### Psychological and Pedagogical Aspects of University Admission Campaign in Russia in the Period of COVID-19 Pandemic

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Keywords: Covid 19, Pandemic, Education, Distant Learning, Applicants, University, Admission Board, Admission

Campaign, Enrollment, Unified State Exams (USE).

Abstract: The admission campaign to Russian universities in 2021 has a number of features due to the very nature of

the period as it was organised totally in a distant way in the conditions of COVID-19 pandemic and some radical changes taken in its procedure by federal educational authorities. There are a number of evidences that it had problematic and unpredictable character that caused nervous stresses and influenced psychological state of the participants of enrolment process. On the basis of theoretical and practical methods of study some contradictions are singled out: between comparatively high scores of school graduates achieved at USE in 2021 and reduction of enrolment scores to regional universities; between certain raise in school graduates' population and insufficient number of students during enrollment to many regional universities. The research managed to determine the aspects of admission campaign that caused the most severe psychological stresses among the applicants and their parents. The suggested recommendations can help the members of the admission boards and the parents to render the future school graduates psychological assistance in the

conditions of COVID-19 pandemic.

### 1 INTRODUCTION

The admission campaign for the enrollment of applicants to higher educational institutions is annually subjected to detailed statistical analysis due to the fact that its results can be used to judge various demographic trends in the state (Pavlov and Katsamakas, 2020; Gabrielson et al., 2021); the prestige of higher education in the country in general and in individual universities in particular (Mahajan and Patil, 2021); to assess public opinion on the most popular professions (Hanson et al., 2020), as well as on the quality of secondary school leavers' training (Mengash, 2020). The data obtained from the results of this analysis allow to make more competent planning of educational policy in the field of higher education both at the level of individual universities, regions, as well as the country as a whole (Pal et al., 2021), to determine more reasonably the admission targets for each university program basing on the need for highly qualified personnel in certain

professions and make competent adjustments to the content of the Unified State Exams (USE) of school graduates (Chamilco et al., 2021; Luk'yanova A., 2021; Mengash, 2020).

The admission campaign to the universities of the Russian Federation in 2021 took place under conditions of full distant interaction with the applicants due to the threat of coronavirus spreading. In addition, precisely explaining the taken decisions by the COVID-19 pandemic, the Ministry of Science and Higher Education of the Russian Federation (further on, MSHE) developed new rules for enrolling applicants, which turned out to be extremely unpopular among applicants and their parents (Luk'yanova A., 2021; Failure, 2021). However, only mass media talk about the "failed" nature of this admission campaign (Luk'yanova A., 2021; Luk'yanova I., 2021), while in scientific publications this issue has not found adequate coverage yet. Therefore, there is an urgent need to provide a scientific justification for those psychological

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The purpose of the study is, firstly, to identify situations associated with changes in the enrollment procedure for applicants under the influence of the consequences of the coronavirus pandemic, which caused an unfavourable psychological stress among the admission campaign participants, and secondly, to find answers to a number of questions: 1) what are the psychological and pedagogical consequences of distance learning for school graduates during 2020-2021, which was introduced as a forced measure in the context of COVID-19 spread; 2) how distance learning affected the opinion of parents and school graduates about obtaining higher education; and 3) what changes were noted in the level of school leavers' training, fixed in the results of the Unified State Exams (USE). And, finally, thirdly, to offer some recommendations of a psychological and pedagogical nature that could improve the atmosphere during the next admission campaigns.

### 2 MATERIALS AND METHODS

Educational policy in the field of higher education, according to a number of researchers (Pavlov and Katsamakas, 2020), should be based on a systematic approach, which will take into account not only financial and demographic indicators, but also psychological and pedagogical factors that determine the motivation of parents and applicants in obtaining higher education, the degree of their confidence in the possibility of employment in their specialty after graduation and receiving a decent wage. In addition, when determining the target figures for admission to universities (i.e. fixed numbers of state-funded places for students that are distributed among the universities by the federal authorities), one should take into account the views of several stakeholders: government agencies, university administration, applicants and their parents, as well as potential employers, which also testifies in favour of a systemic and interdisciplinary approach to the study of this

To carry out this research, theoretical and practical methods were used: study of the results of scientific publications on the theme under discussion; analysis of statistical data published on the official websites of the MSHE, as well as in several information aggregators; survey and processing of empirical material.

