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# Psychology Applications & Developments VII

Edited by Clara Pracana & Michael Wang



Advances in Psychology and Psychological Trends

*Psychology Applications & Developments VII*  
Advances in Psychology and Psychological Trends Series

Edited by: Prof. Dr. Clara Pracana and Prof. Dr. Michael Wang



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## Chapter #7

### THE PSYCHOLOGICAL IMPACT ON RUSSIAN SOCIETY IN THE CONTEXT OF THE COVID-19 PANDEMIC

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#### ABSTRACT

The problem of the psychological impact of a pandemic, quarantine and self-isolation on the state of society attracts increased attention of specialists. The objective of our work was to find the most common attitudes and types of responses of Russians to the epidemic COVID-19 taking into account their involvement in social networks, critical thinking and severity of psychopathological symptoms. The study was carried out during the recession of the first wave of the pandemic in early June 2020. The main tool was the questionnaire of T. Nestik in an abridged version. Additionally, a questionnaire of critical thinking was used (CTI, Epstein, adapted by Lebedev & Enikolopov, 2004); test of psychopathological symptoms SCL-90-R; social media engagement questionnaire (Karadag, 2015) were used. The study involved 986 people (56.9% male, 43.1% female) aged 18 to 76 years. Using exploratory factor analysis, 6 types of responses to the epidemic situation caused by COVID-19 were identified (fans / opponents of the "conspiracy theory"; responsible / irresponsible, covid-dissidents, covid-optimists, misophobes, anti-vaccinators). The low level of trust in society and, above all, in medicine, harms the process of mass vaccination. Against the background of infodemic, social trust is declining and the psychological status of citizens is deteriorating.

*Keywords:* COVID-19, attitude towards the pandemic, psychological impact of society, Russian society, typology.

#### 1. INTRODUCTION

The problem of the psychological impact of a pandemic, quarantine and self-isolation on the state of society attracts increased attention of specialists. The works of scientists from China, Italy, Japan, Spain, France and other countries published since December 2019 analyze the impact of the pandemic on the emotions and behavior of people, the first reaction to challenges and a reformatted way of life during the outbreak of the pandemic (see: Deyneka & Maksimenko, 2020). Negative psychological reactions of people to threats to health, life, well-being and stability in society have been exacerbated by "infodemic" - a little-studied phenomenon that critically affects the minds of people, changing the way people consume information and, as a result, people's behavior, reducing the effectiveness of measures taken by governments against spread of infection. Social media platforms (Facebook, Vkontakte, Odnoklassniki, Youtube, Instagram and Twitter) provide unprecedented numbers of users with direct access to uncontrolled content, which amplifies rumors and the spread of questionable, including fake information. For example, an international team of researchers (Depoux et al., 2020) drew attention to rumors and conspiracy theories about the origin of COVID-19, which circulated on social networks and spread faster than the epidemic itself, giving rise to racism, fear and compulsive buying,



including the purchase of protective masks, and also led to the killing of four Chinese people who had never been to China. In these actions, the authors saw infodemic as a viral form of spreading information about the epidemic, drawing attention to a quote from the speech of the WHO Director-General, Dr. Tedros, who stated that “fakes about coronavirus are more infectious than the virus itself” (WHO Director-General's..., 2020).

Polish scientists (Gruchola, & Slawek-Czochra, 2021), based on weekly reports from the Eurobarometer for the period March-July 2020, studied the public opinion of EU residents regarding the COVID-19 pandemic. The authors concluded that the lack of a sense of security among EU residents in three key areas (health, economy and social life) was not the result of their personal experience, but the impact of the media, which created a “culture of fear”. Fear caused by a severe clinical picture of the disease, a large number of deaths, restrictive measures, legal punishment, mistrust of officials who did not cope with the situation, and the overflow of the media space with inaccurate information also negatively affected the mental state of the US population, especially in Florida, Texas and Arizona (Farmer, 2020). When discussing the infodemic, Japanese researchers Jinling Hua and Rajib Shaw recall at the beginning of their paper the tragedy of 2011, when a similar "invisible catastrophe" related to radiation and caused by a tsunami and an earthquake occurred. In their opinion, the difference between the situations of 2011 and 2020 is that radiation can be measured, while measuring infodemic is an urgent task facing modern researchers (Hua, & Shaw, 2020).

