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Impact of the COVID-19 Pandemic on the Romanian Labor Market

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Abstract: The present research aims to establish the impact that the current crisis situation the planet is facing, namely the COVID-19 pandemic, has had so far on the Romanian labor force market. In this context, given the lack of information and information regarding this pandemic and its effects, the administration of a questionnaire among the population was considered to identify the research results. The method of semantic differential and the method of ordering the ranks were used for the interpretation of the results. With the help of this questionnaire, it will be possible to answer the question of the research in this study: What are the main effects of the COVID-19 pandemic on the Romanian labor market? The main results showed that the COVID-19 pandemic affected the Romanian workforce; the respondents of the applied questionnaire claimed that they obtained better results and maintained a similar income, but the health crisis also influenced the mentality of employees, with respondents stating that in the event of changing jobs, they would consider it very important for the new employer to ensure the conditions for preventing and combating COVID-19, as well as complex health insurance. However, analyzing at the macroeconomic level, it was found that the COVID-19 pandemic induced an increase in the number of unemployed people in the Romanian labor market.

Keywords: labor market; COVID-19 pandemic; Romanian labor market

Citation: Radulescu, C.V.; Ladaru, G.-R.; Burlacu, S.; Constantin, F.; Ioanăș, C.; Petre, I.L. Impact of the COVID-19 Pandemic on the Romanian Labor Market. *Sustainability* **2021**, *13*, 271. https://doi.org/10.3390/su13010271

Received: 26 November 2020
Accepted: 24 December 2020
Published: 30 December 2020

1. Introduction

For almost a year since the onset of the COVID-19 pandemic (12 December 2019) in downtown Wuhan, China, it has spread and now affects all states of the world. The World Health Organization said the coronavirus outbreak became a pandemic three months after its onset on 11 March 2020 [1]. The effects of the COVID-19 pandemic around the world were not as severe from a health point of view as it had been predicted at the beginning, but they were severe from an economic point of view. The limitation of the health effects can also be explained by the radical economic measures applied by the governments of the countries to eradicate this pandemic. The importance of studying the effects of the pandemic on the labor market lies precisely in these imposed measures, with a major impact especially in developing countries, where the effects of economic crises are felt more strongly and over a longer period of time. This paper fills the gap by bringing new empirical evidences on the impact of the COVID-19 pandemic upon a developing country, using survey analysis. Romania's case is discussed as an example of how government measures influence the labor market.

It is generally appreciated that, depending on the extent to which differences and stratifications of labor market integration are explained, with respect to a particular country as well as the level of integration of neighboring localities, it describes how successful policies and strategies are successful [2].

We consider that Romania is a special country for the subject of the labor market, both from the perspective of migration and the discrepancies between salaries in various sectors of activity, so it is worth conducting an in-depth analysis. In Romania, there are divided opinions among the population regarding the measures taken by the government during the pandemic, some agreeing with them and others opposing.

There are two main aspects regarding the labor market in Romania, but also outside it, which people support, namely: Romania is the country with the most emigrants in the European Union, with over 3 million Romanians living in the 27 member countries in 2019, and on the other hand, contrary to this statistical record, the unemployment rate in Romania was lower and lower, reaching 2.9%, before the health crisis.

Before the health crisis, in Romania, given the decrease of the population registered in this country, which directly contributes to the decrease of the labor resource, as well as to its aging, there was the problem of insufficient labor in the national economies, and of these, agriculture was the most affected, with farmers complaining about the lack of labor.

The Romanian College of Physicians shows that in Romania, the COVID-19 epidemic evolved in the context of the epidemic in Western Europe, having common aspects, but also some peculiarities. At time of the appearance of the first case in Romania, there were already cases of COVID-19 in Western Europe: Italy (323 cases), France (14 cases), Germany (18 cases), Great Britain (13 cases), Spain (7 cases). During that period, hundreds of thousands of Romanians began to return to the country from areas where the epidemic was ongoing. Some of them were infected with SARS-CoV-2. Between 26 February 2020–18 March 2020, out of the 261 cases diagnosed in Romania, 127 (49%) were import cases: from Italy (66%), France, Germany and Spain (5%), Great Britain, Austria (by 4%) and 130 (49.1%) direct or indirect contacts of import cases. The percentage decreased gradually, reaching 13% at the end of March.

The introduction of the state of emergency on 15 March 2020 contributed greatly to limiting the spread of SARS-Cov-2 infection among the population. However, this effect was achieved with a series of drastic restrictions on the labor market. Thus, economic analysts claim that large companies, employees and employers have been severely affected by the global coronavirus pandemic. They claim that according to the National Institute of Statistics, the hourly cost of labor in the second quarter of this year recorded a growth rate of 11.47% compared to the previous quarter and 16.11% compared to the same quarter of the previous year, mainly determined by the interruption of the activity in the context of COVID-19.

2. Literature Review

In Romania, there are increasingly difficult problems for the new generation in finding their profession or trade and, implicitly, a job. These problems come against the background of some professions in dynamics, their appearance, the disappearance of those outdated by modern technology, as well as the concentration of some professions, in the current conditions on this market. The phenomenon of migration as well as the decrease of the population, mentioned in the introduction are also confirmed by specialized studies where it is stated that both the employed population and the active population are influenced by the decreasing labor resource.

Between 2012 and 2016, the active population decreased yearly [3], which once again strengthens the prepandemic labor market problem.

We agree that the great historical pandemics of the last millennium have usually been associated with the subsequent low return on assets [4–7]. Studies regarding other pandemics have been conducted. For example, the HIV/AIDS pandemic argues that such a global crisis decreases labor demand through three effects: declines in overall growth,

sharp declines in sectors that provide investment goods, in particular the construction and equipment sectors, and the effects of disease-induced morbidity on unskilled and semi-skilled workers who tend to reduce production relatively more in sectors that use intensive unskilled and semi-skilled labor, with other negative employment implications for work [8]. However, there are authors who consider that through the COVID-19 pandemic, we are facing a common economic and health crisis of unprecedented proportions in recent history [9]. Regarding women's labor force participation, there are studies that conclude that it tends to increase with economic development (although the relationship is not direct or coherent at the country level) so that in the case of recessions, women's involvement could decrease [10–12].

Perhaps one of the major challenges in the labor market during the COVID-19 pandemic is putting health professionals around the world in an unprecedented situation [7], having to make impossible decisions and work under extreme pressure [13], decisions that often consider allocating limited resources, balancing their own needs (including physical and mental health) [14] that can lead in some situations to mental health degeneration [15].

A major impact on the formation of the labor market is the differentiation of the level of labor productivity with a direct impact on wages. The motivation of workers from different sectors of the economy can determine the orientation toward more prestigious and better paid industries. However, increasing labor productivity, mechanization, automation and digitization of the economy were considered factors that contribute to the reduction of labor. The COVID-19 pandemic paradoxically leads to the accentuation of these factors, being able to be a source of economic recovery [16].

Another area strongly affected by the COVID-19 pandemic is education. Specialist studies show that higher levels of education can at least partially compensate for the negative effects of economic crises [17].

Studies conducted immediately after the onset of the COVID-19 pandemic presented preliminary indicators with catastrophic declines in employment [18]. Surveys provided further evidence of declining employment and indicated a 20 million drop in the number of employed workers. The same studies showed that, surprisingly, there was a much less proportional increase in unemployment, which could indicate that most of these new unemployed workers are not looking for a new job [19,20]. However, the wave of early retirements they have documented suggested that permanent changes may already be taking place [21].

Regarding the long-term economic consequences of pandemics, some studies show that capital is destroyed in wars, but not in pandemics [22]; pandemics can, in turn, induce a relative labor shortage and/or a shift to greater precautionary savings [23], although this would lead to the idea that these consequences are consistent with the neoclassical growth model [7].

Moreover, researchers agree that traditional statistical models for measuring unemployment are no longer useful during pandemics where rates are evolving rapidly [24], within weeks and not in the order of months [25]. Tracking the effects of the COVID-19 pandemic on the labor market with weekly payroll series based on microdata (data available in real time) allowed tracking of both aggregate and industry effects [26]. Data on the US economy show that the cumulative job losses paid by April 4 are estimated at 18 million, and for the two weeks between March 14 and 28, about 13 million paid jobs were lost [27].

Of course, measuring the impact of the pandemic on the labor market must be done in the context of assessing the economic impact of "social distancing" measures taken to stop the spread of COVID-19, which raises a fundamental question about the modern economy, namely: "How many jobs can be fulfilled at home?". Those who tried to answer this question found that 37 percent of jobs in the United States can be done entirely at home, with significant variations between cities and industries, and these jobs are usually paid more than those that cannot be done from home and accounts for 46% of all US wages. The same study shows that the application of professional classification in 85 other

countries has led to the conclusion that lower-income economies have a lower share of jobs that can be done at home. [28].

With initial massive job losses caused by the economic response to the COVID-19 virus, it is estimated that the official US unemployment rate is likely to rise in the coming months [23]. The estimates are based on an analytical approach that combines the historical dynamics of the labor market with assessments of the scale of initial job losses and potential employment behavior as the economy adapts to the virus shock [29]. It is also estimated that the unemployment rate is likely to exceed by a substantial margin, higher than in any other recession (even after World War II), and will remain fairly high next year [30].

The health crisis has an impact on sociodemographic changes (gender, age, level of education, household size or marital status) as well as on the economic cycle that affects the likelihood of employment in the labor market [31].

Regarding the impact of the COVID-19 pandemic on the relationship between the organization and employees, some studies have found that perceived organizational support can moderate the relationship between exposure and stress. Thus, it was found that the relationship was weaker when the organizational support was perceived as high and, conversely, the relationship was stronger when the perceived organizational support is at a low level [32].

Embracing the idea that the COVID-19 pandemic has a profound impact on labor markets around the world [33], the authors of some papers analyze the heterogeneous impacts observed in the early stages of the pandemic in different occupations and workers using the latest available labor force survey data from Current Population Survey, the main source of labor statistics for the United States. These show that the early stages of the pandemic had a disproportionately negative impact on employment and hours in lower paid occupations, the only notable exception being caretakers and building cleaners, for whom employment increased sharply between mid-February and mid-March 2020. An important research finding shows that in the US, workers who were employed in lower-paid jobs in mid-February 2020 became, in less than two months, disproportionately fewer in employment, compared to workers employed in higher paid occupations [34].

Studies of an economy's response to an unexpected epidemic have shown that households reduce the spread of the disease by reducing consumption, reducing working hours and focusing on working from home. Recent research shows that working from home is subject to learning by doing doubled by a capacity of the limited health system [35].

An important finding in the labor market analysis during the COVID-19 pandemic is that if in the recent US recessions, job losses were much higher for men than for women, in the current recession the opposite is true: unemployment is higher among women [36]. The causes and consequences of this phenomenon are that women have experienced increased job losses both due to the fact that employment is concentrated in severely affected sectors, such as restaurants, and due to the increased need for childcare, caused by the closure of schools and kindergartens, which prevented many women from being able to work [37].

Gender inequality in the labor market during the pandemic is also revealed by a study conducted in Israel. Research shows that the coronavirus epidemic has not leveled gender inequality but, on the contrary, the consequences of the economic recession after coronavirus affect women much more severely than men, more women have lost jobs than men, which has led to a significant increase in income disparities between women and men. As a result, the economic downturn during the COVID-19 pandemic negatively affected women's attachment to the labor market compared to men, both in terms of overall employment and working time.

