

TRANSFORMATION OF UNIVERSITY TEACHERS' PROFESSIONAL ACTIVITY DURING THE PANDEMIC: SOCIO-PSYCHOLOGICAL CONSEQUENCES AND EVALUATION OF PROSPECTS

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ABSTRACT

The transition of the educational system to a distance format due to the spread of COVID-19 has led to a transformation in the nature and content of professional activities of university teachers. A wide range of research methods, the results of sociological surveys and interviews, as well as an analysis of text arrays from Internet resources, are used to assess the socio-psychological consequences of remote employment. Drawing a conclusion on their remote employment, teachers note the acquisition of a unique experience consisting not only in the mastery of online educational technologies but also in the implementation of new models of professional interaction with students and colleagues. Teachers associate the perspectives for further transformation of their professional activity with the formation of new combined (multi-format) models of education. At the same time, there forms a system of negative expectations as teachers believe that the launched process of transformation of education will lead to stricter requirements for the teacher as the subjects of educational and labor relations, as well as to the destabilization of the situation in the professional labor market.

Keywords: University teachers' professional activity. Remote employment, teachers' working conditions. Combined (multi-format) models of education. Labor market for university teachers.

TRANSFORMAÇÃO DA ATIVIDADE PROFISSIONAL DOS PROFESSORES DA UNIVERSIDADE DURANTE A PANDEMIA: CONSEQUÊNCIAS SÓCIO-PSICOLÓGICAS E AVALIAÇÃO DE PERSPECTIVAS

TRANSFORMACIÓN DE LA ACTIVIDAD PROFESIONAL DE LOS DOCENTES UNIVERSITARIOS DURANTE LA PANDEMIA: CONSECUENCIAS SOCIOPSICOLÓGICAS Y EVALUACIÓN DE PERSPECTIVAS

RESUMO

A transição do sistema educacional para o formato a distância devido à disseminação do COVID-19 levou a uma transformação na natureza e no conteúdo da atividade profissional dos professores universitários. Uma ampla gama de métodos de pesquisa, os resultados de pesquisas sociológicas e entrevistas, bem como uma análise de matrizes de texto de recursos da Internet são usados para avaliar as consequências sócio-psicológicas do emprego remoto. Os professores constatarem a aquisição de uma experiência única que consiste não só no domínio das tecnologias educacionais online, mas também na implementação de novos modelos de interação profissional com alunos e colegas. Os professores associam as perspectivas de uma maior transformação da sua atividade profissional com a formação de novos modelos combinados (multiformato) de educação. Ao mesmo tempo, forma-se um sistema de expectativas negativas na medida em que os professores acreditam que o processo de transformação da educação lançado conduzirá a exigências mais rígidas para o professor como sujeito das relações educacionais e de trabalho, bem como à desestabilização da situação em mercado de trabalho profissional.

Palavras-chave: Atividade profissional dos professores universitários. Emprego remoto, condições de trabalho dos professores. Modelos combinados (multiformato) de educação. Mercado de trabalho para professores universitários.

RESUMEN

La transición del sistema educativo a un formato a distancia por la propagación del COVID-19 ha provocado una transformación en la naturaleza y contenido de las actividades profesionales del profesorado universitario. Se utiliza una amplia gama de métodos de investigación, los resultados de encuestas y entrevistas sociológicas, así como un análisis de matrices de texto de recursos de Internet para evaluar las consecuencias socio-psicológicas del empleo remoto. Los docentes constatan la adquisición de una experiencia única consistente no solo en el dominio de las tecnologías educativas en línea sino también en la implementación de nuevos modelos de interacción profesional con estudiantes y compañeros. Los profesores asocian las perspectivas para una mayor transformación de su actividad profesional con la formación de nuevos modelos de educación combinados (multiformato). Al mismo tiempo, se forma un sistema de expectativas negativas ya que los docentes creen que el proceso de transformación de la educación iniciado conducirá a requisitos más estrictos para el docente como sujetos de las relaciones educativas y laborales, así como a la desestabilización de la situación en el país. el mercado laboral profesional.

Palabras-clave: Actividad profesional del profesorado universitario. Empleo a distancia, condiciones laborales de los profesores. Modelos de educación combinados (multiformato). Mercado laboral del profesorado universitario.

INTRODUCTION

The higher education system has changed drastically in the past year – a mass transition of universities to distance education formats took place during the pandemic. Russian and foreign universities gained a unique experience of working in the online environment and it is currently evident that the return to the previous formats of education will not be automatic as the process of the renewal and modernization of the university system already launched. The relevant problems of higher education traditionally draw the interest of not only experts but also the general public. Strategic directions and mechanisms of reforms in higher education (ABRAMOV, MORKOVIN, PAZUKHIN & TKACHEVA, 2020; GLEASON, 2018), the development of staff potential of higher educational institutions (ILINA, VINICHENKO, MELNICHUK, KOZYREV & LOBACHEV, 2020; GOSTEV, IVANOVA, DEMIDOVA, DEMCHENKO, LAPTEV & SHURAEVA, 2020), the problems of introducing and effectively using various training formats (ZABOROVA, GLAZKOVA & MARKOVA, 2017; FADEEV, 2017), etc. are being actively discussed.

The pandemic has made significant adjustments to the educational process in virtually every country in the world. According to UNESCO, around 1.5 billion people in the world have been deprived of the opportunity to attend classes in the traditional format (COVID-19 EDUCATIONAL DISRUPTION AND RECOVERY, 2020). The urgent transition to the distance format was accompanied by numerous problems that had not previously been the subject of proper scientific research. Experts emphasize the unprecedented nature of the situation (SURMA & KIRSCHNER, 2020). S. Krishnamurthy notes that “never in history have entire student communities been suddenly moved from face-to-face to distance learning via digital technology” (KRISHNAMURTHY, 2020).

