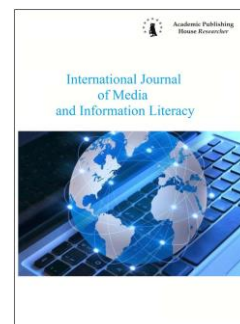


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The Role of Media and Information Literacy during COVID-19 Pandemic and Post-Pandemic Period

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Abstract

Media and information literacy in the modern world is a set of skills, abilities that allow users to analyze media messages broadcast through the media and the Internet, the ability to critically approach the received data and perceived information. The COVID-19 pandemic that swept the whole world in the spring of 2020 forced all the population of the planet to use the worldwide network and the media actively, because they became the main source of information and a means of communication. This fact was also used by "ill-wishers" who launched false information about the statistics of those infected with the new virus, about the means of fighting it and much more. It was information literacy and critical thinking that allowed the population not to succumb to fake news and not to lose their heads. As shown by the authors' survey, the time that the population spent on the Internet before the pandemic was less than the time that it began to spend on the Internet after the announcement of the total quarantine. This can be explained simply – people had no other means of communication. However, as it was revealed as a result of the survey, people after the lifting of the quarantine regime, especially between the ages of 20 and 25, do not want to spend so much time at electronic space. According to the authors, the reason for this fact was the increased media literacy of this category for the population. People have learned to filter information flows, think critically and be skeptical about news. Nevertheless, many have switched to a distant work format and do not want to return to the previous offline mode, and for them, it is also necessary to develop media communications and increase their information literacy.

Keywords: media literacy, media, information literacy, COVID-19 pandemic, Internet, critical thinking.

1. Introduction

The development of information literacy is closely related to the acquisition of digital and media competencies. The ability to think critically and not to trust all information that is distributed on the network, and above all to analyze the data base, assess the status of the media and the author are the main components of a person's media literacy. The COVID-19 pandemic, which locked the entire population of the planet at home, forced people to develop their information and media literacy actively and the ability to filter information flows (Al-Zou'bi, 2021; Datu et al., 2020; Greene et al., 2020; Nagle, 2018; Schmuck, Sikorski, 2020).

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2. Materials and methods

The materials of our research are books and scientific articles on media literacy, the development of media literacy and critical thinking skills in modern society, as well as Internet sites. The methodology is based on fundamental research in the field of interconnection and integrity of phenomena, logical cognition, information literacy theory and development trends of modern society. The research is based on comparative analysis. The following methods were used in the research: information gathering and analysis, field research in the survey form of respondents using the Google docs tool (docs.google.com/forms/d/1WU6_9r4Ek2d_CCwh4-EgCg01Wl4ilVFCVNTtIGSnvk/edit), theoretical analysis and synthesis, generalization, and classification.

3. Discussion

Over the past year, the number of studies related to media and information literacy, critical thinking, analysis of information disseminated in the media and the Internet has increased significantly. This is quite logical, because the whole last year was spent under the slogan “stay at home” (Al-Zou’bi, 2021; Datu et al., 2020; Greene et al., 2020; Polizzi, 2020; Schmuck, Sikorski, 2020).

Information literacy includes a number of components such as computer, digital, visual, and media literacy. It is the combination of all these components that ultimately forms information literacy – the ability to think critically and interpret the information received. Figure 1 shows a diagram of the information literacy development.

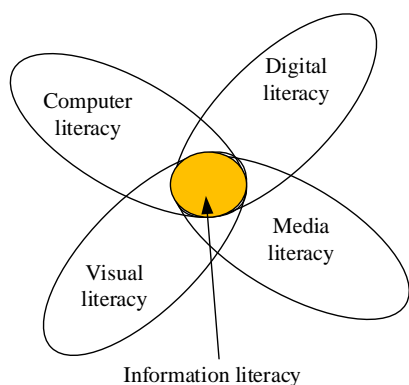


Fig. 1. Scheme of information literacy development

Thus, the information literacy development is possible only if there is digital, computer, visual and media literacy. The importance of all information literacy components has been described in the studies of many scientists and researchers (Graves et al., 2020; Gálik, 2019; 2020; Hammons, 2020; Kačínová, 2018; Petranová et al., 2017; Schmuck, Sikorski, 2020).

The following list is what exactly is involved in the development of information literacy:

- ability to analyze the information source;
- ability to determine the validity of data;
- ability to master the technologies for searching information on the Internet;
- ability to understand the purpose of searching for different information types;
- ability to work with databases and libraries;
- ability to understand the legal aspects and consequences for the dissemination of false information on the network;
- ability to be skeptical about unverified sources of information.