Another important finding is that these negative effects on the economic situation of women were more evident among the youngest employees and the severity of the crisis on this age group is also reflected in their extremely pessimistic prospects for the future. Surprisingly, however, men and women in this age group are just as pessimistic. One possible explanation would be that this view is subjective and quite naive of women's

economic prospects, probably because this is the first economic crisis they have experienced. Israeli researchers argue this conclusion by saying that older women in the cohorts, who experienced some economic slowdowns, such as after each major war or after the 2000 crisis and the 2008 financial crisis, are more realistic and understand that their prospects they are not and cannot be equal to those of men [38].

We agree with those who believe that the COVID-19 pandemic has an unprecedented impact on societies around the world because as governments impose practices of social distancing and urge nonessential businesses to close to slow the spread of the outbreak, a major uncertainty about to the effect that these measures will have on life and livelihood is born.

Research conducted during this period finds that demand for specific sectors, such as healthcare, is growing in recent weeks, while for other sectors such as air transport and tourism the demand for their services is evaporating.

The researchers aimed to provide quantitative forecasts for the US economy of supply and demand shocks associated with the COVID-19 pandemic. To characterize supply shocks, they developed a telework index to estimate the extent to which workers can carry out activities associated with their occupation at home and identified which industries are classified as essential versus non-essential [29]. They also reported plausible estimates of demand shocks in an attempt to recognize that some industries will have an immediate reduction in production both due to a lack of demand and especially due to the inability to work. However, they emphasize that their works are predictions and not measurements. Their estimate is that the aggregate first-order shock to the economy represents a reduction of about a quarter of the economy [39].

Some researchers looked at the initial impact of the 2019 coronavirus pandemic (COVID-19) on the Canadian labor market. They focused on changes in employment and aggregate hours worked between February 2020 and April 2020, taking into account the normal monthly changes in these indicators, and found that COVID-19 induced a 32% decrease in working hours, cumulative weekly work among workers aged between 20 and 64, along with a 15% drop in employment. They characterized the distribution of lost work, considering that almost half of job losses are attributed to workers in the lower earnings quartile and found that those most affected by COVID-19 are in public jobs in the industries most affected by shutdowns, such as those in accommodation and food services, younger workers, those paid by the hour or those who are not affiliated with a trade union [33].

Of course, what is happening in some countries like the USA, Israel or Canada can be identified worldwide so that an extrapolation of the situation and the consequences would be possible. However, we are grateful to the researchers who analyzed the issue of the COVID-19 pandemic globally. A recently published study looked at the role of global supply chains in the impact of the COVID-19 pandemic on GDP growth for 64 countries. The researchers segmented the shock of labor supply between sectors and countries using the fraction of work in the sector that can be done from home in interaction with the strictness with which countries have imposed certain quarantine and isolation measures. Their research showed that the average real GDP recession due to the COVID-19 shock was expected to be −29.6%, with a quarter of the total due to transmission through global supply chains.

However, they argued that the "renationalization" of global supply chains does not make countries generally more resilient to the contractions caused by the labor pandemic and the average decline in GDP would have been −30.2% in a world without trade with inputs and final goods. This would be due to the fact that eliminating dependence on foreign inflows would increase dependence on domestic inflows, which are also disrupted due to national blockades, and in fact trade could isolate a country that imposes a strict blockade of pandemic shock, because its external entrances are less disturbed than the internal ones. Their conclusion is that unilateral lifting of bottlenecks in the largest economies can contribute up to 2.5% to GDP growth in some of their smaller trading partners [40].

At the time of writing, the pandemic is in full swing. The most optimistic estimates consider that it will last until the spring of 2021 if the vaccine is administered in winter 2020. Studies on the impact of the duration of unemployment benefits on the motivation to look for new jobs for re-employment have been made since 2008, during the economic crisis. The researchers examined an unexpected reform of the German unemployment insurance system in 2008, which increased the potential duration of the benefit from 12 to 15 months for benefit recipients aged between 50 and 54 years. They concluded from their analysis that any benefit will reduce the motivation for early employment. For example, a one-month increase in sleep duration will reduce the demand for early employment by about 10% [41].

Another paradigm of the pandemic situation given by the government policy is given by the workers within the home delivery services. These services are considered essential and their workers move freely, while many jobs have been lost and the population is advised to stay at home. Pandemic labor research is still trying to identify the factors that determine that in times of crisis the rules cannot be applied equally to everyone [42]. Preliminary conclusions would be that employment or economic security does not determine the immunity of human beings. Exposure to health or other risks is determined by economic causes and the specifics of the job. We agree that the complexity and scale of the COVID-19 pandemic have created turbulence in the fields of modern human existence with health, the economy and social life as reference pillars.

Although some studies claim that the actions taken by some countries seem to have largely succeeded in reducing the health impact of COVID-19 and have allowed a return to normal economic activities much earlier than in neighboring countries, the same studies conclude that the implications of certain economic policies cannot yet be fully evaluated. Moreover, these policies may prove to have negative effects in the future [43]. A finding made during this period by some researchers is that in the states with higher jobs in the industries most affected by the virus and which have a higher share of workers who earn less than the weekly amount of unemployment benefit recorded new higher unemployment insurance claims. An unsurprising suspicion was confirmed. Moreover, the same research has provided mixed evidence that unemployment benefits affect the number of unemployment claims. Surprisingly, it could be that they found no evidence that the ability to work at home should alleviated unemployment rates increased during this period [44].

According to studies published by the European Commission [44], on the labor market in the European Union, there were three main directions analyzed:

1. The impact of COVID-19 measures on the labor market is expected to be greater in some Member States in Southern Europe and Ireland, as these are the areas where the share of tightly closed sectors is higher.

2. The impact was likely to focus on the most vulnerable segments of the active population. These segments are represented by workers with lower wages and poorer employment conditions, as well as women and young workers.

3. Previous experience could support the current large-scale transition to telework.

Taking the relevant information from national decrees and additional information on the possibility of working remotely, the European Commission has constructed five categories of sectors according to the likely impact of isolation measures:

(1) essential and fully active sectors;
(2) active, but through teleworking;
(3) mostly essential and partially active, cannot be teleworked;
(4) mostly non-essential and inactive, not workable and
(5) closed.

The findings of studies published by the European Commission show that the worst effects of pandemic measures are often focused on the most vulnerable and disadvantaged workers. It is noted that the European Commission admits that sectors tightly closed by decrees (i.e., hospitality, personal services, leisure activities, etc.) are, in most EU countries,

characterized by low wages, poor working conditions and a tendency to increase the concentration of women and young workers.

The impact of the COVID-19 pandemic on the economy in Romania was studied in the literature, determining that the most affected area in Romania will be foreign trade, and among the affected macroeconomic indicators that are mentioned public debt, budget deficit, investments and unemployment are the major ones [45].

Based on these studies, the hypothesis of this research can be created, namely the one in which it is considered that the impact of the health crisis on the labor market will be direct, both socially and economically, with changes in behavior and the choices of the employed population, as well as increases among the unemployed.

3. Methodology

The present research aims to establish the impact that the current crisis situation facing the planet, namely the COVID-19 pandemic, has on the Romanian labor force market. In this context, given the lack of information and information regarding this pandemic and its effects, the administration of a questionnaire among the population was considered to identify the research results.

The questionnaire was composed of 18 questions, 5 of which were socioprofessional. Among the main objectives of the questions are: identifying the current status and professional field; determining the main way of carrying out the professional activity during the COVID pandemic; identifying the degree to which the position is suitable for the employment regime; identification of the main challenges, but also of the benefits related to the development of the activity during this period; determining the impact of the pandemic on respondents' incomes; identifying the optimal variant, from the respondent's perspective, on the program for carrying out professional activities in the future and identifying changes in the behavior of the population when occupying a new job.

Regarding the sampling method, the "snowball" method was used, and the sample size as well as the confidence factor were determined based on the Taro Yamane method [46–48], by the following calculation method:

$$n = \frac{N}{(1 + N \times e^2)}, \text{ where :} \quad (1)$$

n—sample size; N—total population (the population over 16 years old in Romania); e—accepted error.

Regarding the legal age for work, according to Romanian legislation, this is 16 years old, so, according to statistics, the population of Romania that meets this criterion is about 16.1 million people, and this value was considered as "*N*". It was desired to reach an error (e) of 4%, and for this volume of the population, this would have meant a sample of 600 people. However, only 548 people responded to the research conducted in this study, which increases the error slightly to 4.2%, but still within the 95% confidence level, so it can be seen that the sample is representative of the active population of Romania.

In order to confirm or refute the aforementioned hypothesis, descriptive analysis was used by means of descriptive statistics. The questionnaire was made in electronic format, on the Google platform, and the distribution and completion method was also electronic.

In the interpretation of the results, the method of semantic differential and the method of ordering the ranks were used. With the help of this questionnaire, it will be possible to answer the question of the research in this study: What are the main effects of the COVID-19 pandemic on the Romanian labor market?

The following variables were considered for this research, as independent: age, sex, income, level of education, field of activity, and the dependent variables were those related to the opinions, preferences and opinions of the active population.

4. Findings

The questionnaire was completed by a number of 548 respondents, and compared to the population of Romania in 2020, aged over 15 years (17,592,625), it can be established that the confidence interval is lower than the maximum accepted threshold of 5% (4.19%), at a 95% confidence level. Thus, it can be appreciated that this sample is representative, compared to the potential level of the workforce.

Regarding the sociodemographic component of the questionnaire and the structure of the sample, the main classifications can be seen in Figure 1.

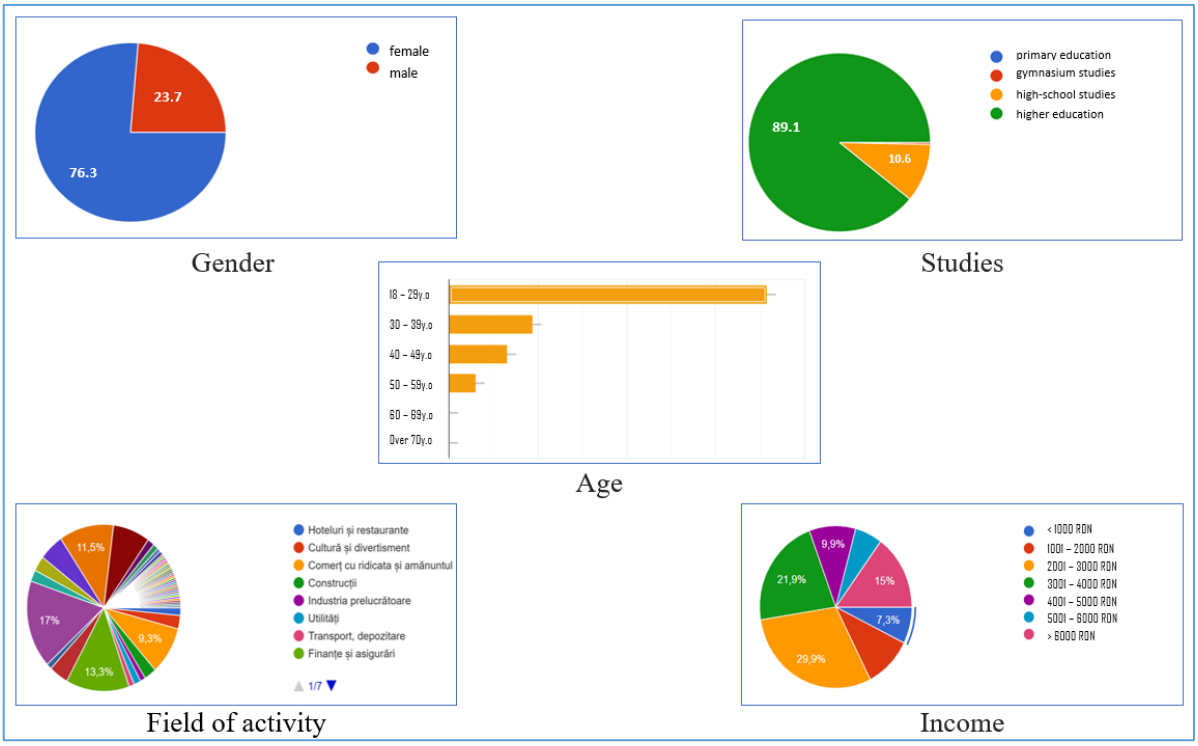

Figure 1. Size and structure of the sample. Source: own processing based on data obtained from the centralization of questionnaire responses.