Both in Russia and abroad, a large-scale scientific discussion on the organization of distance learning and the introduction of online technologies in the educational process (ZABOLOTSKA, ZHYLIAK, HEVCHUK, PETRENKO & ALIEKO, 2021; LOKANATH, TUSHAR & ABHA, 2020), as well as the problems of ensuring the quality of education (JACQUES, OUAHABI & LEQUEU, 2021; HABIB, JAMAL, KHALIL & KHAN, 2021) stated during the pandemic. Special attention was paid to organizing teachers' communication with students (DENDEN, TLILI, BURGOS, ESSALMI & CHANG, 2021; JACQUES, OUAHABI & LEQUEU, 2021). Specialists identified several problems in such communication (ALESHKOVSKII, GASPARISHVILI, KRUKHMALEVA, NARBUT & SAVINA, 2020). First of all, these are technical problems related, for instance, to the online platforms utilized by universities to conduct distance learning classes. Because of hacker attacks, several leading universities were forced to temporarily suspend online learning. There emerged the term “Zoombombing” referring to actions associated with violation of online spaces including hacking into virtual classes, shouting profanities, etc. (KARPINSKAIA, 2020). Moreover, organizational and psychological problems sprouting from the need for direct contact and face-to-face communication in the “student-student” and “student-teacher” formats during the period of study were identified. Specialists note that students missed “the atmosphere of a class” with jokes, friendly atmosphere, “collective consciousness”, and the individuality of each group member creating the psychological climate and working attitude in the collective (SMIRNOVA, 2020).

In the course of the pandemic, the attention of many researchers in Russia and abroad is drawn to the professional activity of teachers carried out in the distance format. In particular, the system for evaluation of university teachers' preparedness/unpreparedness to use educational online technologies is widely discussed. It is noted that the rapid development of the pandemic brought to the fore the problem of low qualifications of teachers most of whom had no experience in effective remote work (BAKKER, & WAGNER, 2020; BAO, 2020). A shortage of specialists in the creation of online resources and quality control of such resources was discovered (SKULMOWSKI, 2020; TOQUERO, 2020).

However, the spectrum of problems universities had to face during the pandemic is much wider. Specifically, many aspects of the transformation of teachers' professional activity shaped by the acquisition of the unique experience of remote work in the course of the pandemic remain undiscovered. The goal of the present study is to reveal the impact of forced distance learning during the pandemic on the professional activity of university teachers. The study objectives include:

- identifying the peculiarities of university teachers' professional activity during the pandemic;
- revealing the socio-psychological consequences of remote employment of university teachers;
- evaluating the perspectives of the transformation of teachers' professional activity in the context of the development of new multi-format education models.

The study hypothesis states that under the conditions of forced transition to distance learning, there started a process of active transformation of university teachers' professional activity including, on the one hand, an increase in digital literacy and the mastery of new competencies and, on the other hand, a system of risks and negative expectations of teachers due to the possible destabilization in the professional sphere as a result of the development of multi-format education models.

METHODS

The problems of the transformation of relations in the higher education system during the pandemic and the liquidation of its consequences are analyzed based on a wide range of scientific research methods. In particular, we use general scientific methods including synthesis and comparative and typological analysis. The evaluation of the impact of distance education formats on university teachers' professional activity is based on the summarization and systematization of the existing approaches to analyzing various aspects of distance learning. Sociological methods (surveys, semi-structured interviews, expert surveys) are actively used and monitoring of text arrays on the problems of distance learning from various Internet sources is conducted.

The foundation for the present study is formed by data from a survey of university teaching staff conducted by the Ministry of Science and Higher Education of Russia in collaboration with the Institute for Social Analysis and Forecasting of the Russian Academy of Sciences during the "first" wave of distance learning the sample of which includes over 33,000 teachers from Russian universities. The empirical base of the study also includes the results of regional and intra-university research on the problems of teachers' adaptation to the new working conditions. We use data of sociological surveys conducted with our active participation in November and December of 2020 – a series of surveys and interviews of teachers from several Russian universities (Russian State Social University, Russian State University for the Humanities, Russian Technological University) with a sample of 120 people. The study of the problems of teachers' professional activity uses the information obtained from the analysis of Internet arrays, social networks, websites of professional teaching communities, and electronic and print media.

RESULTS

Peculiarities of university teachers' professional activity during the pandemic

An increase in teachers' digital competence can be viewed as one of the crucial results of distance learning during the pandemic. Active public and expert discussion of the problems of teachers and students working in the Internet environment allows us to identify both significant successes and significant shortcomings of this model of interaction. Most studies from the examined period touch upon the issues of teachers' adaptation to the new conditions of working in the online format. According to statistics, 96% of university teachers transitioned to the online mode of work during the first wave of the pandemic (UROKI "STRESS-TESTA", 2020). Meanwhile, it is difficult to give a realistic assessment of the situation. 75% of teachers initially estimated their skills of working with online tools quite highly (KAMAROVA, 2020), only 6.55% of teachers admitted their digital competencies being developed insufficiently (KAMAROVA, 2020).

Nevertheless, it can be assumed that some teachers participating in the surveys did not assess their readiness to use online tools at the first stage of distance learning quite objectively and somewhat exaggerated their digital competence. This idea is supported by the following data. According to experts, 60% of teachers rarely or never held classes in the format of webinars before the pandemic, and from 5% to 30% of teachers (depending on the university) lacking even the basic skills online work factually switched to distance learning sending students control assignments and materials recommended for study (STUDENTY OTSENILI KACHESTVO DISTANTSIONNOGO OBUCHENIYA, 2020).

An essential feature of the first stage of distance learning was a paradoxical situation of students evaluating not the professionalism and pedagogical competence of teachers but only the level of their technical adaptation to the work in the online environment. Older teachers were the ones most affected. Experts note that "the moments when an older employee cannot figure out where to press affect the quality of a teacher's work. Students start judging a teacher not as an experienced professional but as someone who cannot use software and attach files quickly" ("MNOGO VREMENI I MALO UDOVLETVORENIYA": PREPODAVATELI URALSKIKH VUZOV O VTOROY VOLNE DISTANTA, 2020).

Survey data demonstrate that during the period of remote employment, 85.7% of teachers had less free time and experienced their workload as increased (PREPODAVATELI VYSKAZALI SVOE MNENIE O VYNUZHDENNOM PEREKHODE OBRAZOVATELNOGO PROTSESSA V ONLAIN, 2020). This situation is associated not only with

teachers' subjective perceptions but also with real circumstances. First, there was a need for expedited development of new Internet platforms, online tools, and teaching materials (presentations, cases, etc.) adapted to the distance format of interaction with students; second, many universities introduced a system of ongoing reporting on classes involving a great number of reporting forms to complete. The Minister of Science and Higher Education of Russia acknowledged that during the pandemic, teachers "switched to practically individual work with students. At the same time ... the workload of all participants in the educational process has increased" (STUDENTY OTSENILI KACHESTVO DISTANTSIONNOGO OBUCHENIYA, 2020).