The COVID-19 pandemic has made significant adjustments to the development of information literacy. People who stayed at home and spent virtually all their free time surfing the Internet had to develop their own critical thinking, master new computer technologies, and acquire new digital competencies. Those who were able to cope with this task faster became less vulnerable to fake news and a large number of pseudo news. This is also emphasized by many researchers (Ahmed et al., 2021; Lutfullaev et al., 2020; Makarova et al., 2020; Sandars et al., 2020; Soldatova et al., 2020).

In this connection, according to the authors, it became expedient to conduct a study of Internet users from different age categories and social status in order to obtain information about

how information literate they are, how their information literacy level has changed during the pandemic and whether they want to spend most of their time online, reading the news or working.

4. Results

The year 2020 will be remembered for a long time not only as the year of the first global pandemic (we are talking about COVID-19), but also, in fact, the first large-scale experience in the history of mankind in the implementation of the "distant work / learning format".

It cannot be argued that the distant work format is fundamentally new - back in 2018-2019, studies conducted showed that about a third of employees employed in such areas of activity as marketing, advertising and PR, accounting and law already had such experience, and they even found certain advantages in it, including saving on transport, flexible working hours, etc. (Challenge..., 2021). However, what the domestic economy faced in 2020 was a real shock for entrepreneurship: many enterprises and their employees had to build new work schemes in just a matter of hours or days as a maximum.

Almost a year has passed since the moment when Russian citizens first encountered "distant work" mode, and it seems that the world will never be the same: people will not completely return to the old work formats and will use distant work formats, even if not to the same extent that it used to be during the pandemic outbreak, but definitely more than a couple years ago. Nevertheless, the number of news related to COVID-19 in the network does not decrease, and there are also news stories related to political changes in the world. People who are accustomed to consuming large streams of information during a pandemic are in the news stream all the time. The authors decided to clarify how much the respondents learned over the past 2020 to filter information and news coming from the network, how much time they are spending in the Internet and for what purpose, whether or not their level of information literacy has increased due to the development of digital competencies. The composition of the respondents who took part in the survey is characterized as follows (see Fig. 2, 3).

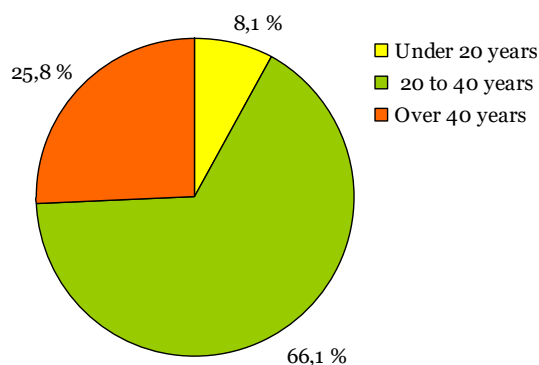


Fig. 2. Composition of respondents by age

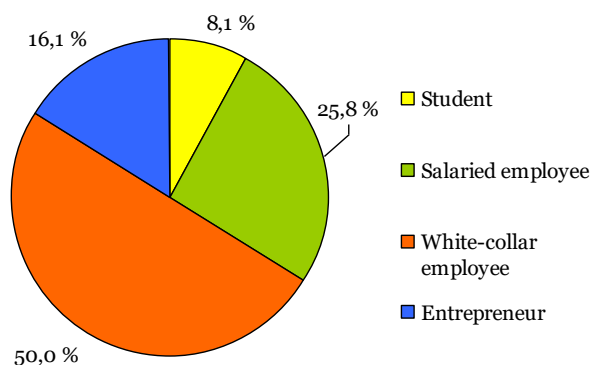


Fig. 3. Composition of respondents by social status

Based on the results of the survey, the following findings were obtained: in general, during the pandemic, most of respondents began to use various kinds of digital technologies for

communication and work to a greater extent. Also, a significant part of them are sure that after the end of the pandemic, if the use of these devices and technologies decreases, the decrease will be insignificant. At least, it will not decrease to the level of information and communication Internet technologies use in 2019 (Figure 4). This means that there is a need to increase the level of information literacy for safe work in the Internet.