In addition to increasing anxiety and tension among people, against the background of the pandemic, an exacerbation of economic and environmental problems was also recorded, in particular, a decrease in confidence in the future (Jia et al., 2021), panic buying behavior (Naeem, Ozuem, 2021). At the same time, some studies have identified not only negative but also positive effects of communication on social networks (Liu et al., 2021; Mohamad, 2020; Jia et al., 2021) and changes in society in response to the pandemic. Researchers found that group threats (such as natural disasters and epidemic diseases) identified group interests, leading to increased social solidarity (Liu et al., 2021). According to Japanese authors, the deep commitment of the Chinese people to collective action (Hua, & Shaw, 2020), facilitated by social networks, made it possible to achieve exceptional coverage of the Chinese population with a mindset to comply with disease containment measures.

The need for monitoring of the psychological status of society against the background of the epidemiological situation is obvious.

## **2. BACKGROUND**

The results of empirical studies of the psychological status of Russian society and its adaptation to the pandemic caused by COVID-19 have been covered in scientific and journalistic literature since March 2020. For example, E.V. Fedoseenko (2020) results of a study of human psychological resources during the period of forced isolation. The most common reactions of respondents (N = 784 people) to the epidemic situation are highlighted. Fear (47.3%), apathy (22.2%), stupor (14.5%) formed the three most common responses to forced isolation. Also, such psychological "effects" of epidemics and related quarantines as anger, irritation, depression, emotional exhaustion, symptoms of post-traumatic stress were recorded. The author has characterized the epidemic situation as an emergency due to the “psychological effects” that it provokes.

S. N. Enikolopov and his colleagues (2020), having interviewed 430 people at the end of March 2020 using a battery of questionnaires, obtained evidence of an increase in the number of people who view the pandemic as a result of the use of biological weapons, punishment for sins, and retribution for neglect of environmental problems. The respondents

showed a statistically significant increase in depression; sleep worsened; the level of anxiety, fear and panic increased. At the same time, it was noted that Russians turned to religion, the level of constructive thinking and emotional coping fell.

T. A. Nestik (2020) identified 4 types of responses encountered by citizens during an epidemic. The highest level of stress was experienced by “skeptics” (20%), who had a low level of trust in state authorities and official information and consider the threat of a pandemic to be exaggerated. “Alarmists” (30%) showed the greatest concern about the pandemic, believing that everything is much worse than it was broadcasted in the official media, and that more stringent regulatory measures should have been taken in society. “Fatalists” (25%) were convinced that little depends on people and assessed the prospects very pessimistically, developing conspiracy theories on social networks. And finally, “optimists” (25%) considered the threat to be serious but showed more inclination to empathize with others, more faith in their own strengths and in the efforts of the state.

The aim of the study was to diagnose the psychological status of Russians against the background of the period of recession of the conditionally first or spring wave of a pandemic. For this, a comprehensive study of the everyday consciousness, psychological states and characteristics of the respondents was carried out.

The following tasks were set:

- 1) find the most common views and types of responses of Russians to the COVID-19 pandemic and infodemic;
- 2) measure some indicators of mental health in society;
- 3) investigate the degree of trust in society;
- 4) test the link between social media involvement and mistrust of government and citizens in a pandemic, between social media involvement and belief in conspiracy theories of a pandemic,
- 5) identify demographic differences in attitudes to the pandemic.