#### 3 RESULTS

## 3.1 Features of 2021 Admission Campaign

In 2021, the admission campaign to the universities of the Russian Federation was held according to the updated rules based on the decisions of the MSHE, set out in order No. 226, dated 01.04.2021. The main distinguishing features of the new admission procedure were:

- cancellation of the previously existing "second wave" of admission, during which applicants had the opportunity to send documents to other universities, which they considered as "reserve", in case they were not accepted for state-funded places during the "first wave" of admission;
- applicants received the right to apply for admission to five universities for 10 programs of study; thus, each applicant received the right to participate in 50 (!) admission competitions;
- instead of the original school certificate as in the "pre-quarantine period", it was necessary to provide the Application for Enrollment Consent (AEC) as a document for admission, guaranteeing the seriousness of the applicant's intentions, moreover, this type of document could be "transferred" from one university to another in a distant mode on the websites of university admission boards.

# 3.2 Psychological Consequences of Admission Procedure

These "innovations" created an atmosphere of uncertainty and nervousness both among applicants and their parents, and among members of admission boards. When assessing the admission campaign in 2021, applicants and their parents used definitions such as "chaos", "unpredictability", "the wildest random", "mockery", "humiliation", "muddy water", "Russian roulette", "fortune-telling on coffee "Russian roulette", "fortune-telling on coffee grounds" and others (Luk'yanova I., 2021). The greatest difficulties arose due to the introduction of only one "wave" of enrollment, since even school graduates who had extremely high USE scores, and among them even those who had 100 points, did not get into state-funded places during the first and only wave to the most prestigious universities in Moscow and St. Petersburg and were forced to get enrolled in paid tuition at regional universities (Luk'yanova A., 2021).

As objective indicators of the insolvency of the changes made during the admission campaign, the following should be noted:

- a drop in the passing score in many "non-top" universities in the country;
- shortage of applicants for state-funded places during one "wave", as a result of which many leading and regional universities, including Moscow State University (Departments of Law, Geography, Journalism), Moscow Institute of Physics and Technology (MIPT), Moscow Automobile and Road Construction State Technical University (MADI), National Research University "Moscow Economic Institute", etc., were forced to announce an additional enrollment:
- students who had high enough USE scores to qualify for state-funded places after finding themselves in a situation of confusion and uncertainty decided to apply for commercial / paid places;
- the official websites of universities could not stand the load on the last day and even the last hours of enrollment and "collapsed", which also complicated the situation and distorted the objectivity of the results;
- the opportunity given to applicants to submit AEC both in electronic and paper form, as well as using mail services, also introduced additional difficulties in summing up the results, since some postal items were greatly delayed.

All the events listed above, associated with an insufficiently tested enrollment procedure, could not but affect the psychological state of the participants of this process, namely: applicants, their parents, as well as members of admission boards. Applicants and their parents in the survey indicated: "I've passed, but my hair almost turned grey from the stress"; "All universities closed the lists at 6 p.m., and my daughter's university - at 7 p.m. due to the different location. And during the last hour, A-students who had not passed to other universities "overflood" the ranking lists. If there would have been a second wave, my daughter would have passed. Now she is crying"; "My daughter applied for a state-funded place, but Herzen university's website collapsed, and when it started working, she was below the "waterline" in the list" (Lukyanova, 2021). At the same time, it should be borne in mind that it was "extraordinary" school graduates who underwent this psychological torture. They were suffering the constant stress for the past two years due to the difficulties associated with the transition from full-time to remote education, and due to the situation of uncertainty in the world, the worries about their "nearest and dearest". A study conducted at 13 leading universities in Russia on