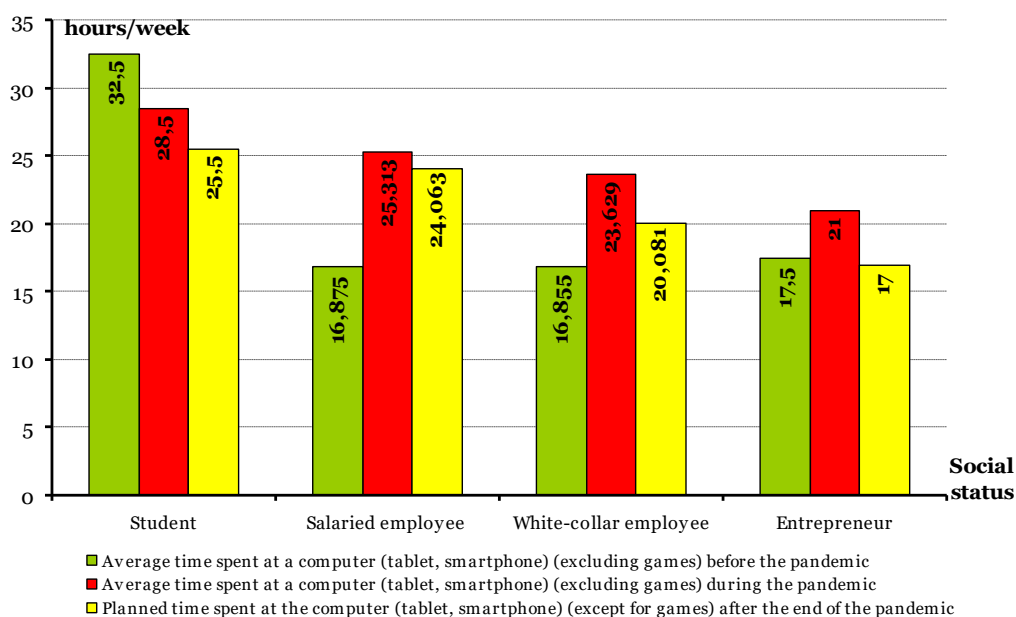


Fig. 4. Average time of respondents using information and communication Internet technologies by social groups

Obviously, during the pandemic, the use of information and communication Internet technologies increased in three out of four groups of respondents: in the category of "salaried employees" - by 50.01 %, in the category "white-collar employees" - by 40.19 %, in the category "entrepreneurs" - by 20.0 %. Moreover, for all these three groups of respondents, there is confidence that after the end of the pandemic, the use of distant work technologies will decrease, but not significantly.

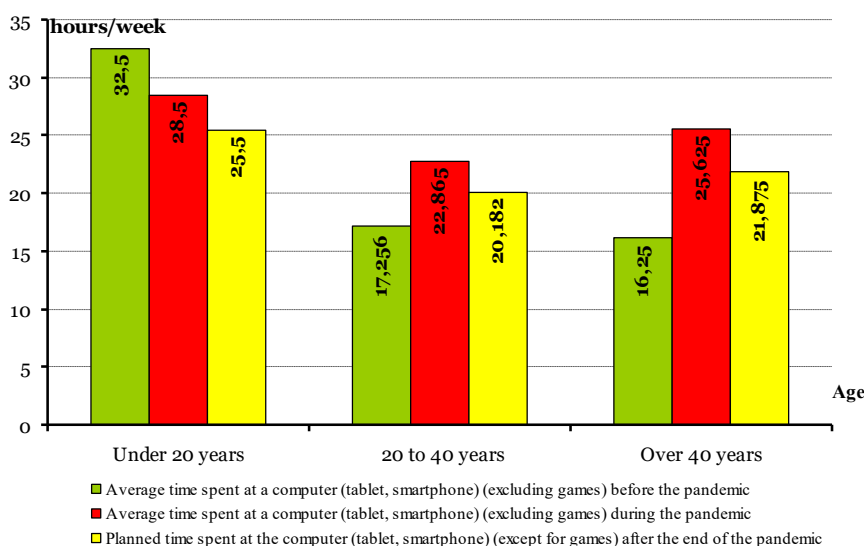


Fig. 5. Average time of respondents using information and communication Internet technologies by age

The only exception is the group of "students" – who spent more time in the Internet environment than other groups of respondents before the pandemic and who are confident that by the end of the pandemic they will graduate and are planning to start working, where it will be much more difficult to spend time "communicating in the Internet".

A similar situation is observed in the case of division of respondents by the age (Figure 5)

The negative dynamics in the group "under 20" is explained by the same factors as in the previous case: almost all respondents under the age of 20 are students.

Further an analysis was carried out of the computer programs used by the respondents in their daily life and at work. The results are shown at Figure 6.