The main hypothesis of the study was that against the background of the pandemic and infodemic caused by COVID-19, there will be a high level of panic, anxiety, search for an enemy, and distrust in society. In addition, it was suggested that those who are more involved in communication through social networks will experience panic and distrust to the country's leadership and fellow citizens to a greater extent.

The study was part of the monitoring of the psychological status of Russians in different periods of the pandemic and may be useful for further comparative studies of the dynamics of the impact of new waves of the pandemic on Russians.

### **3. METHOD**

#### **3.1. Organization of research, sample**

In this study, data were collected through the Toloka.Yandex.ru service for two weeks (from May 31 to June 10, 2020 with the highest number of responses on June 2 and 9). Since the study was conducted during the recession of the first wave of the COVID-19 pandemic, expectations were associated with the accumulation of some experience in adapting to the epidemiological situation in Russia.

The study involved 986 people (56.9% males, 43.1% females) aged 18 to 76 years ( $M = 36.63$ ;  $SD = 10.2$ ). The survey geography covered various regions of Russia. The average income across the entire sample is between low and medium

### 3.2. Instruments

The main research tool was a shortcut version of the questionnaire developed by T. Nestik to measure attitudes to the pandemic and assess trust in representatives of various social groups (Nestik, 2020). Since the Nestik questionnaire was modified and shortened by the authors of this paper, it was necessary to conduct an exploratory factor analysis to clarify its structural validity. The version used 34 included statements with a five-point Likert response scale. At the same time, by adding to the self-efficacy scales statements reflecting skepticism about the threat of coronavirus, a new scale of covid dissidence was formed (4 statements, a Cronbach = 0.731; M = 2.85; SD = 0.940; examples of statements: "The danger of epidemics like COVID-19 is clearly exaggerated"; "It makes no sense to wear a mask or sit at home - if you are destined to get sick, then this cannot be avoided").

To study mental health indicators in the context of the recession of the first wave of the pandemic (task 2), the same tools were used as in the work of clinical psychologists in March 2020 (Enikolopov et al., 2020), namely the symptomatic method SCL-90-R, the constructive thinking inventory (CTI).

Symptom Check List-90-Revised (Derogatis, & Savitz, 2000) is a clinical test and screening technique designed to assess patterns of psychological signs in psychiatric patients and healthy individuals. The SCL-90-R symptomatic questionnaire contains a number of scales, including: depression, anxiety, hostility, as well as an index of the severity of existing distress and the number of symptoms disturbing the patient.

Since in a difficult critical situation of a pandemic, the requirements for adaptive and constructive thinking increase, the Constructive Thinking Inventory was used (CTI, Epstein, Epstein, 2001 adapted by Lebedev & Enikolopov), which was confirmed to be valid and reliable and fully standardized (Lebedev & Enikolopov, 2004). This technique is based on Epstein's theory that constructive thinking is associated with resistance to stress and is defined as "automatic thinking that facilitates solving problems in life in accordance with the principle of achieving maximum results with minimum costs". Violation of constructive thinking leads to the automation of daily activities, however the subject increases the risk of stress. Those with a high score on the General Criticality of Thinking scale tend to think divergently and adapt to the demands of the situation. With the degree of development of critical thinking, the tendency to emotional and behavioral copings increase, and the tendency to naive optimism, as well as esoteric, categorical and personal-superstitious thinking decreases (Epstein, 2001).

To study the involvement in social network communications, a questionnaire "Social Media Addiction Scale" by Indian authors was used (Karadag et al, 2015), translated into Russian and adapted by Deyneka and Maksimenko (2020). It includes 10 statements with a 5-point scale of answers. The reliability of the questionnaire was confirmed by the Cronbach alpha coefficient 0.864. An example of statement: "I prefer using social media rather than watching TV".

The demographic reference also included information about the level of education, the degree of religiosity, the subjective level of income (5-point scale by Ad. Furnham: 0 - making ends meet, 1 - low, 2 - medium, 3 - high, 4 - very high).

