

Psychological and Pedagogical Problems of the Lockdown in Russia During the Spread of Covid-19 and the Ways to Overcome Them

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ABSTRACT

The consequences of the lockdown and quarantine measures introduced to prevent the spread of the new COVID-19 coronavirus infection in identity psychology and the pedagogical field are varied and subject to a long-term study. During the study conducted in April-September 2020, numerous violations were revealed in various areas of human life and personality psychology. Disorders of physical activity, as the most common, were recorded in more than 65% of the respondents, in addition, a decrease in motivation for learning was found, as well as impairment of cognitive functions due to the increased use of electronic means and distance learning technologies in education. A study has been conducted to reduce the negative consequences of quarantine by using the author's neuro-gymnastics. Continuation of the research will reveal the effectiveness of the developed methods.

Keywords: *lockdown, distance learning technologies, physical activity, emotional disorders, neuro-gymnastics.*

1. INTRODUCTION

New coronavirus infection, or COVID-19 (Corona Virus Disease 2019), is a severe acute respiratory infection caused by a new coronavirus strain. It is a particularly dangerous disease, which, however, can be mild. The most common symptoms are fever, fatigue, dry cough and loss of smell. Complications of the disease can be the viral pneumonia, which can lead to acute respiratory distress syndrome and subsequent respiratory failure. No specific treatment has been developed, the vaccine is in the final stages of clinical trials.

An outbreak of a new disease was first recorded in December 2019 in the Chinese city of Wuhan (the most populous city in central China). On March 11, the infection spread to all continents and officially received the status of a pandemic. At that time, there were 126,000 infected people in the world. [1,2] There are now over 19 million infection cases and 718,000 deaths. Coronavirus tests (by PCR or antibody determination) are done for people with severe acute respiratory infections or for epidemiological indications. Thus, patients in mild or asymptomatic condition do not even get into the statistics and the true number of infected is much higher.

The first two cases of a new coronavirus infection occurred in Russia on January 31, 2020. Both patients are Chinese citizens who came from the PRC to Tyumen and

Chita. The increasing amount of cases in the first month was mainly due to the imported cases, when the Russians, frightened by the panic in the media, were returning from the countries of South-East Asia and Europe resorts. Starting in March, the number of infection cases on the territory of the Russian Federation began to gradually prevail over imported ones. On March 30, Moscow introduced a mandatory general lockdown, made it mandatory to wear masks and gloves in public places. Following Moscow, almost all regions of the country have introduced a lockdown in one form or another. Locked in their homes, Russians reacted differently to the forced restriction of freedom of movement.

The questions of understanding the influence of a closed space on human psychology are not new [3,4]. The social and hygienic situation in 2020 added the fear of infection, a decrease in material wealth, the replacement of ordinary social communications with remote ones, etc., to the problem of space limitation. [5,6,7] Research results report [8] that the psychological and pedagogical consequences of quarantine can be varied and long-term. Both financial difficulties and stigmatization of people [9] who were isolated due to illness play a role here. In the course of self-isolation, psychological disturbances were triggered not so much by the fact of space limitation as by violations of the social contact methods, their forced technologization, the introduction of forms of state control over the citizen movement and life.

The lockdown should be considered as a psychological trauma that can lead to post-traumatic stress disorder (PTSD), depressive disorders, alcohol addiction, but today it is impossible to predict all the psychological consequences.

The expansion of the use of electronic means and distance learning technologies in education, the actual replacement of face-to-face contact with distant forms also require a careful research.

2. RESEARCH METHODS

The research was conducted in Moscow and the Moscow region from April to September 2020, participants were mainly students of higher educational institutions who studied using electronic means and distance learning technologies in the spring semester 2020 and their teachers. In accordance with the purpose and objectives of the study, the author's questionnaire was developed, its electronic version was created and 254 people were remotely surveyed.

102 juvenile respondents (40.8%), 132 middle-aged people (51.2%), 10 elderly and senile age people, 4 teenagers. The average age is 41 years, 83.6% are women, the rest are men. Half of the respondents (51.6%) have higher education. In the last 6 months, 36.4% of respondents had respiratory infections, a confirmed diagnosis of Covid-19 in 14% of those with respiratory diseases, or 5.2% of all respondents.