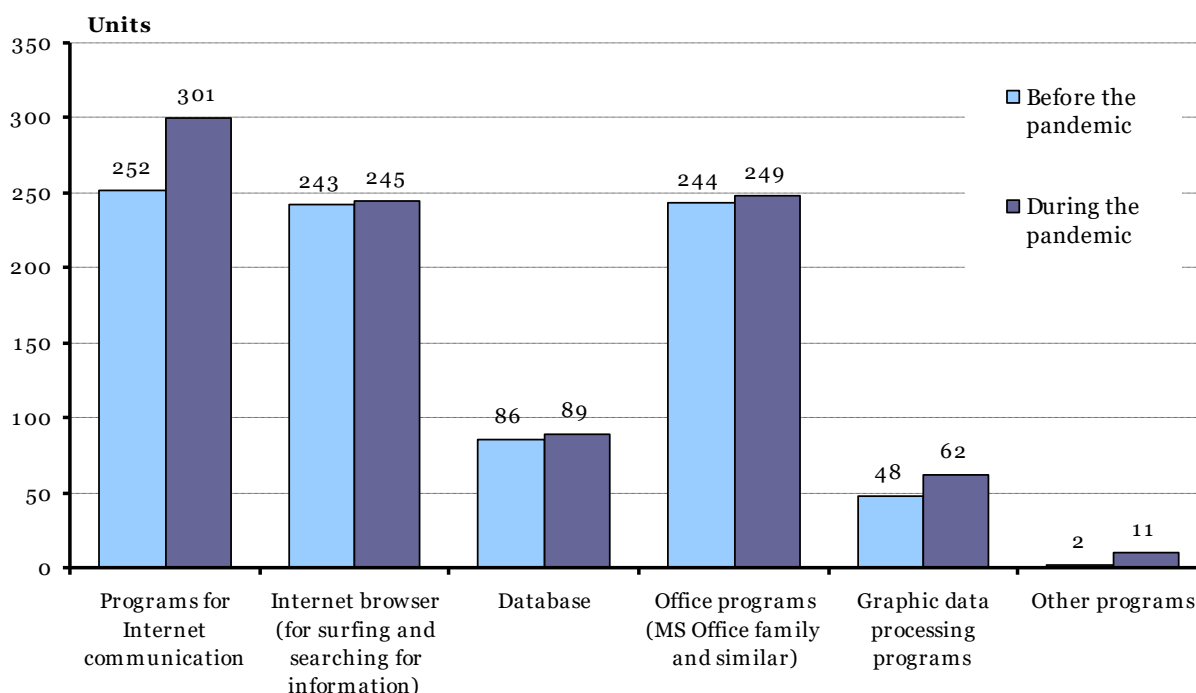


Fig. 6. Dynamics of the various kinds of programs use, before and during the COVID-19 pandemic

The analysis shows that across all categories of programs, there was an increase in use. However, the major increase (19.44 %) was observed in the category of “Programs for Internet communication”. The second most popular is the “Internet browser for information search”, which is important, it is from the browser that people get the main stream of news, which means that it is important to develop information literacy and critical thinking. Many respondents admitted that the source of information is important for them, but they found it difficult to answer how to check the level of the source reliability, and this is the first stage in the development of information literacy. It is also worth paying attention to the small percentage of using databases – people do not know how and do not want to use databases, statistical yearbooks, collections of reports, they would rather trust unverified sources with unconfirmed facts, because looking for facts on their own takes a lot of time and is difficult.

The above data, on the one hand, determine and confirm a real increase in the time people spend at work and communication through the information and communication capabilities of the Internet, and on the other hand, they show that people do not possess all the tools necessary for information literacy and the development of critical thinking, as well as software products necessary for distant work and data analysis. However, this assumption is also confirmed by the fact that a significant part of the respondents (of those who were forced to acquire new software knowledge and a new communication format in the Internet) was able to cope with this either on their own or by watching the corresponding training videos in the Internet (see Figure 7).