behalf of the MSHE, during which more than 60 thousand students, teachers and parents were interviewed, showed that 75% of students during their studies in the conditions of the coronavirus pandemic displayed signs of a psychologically unfavourable state and 20% of them had moderate and severe depression syndromes (Vasil'eva, 2021). As noted in a number of studies, transition to online learning, the constant stresses due to the threat of getting infection, lockdown periods and periods of social limitations affect mental, physical, and social health of children and young adult learners in grade school, middle school, high school, college, and universities (Hoofman, Secord, 2021). Besides, the researchers point out that constant psychological stress during the pandemic definitely lead to mental disorders and mental health problems, that is why it is of crucial relevance to study the effects of different changes in the humans' life during the pandemic. It can help to overcome these mental and health problems and to protect people beyond the pandemic (Pfeifer, 2021).

# 3.3 Reasons of Dropping Motivation to Get Higher Education

Among the main reasons that influenced the decrease in the motivation of applicants and their parents to enroll in higher educational institutions and caused nervous overstrain and stress, we can name the following:

- the introduction of an insufficiently tested and streamlined admission procedure in 2021, as a result of which some applicants chose to postpone admission until next year;
- doubts of applicants about the level of their available knowledge and the compliance of their training with the requirements of studying at universities in view of the distant mode of educational process in schools during 2020-2021 (Shi, 2021), (Hoofman, Secord, 2021).
- the lack of confidence in the possibility of getting a decent job after graduation (Hanson, 2020), (Hensvik, 2021);
- the lack of special psychological and pedagogical training among members of admissions boards to relieve nervous tension and provide support to applicants and their parents in conditions of uncertainty.

### 4 DISCUSSION

It goes without saying that enrolment processes into universities depend on a number of demographical, political, economic and social factors (Pavlov, Katsamakas, 2020). Nevertheless, psychological and pedagogical issues should attract special attention during COVID-19 pandemic because this unprecedented situation has influenced all the spheres of the humans' life, moreover, these effects have a global character.

The first problem faced by many, mainly regional universities in Russia in 2021, is insufficient number of applicants for state-funded places. There could be several reasons for this situation:

1) the consequences of the "demographic gap" that has been observed in the population of Russian school graduates for several years and which will continue to affect their number for some time in future, although in the last 2-3 years, there has been a statistically significant increase in this population group.

For example, in 2021, an increase in the number of USE participants was recorded almost in all subjects compared to 2020, and it is reflected in Table 1.

Table 1: Comparison of a number of USE participants within two years.

School subjects	2020,	2021,
	thousand pers.	thousand pers.
The Russian language	613	653
Profile Mathematics	362	365
Social Science	292	306
Biology	124	127
Physics	139	128
History	102	99
Informatics	83	94
Chemistry	81	93
The English language	81	87
Literature	46	48
Geography	11	14

Studying the same problem, i.e. of the decline in the number of applicants in the USA universities, O.V. Pavlov and E. Katsamakas associate it, first of all, with a decrease in the number of young people aged 18-20 years by 13-29 percent depending on the state in the country. In their opinion, small educational institutions located on the periphery of the country will suffer most of all from this (Pavlov, Katsamakas, 2020).

- 2) Refusal of school graduates from the idea of obtaining higher education due to the new rules for admission to universities;
- 3) the manifestation of a crisis of higher education associated with a decrease in the quality of education, failure of diplomas in the labour market, high cost of training, the lagging of curricula behind modern industries and technologies, etc.;

- 4) reduced mobility of applicants due to social constraints caused by the COVID-19 pandemic;
- 5) increase of the prestige of education in secondary vocational educational institutions, after graduation of which the students have immediate opportunity to start working in their specialty or enter the university.