The lockdown was easy for 27% of the respondents, it was hard for the rest (17%) and 56% of the respondents experienced some difficulties. The main difficulties were: low physical activity, a lot of sedentary work at a personal computer, a lack of live communication, financial difficulties, a negative psychological state.

3. RESEARCH RESULTS

In the course of the study of the psychological and pedagogical components of the lockdown and distance learning forms, it was revealed that the physical activity of the respondents have changed most of all: despite the fact that 13.3% indicated that they began to move more and go in for sports, including at home, 65.3% reported a decrease in physical activity.

Emotional changes were noted by 38.4% of respondents, mainly: feelings of anxiety, fear, anger, resentment, depressive symptoms were registered.

20.6% of the respondents were in contact with relatives or friends who were diagnosed with COVID-19. Half of them experienced strong negative emotions of resentment, fear, anxiety, up to panic states, some noted a sense of humility and hope.

43.1% of the respondents pointed to the changes that have occurred in people's attitudes towards each other. 28.6%

note a bitter relationships, and only 14.5% say empathy is improving and growing.

78.3% of the respondents participated in the distance learning programs as students, teachers, or parents of students. Changes in motivation to study were noted by more than half of the respondents, only 15% of them said that their motivation had improved, the rest noted that it was more difficult to force themselves to study. Changes in cognitive abilities were noted by 23.8%, mainly their deterioration occurred.

201 people expressed their opinion on distance education.

The main positive points that were noted: convenience, comfort, no need to waste time on the road, the development of the disease in students and teachers was prevented. Let us quote a detailed positive answer: "this is the best thing that happened to the higher education system, for students who, due to their age, consciously approach their studies - saving time on the road and the ability to concentrate on the lesson without wasting energy on the road."

Usually, along with the pros, the respondents were noting the cons: difficulties in passing practice remotely, the effectiveness of distance learning among students, but not among schoolchildren, the difficulty of monitoring the material assimilation. Among the negative feedback, the most frequent are: problems with equipment, heavy workload with written assignments, the difficulty of perception.

The topic about the changes taking place in society in connection with the transition to the online regime in various areas of social life was approved by more than a third of the respondents, half of the respondents assessed such changes negatively.

4. DISCUSSION OF FINDINGS

In 2020, the international community is faced with a new type of respiratory infection, which, on the one hand, is a very dangerous disease, on the other, it can be mild. The disease complications can lead to a tragic outcome: acute respiratory distress syndrome and subsequent respiratory failure. One of the means of fighting the spread of COVID-19 was the introduction of special restrictive measures in many regions of Russia. Moscow and the Moscow region that occupy the central position, being the largest transport hub, have introduced quite serious restrictive measures. The students were completely transferred to learning using electronic means and distance learning technologies. These events had an impact on various areas of human life.

One of the important limitations that the respondents experienced during the lockdown was the restriction of movement and a decrease in motivation for studying, as well as impairments to attention and memory. The study showed disorders in the physical, motivational, and cognitive areas of the personality of the participants in the educational process.

Physical limitations were experienced equally by teachers and students, slightly more men than women. The modern rhythm of life does not allow everyone to take a healthy lifestyle with regular special physical activities. For many people, physical activity is often limited to walking when going to school/work and back. The lockdown and the use of electronic means and distance learning technologies reduced the already low physical activity of teachers and students. Despite the fact that saving time on the road was considered by some as a positive aspect of distance education, the lack of the skill of special physical exercises led to a decrease in physical activity, which was stated by more than 65% of respondents.

The issues of motivation, and, in particular, educational motivation are complex even outside the period of self-isolation and distance learning technologies. The difficulty of understanding motivation is determined by different approaches to its study. There are two main directions in the study of motivation, conditioned by the methodological platform of scientists: from a biologic standpoint as a manifestation of the biological essence of a person, and understanding the genesis of motivation from the standpoint of a social approach.[10] The relationship between the social and the biological in the process of the formation of motivation as an integral system of human motives is complex and contradictory. N.P. Dubinin, who is quite critical towards the internal determination of behaviour, noted that "the stance of biologization of the human spiritual world can lead far. In particular, it forms in people the idea that they supposedly carry the fatal determination of their mental health in their biological heredity. This diminishes the possibility of free personality development of a young person" [11].