Out of the total respondents, 76.3% are female respondents (418 people), and 23.7% (130 people) are male respondents. About 89% (488 people) completed higher education, 10.6% (58 people) completed high school, and 1% (2 people) completed secondary school. Among the respondents, 65.3% (358 people) are between 18–29 years old, 17.2% between 30–39 years old, 12% between 40–49 years old, 5.5% between 50–59 years old years, and there were no responses for segments over 60 years. Among the fields of activity in which the companies in which the respondents operate, we emphasize: education with 17%, finance and insurance with 13.3%, informatics, telecommunications with 11.5% and trade with 9.3%. Regarding income, almost 30% of respondents earn between 2001 and 3000 lei monthly, 21.9% earn between 3001–4000 lei, 15% earn over 6000 lei, 9.9% earn between 4001–5000 lei, 10.2% earn between 1001–2000 lei, 7.3% earn less than 1000 lei, and 5.8% earn between 5 and 6 thousand lei.

The first question, "What is your status on the labor market?", aimed to determine the status of the respondent on the labor market.

Analyzing the status of respondents, from Figure 2, 83.6% of them are employees, which is distributed by gender as follows: 63.9% female (350 people) and 19.7% male (108 people). The next status, depending on the frequency of answers, is "looking for a job" with a total percentage of 10.2% of which 48 are women (8.8%) and 8 are men (1.5%). Out of the total number of respondents, 2.6% are unemployed, thus divided, 1.8% women

and 0.7% men. The categories of student, entrepreneur, freelancer and student register between 0.4% and 0.7% of respondents.

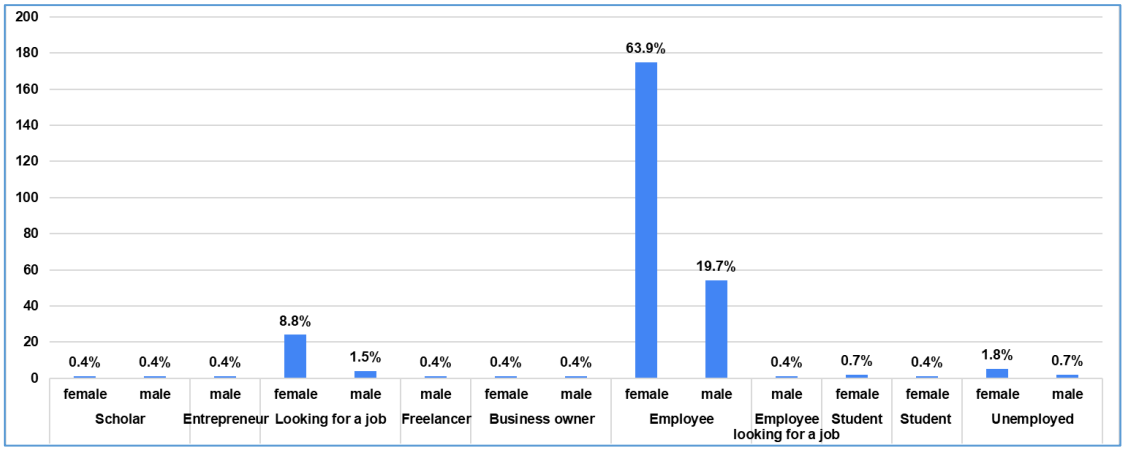

Figure 2. Sample structure according to status and gender. Source: own processing based on data obtained from the centralization of questionnaire responses.

The second question, "What is the field of the position you hold?", aimed at identifying the field of the position held by the respondent.

According to Figure 3, centralizing the answers to this question, it emerged that the field of the position held, with the highest frequency was financial accounting with 108 people, respectively 19.7%. The second field was education with 14.6% (80 people), followed by marketing with 9.9% (54 people), the technical field included 50 respondents (9.1%) and the sales field included 40 of respondents (7.3%).

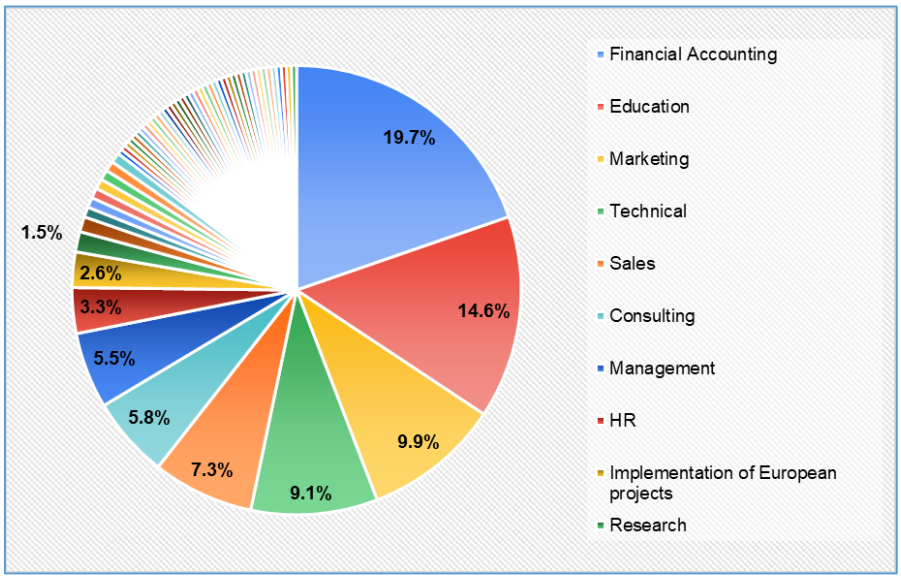

Figure 3. Sample structure according to the field of the position occupied. Source: own processing based on data obtained from the centralization of questionnaire responses.

The third question, "What was the way of carrying out the professional activities during the COVID-19 pandemic?", had as objective the identification of the way of carrying out the professional activity during the pandemic.

According to Figure 4, out of the total respondents, 46.1% (246 people) carried out their professional activity during the telemarketing pandemic. Of this percentage, 11.2% (60 people) worked in education, 9.7% (52 people) worked in computer science, telecom-

munications and 6.4% (34 people) worked in finance and insurance. The next way of working, depending on the frequency of responses was the mixed mode (telework and flexible schedule), for which 136 responses were recorded (25.5%), of this percentage, 3.7% (20 people) had worked in education and 3.7% also worked in finance and insurance. Of the total respondents, 24% (128 people) had a normal schedule during this period marked by the emergence of COVID-19, of this percentage, most 3.4% (18 people) worked in the field of trade and 2.2% (12 people) in agriculture, forestry and fishing. It can be seen that the flexible program was not often encountered during this period, with a share of 4.5% among respondents, of which 1.5% were people working in agriculture, forestry and fishing.

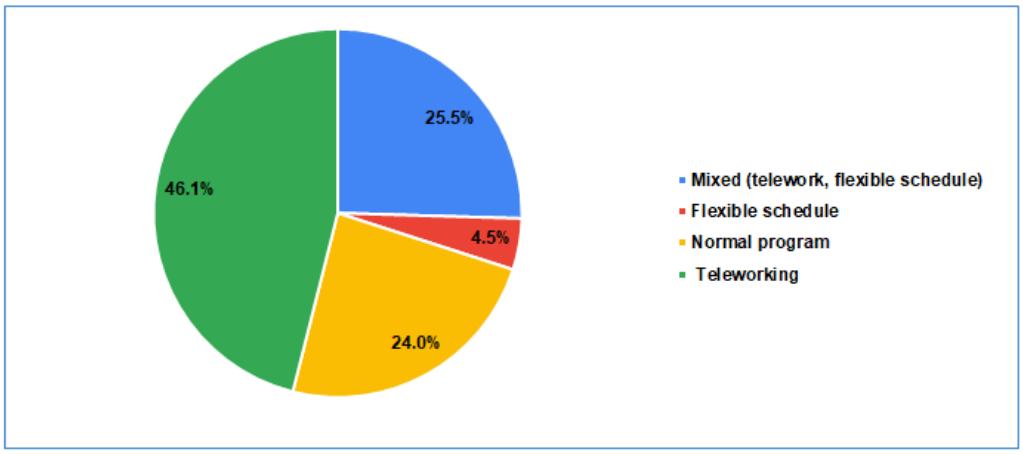

Figure 4. The structure of the pandemic activity. Source: own processing based on data obtained from the centralization of questionnaire responses.

The fourth question, "To what extent is the position you hold suitable for carrying out professional activities in telework, on a scale from 1 to 10?", aimed at identifying the degree to which the position held by the respondent is suitable for telework.

As can be seen, in Figure 5, 27.7% of respondents (152 people) gave the maximum grade, regarding the degree to which their professional activity is suitable for the telework regime. Of this percentage, 8.03% (44 people) work in computer science and telecommunications. The next grade awarded was grade 8, which registered a share of 16.1% of the total respondents (88 people), of this percentage, 3.28% (18 people) work in education. The lowest grade—respectively, the respondents who cannot work in telework—at all were in proportion of 9.1%, of this percentage, 1.49% (8 people) working in the field of health and social assistance. Carrying out a weighted average of the marks awarded, for the entire sample, the average grade for which the activity carried out by the respondents is suitable for the telework regime is 7.04 out of 10.

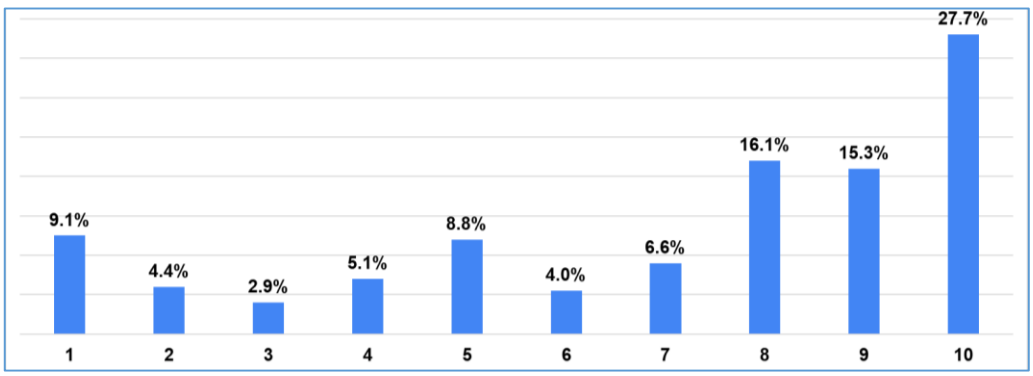

Figure 5. Grade given to the degree to which the job is suitable for telework. Source: own processing based on data obtained from the centralization of questionnaire responses.

The fifth question, "What is the option that suits you from the perspective of the efficiency of carrying out professional activities?", had as objective the determination of the efficiency of carrying out professional activities.

According to Figure 6, out of the total respondents, 37.4% (198 people) selected the option "I worked a higher number of hours with better results"; out of this percentage, 25.3% are people aged between 18 and 29, 4, 9% aged between 30–39 years, 4.5% aged between 40–49 years and 2.6% aged between 50–59 years. The next option, depending on the frequency of answers, is "I worked fewer hours with better results", with a percentage of 32.1% (170 people), of this percentage, 21.5% are people aged 18–29. The variant "I worked a higher number of hours with poorer results", registered a share of 20.8% (110 people), of which 10.6% falling into the first age category. The last option, depending on the number of answers, is "I worked fewer hours with poorer results", with a share in the total number of respondents, of 9.8%, the first age category recording 7.9% of the percentage.