According to the survey (Failure, 2021), the number of school leavers wishing to continue their education at universities is steadily falling: in 2010 they accounted for 80% of the total number of graduates finishing 9th and 11th grades of secondary / high school, in 2020 - already 48%, and in 2021 this figure dropped to 43% (fig. 1). At the same time, one in five of the parents surveyed (21%) said that after school their child would go to college or technical school. Parents indicated that the plans of graduates in 2021 were influenced by circumstances related to COVID-19: the quality of school-children's knowledge decreased due to the introduction of distant learning; children were not able to attend fulltime courses or tutors due to coronavirus restrictions, the situation was further complicated by the reduction of family income due to the economic crisis also caused by the pandemic (Research Center, 2021), (Maltsev, Shabalin, 2021).

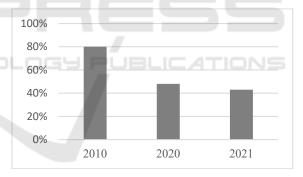


Figure 1: School-leavers who wish to get higher education.

To understand this situation better, we can dwell on the following information: according to the available data, 50-55% of school-children left school after 9-th grade in 2020-2021 with the intention to start working or continue education in the secondary vocational colleges (fig. 2).

Among those school-children who stay at school after grade 9 the situation is ambiguous: out of 100 school-children in grade 10, only 40 graduates (40%) continue their education, of which 17 (42.5%) want to get higher education, but in practice no more than 12 of them apply for the universities (30%) (Failure, 2021). At the same time, the number of school-graduates who prefer entering institutions of.

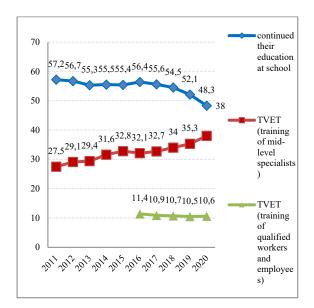


Figure 2: Preferences in education among 9-grade schoolchildren.

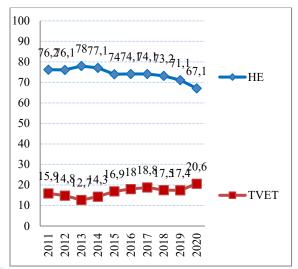
Technical and Vocational Education and Training (TVET) is constantly growing (Maltseva and Shabalin, 2021) (fig. 3). Therefore, Russian universities, especially regional and medium-sized ones, face an acute problem of insufficient number of applicants.

The problem of the future employment of university graduates, which has become even more acute during the pandemic, has a global character, as evidenced by numerous publications in foreign scientific journals:

- the number of new vacancy postings fell by 40% in the first three months of the COVID-19 pandemic;
- the activity of job seekers in the process of job search decreased by 15% during the 3 months after the COVID-19 outbreak;
- the graduates began paying more attention to less prestigious and low-paid positions;
- the number of applications submitted per vacancy increased by 25% over the same period (Hensvik, 2021).

The team of medical scientists from several US universities conducted a study of the degree of satisfaction of the expectations of 3rd and 4th year students regarding the organization of training in the context of the Covid-19 pandemic and the prospects for employment in local hospitals. The data obtained indicate that 35% of respondents expressed concern about the possibility of getting a job in the near future due to the reduction of staff rotation processes in hospitals. In turn, 68% of the respondents noted that changes in the established system of real contacts

with employers and the provision of letters of recommendation can also negatively affect their job searching attempts (Hanson, 2020).



HE - Higher education

TVET - Technical and Vocational Education and Training

Figure 3: Distribution of educational interests of school-graduates.

Another characteristic feature of the admission campaign in 2021 was the following contradiction: despite the fact that, according to Rosobrnadzor (i.e. the authority that controls the work of educational institutions), the results of the USE in 2021 remained practically at the level of previous years. Table 2 shows that the results of physics and history are comparable with the results of 2020, and the USE participants passed the exams in Mathematics, English, Literature, Computer Science, and Physics even slightly better in 2021 than in the past (Rosobrnadzor, 2021), the average score of applicants who entered universities is much lower than in previous years. This provision, of course, does not apply to the country's leading universities, which traditionally get the applicants with the best USE results, and the average passing score in them reaches 285. For example, 575 applicants with 100 points entered the Moscow State Institute of International Relations, and 55% of all freshmen had a gold medal, as a result, the average USE scores increased in all departments of this university by 10-15%. An equally popular university, the Higher School of Economics, received such a number of winners of various Olympiads that even applicants with 100 points could not get state-funded places (Luk'yanova A., 2021). However, if we are talking about regional

universities, then there has been a tendency towards a decrease in the average score.