The motivation of a person to commit conscious educational actions has its own characteristics, the activation of the ability to independently satisfy their needs in education, to achieve the set goal is a must for an effective pedagogical process. In the conditions of a complete replacement of the contact method of teaching, the solution of motivation issues becomes largely dependent on the student.

The understanding of these processes formed the basis of our proposed special neuro-gymnastics, which includes light warm-up physical exercises and several exercises aimed at stimulating brain activity (attention, memory, and associative activity of the hemispheres) [12, 13].

Human thinking and movements are interconnected, which was paid attention to even in ancient times. At the beginning of the twentieth century, a whole thread of research was formed related to the action of muscles and the use of the revealed patterns in the diagnosis of correctional and developmental kinesiological effects (Kendall's spouses, osteopathic doctor G. Goodhart, etc.). In the second half of the XX century, P. Dennison developed "Brain Gymnastics". The basis of the technique is a natural and effective possibility for the development of mental processes through special physical activity. In domestic science, the development interdependence of the mechanisms of mental and physical activity was indicated by such prominent scientists as I.M. Sechenov [14], P.K.

Anokhin [15], N.A. Bernstein [16], A.R. Luria, and others. Today, varieties of educational kinesiology are popular, using as a basis the connection of muscle tone with the psychoemotional state of an individual and the level of stress, and formulating methods of corrective action in terms of psychocorrection and body-oriented therapy [17]. Based on the accumulated practical data, the authors have developed a complex of neuro-gymnastics to activate the functioning of the "body-intellect" system, the development of interhemispheric interactions of the brain. The peculiarities of the neuro-gymnastics complex include the presence of exercises with the intersection of the body axis, with non-parallel actions of the right and left upper and lower limbs. Most of the students participating in the experiment were familiar with the complex before the lockdown, which allowed them to easily continue the performance of neuro-gymnastics, under the guidance of a teacher in a distant form. Students who performed the exercises on a regular basis noted an improvement in adaptation processes to the restrictions regime and a good mood.

The next stage is to study changes in the cognitive and motivational components of the study of students participating in the experiment, approbation of neuro-gymnastics in regular schools and correctional classes.

5. CONCLUSION

The spread of the new coronavirus infection (COVID-19), a severe acute respiratory infection, has led to the introduction of special restrictive measures around the world. On March 30, Moscow introduced a mandatory general lockdown, made it mandatory to wear masks and gloves in public places.

The lockdown introduced in Moscow and the Moscow region in connection with the spread of a new coronavirus infection has led to an increase in negative psychological and pedagogical phenomena. In the course of the study, in which more than 250 respondents were surveyed in a distant form, mainly participants in the educational process (teachers, students and their parents) revealed changes in various areas of life.

The most significant in the study were: changes in physical activity and a decrease in motivation to study in students.

To reduce the identified learning difficulties, during distance learning, students were offered with the author's neuro-gymnastics. Under the guidance of the teacher, together with them, the students performed a simple complex, including light warm-up exercises and several exercises aimed at stimulating brain activity (attention, memory and associative activity of the hemispheres).

The neuro-gymnastics, which was performed throughout the entire phase of using electronic means and distance learning technologies, made it possible to activate the physical state of students, increase motivation for learning, and improve adaptation to limitations.

Continuation of the research will reveal the effectiveness of the developed methods among students, and it is also

planned to test neuro-gymnastics in regular schools and correctional classes.

Thus, the lockdown can be considered as a psychological trauma with impairments in the physical, motivational and cognitive areas of the personality of the participants in the educational process, requiring correction in the course of using electronic means and distance learning technologies. The neuro-gymnastics developed by the authors, aimed at eliminating these disorders, makes it possible to improve adaptation to restrictive measures. Continuation of the study will determine its effectiveness in educational institutions of other levels.

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