A major part of the surveyed teachers was not ready for remote work not only in terms of skills in the online environment but also psychologically. Summarizing the results of the "first" wave of distance learning, teachers identified the following risks of distance education (PREPODAVATELI VYSKAZALI SVOE MNENIE O VYNUZHDENNOM PEREKHODE OBRAZOVATELNOGO PROTSESSA V ONLAIN, 2020):

- a decrease in students' motivation for learning;
- the lack of skills of maintaining self-discipline and diligence in students;
- emotional breakdowns both in students and teachers;
- increased workload of teachers;
- the lack of individual approach, depersonalization;
- 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, an inclination to use formulaic solutions.

Thus, universities mostly coped with the task and ensured an acceptable level of quality of the educational process during the pandemic. However, we believe that teachers' achievements in mastering online tools should not be overestimated. Experts rightfully note: "Many universities currently use online learning technologies in the most simplified version. The greatest emphasis is placed on replacing the form of communication rather than on a comprehensive methodological rethinking of the educational process to adapt it for digital tools..." (BEREZINA, 2020). We should distinguish between teachers' forced adaptation to the distance format associated with the extreme conditions of the pandemic and large-scale systemic work on developing the up-to-date digital competencies in the university faculty.

Socio-psychological consequences of teachers' remote employment

As evidenced by the results of regional and inter-university studies of distance learning problems, the vast majority of surveyed teachers note the negative social and psychological consequences of remote work, as well as signs of emotional burnout. In the interviews we conducted, the teachers confess:

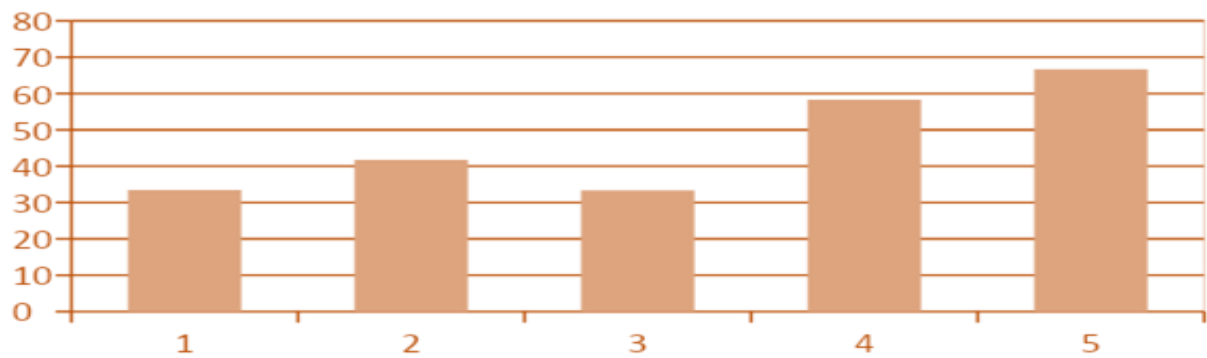
"The first weeks of distance learning were just awful. I was constantly afraid of doing something wrong, of appearing unprepared, of disrupting classes. There was just panic". (Respondent 1).

"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..." (Respondent 2)

Nevertheless, there is also a significant positive outcome of long-term remote employment – 2/3 of respondents note that during the period under consideration, they developed new technical skills and gained confidence in working in the online environment (Fig. 1). The second most common consequence of remote work has a completely new, unexpected nature. Over 58% of teachers are worried about having gained excess weight during remote work and having to get rid of it. The relevance of the problem is probably aggravated by the fact that the vast majority of the surveyed teachers (over ¾) are women for whom the problem of excess weight presents a factor of not only physical but also psychological discomfort.

What are the consequences of working remotely for you personally?

Figure 1. The structure of answers to the question “What are the consequences of working remotely for you personally?”



Source: Search data.

- 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, poorer emotional state
- 4 – Gaining excess weight and having to lose it
- 5 – New technical skills mastered, newly acquired confidence in working in the online environment

Increased anxiety and worsened psychological state are indicated by around 1/3 of the surveyed teachers. Approximately the same number of respondents note the most significant consequence of remote work being the disruption of work and rest patterns. Teachers feel the blurring of boundaries between personal and work time very acutely (ILINA, 2021):

“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”. (Respondent 3)

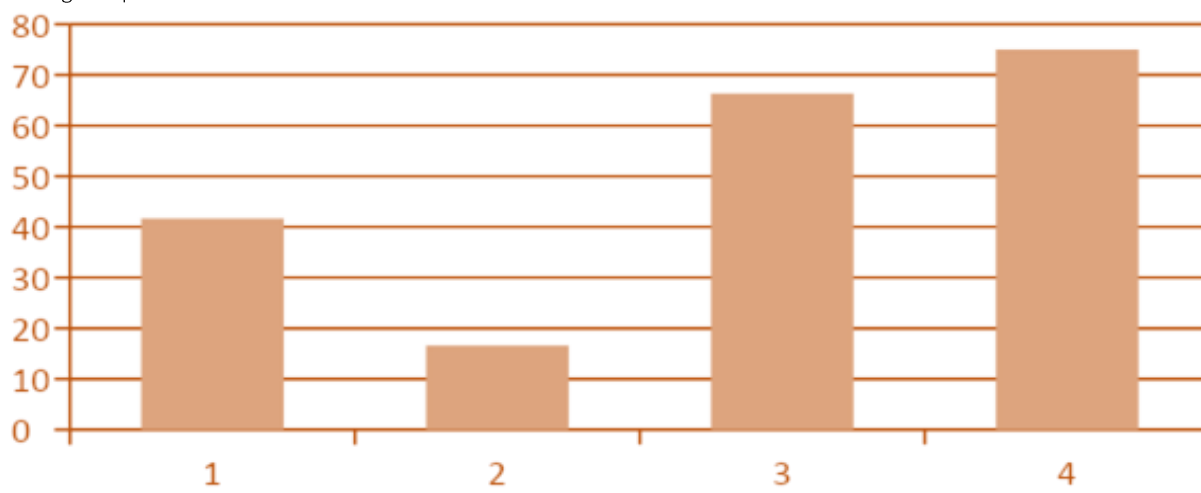
“The managers act like slave owners as if they can order us around all day long. All kinds of briefings and Skype meetings are scheduled suddenly, almost at any time. My personal plans, household chores, and problems are not taken into account”. (Respondent 4)