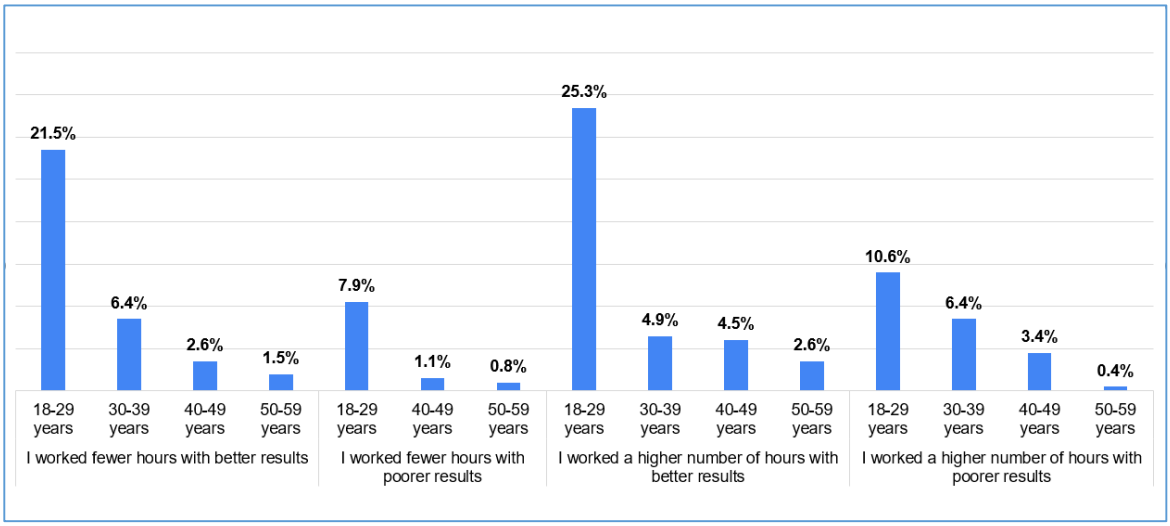

Figure 6. Determining the efficiency of performing activities, structured by age. Source: own processing based on data obtained from the centralization of questionnaire responses.

The sixth question "What were the most important challenges for carrying out the professional activities, on a scale from 1 (the most important challenge) to 4 (the least important challenge)?", aimed at identifying the challenges in carrying out the professional activity.

According to Figure 7, the first criterion, namely "Adaptation to new means/communication tools", recorded the most answers in note 4, with 36.1%; thus, this possible challenge is not so important, especially for young people (18–29 years), which represents 23.7% of the respondents who gave this grade. The second criterion, "Duration of work schedule", recorded the most answers for grade 2, with 35%, so this challenge is considered important among respondents. The third criterion, "Working in the same space with other family members", registered the most answers for grade 1, but only with 29.6%; thus, for these people, this criterion is the biggest impediment. The last criterion, "Access to modern technology (devices, internet connection, etc.)", recorded the most answers for grade 4, with 35%, so this criterion is not so important for these people.

In order to determine the general scores, a summary table (Table 1) was created with the answers for each possible challenge in carrying out the professional activity.

Using the semantic differential method for processing results, the ranking of criteria for the challenges of professional activity is as follows: duration of work schedule, working in the same space with other family members, adaptation to new means/communication tools and access to modern technology, as shown in Figure 8.

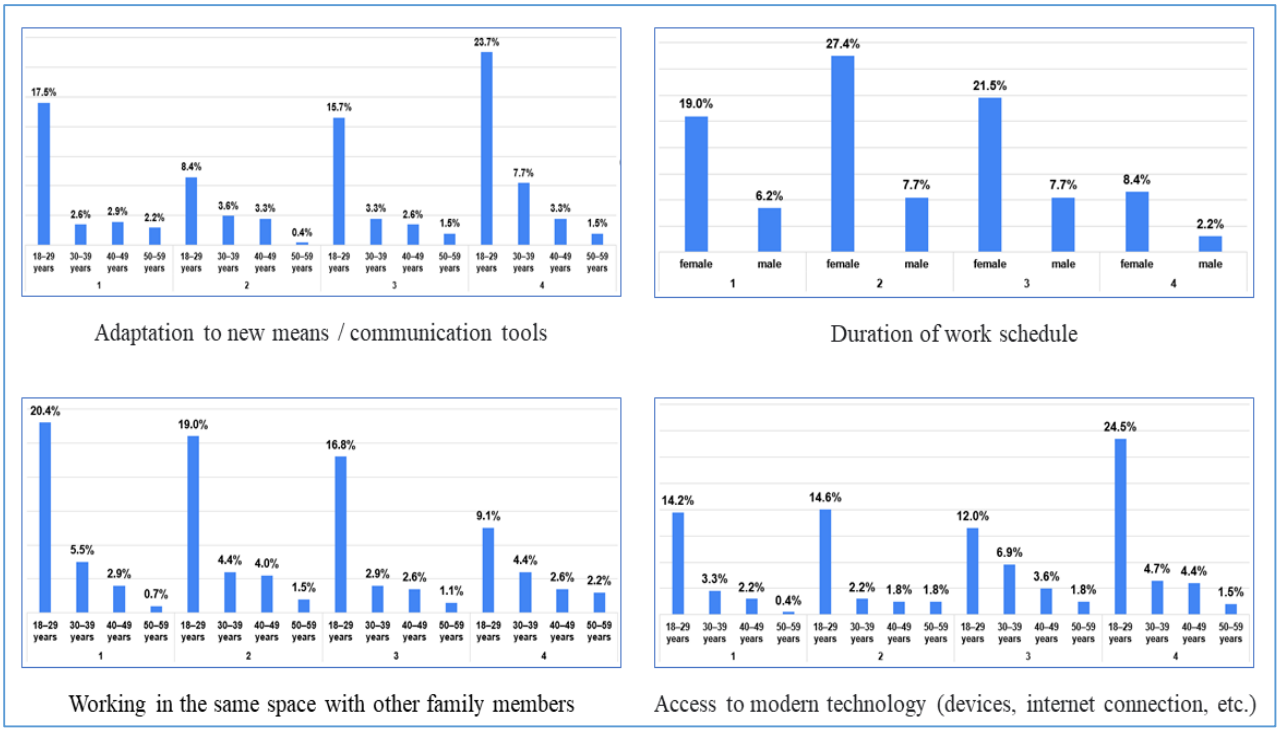

Figure 7. Identifying the challenges in carrying out the professional activity, depending on age and gender. Source: own processing based on data obtained from the centralization of questionnaire responses.

Table 1. Importance of criteria on the challenges of professional development.

Scale	What Were the Most Important Challenges for Carrying Out Professional Activities, on a Scale from 1 (the Most Important Challenge) to 4 (the Least Important Challenge)?			
	Adaptation to New Means/Communication Tools	Duration of Work Schedule	Working in the Same Space with Other Family Members	Access to Modern Technology (Devices, Internet Connection, etc.)
1	138	138	162	110
2	86	192	158	112
3	126	160	128	134
4	198	58	100	192
Total	548	548	548	548
Final Score	2.30	2.75	2.70	2.26

Source: own processing based on data obtained from the centralization of questionnaire responses.

The seventh question, "What are the main benefits you consider in carrying out professional activities in telework, on a scale from 1 (most important benefit) to 5 (least important benefit)?", was aimed at identifying the benefits in carrying out professional activity.

According to Figure 9, the first possible benefit, "saving significant time resources allocated to the home-work commute" recorded the most answers (54.4%) for grade 1. The second benefit, "elimination of stress caused by congestion in traffic or public transport" recorded the most answers (43.4%) for grade 2. The third benefit, "a greater level of flexibility in organizing one's own program" recorded the most responses (46.4%) for grade 3. The fourth benefit, "more time spent with family" recorded the most answers (43.1%) for grade 4. The fifth benefit, "a higher level of promptness in organizing business meetings due to the use of technology" recorded the most answers (57.3%) for grade 5.

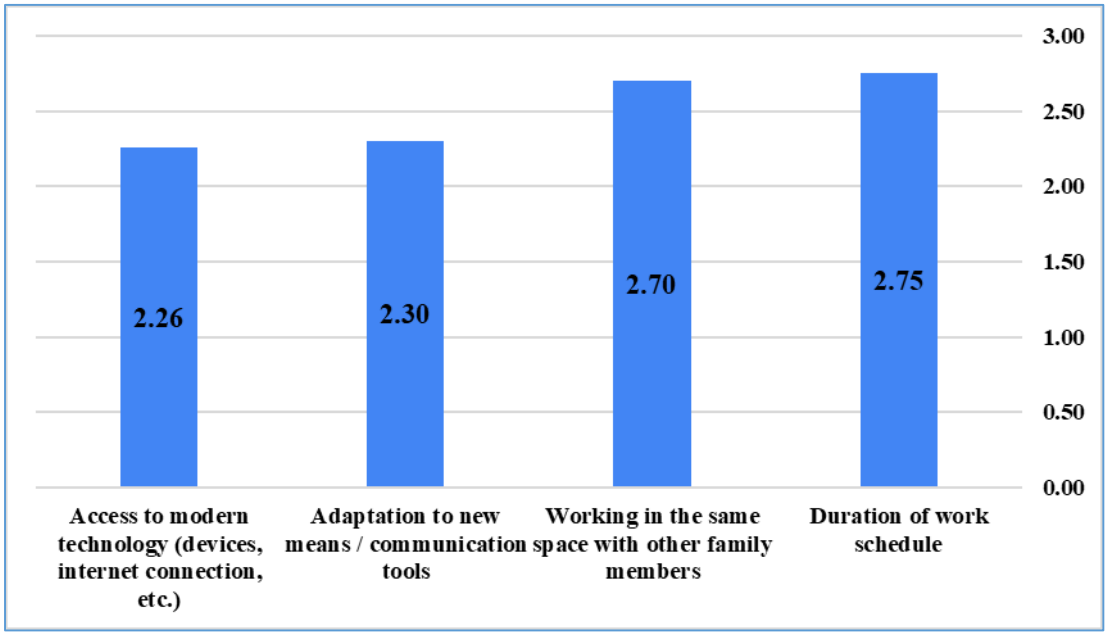

Figure 8. Score obtained regarding the challenges of carrying out the professional activity. Source: own processing based on data obtained from the centralization of questionnaire responses.

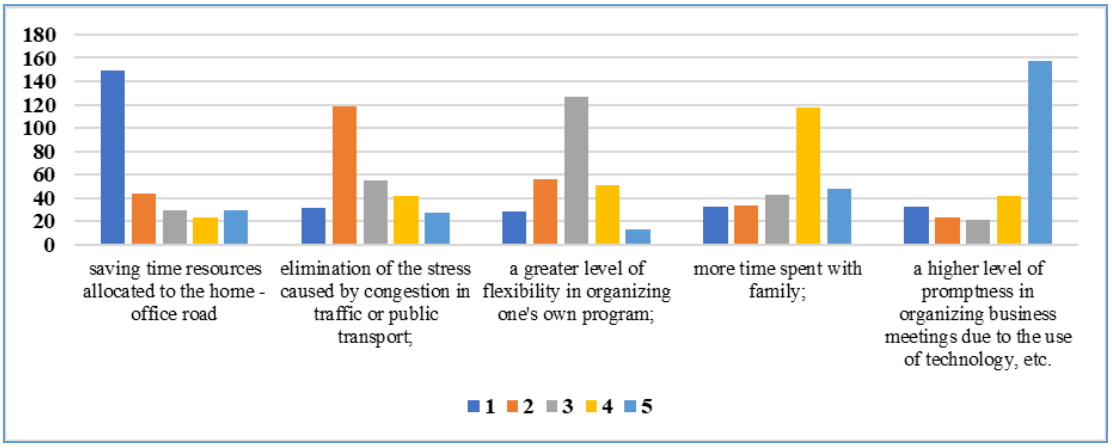

Figure 9. Identification of benefits in carrying out professional activity, depending on age and gender. Source: own processing based on data obtained from the centralization of questionnaire responses.

