

## EMPLOYEES' PERCEPTION OF COVID-19 PANDEMIC'S INFLUENCE ON THE BASIC JOB DESCRIPTORS

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**Abstract** In addition to all of the severe consequences on human health, the SARS-CoV-2 virus pandemic resulted in economic repercussions. Many people have lost their jobs around the world, some have been directed to forced leave, and wages have been cut in many branches of industry. All of this created a sense of concern and sometimes panic among the workers. The goal of this study was to examine the extent of induced employee concerns as a result of the Coronavirus pandemic's detrimental influence on economic trends. One of this study's key goals was to consider if there was a statistically significant difference between the level of concern of employees who work for governmental institutions and firms and those who worked for private companies. The results of the analysis indicate that in general, the level of concern about detrimental effects of the pandemic on the job determinants is higher among employees in the private sector. In addition, seen as a whole, the level of concern of employees has not been dramatic, but it cannot be neglected and it requires further attention.

**Keywords:** COVID-19 pandemic; SARS-CoV-2 virus; employees; workers' perception; job.

### 1. INTRODUCTION

The COVID-19 pandemic has not only become a public health crisis, but has also had an economic impact on humanity. Reduced productivity, business closures, trade disruption, and the annihilation of the tourism industry have all had significant economic consequences around the world. The disease mitigation measures that have been imposed in many nations have resulted in significant income reductions, increased unemployment, and disruptions in many branches of industry, such as transportation, various services, and even in production. As a result of this situation, some workers lost their jobs during the pandemic, some were sent on vacation or unpaid leave, and some workers had their salaries reduced.

The overall situation caused by the pandemic also affected the mental sphere of workers. Given this, it is important to investigate the impact of the SARS-CoV-2 virus pandemic on workers' perceptions in connection with their concerns about employment aspects that are fundamental to them. The first research on this topic in the world was published in the first half of 2020 [1]. The research that will be presented in this paper started in June 2020. To date, we have not been able to find any more research done on this topic.

The research that will be presented below was conducted in Serbia. Serbia is a developing country, so the economy of this country experienced a pandemic in conditions of economic growth. There are a

large number of companies that opened in Serbia just before the pandemic, or whose construction began in the previous period and was completed during the pandemic period. As a result, the number of employees during the pandemic did not decrease, but even increased slightly. Certainly, some industries, such as tourism and hospitality, have suffered heavy losses due to the locking of state borders and restrictions on working hours. In order for the state to prevent the dismissal of workers in those branches of the economy, the Government of the Republic of Serbia has adopted a series of incentive measures. On several occasions during the pandemic, these branches of the economy were stimulated in various ways, including financial aid.

However, regardless of various incentives, the Serbian economy is under a heavy burden in the conditions of the pandemic. The situation is aggravated by the fact that the average salary in Serbia is lower than in EU countries. Taking all of the above into account, it is important to consider how these circumstances are projected onto workers' perceptions of their employment. It is necessary to consider the level of concern that the COVID-19 pandemic induced, when it comes to some essential job determinants. This paper aims to investigate the mentioned problem. In addition, since the characteristics related to the sustainability of employment are different in the public and private sectors, this paper aims to determine whether there are differences between employees within these sectors in the perception of the business environment and events that are imposed by the pandemic.

## 2. METHOD

A questionnaire created in [1], which was previously used for the same purpose, was used for this research. Two more questions were added at the beginning of the questionnaire. These two questions were added for the purpose of collecting important data about the sample of respondents itself. The questions are:

Q1 In the period since the appearance of the Coronavirus, I lost the job I had been doing until then

Yes No

Q2 In the period since the appearance of the Coronavirus, my income has been reduced (circle or enter the percentage of reduction)