A significant part of the teachers (almost 42%) reports having work problems due to the lack of direct contact with colleagues and supervisors. These are not only organizational but also socio-psychological issues related to the inability to ensure an optimal mode of interaction with colleagues, management, and employees of various university departments. The changes taking place in the system of relationships in the university concern many teachers (Fig. 2). 2/3 of the respondent’s report experiencing an acute deficit of live communication during remote employment and an even higher proportion of people admit that work becomes less interesting without live communication. Many teachers note that both the nature and content of the professional activity and, of course, the mechanism of interaction with students change in the online environment. One faculty member made an interesting observation: *“It turns out that charisma does not transfer through the screen”*. Overall, teachers suffer from the destruction of emotional and psychological ties with students greatly and believe that without direct contact and real communication, teaching becomes less attractive and more physically and emotionally demanding.

What changes are occurring in the system of relationships during the period of remote work?

Figure 2. The structure of answers to the question “What changes are occurring in the system of relationships

during the period of remote work?"



Source: Search data.

- 1 – The corporate spirit and the atmosphere created in the university is destroyed
- 2 – Friendly relations with colleagues are dismantled
- 3 – An acute deficit of live communication arises
- 4 – Work becomes less interesting without live communication

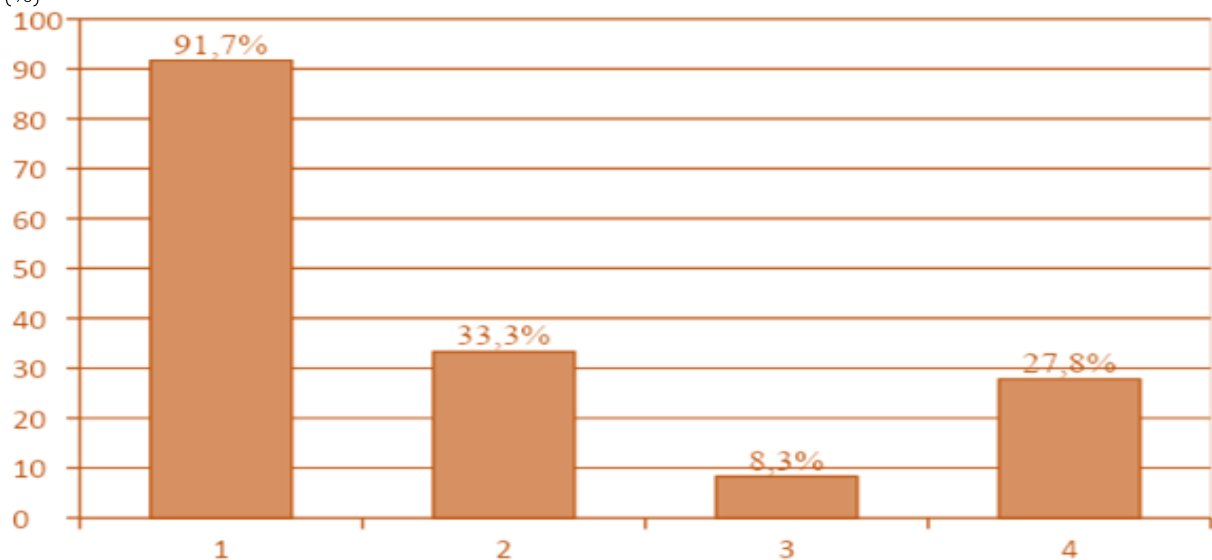
More than 2/5 teachers note the particular importance of the problem associated with the destruction of the corporate spirit, the atmosphere created at the university. In the conditions of distant employment, the whole system of traditions and rituals, the values of corporate culture that had been forming in the university for many years are at risk of being destroyed. However, what teachers are most afraid of is losing the atmosphere, the “energy” of the university that in many ways forms the attractiveness of professional activity in the university. One in eight surveyed teachers worries about their friendships with colleagues being ruined because of the long periods of distance learning. Thus, the most significant “losses” of the remote format of work are associated with the deformation of the socio-psychological mechanisms of interaction between teachers and colleagues, students, and supervisors.

Prospects for the transformation of university teachers' working conditions and employment

At a time of significant decline in the incidence of coronavirus, the higher education system is gradually returning to full-time formats of study. These conditions raise the issues of further transformation of higher education in view of the experience in the distance format gained during the pandemic. The experience of working remotely made teachers take a fresh look at the possibilities of remote professional employment. Most respondents noted many positive aspects of distance work. 91.7% of teachers indicate saving time on transportation as the main advantage of working remotely (Fig. 3). Every third respondent notes that the distant format allowed to (completely or partially) abandon the dress code, although they recognize the importance of the visual image of the teacher during distant classes. About 30% of teachers point to the fact that the distance format allowed them to eat at home as a benefit. Another positive aspect of remote employment reported by some teachers is the opportunity to spend more time communicating with their loved ones.

What are the main advantages of remote employment?