Table 2: Comparison of USE results within two years.

School subjects	2020,	2021,
	average score	average score
The Russian language	71.6	71.4
Mathematics	53.9	55.1
Social Science	56.0	56.4
Biology	51.3	51.1
Physics	54.5	55.1
History	56.3	54.9
Chemistry	54.2	53.8
The English language	70.9	72.2
Literature	64.9	66.0
Geography	59.9	59.1
Informatics	61.2	62.8

The problem of creating conditions psychological, technical, and legal nature - for the selection of the best applicants has a global character. H.A. Mengash notes that admission system should be based on valid and reliable techniques in order to select the best candidates capable to display very high performance results while studying. In his article the scientist proves that high school grade average, Scholastic Achievement Admission Test score, and General Aptitude Test score can be of great value while predicting university performance before admission. Unlike Russian admission procedure where the applicants are to provide the results of Unified State Exams (USE), the Suadi public universities enrol students on the basis of three criteria: the High School Grade Average (HSGA), the SAAT, and the GAT. Moreover, each university has the right to assign certain weights to each of these tests depending on the programme or other conditions (Mengash, 2020). Thus, we can state that Russian system of USE is still far from being exhaustive and absolutely trustworthy.

It should be noted that there is another feature of the admission company in 2021, which affected the psychological state of applicants and their parents: as a result of social restrictions, applicants were not able to get sufficient information about the universities. According to Indian researchers P. Mahajan and V. Patil, in the era of a pandemic, each university, engineering institutions, especially completely change the preparatory campaign before admission and focus on the image and reputation of the educational institution, distance acquaintance of applicants with the faculty and their scientific achievements, on technical capabilities university, etc. (Mahajan, 2021). Due to mainly remote character

of the contacts with applicants, it is necessary to improve the content of the official university website and, in particular, the technical system that provides admission.

Thus, the admission campaign of 2021, which was significantly influenced by the coronavirus pandemic, showed a number of features compared to previous years. Taking into account the fact that the pandemic will continue for some indefinite time, all authorities responsible for organizing the admission of applicants to universities should find the most effective measures to reduce nervous stress, depression, insecurity, and confusion that young men and girls experience in a completely unusual situation.

### 5 CONCLUSION

The COVID-19 has made major changes in all areas of life of the society, with the new way of life and the economic and social consequences associated with the pandemic being global in nature. However, along with these objective reasons, sometimes rash decisions of various authorities that are trying to carry out social experiments without proper scientific and practical reasoning become factors that provoke nervous stress in the population.

The new rules of university enrolment campaign in the Russia Federation can be treated as one of these social experiments. Minister Valeriy Fal'kov recommended the university administrations to pay attention to the students' mental health and "to organize psychological support on the new level" (Fal'kov, 2021).

Taking into account that in 2022 the "single wave" type of the enrolment campaign with insignificant alternations will go on, we consider the following measures should be implemented to improve pedagogical and psychological atmosphere for future applicants and their families:

- to work out a system of psychological assistance for the applicants to help them compensate for any losses incurred by this pandemic and to better prepare for future life in the conditions of pandemic;
- -to organize a system of professional development for the members of the university admission boards, during which they will learn the basics of psychological relaxation in the process of communication with applicants and their parents;
- -use technical and digital capabilities of universities when updating the content of the official university website, organizing the smooth operation of the admissions board website, as well as finding

the most effective means of advertising of the university in the electronic environment in terms of creating a positive image of the university, its faculty, campus and technical facilities to attract more applicants, as well as those school graduates who have high USE scores.

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