined and they are unable to provide the same level of work quality as before. Many teachers lament that a teacher's "charisma" does not work and the "energy" of the university is not transmitted in the distance learning conditions. This group of risks is most often discussed in professional and expert Internet communities.

2. A special group is formed by technical risks that have a different nature in the "first" and "second" wave of remote work. In the spring, teachers were most afraid of failing to cope with Internet technologies and disrupting classes. In a very short amount of time, teachers had to educate themselves, improve their technical literacy, and develop the competencies needed to work in the online environment. The positive shifts are evident – most teachers are currently no longer afraid of "doing something wrong" due to the lack of remote work skills. The fear of disrupting classes is now linked to other circumstances. Teachers are predominantly anxious about unstable Internet connection and Skype or Zoom failures although they admit that such failures have decreased in recent months.

3. The risks associated with the specifics of work from home. The vulnerability of teachers has increased in the time of remote employment as the boundaries between work and free time were broken. On the one hand, the process of teaching classes is interrupted by the presence of children, other people constantly moving around the flat, various noises; a high proportion of these problems are due to the lack of living space and a personal office. On the other hand, managers take advantage of the situation suddenly scheduling various events that require mandatory remote attendance. These decisions do not account for teachers' domestic circumstances or excessive workload.

4. Risks associated with teachers' professional deformation and psychological burnout. The work of a university teacher has long been characterized by high stress levels due to high workload, strict requirements for research activity, etc. However, in the context of remote employment, the situation became even more complicated. Being forced to master new teaching formats on a tight schedule and spend their whole days online, teachers faced many psychological problems during the "first" wave. Intense professional activity saturated with numerous stresses and personal and professional micro-conflicts certainly had a negative impact on the emotional and psychological state of teachers. Uncoincidentally, 16.7% of teachers name remote work as the most stressful period in their entire professional career.

5. Systemic risks associated with the consequences of the pandemic for the higher education system as a whole. In the context of the forced transition to the distance format, teachers hope to return to the previous model of professional activity on the one hand but on the other hand, understand that the situation in universities will not be the same after the pandemic. An increased proportion of distance learning formats, an expanded range of deployed online technologies, and a reduced number of classic full-time students are only a few probable trends of the higher education system transformation. It is no coincidence that 2/3 of the surveyed teachers believe that the role of a university teacher will change in the near future and 41.5% of them anticipate the destabilization of the professional labor market. In particular, teachers fear that universities will begin to make significant reductions in the teaching staff of universities and that there may also be a reduction in income, increased workload, stricter requirements in competition for positions, etc.

The system of risks and negative expectations will only transform with the return of the previous forms of educational activity and only then it will be possible to evaluate the degree to which the negative predictions regarding certain aspects of teachers' professional activity are realistic.

DISCUSSION

The problems of organizing distance learning in universities during the restrictions due to the COVID-19 pandemic are being actively discussed by the widest sections of the public. The conditions of university teachers' work and employment in the context of transitioning to the remote format also draw a lot of interest. Nevertheless, it should be recognized that many aspects of distance learning are still at the stage of emotional rather than scientific comprehension. This determines the great interest in the present study that attempts to systematize the extensive material from Internet resources, as well as the results of various sociological surveys and interviews.

The results of the study were reported and actively discussed at various scientific conferences. In particular, the problems of the teaching community adapting to the new working and employment conditions during the pandemic were the subject of discussion at the 20th International Social congress (October 20, 2020). It was noted during the discussion that the forced transition of education to a distance format reduces the value and attractiveness of teaching work deforming the very system of the professional "teacher-students" and "teacher-teacher" relationships. The staffing situation and the socio-psychological climate at universities are deteriorating. Specifically, the interpersonal competition in teams becomes tougher with the growing struggle for profitable positions, the favor of the superiors, stable sources of extra income, etc.

The professional activity of a teacher in higher education has always been characterized as a highly complex work that combines teaching, research, educational, and organizational functions. The requirements for the teaching staff of universities are constantly rising, at the present stage, a teacher is evaluated as a teacher, researcher, expert, participant in social projects, etc. Competition in both the intra- and inter-university labor market has grown significantly. In the past year, the situation in the professional teaching community has become even more difficult. Most experts give a negative assessment of the dynamics of the professional labor market for university teachers in the coming years.

CONCLUSION

The pandemic has brought forward the educational trends related to digitalization and the introduction of online technologies into the educational process. The forced transition to distance education under the restrictions imposed by the spread of coronavirus has led to a re-evaluation of the use of modern technology in the field of education. Over the past year, the problem of introducing mixed learning formats has evolved from an abstract subject of expert discussion into a widely discussed and quite realistic trajectory for higher education.

The conducted study shows that there are significant differences between the "first" and "second" waves of distance learning associated with changes in the professional activities of university teachers. Teachers now feel more technologically confident with most respondents noting their considerable success in mastering the latest Internet technologies. The online environment has ceased to be hostile and is seen by many as one perfectly acceptable educational format the partial use of which should continue even after the pandemic is over. Nevertheless, no teacher believes that the distance format should be used exclusively.

Thus, the impact of the distance format on teachers' professional activity cannot be evaluated unequivocally. On the one hand, in the time of remote employment, teachers have developed new skills and competencies, mastered innovative online technologies, managed to overcome many psychological difficulties, etc. On the other hand, teachers are aware of the fact that the irreversible process of transformation of education will not only significantly change their professional activities but will also lead to the formation of fundamentally new social roles and models of professional behavior. The study results demonstrate that the professional community is experiencing increasing anxiety and confusion and negative expectations associated with uncertainty in the professional labor market are forming.

Even by now, the levels of both hidden and real unemployment among university teachers have risen substantially, many of them are forced to accept part-time employment proposals with no guarantee of stable employment in the future. Older people, teachers without degrees, and those with low publication activity rates find themselves in the most difficult situation. Many teachers are willing to accept a partial income cut and move to other less prestigious fields (e.g., colleges).

It will only be possible to assess the real scale of the transformation in teachers' work and employment conditions in the course of the distance learning period after all spheres of public life are restored and the restrictions associated with the pandemic are completely lifted.

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