Figure 3. The structure of answers to the question “What are the main advantages of remote employment?” (%)



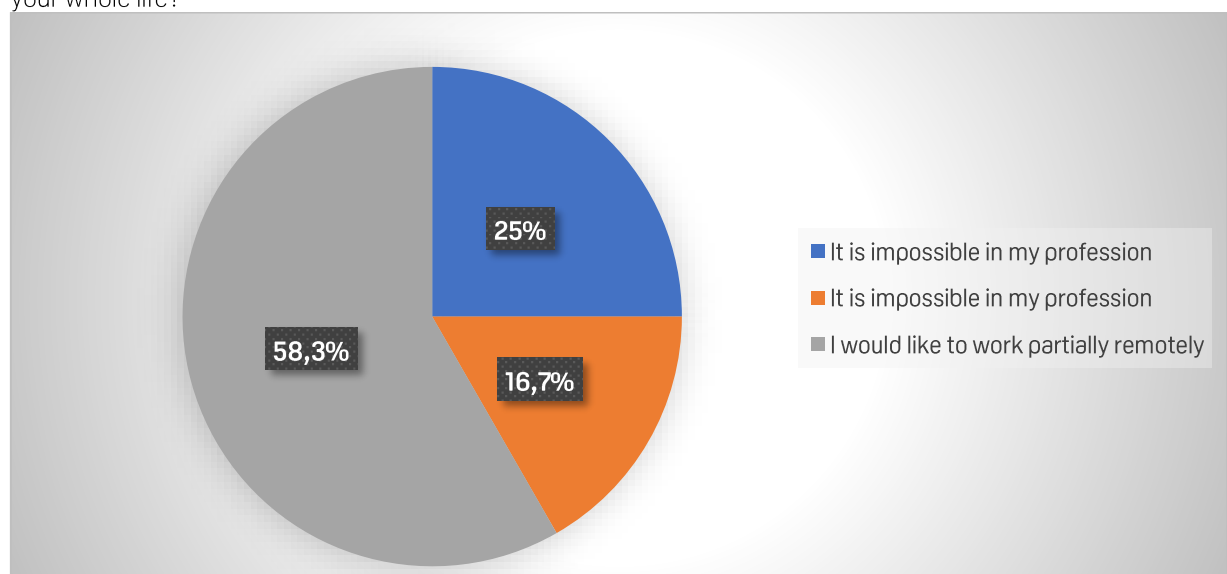
Source: Search data.

- 1 – Saving time on transportation
- 2 – No need to follow a dress code
- 3 – The opportunity to spend more time with loved ones
- 4 – The ability to eat at home

Comparing the positive and negative aspects of remote employment, some teachers consider the combined (“multiformat”) approach to organizing their professional activities quite acceptable. In evaluating the prospect of permanent work in the distance format, not a single faculty member chose the “work completely in-person” option. Every fourth teacher is ready to work completely remotely – teachers most often explain this choice by personal circumstances. A significant part of the respondents would like to work partially remotely, i.e. for several days a week – this model is considered optimal by more than 58% of teachers (Fig. 4).

If you get to choose, would you like to work remotely for your whole life?

Figure 4. The structure of answers to the question “If you get to choose, would you like to work remotely for your whole life?”



Source: Search data.

The study reveals the opinions of teachers about the prospects of changes in working and employment conditions in higher education. The main directions of the transformation of education are associated by teachers with the use of various distance learning tools. $\frac{3}{4}$ of the respondents believe that after the pandemic, universities will start to use online technologies more actively, the proportion of those predicting a substantial increase in the share of distance learning formats is a little lower. On the one hand, teachers feel positive about the prospect of online skills acquired during distance learning being in demand in the future; more than 58% of the respondents believe that expanding the choice of learning formats is a legitimate process. On the other hand, teachers are concerned that the distance format may become non-alternative meaning that the process of the actual destruction of the classical system of higher education may start.

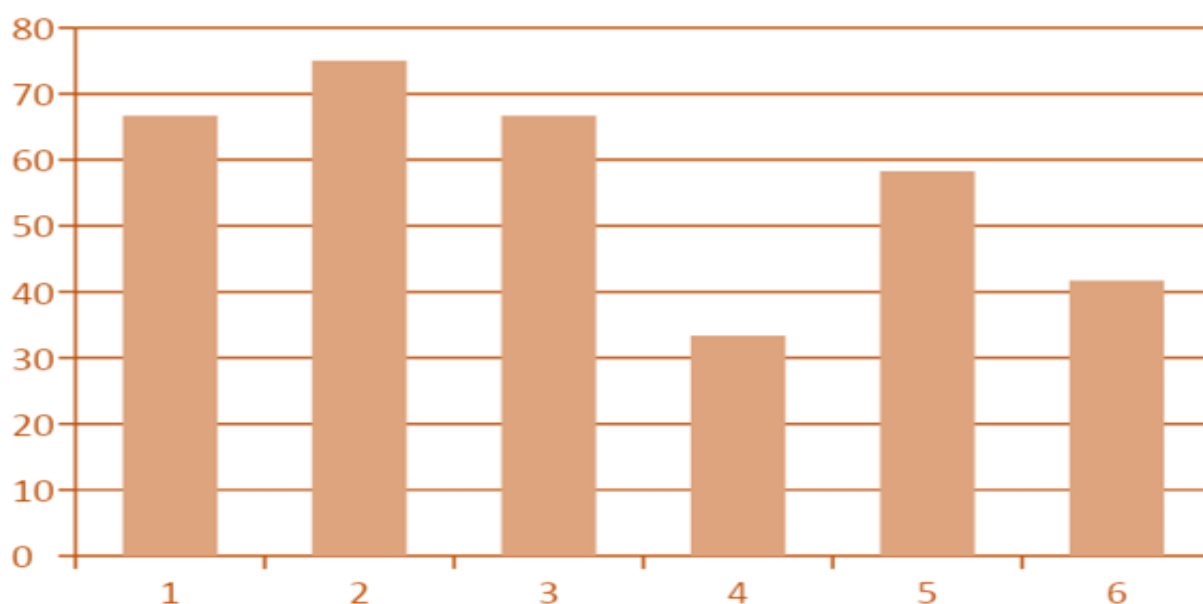
Teachers comment on the situation as follows:

"Distance learning is quite acceptable as a forced measure during the pandemic. But I am frightened by the sentiments of some experts and leaders in our system – they rave about the advantages of distance learning and fail to see its disadvantages..." (Respondent 5).

Everyone is now convincing each other that the distance format makes it possible to provide a normal quality of education as if everything depends on the willingness of teachers to master new technologies. We are ready to master them, ready to use them. But will it replace the proper educational process?" (Respondent 6)

What changes will take place in higher education after the end of the pandemic?

Figure 5. The structure of answers to the question "What changes will take place in higher education after the end of the pandemic?"



Source: Search data.