Data processing included exploratory factor analysis with Varimax rotation and Kaiser normalization, and correlation analysis using Spearman's coefficient. The calculation of descriptive statistics, correlation and factor analysis were performed using the statistical package SPSS 20.0.

#### 4. RESULTS

Factorization of the data from the pandemic attitudes questionnaire set eight factors (table 1) the last four of which are represented by low factor weights, but can be considered in the context of the general diversity of typical attitudes and perceptions that arose in response to the epidemic situation.

*Table 1.*  
*Factor structure and descriptive statistics of data from the pandemic attitudes questionnaire (N = 986).*

| Assertions  | Factor load | M (SD)      |
|---|-------------|-------------|
| <b>The factor of conspiracy theories about coronavirus</b><br>(share of explainable variance 15.9%)                                     |             |             |
| 1. Viruses like COVID-19 are created artificially for some purpose.   | 0,779       | 2,88 (1,27) |
| 7. Epidemics are weapons used by some people against others.  | 0,726       | 2,65 (1,25) |
| 4. Through epidemics, the rich regulate the number of the poor.   | 0,645       | 2,28 (1,23) |
| 2. An outbreak of an epidemic is, as a rule, the result of someone's mistake.   | 0,485       | 3,24 (1,16) |
| 6. The emergence of new infectious diseases is a natural process of mutation that occurs in nature without the participation of people. | -0,766      | 3,42 (1,17) |
| 5. The emergence of new pathogens is pure chance.   | -0,762      | 2,89 (1,15) |
| <b>The covid dissidence factor</b><br>(share of explainable variance 12.0%)   |             |             |
| 19. The danger of epidemics like COVID-19 is clearly exaggerated.   | 0,738       | 3,03(1,22)  |
| 29. It is pointless to wear a mask or sit at home - if you are destined to get sick, then this cannot be avoided.                       | 0,687       | 2,40 (1,32) |
| 20. The media hype about COVID-19 is being used to divert public attention from more important issues.                                  | 0,657       | 3,20 (1,26) |
| 21. Epidemics pose a threat only to people with poor health.  | 0,620       | 2,79 (1,25) |
| 28. Flu shots can do more harm than good.   | 0,437       | 2,79 (1,27) |
| 27. Vaccinations often cause side effects.  | 0,423       | 3,16 (1,21) |
| <b>Covid optimism factor</b><br>(share of explainable variance 8.1%)  |             |             |
| 25. The leadership of our country is making sufficient efforts to contain the pandemic.   | 0,812       | 2,79 (1,28) |
| 24. The level of development of medicine in Russia is sufficient to save most of the sick from the epidemic.                            | 0,793       | 2,83 (1,24) |
| 26. In the event of a global epidemic, doctors will be able to create the necessary medicine.   | 0,670       | 3,34 (1,03) |