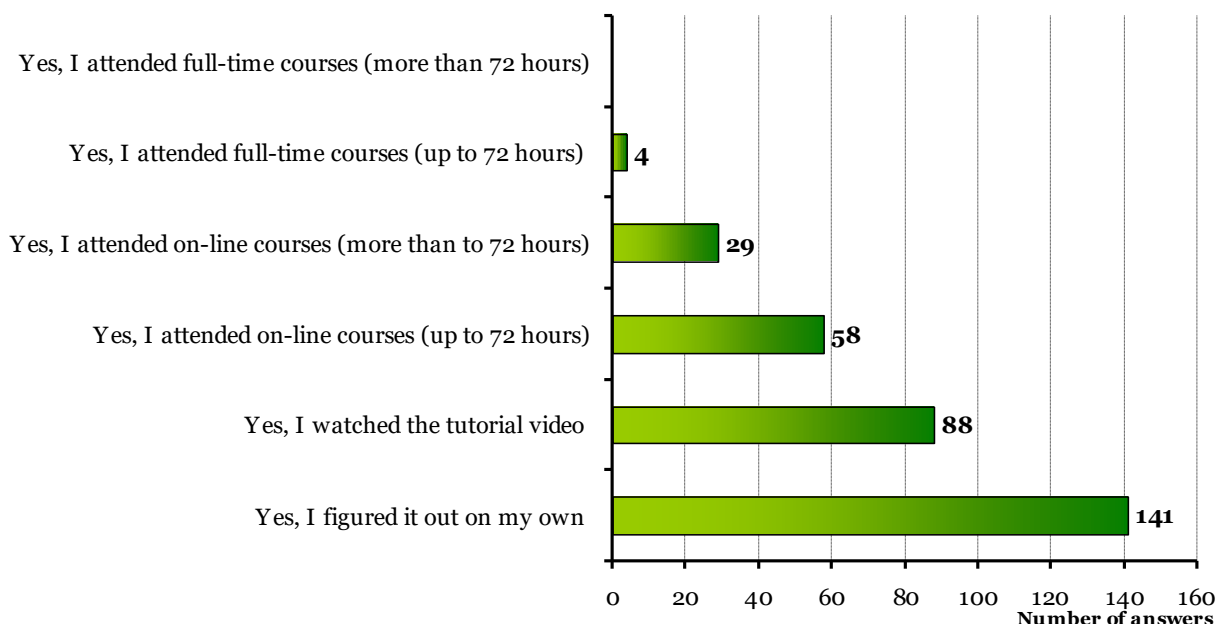


Fig. 7. Respondents' responses on how they can acquire new software and technologies knowledge during the COVID-19 pandemic (multiple choice is assumed)

It is noteworthy that about a third of the respondents (32.25 %) answered that they did not have to acquire new software products at all during the last year, and they easily switched to a distant format mode of work and/or training. Another confirmation is the fact that the absolute majority of respondents liked the distant work format (Figure 8), and there is no correlation between this answer and the respondent's age and/or status.

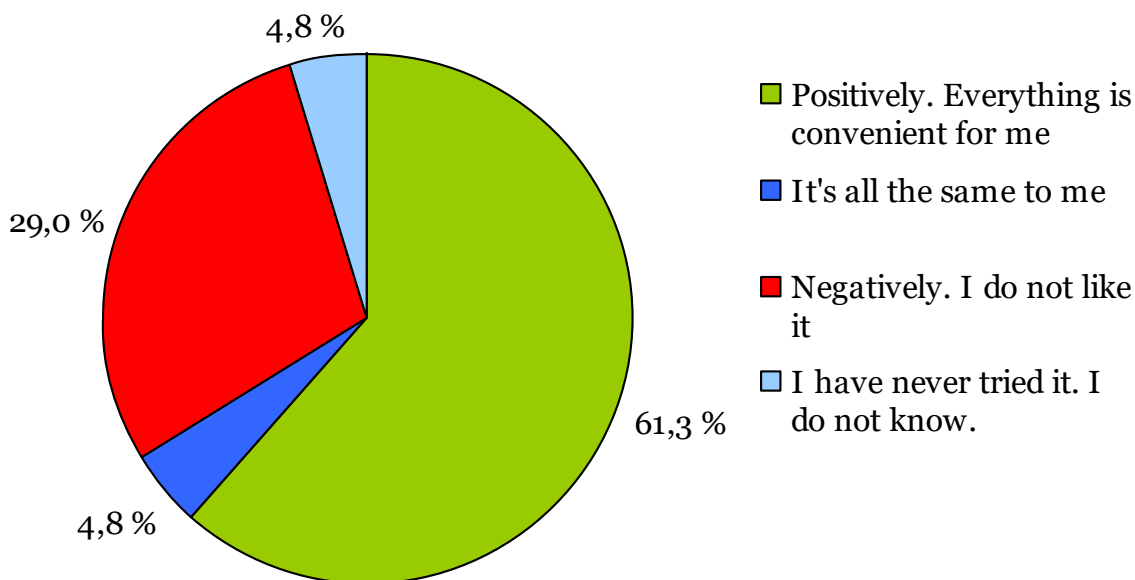


Fig. 8. Respondents' answers to the question "How do you feel about the distant format mode of work (training)?"