- 1 – The share of distance learning formats will increase
- 2 – The use of online technologies will rise
- 3 – The role of teachers in higher education institutions will change
- 4 – The requirements for teachers will become stricter
- 5 – The opportunities for choosing educational formats will expand
- 6 – The situation on the professional labor market will destabilize, teacher layoffs may happen

Assessing the prospects for the transformation of higher education, $\frac{2}{3}$ of the respondents note that the position of teachers at universities may change significantly in the near future. The share of those who predict stricter requirements for teachers is two times lower. This will primarily affect the formation of digital competencies and the improvement of online environment improving skills and this aspect is generally well-understood in the teaching community. However, the active introduction of distance formats of interaction with students into the educational process is perceived by many teachers as a risk factor that can cause significant changes in the structure and amount of teaching load. The consequence of reduced workload could also be a

reduction in the number of the teaching staff at universities. Almost 42% of the respondents believe that the situation in the professional labor market will destabilize in the near future and mass layoffs of teachers are a possibility. There are also other negative forecasts – some believe that we should expect a reduction in the duration of contracts with teachers, the decline in real income, etc. Thus, the assessments of changes in the nature and content of labor activity and the formation of new models of teachers' professional behavior are inextricably linked to the possible expansion of the use of various learning formats. Moreover, negative expectations prevail due to the risks of the overall staffing situation in higher education institutions worsening.

DISCUSSION

The peculiarities of the educational system during the period of forced distance learning associated with the pandemic are actively discussed by representatives of the university and academic community, experts, students, and their parents. Of great interest are the problems of university teachers' adaptation to the conditions of remote employment, as well as the possible consequences of the extreme transition to distance learning for the entire system of higher education. The period of accumulation and systematization of empirical material on the problems of university students' distance learning in 2020-2021 is not yet completed which means that many aspects of the transformation of teachers' professional activity are at the initial stage of scientific reflection. In this study, we not only systematize the data from several surveys but also expand the range of empirical information on the results of distance learning in universities, as well as reinterpret the results in the context of general trends in the development of higher education.

The results of this study largely confirm the findings of other studies regarding the outcomes of distance learning. The significance of the transformations that took place in the Russian educational system during the pandemic cannot be overestimated. Many experts emphasize that this situation "will become a new revolution in the educational environment" (TURYGINA & USOVA, 2020) and register "global changes in the organization of the entire learning process" (PATUTINA, 2020).

Characterizing the impact of the changes on the professional activities of teachers, experts acknowledge that under the most extreme conditions, teachers were forced to "reformat the traditional professional skills, competencies, methodological techniques, lecture materials, etc." However, while recognizing the obvious success of teachers in mastering online technologies, experts believe that the importance of changes in this area should not be exaggerated. Many studies demonstrate that after distance work, the online environment ceased to be hostile for most teachers, and the panic that was very common in the "first" wave of distance learning disappeared (UROKI "STRESS-TESTA", 2020). Nevertheless, we believe that the real "digital revolution" in education still lies ahead. The "extreme digitalization" that took place in Russian education in a few weeks does not mean the complete readiness of teachers to transition to a new stage – multi-format education. This position is supported by the results of studies conducted not only in Russian but also in foreign universities (BEREZINA, 2020; TSIPIANITIS & GROUMPOS, 2018).

Thus, the approach to the formation of education as a "sphere of free and individualized formats of knowledge transfer" (PREPODAVATELI VYSKAZALI SVOE MNENIE O VYNUZHDENNOM PEREKHODE OBRAZOVATELNOGO PROTSESSA V ONLAIN, 2020) which is being actively discussed today causes a significant increase in the risks associated with the uncertainty of teachers' position in the changed educational system. Uncertainty about one's professional future is one of the main trends revealed in the survey. It is no coincidence that more than 2/5 of the surveyed teachers expect destabilization of the professional labor market in the near future. This result of the study is also supported by other sources. Experts most often attribute the deterioration of the situation of teachers to the requirements for them becoming stricter under an effective contract, as well as to changes in the structure of workload and the need to master new digital competencies (. UROKI "STRESS-TESTA", 2020; STUDENTY OTSENILI KACHESTVO DISTANTSIONNOGO OBUCHENIYA, 2020). The possibilities of reduction in the level of teachers' social protection, a partial reduction in income, increased risk of job loss, etc. are considered as a further negative prospect (ILINA, 2021).

At the same time, the study partially refutes the data from surveys of teachers at several Ural universities. Researchers use the term "precariat" to characterize the changes in the professional activity of university teachers (PATUTINA, 2020). The main features of precapism include the lack of stable employment, the absence of guarantees and security, the lack of professional self-identification, and the denial of civil, political, and economic rights. We argue that the obtained data demonstrating a negative dynamic in some indicators of involvement and satisfaction with labor do not yet allow concluding on the precarization of university teachers' employment. As evidenced by the results of the study we conducted, teachers experience a high degree of self-

identification with their professional activities, seek a certain level of stability (by entering into an effective contract), and are focused on maintaining their socio-professional status. Overall, the results of the present study make a certain contribution to the formation of a general system for assessing the effects of distance learning during the pandemic. Extensive empirical material generalized and systematized in this study can be used to form a scientifically substantiated strategy for the preservation and development of universities' human resources potential.

CONCLUSION

Thus, the study hypothesis is confirmed. The forced transition to distance learning during the pandemic has had a mixed impact on the professional activities of teachers. There certainly are some positive outcomes of remote work. For example, there are successes in mastering online educational tools, the formation of new models of interaction in the system of "teacher-students" and "teacher-teacher" relations. The value of in-person, live communication which, as it turned out, constitutes one of the most significant aspects of teaching increased. However, as the period of distance learning ended, the problems of further development of higher education considering the experience gained from working in an online environment became relevant. According to teachers, there is a significant risk that the most promising strategy for the development of universities will be the expansion of the use of combined formats of education (with the distance technology being predominant). Many teachers believe that a multiformat environment not only entails significant changes in the content and nature of professional activity but may also become a factor in the deterioration of the position of university teachers as subjects of labor and educational relations. The conducted study allows making the following conclusions:

- the digital progress of teachers during the pandemic should not be overestimated as the extreme working conditions did force most teachers to master basic online tools but these changes are not sufficient for a transition to a fundamentally new level of multi-format education;
- a significant part of teachers recognize the special value of personal contacts and face-to-face interaction with students and colleagues; during the period of distant work, a significant problem for many has been the loss of the special atmosphere, the "energy" of the university which largely constructs the attractiveness of teaching work;
- the requirements for teachers in terms of digital competence and readiness to master new models of professional activity including the context of the specifics of combined educational formats are expected to increase in the near future;
- a system of teachers' negative expectations about the reduction or redistribution of workload, destabilization of the situation in the intra- and inter-university labor market, staff reductions in universities, etc. is forming.