In order to determine the general scores, a summary table (Table 2) was created with the answers for each possible benefit in carrying out the professional activity.

Using the semantic differential method for processing the results, the hierarchy of criteria regarding the benefits of carrying out the professional activity, is the following: saving time resources otherwise allocated to commuting between home and work, elimination of stress caused by congestion in traffic or public transport, a greater level of flexibility in organizing one's own program, more time spent with family and a higher level of promptness in organizing business meetings due to the use of technology, as shown in Figure 10.

The eighth question, "How did the period of the COVID-19 pandemic influence you from the perspective of income level?", aimed at determining the influence that the pandemic had on income.

Table 2. The importance given to the criteria regarding the benefits of carrying out the professional activity.

Scale	What Are the Main Benefits you Consider in Carrying out Professional Activities in the Telework Regime, on a Scale from 1 (the Most Important Benefit) to 5 (the Least Important Benefit)?				
	Saving Important Time Resources Allocated to the Road Saving Important Time Resources Allocated to the Road	Elimination of Stress Caused by Congestion in Traffic or Public Transport	A Greater Level of Flexibility in Organizing One's Own Program	More Time Spent with Family	a Higher Level of Promptness in Organizing Business Meetings Due to the Use of Technology
1	298	64	56	66	64
2	88	238	110	66	46
3	58	108	254	86	42
4	46	82	102	236	82
5	58	56	26	94	314
Total	548	548	548	548	548
Final Score	3.95	3.31	3.12	2.59	2.02

Source: own processing based on data obtained from the centralization of questionnaire responses.

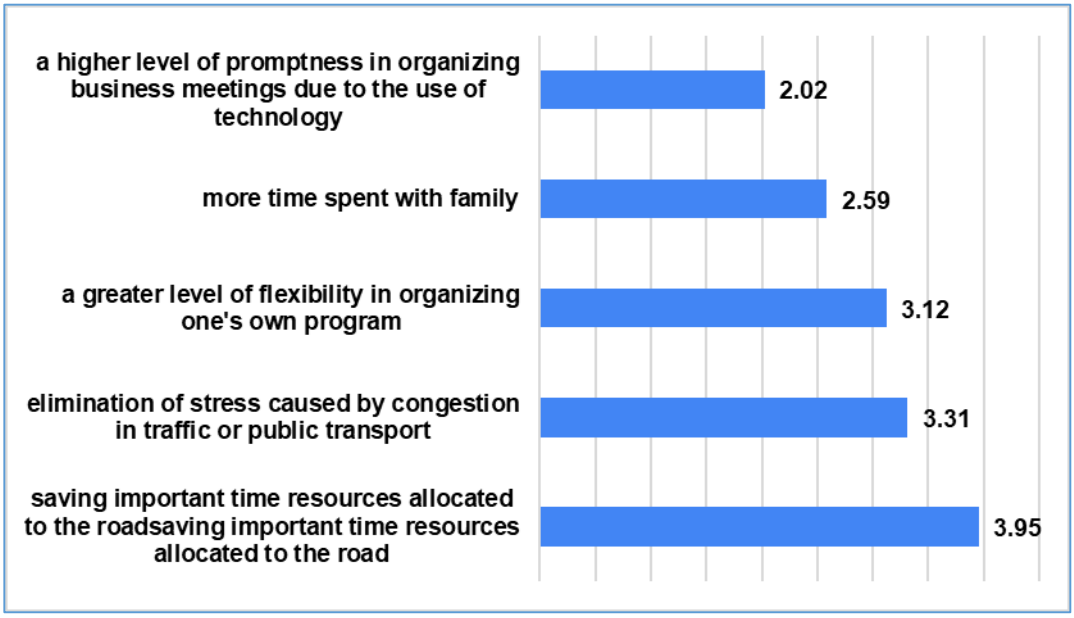

Figure 10. The score obtained regarding the benefits of carrying out the professional activity. Source: own processing based on data obtained from the centralization of questionnaire responses.

According to Figure 11, among the interviewees, 65.7% obtained the same level of income, 25.9% obtained lower income and 8.4% obtained higher income. Among the people who obtained the same level of income, 3.3% people obtained an income of less than 1000 lei, 6.2% people obtained an income between 1001–2000 lei, 20.1% people obtained an income between 2001–3000 lei, 16.1% people obtained an income between 3001–4000 lei, 6.6% people obtained an income between 4001–5000 lei, 4% people obtained an income between 5001–6000 lei and 9.5% of people obtained an income higher than 6000 lei.

The ninth question, "Have you identified the need to develop certain skills in the field?", aimed to identify the need to develop certain skills.

Regarding the need to develop certain skills, as can be seen in Figure 12, 47.4% of respondents consider the need for development in the digital field, 44.9% of respondents consider the need for development in communication and 27.7% of respondents consider the need for development in management. Of those who opted for the "Digital" variant,

respectively 36.9%, 23% are aged between 18–29 years, 6.2% are aged between 30–39 years, 5.1% are between 40–49 years and 2.6% are between 50–59 years. Among the interviewees who opted for the "Digital, Communication" variant, respectively, 5.5%, 3.6% are aged between 18–29 years, 1.1% are aged between 30–39 years and 0.7% are between 40–49 years old, among the interviewees who opted for the "Digital, Management" variant, respectively, 0.7% are between 18–29 years old. Among the interviewees who opted for the "Digital, Management, Communication" variant, respectively, 4.4%, 3.6% are aged between 18–29 years, 0.4% are aged between 30–39 years and 0.4% are between 50–59 years old.

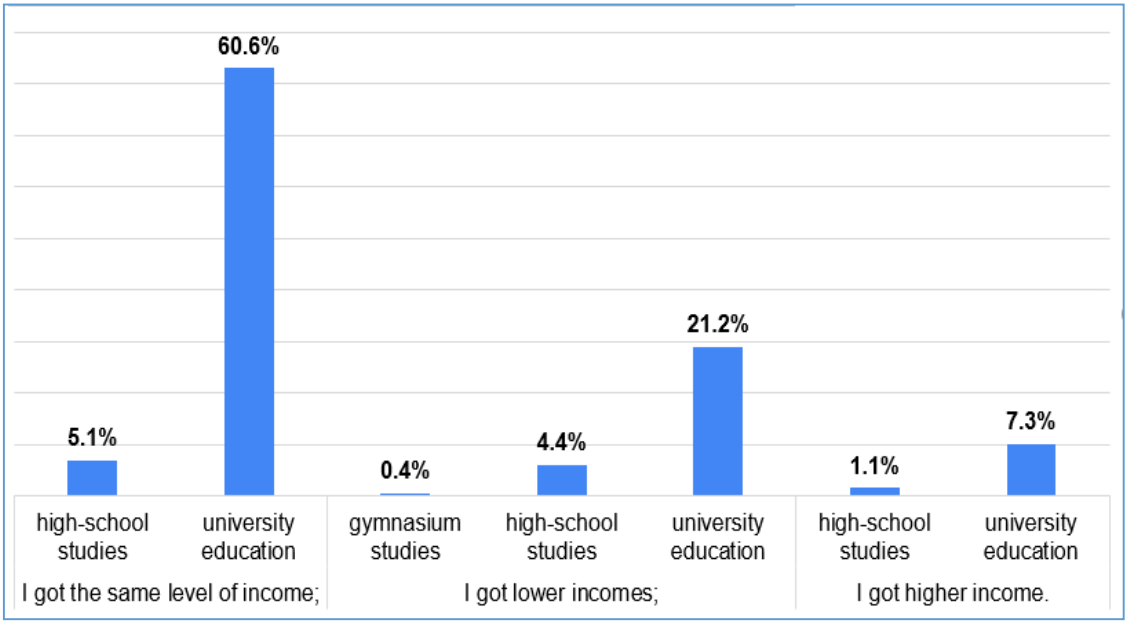

Figure 11. Determining the influence that the pandemic had on revenues, according to studies. Source: own processing based on data obtained from the centralization of questionnaire responses.

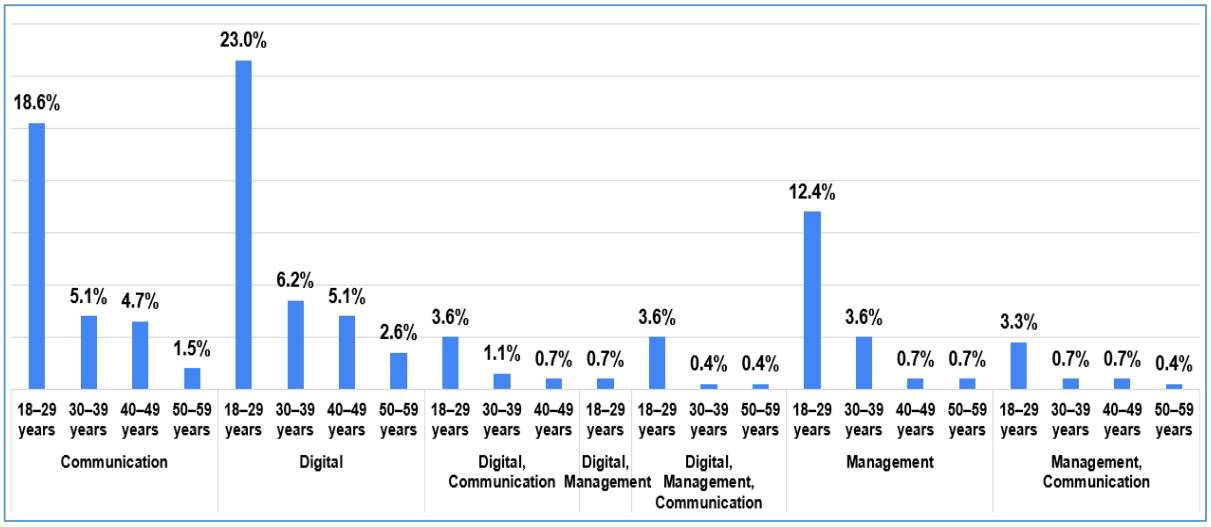

Figure 12. Identifying the need to develop certain skills, depending on age. Source: own processing based on data obtained from the centralization of questionnaire responses.

The tenth question, "What do you consider to be the optimal way to carry out your professional activity, given the experience you have had so far?", aimed to identify the optimal way to carry out your professional activity.

According to Figure 13, among the interviewees, 51.8% of people opted for the Mixed

version (telework, flexible schedule), 10.3% of people opted for the Flexible schedule option, 22.8% of people opted for the Normal program option and 15.1% of people they opted for the Teleworking variant. Among those who prefer the Mixed version (telework, flexible schedule), 30.1% of people aged 18–29, 11.4% of people aged 30–39, 7% of people aged between 40–49 years and 3.3% people are between 50–59 years old.