0 10 20 30 40 50 60 70 80 90 100 % \_\_\_\_\_

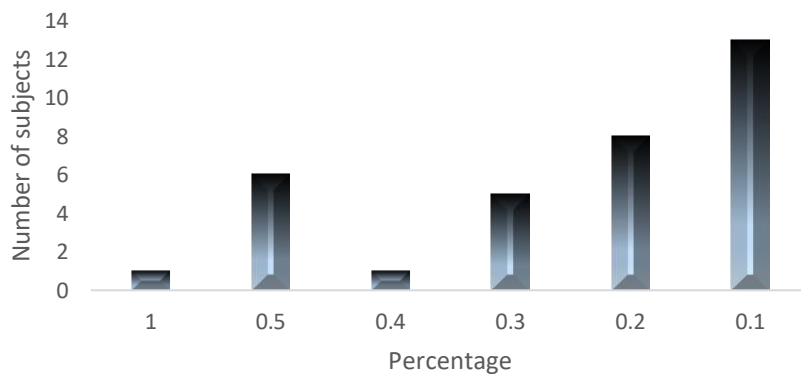
Other questions from the questionnaire used in this paper Q3 - Q9 in their original form can be found in [1]. For questions Q3 – Q9, a 5-level Likert rating scale was used (from completely disagree to completely agree).

A total of 206 employees from Serbia, 126 women and 80 men, took part in the research. The research included the following categories of employees: employees in state-owned companies, employees in companies with a majority share of the state capital, employees in privately-owned companies, employees in companies with a majority share of private capital, university students with employment, and high school students with employment. The average age of employees was 38.2 years (SD = 10.6). The sample was taken from the territory of the capital Belgrade, as well as several

towns and villages around Belgrade. The research started in Jun 2020 and lasted for several months. Respondents were selected on a random sample basis.

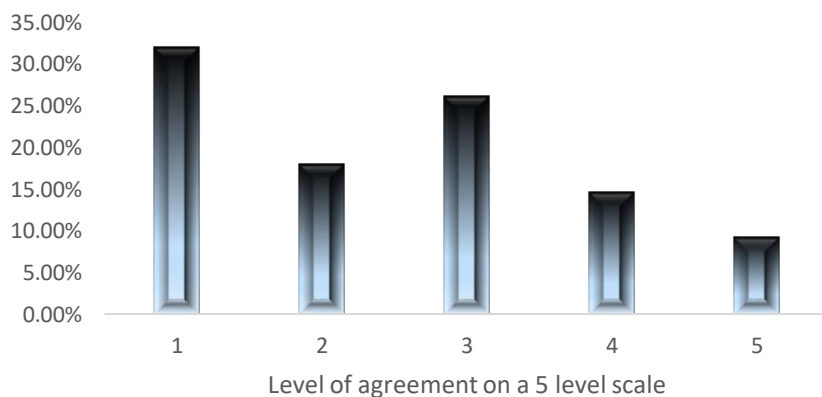
### 3. RESULTS

Respondents' answers to question Q1 showed that no person who participated in the study in the observed period in 2020 lost their job due to the outbreak of the COVID-19 pandemic. Respondents' answers to question Q2 showed that 16.5% of subjects (out of 206 respondents) had a salary reduction in the observed period. That reduction ranged from 0.1% to 1% of pre-pandemic earnings. Figure 1 shows all reported percentages of salary reductions, depending on the number of respondents who reported a reduction in monetary income in the specified percentage.

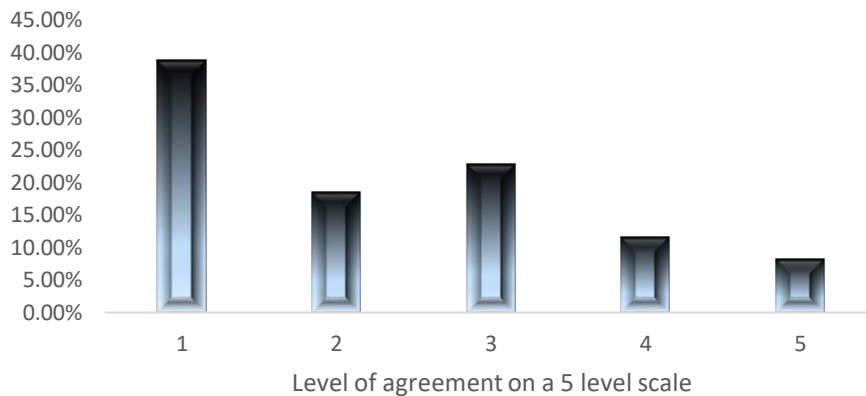


**Figure 1. Reported percentages of salary reductions in the period of the pandemic in 2020 and the number of respondents who reported that reduction in income in the examined sample.**