|   |        |             |
|---|--------|-------------|
| 30. If I get sick during an epidemic, I can only rely on myself and my loved ones.  | -0,488 | 3,33 (1,30) |
| <b>The factor of trust and responsibility in society</b><br>(share of explainable variance 6.3%)  |        |             |
| 10. During an epidemic, information on the number of infected people will be deliberately distorted so as not to sow panic.                       | 0,594  | 3,65 (1,08) |
| 11. In the event of an epidemic, most people will not report that they are sick, so as not to be quarantined.                                     | 0,582  | 3,52 (1,05) |
| 14. The only salvation from the epidemic is in the moral conscience and responsibility of everyone.   | 0,534  | 3,95 (1,07) |
| 9. The cause of epidemics is low education and poor hygiene.  | 0,519  | 3,17 (1,27) |
| 12. Most Russians will not believe the official information about the number of cases and deaths during the epidemic.                             | 0,516  | 3,68 (1,03) |
| <b>Fear factor of infection and misophobia</b><br>(share of explainable variance 4.6%)  |        |             |
| 33. I am afraid to come to the clinic in order not to get infected.   | 0,845  | 3,25 (1,35) |
| 32. I am afraid to use public transport as it is easy to get infected there.  | 0,806  | 3,11 (1,35) |
| <b>The Factor of Anxiety, Repentance and Charity</b><br>(share of explainable variance 3.5%)  |        |             |
| 22. I am very worried about the news about epidemiological threats.   | 0,661  | 2,95 (1,18) |
| 23. I fear new and more dangerous epidemics.  | 0,605  | 3,25 (1,22) |
| 31. I am ready to donate money to help the elderly who fell ill during the epidemic.  | 0,598  | 2,81 (1,15) |
| 3. Epidemics are God's punishment.  | 0,533  | 1,68 (1,02) |
| <b>Predictive pessimism factor</b><br>(share of explainable variance 3.3%)  |        |             |
| 17. It is likely that in the next 50 years there will be an epidemic that will kill all people.   | 0,661  | 2,27 (1,15) |
| 18. In the next 20 years, epidemics like COVID-19 will repeat.  | 0,605  | 3,63 (0,92) |
| 27. Vaccinations often cause side effects.  | 0,575  | 3,16 (1,21) |
| 28. Flu shots can do more harm than good.   | 0,574  | 2,79 (1,27) |
| <b>Preference factor for strict restrictive measures</b><br>(share of explainable variance 3.0%)  |        |             |
| 13. Violation of quarantine should be punished with prison terms.   | 0,771  | 2,08 (1,19) |
| 15. It is necessary to disclose information about the history of movement and contacts of patients, even if this violates their right to privacy. | 0,757  | 2,87 (1,36) |
| 8. Only iron discipline can save society from a serious epidemic.   | 0,413  | 3,50 (1,23) |

|   |       |             |
|---|-------|-------------|
| 16. To prevent panic, it is necessary to suppress the dissemination of news that differs from official information and WHO recommendations. | 0,392 | 3,06 (1,33) |
|---|-------|-------------|

The first factor was named "*the factor of conspiracy theories about coronavirus*." This factor accounts for 15.9% of the explained variance. It contains the opposition of the idea of the causative agent of a pandemic as a man-made, artificially created by a certain "enemy", as a biological weapon, or, on the contrary, a natural, inartificial phenomenon.

The second factor "*covid-dissidence*" (12.0% of the variance) includes ignoring the danger of infection in combination with a fatalistic approach to the danger (probability) of getting sick. With fewer contributions, it included manifestations of a negative attitude towards vaccinations, which confirms the fact that among covid dissidents there are more of those who are called "anti-vaccines".

The third factor "*covid-optimism*" is formed by trust in the Governance against the backdrop of a pandemic, faith in domestic medicine and world science, and with the opposite sign (with a small factor load), the factor includes hope only for oneself and one's loved ones in case of infection.

The fourth factor "trust and responsibility in society" embodies the awareness of problems related to the responsibility or irresponsibility of members of society against the background of a pandemic and trust / distrust in the systems "citizen-state" and "citizen-society".

The fifth factor, called "*fear of infection and misophobia*", is formed by the fear of contracting the COVID-19 virus in public places (in transport or at a clinic reception) and refusal to visit them.

Against the background of a pandemic, the manifestations of misophobia (the desire to minimize the need to interact with strangers and avoid touching various things due to the fear of microbes) were provoked by an epidemic situation, i.e., we are talking about situational anxiety and cautious (sometimes excessive) behavior.

Fears, anxiety, panic moods in different forms are embodied in two more factors. Thus, in the sixth factor, or "*the factor of fear, repentance and charity*," the fear of new epidemiological threats and more dangerous epidemics in the future is combined with the interpretation of the pandemic as punishment for sins and a willingness to donate money to elderly people who fell ill during the epidemic.