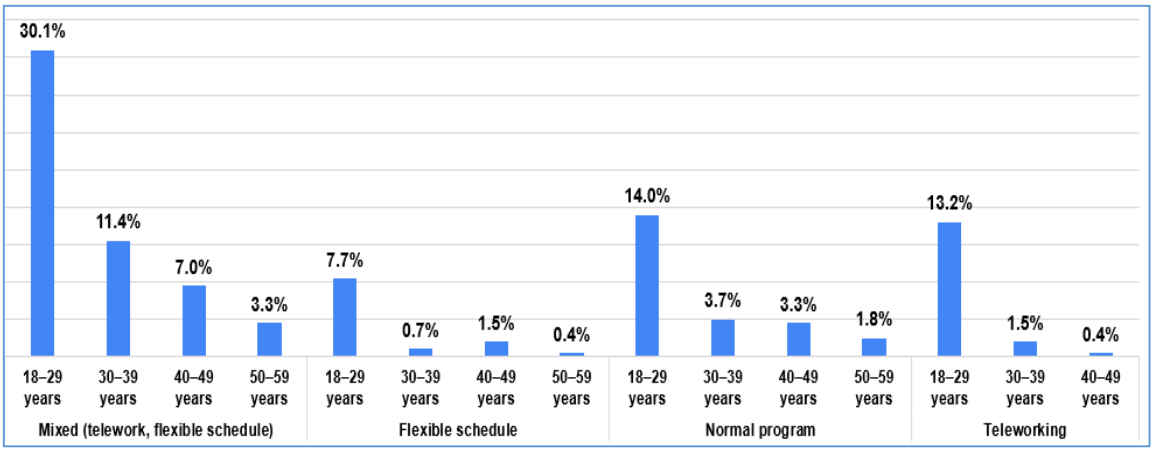

Figure 13. Identification of the optimal variant of the way of carrying out the professional activity, depending on age. Source: own processing based on data obtained from the centralization of questionnaire responses.

The eleventh question, "During this period, did you consider becoming an entrepreneur?", aimed at determining the degree to which respondents thought about becoming an entrepreneur.

According to Figure 14, during this period, 36.1% of people thought of becoming entrepreneurs and 63.9% of people did not think of becoming entrepreneurs. Among the people who thought of becoming entrepreneurs, 27.4% of people are between 18–29 years old, 5.1% of people are between 30–39 years old, 2.9% of people are between the ages of between 40–49 years and 0.7% of people are between 50–59 years old. Among the people who did not think about becoming entrepreneurs, 38% of people are between 18–29 years old, 12% of people are between 30–39 years old, 9.1% of people are between 40–49 years and 4.7% of people are between 50–59 years old.

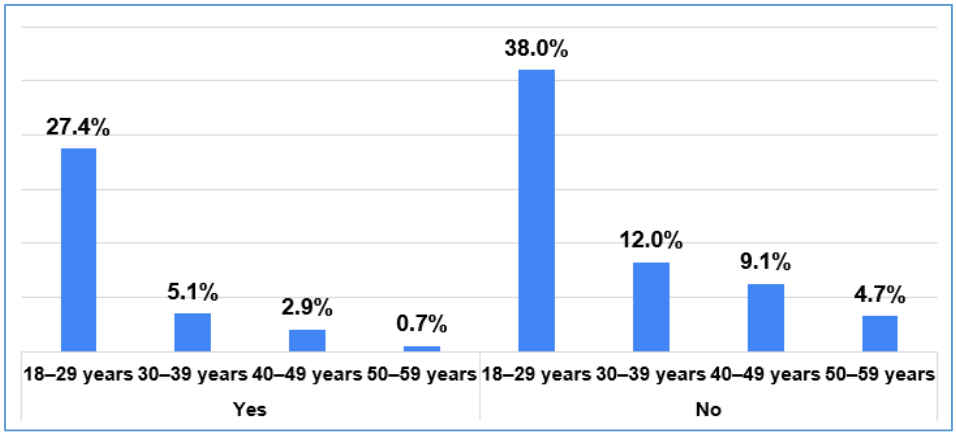

Figure 14. Determining the degree to which respondents considered becoming entrepreneurs, according to age. Source: own processing based on data obtained from the centralization of questionnaire responses.

The twelfth question, "What field of activity would you consider appropriate during this period?", aimed to identify respondents' views on work field during this period.

According to Figure 15, the field most indicated by the respondents, with a weight

of 26.2% of the answers was that of informatics and telecommunications, out of this percentage 23.1% are respondents with higher education. The field most indicated by the respondents, with a weight of 26.2% of the answers was that of informatics and telecommunications, out of this percentage 23.1% are respondents with higher education. The next field according to frequency was health and social assistance with a share of 12.8% of the answers. Of these, 10.3% with higher education, 2.1% with high school education and 0.5% with secondary education. The third field with a share of 10.8% of the total respondents was agriculture, forestry and fishing, followed by the field of wholesale and retail trade with a share of 10.3%. The areas that recorded the lowest shares (0.5%) were: local government, culture and entertainment, graphic design and wellness services.

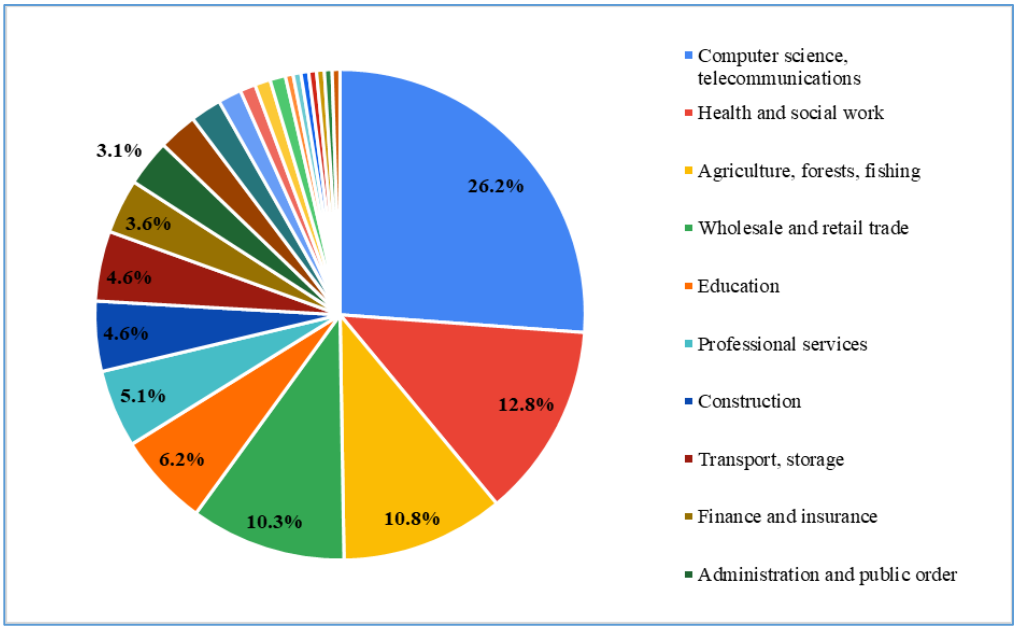

Figure 15. Identifying the respondents' opinion on the work field during this period. Source: own processing based on data obtained from the centralization of questionnaire responses.

The thirteenth question, "If you were aiming to change/find a job, what importance would you give to the following elements, on a scale from 1 (most important element) to 4 (least important element)?", was aimed at determining the importance criteria for starting a new job. The weight of the answers can be seen in Figure 16.

In order to determine the general scores, a summary table (Table 3) was created with the answers for each criterion regarding the start of a new job.

Using the semantic differential method for processing the results, the hierarchy of criteria regarding the benefits of carrying out the professional activity, is the following: satisfactory salary package, flexible work schedule, complex health insurance and ensuring the conditions for preventing and combating COVID-19, as shown in Figure 17.

For the first criterion, when it comes to starting a new job, the flexible work schedule was considered, and the respondents' most chosen grade on importance was grade 1, with 44.1% of responses, of this percentage. 31.6% are people aged between 18–29. The second criterion, "complex health insurance", obtained the highest share of the answer for grade 1 with 29.8% of the answers. The third criterion, concerning "ensuring the conditions for preventing and combating COVID-19", obtained marks of 1 in proportion of 32.5%. The last criterion, the salary one, registered the most marks of 1, with a weight of 60.5%. Of this percentage, 19% are people with incomes between 2–3 thousand lei, 14.7% have an income between 3–4 thousand lei, and 9.7% have an income of over 6000 lei, those who have an income small, under 1000 lei, opted for this criterion and this grade in proportion of only 2.7%.

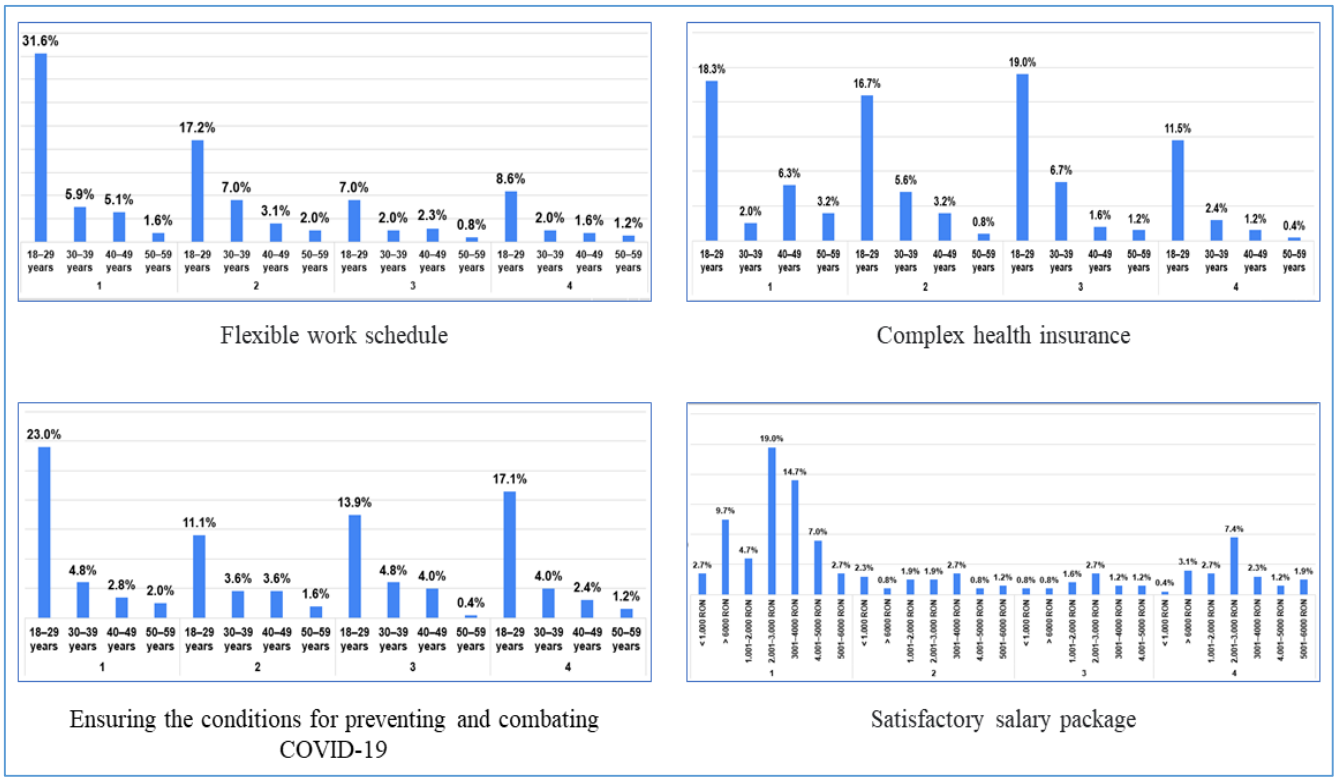

Figure 16. Determining the importance of the criteria for starting a new job, according to age and income. Source: own processing based on data obtained from the centralization of questionnaire responses.