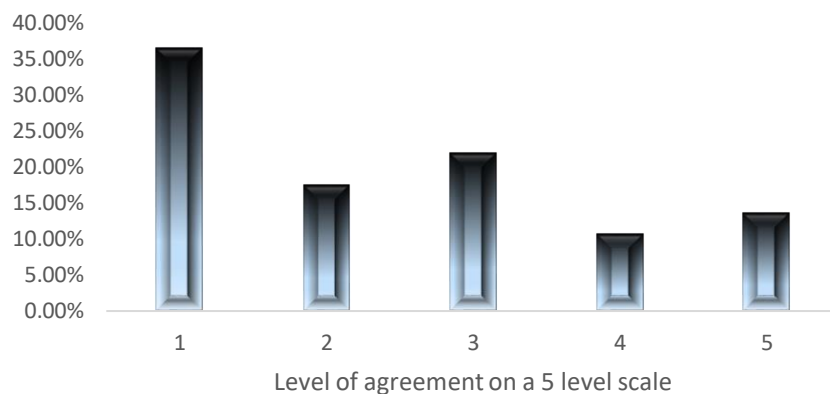
For the questions from the questionnaire Q3, Q4, Q5, Q6, Q7, Q8 and Q9, Figures 2, 3, 4, 5, 6, 7, 8, 9 and 10 show the answers of the respondents in percentage, respectively, in relation to the values that were used on the assessment scale (1 to 5). In this way, insight is gained into the level of agreement of employees with the views expressed in the questions asked. In addition, in this way, a global picture of the level of concern (fear) of employees for their business perspective in the conditions of the COVID-19 virus pandemic can be obtained in a visual form.



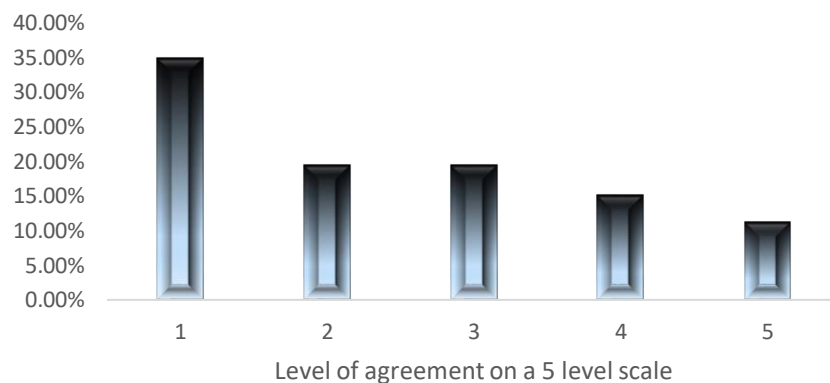
**Figure 2. Percentage of respondents' answers to the third question (Q3) from the questionnaire, where numbers 1 to 5 represent values from the scale for assessing the level of induced fear resulting from employees' belief that the pandemic could lead to job loss in a shorter or longer period.**



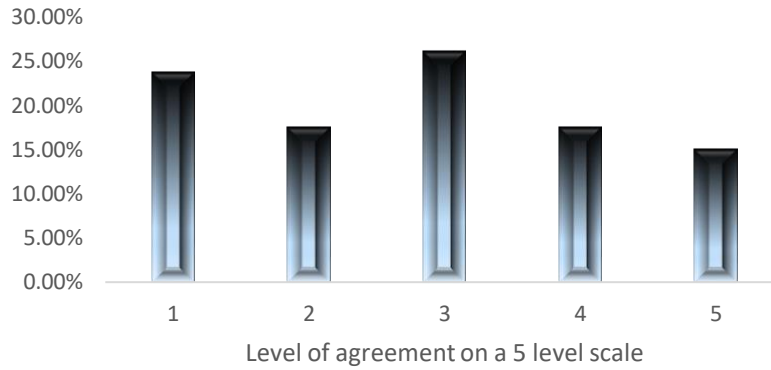
**Figure 3. Percentages of respondents' answers to the fourth question (Q4) from the questionnaire, where numbers 1 to 5 represent values from the scale for assessing the level of induced fear resulting from employees' belief that the pandemic could lead to job loss by the end of the current year.**