Undoubtedly, the nature and direction of changes in university teachers' professional activity will be determined by the context of general trends and priorities of higher education modernization in the upcoming years.

REFERENCES

- ABRAMOV, R.A., MORKOVIN, S.A., PAZUKHIN, A.M., & TKACHEVA, E.A. Modernizatsiia sistemy upravleniia obucheniem kak faktor povysheniia kachestva vysshego obrazovaniia [Modernization of the learning management system as a factor in improving the quality of higher education]. *Education Management: Theory and Practice*, 1(37), 2020. Available at: <https://cyberleninka.ru/article/n/modernizatsiya-sistemy-upravleniya-obucheniem-kak-faktor-povysheniya-kachestva-vysshego-obrazovaniya>. Access: Nov. 03, 2020.
- ALESHKOVSKII, I.A., GASPARISHVILI, A.T., KRUKHMALEVA, O.V., NARBUT, N.P., & SAVINA, N.E. Studenty vuzov Rossii o distantsionnom obuchenii: otsenka i vozmozhnosti [Russian university students on distance learning: evaluation and opportunities]. *Higher Education in Russia*, 10, 2020. Available at: <https://cyberleninka.ru/article/n/studenty-vuzov-rossii-o-distantsionnom-obuchenii-otsenka-i-vozmozhnosti>. Access: March 7, 2021.
- BAKKER, A., & WAGNER, D. Pandemic: Lessons for Today and Tomorrow? *Educational Studies in Mathematics*, 1–4, 2020. Available at: <https://doi.org/10.1007/s10649-020-09946-3>. Access: March 7, 2021.

BAO, W. COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies*, 2(2), 113–115, 2020. Available at: <https://pubmed.ncbi.nlm.nih.gov/32510042/>. Access: March 7, 2021.

BEREZINA, E. Lektsiia v tsifre [Digital lectures]. 2020. Available at: <https://rg.ru/2020/06/15/uzuzy-izvlekli-nemalyj-opyt-iz-prinuditelnoj-cifrovizacii.html>. Access: March 7, 2021.

COVID-19 EDUCATIONAL DISRUPTION AND RECOVERY. United Nations Education, Scientific, Cultural Organization. 2020. Available at: <https://en.unesco.org/covid19/educationresponse>. Access: March 7, 2021.

DENDEN, M., TLILI, A., BURGOS, D., ESSALMI, F., & CHANG, T.-W. Framework for teacher support during remote teaching in a crisis: COVID-19, as a case study. *Lecture Notes in Educational Technology*. 147–161, 2021. Available at: https://www.researchgate.net/publication/347792684_Framework_for_Teacher_Support_During_Remote_Teaching_in_a_Crisis_COVID-19_as_a_Case_Study. Access: March 7, 2021.

FADEEV, E.V. Organizatsionnye i psikhologicheskie problemy distantsionnogo obucheniia [Organizational and psychological problems of distance learning]. *The world of science, culture and education*, 3 (64), 2017. Available at: <https://cyberleninka.ru/article/n/organizatsionnye-i-psihologicheskie-problemy-distantsionnogo-obucheniya>. Access: March 7, 2021.

GLEASON, N.W. Higher Education in the Era of the Fourth Industrial Revolution. Singapore: Palgrave Macmillan, 2018. Available at: <https://doi.org/10.1007/978-981-13-0194-0>. Access: March 7, 2021.

GOSTEV, A.N., IVANOVA, O.A., DEMIDOVA, S.S., DEMCHENKO, T.S., LAPTEV, L.G., & SHURAEVA, L.Y. Traditions and innovations in higher education management: Conflictological aspect. *Journal of Advanced Research in Dynamical and Control Systems*, 12(3), 798–806, 2020. Available at: <https://jardcs.org/abstract.php?id=3393>. Access: March 7, 2021.

HABIB, M.N., JAMAL, W., KHALIL, U., & KHAN, Z. Transforming universities in interactive digital platform: case of city university of science and information technology. *Education and Information Technologies*, 26(1), 517–541, 2021. Available at: <https://pubmed.ncbi.nlm.nih.gov/32837236/>. Access: March 7, 2021.

ILINA, I.Iu. Transformatsiia uslovii truda i zaniatosti prepodavatelei vuzov v period pandemii: aktualnye tendentsii [Transformation of working conditions and employment of university teachers during the pandemic: current trends]. *Economics of Education*, 1 (122), 57–65, 2021. Available at: <https://www.elibrary.ru/item.asp?id=43282501>. Access: March 7, 2021.

ILINA, I.Y., VINICHENKO, M.V., MELNICHUK, A.V., KOZYREV, M.S., & LOBACHEV, A.S. The formation of a university teacher's career strategies in modern conditions. *Journal of Advanced Research in Dynamical and Control Systems*, 12, S4, 907–915, 2020. Available at: <https://www.elibrary.ru/item.asp?id=43282501>. Access: March 7, 2021.

JACQUES, S., OUAHABI, A., & LEQUEU, T. Remote knowledge acquisition and assessment during the covid-19 pandemic *International Journal of Engineering Pedagogy*, 10(6), 120–138, 2021. Available at: https://www.researchgate.net/publication/346718828_Remote_Knowledge_Acquisition_and_Assessment_During_the_COVID-19_Pandemic. Access: March 7, 2021.

KAMAROVA, T. A. Prekarizatsiia zaniatosti nauchno-pedagogicheskikh rabotnikov vuzov pri perekhode na elektronnoe obrazovanie v usloviakh pandemii COVID-19. [Precarization of the scientific and pedagogical employees of higher education institutions in transition to e-learning under the conditions of the COVID-19 pandemic.] *Materials of the 1st International scientific and practical conference "Trends in e-Learning Development in Russia and Abroad"* (Yekaterinburg, May 15, 2020) *Yekaterinburg: Ural University Publishing House*, 74–77, 2020. Available at: <http://science.usue.ru/images/docs/itogi/tendencii2020.pdf>. Access: March 7, 2021.