Table 3. The Importance of the criteria for starting a new job.

Scale	If You Were Aiming to Change/Find a Job, What Importance Would You Give to the Following Elements, on a Scale from 1 (Most Important Element) to 4 (Least Important Element)?			
	Flexible Work Schedule	Complex Health Insurance	Ensuring the Conditions for Preventing and Combating COVID-19	Satisfactory Salary Package
1	230	150	168	312
2	152	134	100	64
3	64	152	116	42
4	72	84	128	102
Total	518	520	512	520
Final Score	3.0	2.7	2.6	3.1

Source: own processing based on data obtained from the centralization of questionnaire responses.

From the interpretation of the questionnaire, the results indicate that over 70% of the respondents, during the pandemic period, worked in telework regime, at a certain moment, respectively, 46% worked exclusively in telework regime, and 25% in mixed regime. It should also be noted that only 27.7% of respondents are fully suited to this way of working.

Analyzing retrospectively, approximately 70% of the respondents claimed that they obtained better results, under these conditions, 37% claimed that they worked more hours, and 32% claimed that they obtained better results with fewer hours worked.

The main inconvenience faced by respondents was access to modern technology (devices, internet connection, etc.), but they nevertheless appreciated the benefits of a higher level of promptness in organizing business meetings due to the use of technology and more time spent with family.

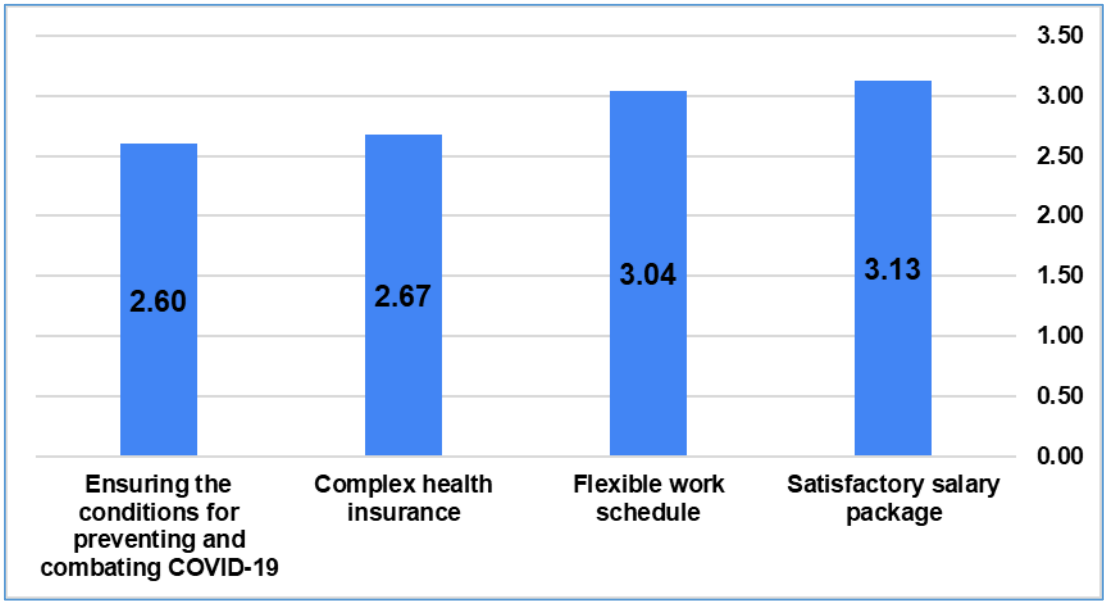

Figure 17. Score obtained on the criteria for starting a new job. Source: own processing based on data obtained from the centralization of questionnaire responses.

Analyzing the level of earnings obtained during this period, it was established that approximately 65% of respondents obtained a similar income. It should be noted, however, that the survey was conducted shortly after the end of the lockdown period and the start of major economic activities in Romania.

The main areas that respondents believe should be further explored as a result of this health situation are the digital and communications fields. However, more than half of the respondents say that they would prefer to work in a mixed way in the near future.

We believe that this health crisis has also influenced the mentality of employees, respondents stating that in the event of a change of job, they would consider it important for the new employer to ensure the conditions for preventing and combating COVID-19, as well as complex health insurance.

Considering not only the results of the survey, but also the macroeconomic indicators, we consider it appropriate to study the unemployment rate in Romania, comparatively, in the first three quarters of 2019 and 2020, subsequently determining the existence or not of significant differences.

As can be seen in Figure 18, although the data are slightly similar, the unemployment rate experienced different dynamics in the two years analyzed. If, in the first three quarters of 2019, there was decreasing dynamics of the unemployment rate from 3.3% to 2.9–3%, respectively an average monthly decrease of 1.18%, in the first three quarters of 2020, an exactly opposite trend is observed, registering an increase from the remaining value of 3% to 3.3%, respectively, an average monthly increase of 1.19%, so we can consider that the period of the health crisis and the immediate period was a turning point of this national indicator.

Although if we analyze on average, between these two periods, no significant differences will be noticed, but taking into account the fact that the state of emergency was applied in March, and only in May some restrictions were lifted and economic activities were able to start again, we considered it useful to analyze the significant differences between the last five months of 2020, compared to the same months of 2019, assuming that the average unemployment rate in these months differs significantly in the periods taken into account.

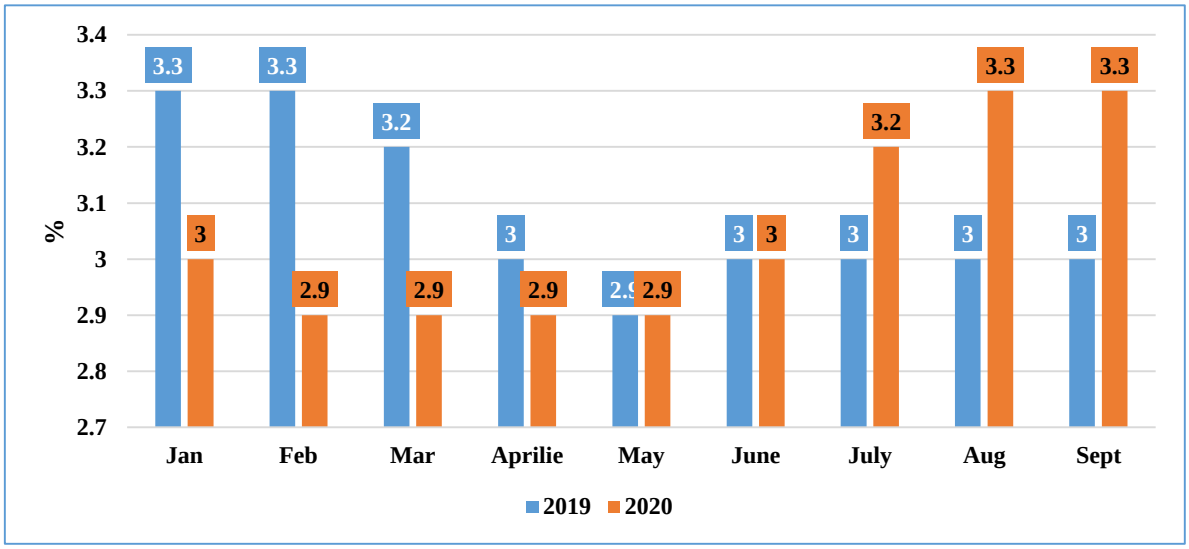

Figure 18. Dynamics of unemployment rate in the first three quarters of 2019 and 2020. Source: own processing based on NIS data.

It can be seen from Table 4 that the statistical parameter *t* (t Stat), measured in absolute value, is higher than the critical level, and the level of significance is lower than the maximum accepted threshold; thus, it can be stated that the null hypothesis is rejected, respectively, as the average of May–September 2019 is not equal to the average of the same months of 2020. In other words, there are significant differences between the two averages, and as can be seen in 2020, there was a greater level of unemployment. Through this analysis, we can consider that the COVID-19 pandemic influenced the labor market, reducing the number of employees on the market, on average by 0.16 percentage points.

Table 4. Statistical analysis of the unemployment rate in the last 5 months compared to last year.

	2019	2020
Mean	2.98	3.14
Variance	0.002	0.033
Observations	5	5
Pearson Correlation	0.73855	
Hypothesized Mean Difference	0	
df	4	
t Stat	−2.35907	
P(T <= t) one-tail	0.03887	
t Critical one-tail	2.13185	
P(T <= t) two-tail	0.07774	
t Critical two-tail	2.77645	

Source: own processing based on data obtained from the centralization of questionnaire responses.

5. Conclusions

In order to highlight the characteristics of the labor force during the COVID-19 pandemic, with the emphasis on the particularities of the Romanian labor market, we used a mix of research methods to lead us, as much as possible, to relevant results. We started studying literature. The analysis of the documentation provided surprising results about perhaps the most important aspects of the global labor force during the pandemic. Since its inception, more and more authors have debated this issue, knowing that governments have taken drastic measures to limit its spread with a major impact on the workforce. In many countries of the world, as in Romania, the state of emergency was declared, entire sectors

of activity were closed, telework or work at home was generalized and territories were quarantined.

To highlight the particular characteristics of the effects of the pandemic on the Romanian workforce, we used a quantitative method based on opinion polls. The questionnaire was completed online and consisted of 18 questions answered by over 500 people. For its interpretation, we used the method of semantic differential and the method of ordering the ranks. The semantic differential method for processing the results allowed the hierarchy of criteria regarding the benefits of carrying out the professional activity. The resulting hierarchy was as follows: saving significant time resources allocated to roads saving important time resources allocated to the road, eliminating stress caused by congestion in traffic or public transport, a higher level of flexibility in organizing one's own program, more time spent with family, a higher level of promptness in organizing business meetings due to the use of technology.

In conclusion, we can say that the changes in the labor market have been and will be directly influenced by the evolution of the pandemic situation. It was an expected fact, with the novelty of our research being to highlight both the background and the perspective. In the future, we would see if the results obtained by us in this research will keep their image or will be completely reorganized.

Through this study, we wanted to create a static vision of active people in Romania, with the help of empirical research. As a limitation in determining the optimal impact of the health crisis on the Romanian labor market, it could be emphasized that the survey research was conducted in a fairly short time since the resumption of economic activities, perhaps this impact, under all its forms will be observed in a longer time. However, to provide a more realistic view, longitudinal research should be carried out following the present study, on a larger scale.