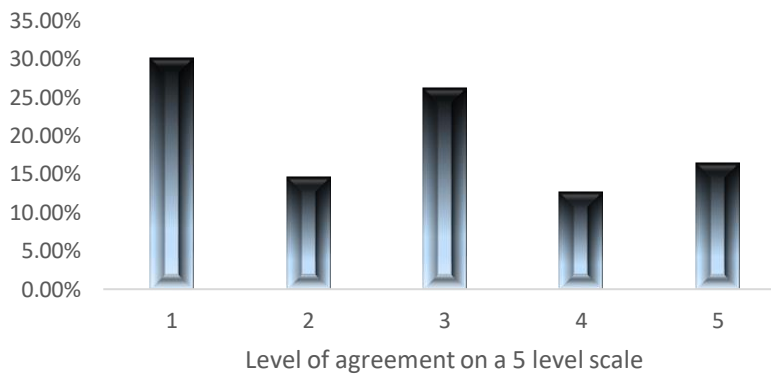
**Figure 4. Percentage of respondents' answers to the fifth question (Q5) from the questionnaire, where numbers 1 to 5 represent values from the scale for assessing the level of induced fear resulting from employees' belief that the pandemic could lead to a lack of expected job promotion.**



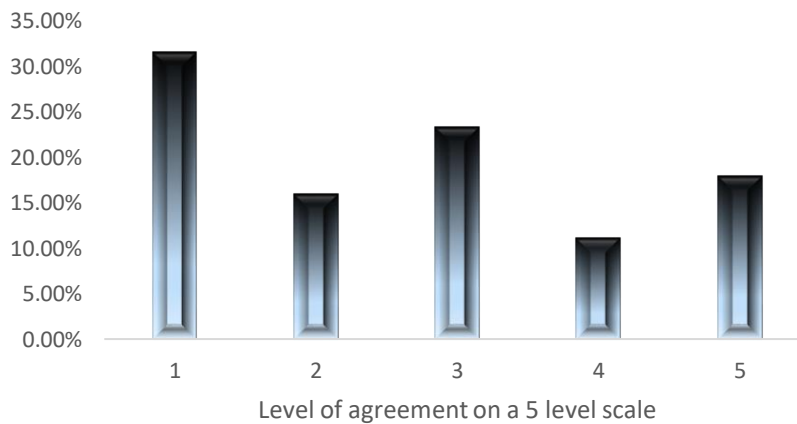
**Figure 5. Percentage of respondents' answers to the sixth question (Q6) from the questionnaire, where numbers 1 to 5 represent values from the scale for assessing the level of induced fear resulting from employees' belief that the pandemic could have a negative impact on their overall career.**



**Figure 6.** Percentage of respondents' answers to the seventh question (Q7) from the questionnaire, where numbers 1 to 5 represent values from the scale for assessing the level of induced fear resulting from employees' belief that the pandemic could lead to a reduction in their wages.



**Figure 7.** Percentage of respondents' answers to the eighth question (Q8) from the questionnaire, where numbers 1 to 5 represent values from the scale for assessing the level of induced fear resulting from employees' belief that the pandemic could have a negative impact on their work motivation.



**Figure 8.** Percentage of respondents' answers to the ninth question (Q9) from the questionnaire, where numbers 1 to 5 represent values from the scale for assessing the level of induced fear resulting from employees' belief that the pandemic could have a negative impact on the number of jobs that will be interesting to them.

## 4. ANALYSIS OF RESULTS

The main goal of the analysis is to establish whether there is a difference in the perception of the economic effects of the pandemic between persons employed in the public sector and persons employed in private companies. It is likely that these two groups are experiencing an economic crisis due to the Kovid-19 virus in different ways. On the one hand, employees in state-owned companies have greater job security, find it harder to get fired, but their salaries are usually lower for the same job and the same education than in the private sector. On the other hand, employees in private companies are more sensitive to market developments, have less job security, can be more easily directed on unpaid leave, or get fired.

As mentioned in the heading related to the description of the methodology, in the examined sample there were several categories of respondents with different characteristics in terms of employment. In order to conduct the mentioned analysis without any influences of factors that could affect the quality of the obtained conclusions, respondents who did not have a contract for an indefinite period of time were excluded from the sample for this analysis. Thus, 109 respondents who worked in state-owned companies and institutions and 60 respondents who worked in privately-owned companies were selected for this analysis. In the following, for each question from Q3 to Q9, it will be tested a hypothesis that there is a difference in the level of concern (fear) between public and private sector employees, which is a consequence of different perceptions of economic instability caused by the Coronavirus pandemic.