The seventh factor "*predictive pessimism*" embodies doom, apocalyptic sentiments ("it is likely that in the next 50 years there will be an epidemic from which all people will die"), the expectation of new epidemic threats, doubts about the benefits and safety of vaccinations. The eighth factor "*preference for strict restrictive measures*" united the approval / disapproval of prison sentences for violation of quarantine, the requirement for transparency of movement and contacts of the sick, even to the detriment of privacy, regulation of the life of citizens with iron discipline to save from the epidemic.

Thus, the resulting factorial structure of the survey data, reflects the spectrum of rather diverse attitudes of the Russians' COVID-consciousness.

As the analysis of descriptive statistics shows (see Table 1), the prevailing belief among respondents is that the emergence of new infectious diseases is a natural process of mutation that occurs in nature without the participation of humans, or the result of someone's mistake. Conspiracy explanations for the emergence of a new infection, called COVID-19, were not popular among Russians in the first ten days of June 2020. The explanation of the pandemic as a punishment of the God turned out to be even less popular (M=1.68, SD=1.02).

The greatest degree of agreement among the Russians participating in the survey was received by the statements from the fourth factor, which reflects trust and responsibility in society. Most of the respondents agree with the opinion that the only salvation from the epidemic lies in the moral conscience and responsibility of everyone ( $M=3.95$ ,  $SD=1.07$ ). At the same time, citizens tend to distrust both official information about the number of infected with covid ( $M=3.68$ ,  $SD=1.03$ ) and information from fellow citizens who “will conceal the fact of infection with the virus” ( $M=3.52$ ,  $SD=1.05$ ).

In terms of severity, trust in world science, which will ensure the creation of a cure for an insidious virus, and trust only in oneself and in the inner circle of people in case of illness, turned out to be practically the same. It should be borne in mind that the study was carried out before the development of the Sputnik V vaccine.

Despite the statistically significant predominance with age of predictive anxiety about epidemiological threats ( $p<0.01$ ) and specifically recurrence of epidemics in the coming years ( $p<0.001$ ), as well as fears of side effects of vaccinations ( $p<0.01$ ), representatives of the older generation showed more confidence in the country's leadership in its efforts to contain the pandemic ( $p<0.001$ ). Confidence in the capabilities of medicine and science for saving the majority of patients also turned out to be higher with age ( $p<0.01$ ).

The data indirectly indicate a higher confidence in the World Health Organization, which manifested itself in less agreement ( $p<0.001$ ) with measures regulating the information flow (“in order to prevent panic, it is necessary to suppress the spread of news that differs from official information and WHO recommendations”).

In addition, the factor of age (which may indicate a greater maturity of the individual) manifested itself in greater confidence in fellow citizens in a pandemic situation. The older the respondents were, the less they showed agreement that “in the event of an epidemic, most people will not report that they are sick, so as not to be quarantined” ( $p<0.001$ ), that “most Russians will not believe the official information on the number of cases and deaths during a pandemic ( $p<0.01$ ). At the same time, among the older generation, there were more of those who believe that security is more important than the right to privacy (contacts and movements) ( $p<0.001$ ).

At the same time, the results of the study showed that the older the respondents were, the more among them were supporters of conspiracy and fatalistic theories of the origin of the pandemic (“viruses like COVID-19 are created artificially for some purpose” ( $p<0.001$ ), “Epidemics are God's punishment” ( $p<0.001$ ), “with the help of epidemics, the rich regulate the number of the poor” ( $p<0.01$ )). Accordingly, fewer were those who believed that the pandemic was caused by chance or a natural process of mutations ( $p<0.01$ ).

According to the data obtained, women believe more in conspiracy theories and more often agree that “viruses are created artificially for some purpose” ( $p<0.05$ ), as well as that “the outbreak is the result of someone else's mistake” ( $p<0.05$ ). There were more skeptics among men who agree that “during epidemics, information on the number of infected people will be deliberately distorted so as not to sow panic” ( $p<0.05$ ) and that “the media hype about COVID-19 is used to distract attention of society from more important problems” ( $p<0.05$ ). Men more often agreed that “pharmaceutical companies deliberately delay the release of certain drugs so that they will cost more in the future” ( $p<0.05$ ).