Author Contributions: The authors worked together for this research, but, per structure: conceptualization C.V.R., G.-R.L. and I.L.P.; methodology, software validation and resources, G.-R.L., I.L.P. and F.C.; formal analysis, G.-R.L., C.V.R. and S.B.; writing—original draft preparation, and writing—review and editing, G.-R.L., C.V.R., C.I. and I.L.P. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Informed Consent Statement: The collection of information through the questionnaire was done anonymously, without requiring respondents to specify personal information.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Hui, D.S.; I Azhar, E.; Madani, T.A.; Ntoumi, F.; Kock, R.; Dar, O.; Ippolito, G.; Mchugh, T.D.; Memish, Z.A.; Drosten, C.; et al. The continuing 2019-nCoV epidemic threat of novel coronaviruses to global health—The latest 2019 novel coronavirus outbreak in Wuhan, China. *IJID Off. Publ. Int. Soc. Infect. Dis.* **2020**, *91*, 264–266. [CrossRef] [PubMed]
2. Marcu, N.; Siminică, M.; Noja, G.C.; Cristea, M.; Dobrotă, C.E. Migrants' Integration on the European Labor Market: A Spatial Bootstrap, SEM and Network Approach. *Sustainability* **2018**, *10*, 4543. [CrossRef]
3. Nica, M. Study on Labour Force in Romanian Agriculture. *Int. J. Sustain. Econ. Manag.* **2018**, *7*, 36–44. [CrossRef]
4. McKibbin, W.J.; Sidorenkol, A.A. *Global Macroeconomic Consequences of Pandemic Influenza*; Centre for Applied Macroeconomic Analysis: Acton, ACT, Australia, 2006.
5. Sadique, M.Z.; Adams, E.J.; Edmunds, W.J. Estimating the costs of school closure for mitigating an influenza pandemic. *BMC Public Health* **2008**, *8*, 1–7. [CrossRef] [PubMed]
6. Schanzer, D.L.; Zheng, H.; Gilmore, J. Statistical Estimates of Absenteeism Attributed to Seasonal and Pandemic Flu from the Canadian Labour Force Survey. 2011. Available online: https://bmcinfectdis.biomedcentral.com/articles/10.1186/1471-2334-11-90 (accessed on 5 November 2020).
7. Jordà, Ò.; Singh, S.R.; Taylor, A.M. Longer-Run Economic Consequences of Pandemics. *J. Chem. Inf. Model* **2019**, *53*, 1689–1699. [CrossRef]

8. Arndt, C.; Lewis, J.D. The HIV/AIDS pandemic in South Africa: Sectoral impacts and unemployment. *J. Int. Dev.* **2001**, *13*, 427–449. [CrossRef]
9. Baldwin, R.; Tomiura, E. Thinking Ahead about the Trade Impact of COVID-19. Available online: https://voxeu.org/content/mitigating-covid-economic-crisis-act-fast-and-do-whatever-it-takes (accessed on 16 November 2020).
10. Alon, T.; Doepke, M.; Olmstead-Rumsey, J.; Tertilt, M. The Impact of Covid-19 on Gender Equality. *J. Chem. Inf. Model* **2019**, *53*, 1689–1699. [CrossRef]
11. Martinez, D.A.; Jayawarna, D. Bios, mythoi and women entrepreneurs: A Wynterian analysis of the intersectional impacts of the COVID-19 pandemic on self-employed women and women-owned businesses. *Int. Small Bus. J. Res. Entrep.* **2020**, *38*, 391–403. [CrossRef]
12. Verick, S. Female labor force participation in developing countries. *IZA World Labor.* **2014**, *87*, 1–10. [CrossRef]
13. Keogh-Brown, M.R.; Jensen, H.T.; Edmunds, W.J.; Smith, R.D. The impact of Covid-19, associated behaviours and policies on the UK economy: A computable general equilibrium model. *SSM Popul. Health* **2020**, *12*, 100651. [CrossRef]
14. Huang, A.; Makridis, C.; Baker, M.; Medeiros, M.; Guo, Z. Understanding the impact of COVID-19 intervention policies on the hospitality labor market. *Int. J. Hosp. Manag.* **2020**, *91*, 102660. [CrossRef]
15. Greenberg, N.; Docherty, M.; Gnanapragasam, S.; Wessely, S. Managing mental health challenges faced by healthcare workers during covid-19 pandemic. *BMJ* **2020**, *368*, 1–4. [CrossRef] [PubMed]
16. Kuznetsova, A.; Askarov, A.; Gusmanov, R.; Askarova, A.; Pypłacz, P. Differentiation of labor productivity level and wages as a basis for changes in labor market. *Pol. J. Manag. Stud.* **2019**, *20*, 345–357. [CrossRef]
17. Pană, M.C.; Fanea-Ivanovici, M. Institutional Arrangements and Overeducation: Challenges for Sustainable Growth. Evidence from the Romanian Labour Market. *Sustainability* **2019**, *11*, 6459. [CrossRef]
18. Khanna, A. Impact of Migration of Labour Force due to Global COVID-19 Pandemic with Reference to India. *J. Health Manag.* **2020**, *22*, 181–191. [CrossRef]
19. Kim, A.T.; Kim, C.H.; Tuttle, S.E.; Zhang, Y. COVID-19 and the decline in Asian American employment. *Res. Soc. Stratif. Mobil.* **2021**, *71*, 100563. [CrossRef] [PubMed]
20. Arthi, V.; Parman, J. Disease, downturns, and wellbeing: Economic history and the long-run impacts of COVID-19. *Explor. Econ. Hist.* **2020**, *9*, 101381. [CrossRef]
21. Coibion, O.; Gorodnichenko, Y.; Weber, M. Labor Markets during the COVID-19 Crisis: A Preliminary View. *SSRN Electron. J.* **2020**, *41*. [CrossRef]
22. Couch, K.A.; Fairlie, R.W.; Xu, H. Early evidence of the impacts of COVID-19 on minority unemployment. *J. Public Econ.* **2020**, *192*, 104287. [CrossRef]
23. Forsythe, E.; Kahn, L.B.; Lange, F.; Wiczer, D. Labor demand in the time of COVID-19: Evidence from vacancy postings and UI claims. *J. Public Econ.* **2020**, *189*, 104238. [CrossRef]
24. Dasgupta, P.; De, O. Sustainable Recovery with Jobs and more: This Is a Pandemic, Not a War. IEG Insights 2020 Fighting COVID-19: Assessments and Reflection, Insitute of Economic Growth. 2020, Volume 61, pp. 61–69. Available online: http://iegindia.org/upload/uploadfiles/insight_covid_2.pdf#page=74 (accessed on 16 November 2020).
25. Dang, H.-A.H.; Viet Nguyen, C. Gender Inequality during the COVID-19 Pandemic: Income, Expenditure, Savings, and Job Loss. *World Dev.* **2020**, 105296. [CrossRef]
26. Ghimire, S.; Flury, M.; Scheenstra, E.J.; Miles, C.A. The COVID-19 outbreak in Sri Lanka: A synoptic analysis focusing on trends, impacts, risks and science policy interaction processes. *Sci. Total Environ.* **2019**, *8*, 135577. [CrossRef]
27. Cajner, T.; Crane, L.; Decker, R.; Hamins-Puertolas, A.; Kurz, C. Tracking Labor Market Developments during the COVID-19 Pandemic: A Preliminary Assessment. *Financ. Econ. Discuss. Ser.* **2020**. Available online: https://www.federalreserve.gov/econres/feds/files/2020030pap.pdf (accessed on 16 November 2020). [CrossRef]
28. Dingel, J.I.; Neiman, B. How many jobs can be done at home? *J. Public Econ.* **2020**, *189*. [CrossRef] [PubMed]
29. Seetharaman, P. Business models shifts: Impact of Covid-19. *Int. J. Inf. Manag.* **2020**, *54*, 1–4. [CrossRef]
30. Petrosky-Nadeau, N.; Valletta, R.G. Unemployment Paths in a Pandemic Economy. *Fed. Reserv. Bank San. Fr. Work Pap. Ser.* **2020**, *13294*, 1–20. [CrossRef]
31. Sánchez-Sellero, M.C.; Sánchez-Sellero, P.; Martínez-Filgueira, X.M. Effects of socio-demographic changes on the labour market of Galicia in Spain. *Argum. Oeconomica* **2017**, *38*, 41–62. [CrossRef]
32. Zandi, G.; Shahzad, I.; Farrukh, M.; Kot, S. Supporting role of society and firms to COVID-19 management among medical practitioners. *Int. J. Environ. Res. Public Health* **2020**, *17*, 7961. [CrossRef]
33. Lemieux, T.; Milligan, K.; Schirle, T.; Skuterud, M. Initial impacts of the COVID-19 pandemic on the Canadian labour market. *Can. Public Policy* **2020**, *46*, S55–S65. [CrossRef]
34. Guido, M.C. Heterogeneous Labor Market Impacts During the Early Stages of The Covid-19 Pandemic. *Rimini Cent. Econ. Anal.* **2020**, 20–327. [CrossRef]
35. Jones, C.J. Optimal Mitigation Policies in a Pandemic: Social Distancing and Working from Home. *NBER Work Pap. Ser.* **2020**, *34*. Available online: http://www.nber.org/papers/w26984 (accessed on 17 November 2020).
36. Desson, Z.; Lambertz, L.; Peters, J.W.; Falkenbach, M.; Kauer, L. Europe's Covid-19 outliers: German, Austrian and Swiss policy responses during the early stages of the 2020 pandemic. *Health. Policy Technol.* **2020**, *9*, 405–418. [CrossRef]

37. Alon, T.; Tertilt, M.-R. This Time It'S Different: The Role of Women's Employment in a Pandemic Recession. *NBER* **2020**, *53*, 1689–1699. [CrossRef]
38. Kristal, T.; Yaish, M. Does the coronavirus pandemic level the gender inequality curve? (It doesn't). *Res. Soc. Stratif. Mobil.* **2020**, *68*, 100520. [CrossRef]
39. del Rio-Chanona, R.M.; Mealy, P.; Pichler, A.; Lafond, F.; Farmer, D. Supply and demand shocks in the COVID-19 pandemic: An industry and occupation perspective. *Oxf. Rev. Econ. Policy* **2020**, *36*, 1–38. [CrossRef]
40. Bonadio, B.; Huo, Z.; Levchenko, A.; Pandalai-Nayar, N. Global Supply Chains in the Pandemic. *Natl. Bur. Econ. Res.* **2020**, *27224*, 1–53. [CrossRef]
41. Lichter, A.; Schiprowski, A. Benefit duration, job search behavior and re-employment. *J. Public Econ.* **2021**, *193*, 104326. [CrossRef]
42. Vieira, T. The lose-lose dilemmas of Barcelona's platform delivery workers in the age of COVID-19. *Soc. Sci. Humanit. Open* **2020**, *2*, 100059. [CrossRef]
43. Mbizvo, G.K.; Bennett, K.; Simpson, C.R.; Susan, E.; Chin, R.F.M. Unemployment Insurance Claims and COVID-19 Revised. *Epilepsy Res.* **2019**, 106192. [CrossRef]
44. Fana, M.; Tolan, S.; Torrejón, S.; Urzi Brancati, C.; Fernández-Macías, E. *The COVID Confinement Measures and EU Labour Markets, EUR 30190 EN*; Publications Office of the European Union: Luxembourg, 2020; p. 17. ISBN 978-92-79-18812-4. Available online: https://publications.jrc.ec.europa.eu/repository/bitstream/JRC120578/jrc120578_report_covid_confinement_measures_final_updated_good.pdf, (accessed on 17 November 2020).
45. Albu, L.L.; Preda, C.I.; Lupu, R.; Dobrotă, C.E.; Călin, G.M.; Boghicevici, C.M. Estimates of Dynamics of the Covid-19 Pandemic and of its Impact on the Economy. *Rom. J. Econ. Forecast.* **2020**, *13*, 5–17.
46. Coşkun, A.; Özbük, R.M.Y. What influences consumer food waste behavior in restaurants? An application of the extended theory of planned behavior. *Waste Manag.* **2020**, *117*, 170–178. [CrossRef]
47. Marina, M.; Asma', A.; Jaafar, S.N.A.; Abdul Wahab, M.R.; Wan Zainal Shukri, W.H. Nutrition menu labelling in Terengganu: A cross-sectional study of knowledge, attitudes, perception and their relationship with healthy food choices. *Food Res.* **2020**, *4*, 1573–1581. [CrossRef]
48. Cappelli, L.; D'ascenzo, F.; Ruggieri, R.; Rossetti, F.; Scalingi, A. The attitude of consumers towards "Made in Italy" products. An empirical analysis among Italian customers. *Manag. Mark. Chall. Knowl. Soc.* **2019**, *14*, 31–47. [CrossRef]