KARPINSKAIA, E. COVID-19: efekty dliavyshego obrazovaniia. [COVID-19: Effects for Higher Education.]. 2020. Available at: <https://russiancouncil.ru/analytics-and-comments/analytics/covid-19-effekty-dlya-vysshego-obrazovaniya/>. Access: Oct. 26, 2020.

KRISHNAMURTHY, S. The future of business education: a commentary in the shadow of the covid-19 pandemic. *Journal of Business Research*, 117, 1-5, 2020. Available at:

<https://www.sciencedirect.com/science/article/abs/pii/S0148296320303192>. Access: Oct. 26, 2020.

LOKANATH, M., TUSHAR, G., & ABHA, S. Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*, 1, 2020. Available at:

<https://doi.org/10.1016/j.ijedro.2020.100012>. Access: Oct. 26, 2020.

“MNOGO VREMENI I MALO UDOVLETVORENIYA”: PREPODAVATELI URALSKIKH VUZOV O VTOROY VOLNE DISTANTA. [“A lot of time and little satisfaction”: Ural university teachers on the second wave of distance learning.], 2020. Available at: https://eanews.ru/news/mnogo-vremeni-i-malo-udovletvoreniya-prepodavately-uralских-vuzov-o-vtoroy-volne-distanta_03-11-2020. Access: Nov. 03, 2020.

PATUTINA, S. Iu. Povyshenie udovletvorennosti nauchno-pedagogicheskikh rabotnikov v usloviakh prekarizatsii truda za schetvnedreniia digital-tekhnologii po ikhadaptatsii. [Increasing the satisfaction of scientific and pedagogical workers under the conditions of labor precarization through the introduction of digital technology for their adaptation.]. *Materials of the 1st International scientific and practical conference “Trends in e-Learning Development in Russia and Abroad”* (Yekaterinburg, May 15, 2020). Yekaterinburg: Ural University Publishing House, 2020. Available at: <http://science.usue.ru/images/docs/itogi/tendencii2020.pdf>. Access: March 7, 2021.

PREPODAVATELI VYSKAZALI SVOE MNENIE O VYNUZHDENNOM PEREKHODE OBRAZOVATELNOGO PROTSESSA V ONLAIN [Teachers expressed their opinion about the forced transition of the educational process to online mode.]. 2020. Available at: https://minobrnauki.gov.ru/press-center/news/?ELEMENT_ID=21584. Access: Oct. 26, 2020.

SKULMOWSKI, A. COVID-19 as an Accelerator for Digitalization at a German University: Establishing Hybrid Campuses in Times of Crisis. *Human Behavior & Emerging Technologies*, 2, 212-216, 2020. Available at: <https://doi.org/10.1002/hbe2.20>. Access: Oct. 26, 2020.

SMIRNOVA, A.S. Organizatsiia distantsionnogo obucheniya studentov v usloviakh pandemii [Distance learning organization in the conditions of the pandemic]. *Bulletin of the Priamursky state University named after Sholom-Aleichem*, 4 (41). 2020. Available at: <https://cyberleninka.ru/article/n/organizatsiya-distantsionnogo-obucheniya-studentov-v-usloviyah-pandemii>. Access: March 7, 2021.

STUDENTY OTSENILI KACHESTVO DISTANTSIONNOGO OBUCHENIYA. Official website of the Ministry of Science and Higher Education of the Russian Federation. 2020. Available at: https://www.minobrnauki.gov.ru/press-center/news/?ELEMENT_ID=21576. Access: Oct. 26, 2020.

SURMA, T., & KIRSCHNER, P. Technology Enhanced Distance Learning Should Not Forget How Learning Happens. *Computers in Human Behavior*, 110, 2020. Available at: <https://doi.org/10.1016/j.chb.2020.106390>. Access: March 7, 2021.

TOQUERO, C.M. Challenges and Opportunities for Higher Education amid the COVID-19 Pandemic: The Philippine Context. *Pedagogical Research*, 2020, Available at: https://www.researchgate.net/publication/340680378_. Access: Oct. 26, 2020.

TSIPIANITIS, D., & GROOMPOS, P. University Asynchronous Distance Learning Programs to Enhance Interregional Sustainable Development [University Asynchronous Distance Learning Programs to Enhance Interregional Sustainable Development], *IFAC-PapersOnLine*, 51, 346—351, 2018. Available at: <https://doi.org/10.1016/j.ifacol.2018.11.329>. Access: March 7, 2021.

TURYGINA, V. F., & USOVA, A. V. Vliianie pandemii COVID-19 na sferu obrazovaniia [The effect of the COVID-19 pandemic on the sphere of education]. *Materials of the 1st International scientific and practical conference “Trends in e-Learning Development in Russia and Abroad”* (Yekaterinburg, May 15, 2020). Yekaterinburg: Ural University Publishing House, 2020. Available at: <http://science.usue.ru/images/docs/itogi/tendencii2020.pdf>. Access: March 7, 2021.

UROKI “STRESS-TESTA”. Vuzu v usloviakh pandemii i posle nee [Lessons from the “stress test”. Universities in

a pandemic and after it.]. 2020. Available at: https://www.hse.ru/data/2020/07/06/1595281277/003_Доклад.pdf. Access: March 7, 2021.

ZABOLOTSKA, O., ZHYLIAK, N., HEVCHUK, N., PETRENKO, N., & ALIEKO, O. Digital competencies of teachers in the transformation of the educational environment. *Journal of Optimization in Industrial Engineering*, 14(1), 43-50, 2021. Available at: http://www.qjie.ir/article_677813.html. Access: March 7, 2021.

ZABOROVA, E. N., GLAZKOVA, I. G., & MARKOVA, T. L. Distantionnoe obuchenie: mnenie studentov [Distance learning: students' opinion]. *Sociological studies*, 2, 131-139, 2017. Available at: <http://socis.isras.ru/article/6566>. Access: March 7, 2021.

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