Women are more likely than men to show phobias, significantly more often agreeing that they are more afraid of new more dangerous epidemics ( $p<0.05$ ), and also more afraid to use public transport ( $p<0.05$ ) and come to an appointment at the clinic ( $p<0.05$ ), for fear to contact the virus. More educated respondents also more often demonstrated similar attitudes ( $p<0.01$ ). In addition, they mostly rely only on themselves and their loved ones ( $p<0.01$ ).

Religious respondents believe that the epidemic is God's punishment ( $r = 0.44$ ,  $p < 0.001$ ). Among them, there are more of those who believe that the rich regulate the number of the poor with the help of epidemics ( $r = 0.22$ ,  $p < 0.001$ ) and that epidemics are a weapon used by some people against others ( $r = 0.21$ ,  $p < 0.001$ ), and that viruses are created artificially ( $r = 0.17$ ,  $p < 0.001$ ). Among religious people, there were more supporters of harsh punishments for violating quarantine ( $r = 0.09$ ,  $p < 0.01$ ), advocating compliance with WHO recommendations ( $r = 0.10$ ,  $p < 0.01$ ). They give a higher rating to the efforts of the country's leadership to contain the pandemic ( $r = 0.21$ ,  $p < 0.001$ ), more trust in Russian medicine ( $r = 0.12$ ,  $p < 0.01$ ) and media statistics. At the same time, they are more afraid of vaccinations ( $r = -0.14$ ,  $p < 0.001$ ) and vaccinations ( $r = -0.15$ ,  $p < 0.001$ ) and adhere to a fatalistic view of the possibility of getting sick ( $r = 0.19$ ,  $p < 0.01$ ).

People with a high subjective income ( $r = 0.10$ ,  $p < 0.01$ ) and more religious people ( $r = 0.19$ ,  $p < 0.001$ ) are more inclined to show charity during a pandemic.

Correlation analysis of the data from the questionnaire of attitudes towards the pandemic and the questionnaire of the severity of psychopathological symptoms SCL-90-R showed that persons with high scores on the anxiety scale have higher fears about new and more dangerous epidemics ( $p < 0.001$ ) and expectations of negative news about epidemiological threats. The higher the indicators on the scale of depression and the scale of phobic anxiety, the higher the manifestations of misophobia ( $p < 0.001$ ), the less trust in people around and the more suspicions about their non-compliance with epidemiological rules ( $p < 0.001$ ). Individuals with high scores on the hostility scale advocate jail sentences for those who violate quarantine ( $p < 0.001$ ).

The average data on the critical thinking questionnaire (CTI) on all scales were located in the normative zone. Against the background of the loosening of the self-isolation regime in early June 2020, the manifestations of categorical and personal-superstitious thinking increased slightly.

Correlation analysis of the data from the pandemic and CTI questionnaire showed that news about epidemiological threats causes less anxiety in persons with high scores on the emotional coping scale ( $r = -0.237$ ,  $p < 0.001$ ) and the general constructive thinking scale (GCTI). The higher the GCTI scores, the lower the adherence to conspiracy theories of the origin of the pandemic, suspicion, distrust of people around and social institutions, fear of distant threats and manifestations of misophobia.

For the iron discipline against the background of the pandemic, persons with high indicators on the scales of emotional ( $r = 0.279$ ,  $p < 0.01$ ) and behavioral coping ( $r = 0.217$ ,  $p < 0.01$ ) spoke.

The carriers of esoteric thinking believe that epidemics are a weapon used by some people against others ( $r = 0.371$ ,  $p < 0.001$ ), and do not agree that the emergence of new infectious diseases is a natural process of mutation that occurs in nature without the participation of people ( $r = -0.260$ ,  $p < 0.001$ ). People with higher scores on the scales of categorical and personal-superstitious thinking turned out to have lower trust in the media and people around them.