First, the existence of a difference in the level of induced concern regarding question Q3, which relates to the possibility of losing a job in a shorter or longer period due to a pandemic, will be tested. Since the samples were selected at random and are independent, we will use an independent t-test. The Shapiro-Wilk normality test showed that the conditions for the application of the independent t-test were not met ( $P < 0.050$ ). For this reason, the Mann-Whitney rank sum test was chosen to test the hypothesis. Yates continuity correction option applied to calculations. The test results are as follows: Mann-Whitney U Statistic= 2630.000;  $T = 5740.000$   $n(\text{small}) = 60$   $n(\text{big}) = 109$ ;  $P = 0.029$ . The difference in the median values between the two groups is greater than would be expected by chance. There is a statistically significant difference ( $P = 0.029$ ).

In the following, the difference in the level of induced concerns regarding question Q4, which relates to job loss by the end of the calendar year, will be tested. Since the samples were selected at random and are independent, we will use an independent t-test. To that end, it is necessary to first check whether the conditions for the application of this test are met. The Shapiro-Wilk normality test again showed that the conditions for the application of the independent t-test were not met ( $P < 0.050$ ). For this reason, the Mann-Whitney rank sum test was chosen to test the hypothesis. Yates continuity correction option applied to calculations. The test results are as follows: Mann-Whitney U Statistic = 2430.500;  $T = 5939.500$   $n(\text{small}) = 60$   $n(\text{big}) = 109$ ;  $P = 0.004$ . The difference in the median values between the two groups is greater than would be expected by chance. There is a statistically significant difference ( $P = 0.004$ ).

The difference in the level of induced concerns regarding question Q5, which relates to the lack of expected job promotion due to the pandemic, will now be tested. Since the samples were selected at



random and are independent, we will use an independent t-test. The Shapiro-Wilk normality test again showed that the conditions for the application of the independent t-test were not met ( $P < 0.050$ ). For this reason, the Mann-Whitney rank sum test was chosen to test the hypothesis. Yates continuity correction option applied to calculations. The test results are as follows: Mann-Whitney U Statistic = 2932.000;  $T = 5438.000$   $n(\text{small}) = 60$   $n(\text{big}) = 109$ ;  $P = 0.247$ . The difference in the median values between the two groups is not great enough to exclude the possibility that the difference is due to random sampling variability. There is not a statistically significant difference ( $P = 0.247$ ).

The existence of a difference in the level of induced concern regarding question Q6, which relates to the possibility of a pandemic negatively affecting the entire career, will now be tested. Since the samples were selected at random and are independent, we will use an independent t-test. The Shapiro-Wilk normality test again showed that the conditions for the application of the independent t-test were not met ( $P < 0.050$ ). For this reason, the Mann-Whitney rank sum test was chosen to test the hypothesis. Yates continuity correction option applied to calculations. The test results are as follows: Mann-Whitney U Statistic = 2678.500;  $T = 5691.500$   $n(\text{small}) = 60$   $n(\text{big}) = 109$ ;  $P = 0.043$ . The difference in the median values between the two groups is greater than would be expected by chance. There is a statistically significant difference ( $P = 0.043$ ).

The existence of a difference in the level of induced concern regarding question Q7, which relates to the possibility of wage cuts during the pandemic, will now be tested. Since the samples were selected at random and are independent, we will use an independent t-test. The Shapiro-Wilk normality test again showed that the conditions for the application of the independent t-test were not met ( $P < 0.050$ ). For this reason, the Mann-Whitney rank sum test was chosen to test the hypothesis. Yates continuity correction option applied to calculations. The test results are as follows: Mann-Whitney U Statistic = 2564.000;  $T = 5806.000$   $n(\text{small}) = 60$   $n(\text{big}) = 109$ ;  $P = 0.017$ . The difference in the median values between the two groups is greater than would be expected by chance. There is a statistically significant difference ( $P = 0.017$ ).