However, it should be noted that a fairly large part of the respondents (29.0 %) did not like the distant work format mode at all. Basically, this answer was given by people whose work cannot be transferred to a distant format (drivers, sellers, builders, etc.). Finally, it should be noted that almost 3/4 of the respondents answered that in the future they will be able to work in a distant format at least 50% of their time (moreover, a third of them are ready and can do their work 90 % or more precisely in a distant e format).

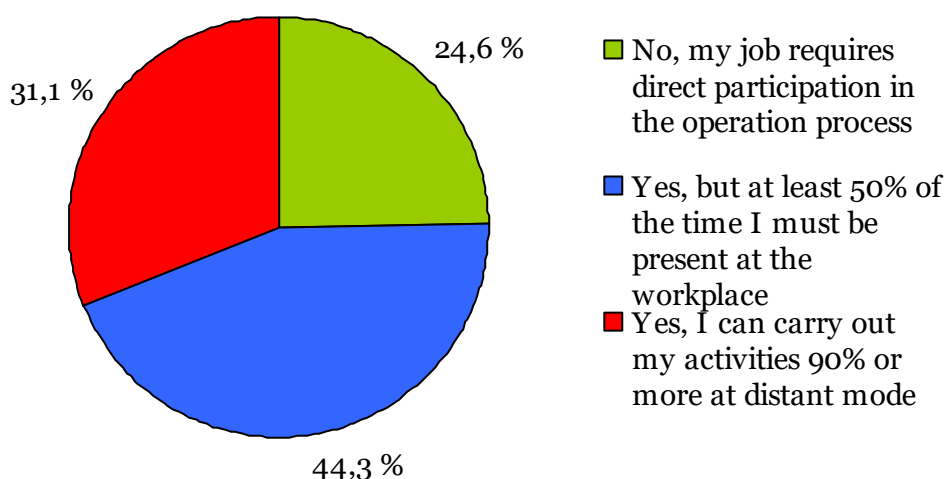


Fig. 9. Respondents' answers to the question "Can you now fully carry out your professional activity (work, study) through Internet technologies?"

The results of the research show that the population of Russia as a whole relatively easily switched to work / education through Internet technologies, and in the future, one should expect that certain professions can completely "switch to distant work". Working "distantly" has its advantages, which many researchers have written about, including the ability to control your time independently, work from anywhere in the world, save on travel costs, receive megalopolis salaries in the regions, and much more. Within the framework of this research, it is necessary to pay attention to the fact that distant work and the possibility of a massive transition to it should be accompanied by the active development of digital and information competencies among the population. The ability to evaluate the information consumed, be skeptical about the data received, be able to verify the data and work with primary sources, know the legal aspects of working with information on the Internet and understand the consequences of its false dissemination. Only having mastered these competencies can we talk about the transition to a distant format of work and study.

Currently, the Digital Certificate program is being implemented in Russia – the provision of free certificates for obtaining digital professions by residents of Russian regions, however, the list of acquired competencies is still not long enough, and the range of programs is mainly aimed at developing computer literacy. According to the authors, it is more important to develop not the ability to use office applications and the browser, but the Internet as a huge mechanism with an uncontrolled flow of information, to teach the skills of competent information search, filtering, skeptical and critical comprehension.

5. Conclusion

The 2020 pandemic showed that people are able to maintain their potential and quickly find solutions in stressful situations: most of the respondents rapidly adapted to the distant work format, figured out new applications, learned how to work outside the office, but it was far from being able to learn how to critically perceive the entire news stream. A survey carried out by the authors showed that, in general, people were comfortable working distantly (at least because they did not lose their jobs during the crisis), and over time, people have adapted to this format, and the majority even expressed a desire to continue distant work mode after all restrictions were lifted.

Nevertheless, it is necessary to make a number of recommendations that should be paid attention to, including by employers, when transferring employees to a distant location mode:

- make sure that employee knows how to use databases, libraries;
- make sure the employee knows how to search for information using search engines;
- make sure the employee is able to prove the quality and reliability of the information received;
- make sure the employee is aware of the legal aspects of the dissemination and use of information received in the Internet.

Only after making sure that a person is media literate and with developed critical thinking, we can talk about the possibilities of transferring this person to a distant work mode.

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