The results of the correlation analysis show that among those who prefer social networks to official information (television, radio, print), there are statistically significantly more respondents characterized by low social and institutional trust. They have a more pronounced negative attitude towards the country's leadership, and they do not consider the efforts made by the authorities to contain the pandemic sufficient ( $r = -0.230$ ,  $p < 0.001$ ), do not believe in the possibilities of domestic medicine ( $r = -0.200$ ,  $p < 0.001$ ) and do not rely on themselves and their loved ones in a situation of illness ( $r = -0.190$ ,  $p < 0.001$ ).



In addition, among them there are more of those who not only do not trust official information about the epidemic situation ( $r=0.140$ ,  $p<0.001$ ), but also do not trust their fellow citizens, attributing to them possible facts of concealing information about the disease due to fear of being quarantined ( $r=0.130$ ,  $p<0.001$ ), and project their distrust of the official statistics on morbidity onto the majority of Russians ( $r=0.180$ ,  $p<0.001$ ).

## 5. FUTURE RESEARCH DIRECTIONS

Currently, the authors have carried out a comparative analysis of the research data during the 1st (spring) and 2nd waves of the pandemic in Russia in the fall of 2020 (827 people, 53.9% of men, 46.1% of women aged 18 to 75 years), paper is in press. In the fall of 2021, it is planned to repeat the study against the background of the 3d wave of the pandemic and find the reasons for the relatively low activity of citizens in the campaign of free vaccination.

## 6. CONCLUSION/DISCUSSION

The results of the study showed a spectrum of rather diverse attitudes of the Russians' covid consciousness (supporters / opponents of the "conspiracy theory"; responsible / irresponsible, covid-dissidents, covid-optimists, predictive pessimism, misophobes, anti-vaccinators).

Individuals with constructive critical thinking and emotional coping proved to be more adaptive in assessing the epidemic situation, connected with the COVID-19 pandemic.

Among religious people, there were more supporters of conspiracy theories about the origin of the virus and the COVID-19 pandemic. Despite the fact that among religious people there are more of those who trust the government, WHO, the media and domestic medicine, they are more often afraid of vaccinations and are prone to fatalism in relation to the threat of the disease.

The older generation shows more confidence in the institutions of power and the people around them against the backdrop of the pandemic which corresponds to the data of other authors (Pak, McBryde, & Adegbeye, 2021). Women have more anxiety and a tendency to misophobia than men.

Among those citizens who derive information mainly from social media, there were fewer people who trust both the authorities and their fellow citizens, as well as skepticism about medicine and vaccination.

The low level of trust in society and, above all, in medicine, harms the process of mass vaccination. Against the background of infodemic, social trust is declining and the psychological status of citizens is deteriorating (Vosoughi, Roy & Aral, 2018). The spread of fake information contributes to an increase in apathy, cynicism and extremism (Lazer et al, 2018). At the same time, according to most researchers, fake information is more easily disseminated than reliable one (Chakravorti, 2020; Limaye, 2020; Pulido, Villarejo-Carballido, Redondo-Sama, & Gómez, 2020). In addition, users who consume scientific news content have been shown to be less active or involved in the dissemination of scientific information (Bessi, Coletto, & Davidescu, 2015). At the same time, the encouraging conclusion of Spanish scholars (Pulido et al., 2020), obtained from careful research, that evidence-based (fact-checking) information is retweeted more than false information should be taken into account. The authors recommend that health authorities post more tweets from their official accounts and run information literacy schools. Also, researchers (Depoux et al., 2020), recommend the creation of interactive platforms and

dashboards to alert in real time to rumors and concerns related to the spread of the coronavirus worldwide, allowing policymakers and health officials and relevant stakeholders to respond quickly, proactively to mitigate misinformation and neutralize fakes. In our opinion, such work in Russia is currently insufficient.

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