The existence of a difference in the level of induced concern regarding question Q8, which relates to the negative impact of the pandemic on work motivation, will now be tested. Since the samples were selected at random and are independent, we will use an independent t-test. The Shapiro-Wilk normality test again showed that the conditions for the application of the independent t-test were not met ( $P < 0.050$ ). For this reason, the Mann-Whitney rank sum test was chosen to test the hypothesis. Yates continuity correction option applied to calculations. The test results are as follows: Mann-Whitney U Statistic = 2945.500;  $T = 5424.500$   $n(\text{small}) = 60$   $n(\text{big}) = 109$ ;  $P = 0.271$ . The difference in the median values between the two groups is not great enough to exclude the possibility that the difference is due to random sampling variability. There is not a statistically significant difference ( $P = 0.271$ ).

The existence of a difference in the level of induced concern regarding question Q9, which relates to the impact of the pandemic on the number of job vacancies that may be of interest, will now be tested. Since the samples were selected at random and are independent, we will use an independent t-test. The Shapiro-Wilk normality test again showed that the conditions for the application of the independent t-test were not met ( $P < 0.050$ ). For this reason, the Mann-Whitney rank sum test was chosen to test the hypothesis. Yates continuity correction option applied to calculations. The test

results are as follows: Mann-Whitney U Statistic = 2987.000; T = 5383.000 n(small) = 60 n(big) = 109; P = 0.337. The difference in the median values between the two groups is not great enough to exclude the possibility that the difference is due to random sampling variability. There is not a statistically significant difference (P = 0.337).

## 5. CONCLUSION

The pandemic of the SARS-CoV-2 virus, in addition to all the negative effects on human health, also caused changes in the economic sphere. Many workers around the world have lost their jobs, some have been sent on forced leave, with wages reduced in many economic sectors. All this caused the appearance of concern and fear among the employees. This paper aimed to determine the level of induced employee concerns due to the negative impact of the Coronavirus pandemic on economic trends. For this purpose, a questionnaire based on the questionnaire used in the paper [1] was used, which was the first in the world to consider this issue. Additional questions Q1 and Q2 from the questionnaire used in this study were used to gather information on whether the respondent lost his job during a pandemic period and whether his salary was reduced. By the way, to our knowledge, this is the second research in the world that has been realized on this topic.

Each question from the questionnaire tested the induced level of concern caused by some event in the economic or business sphere. In relation to the average values of the level of induced concern (fear) that were obtained on the basis of a survey conducted among 206 employees in Serbia, the results showed the following order: Q4 (av = 2.32; SD = 1.31), Q5 (av = 2.47; SD = 1.42), Q6 (av = 2.48; SD = 1.38), Q3 (av = 2.51; SD = 1.32), Q9 (av = 2.68; SD = 1.46), Q8 (av = 2.71; SD = 1.43), Q7 (av = 2.82; SD = 1.37). This means that the respondents were the least worried that they would lose their jobs in a shorter time interval (until the end of the calendar year), while they were most worried that the pandemic could have a negative impact on the reduction of salaries.

One of the main objectives of this study was to determine the existence of a statistically significant difference between the responses of respondents employed in state institutions and firms, and private companies. Differences in the level of induced employee concern for all questions from Q3 to Q9 were tested. The test results indicated that there is no statistically significant difference for questions Q5, Q8 and Q9, which means that public and private sector employees are equally concerned about the problems contained in these questions. On the other hand, the analysis showed that there is a statistically significant difference in the answers to questions Q3, Q4, Q6 and Q7. This means that employees in the private sector are more concerned about losing their jobs in a shorter or longer period of time (av = 2.63; SD = 1.24) than employees in the public sector (av = 2.20; SD = 1.26). Also, employees in the private sector are more worried about losing their jobs by the end of the calendar year (av = 2.48; SD = 1.20) than employees in the public sector (av = 1.99; SD = 1.30). In addition, private sector employees are more concerned that the pandemic will have a negative impact on their entire careers (av = 2.58; SD = 1.38) than public sector employees (av = 2.15; SD = 1.26). In addition, employees in the private sector are more concerned that during the pandemic will be a reduction in their salary (av = 3.11; SD = 1.50) than employees in the public sector (av = 2.53; SD = 1.23). The data obtained indicate that employees perceive the economic events caused by the pandemic as a factor that can have a significant impact on their material status and business career.



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