

# Investigating the Impact of Covid19 on Vulnerability to Various Jobs

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Research

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# Abstract

**Background:** At the beginning of 2020, the end of the solar year 1398 and the middle of 1441, the world was faced with an unknown and uninvited virus called "Covid 19". No medicine has been made to fight this virus yet, so the best way to fight this virus Prevention of infection. Due to the spread of the disease, stopping businesses has damaged the country's economy and morale.

**Methods:** The present research is applied in terms of purpose and descriptive-survey research in terms of method. Among the possible sampling methods, a simple random sampling method has been used and in determining the sample size using Cochran's formula, according to the researcher, the sample size is 210 citizens. In this study, the data were collected through questionnaires distributed among the statistical population, the validity of which has already been confirmed by experts and its reliability experts through Cronbach's alpha test with "0.80" percent.

**Results:** Research shows that law enforcement and physicians have been at high risk for viruses and drivers, workers and hoteliers in terms of economic harm. Therefore, the authorities must plan and manage this crisis with optimal solutions, both at this time and in the unintended future conditions that the country may face, such as this virus, in order to minimize the risk to the nation.

**Conclusions:** The Covid 19 virus is the most dreaded virus in the world, killing not only many people, but also disrupting their lives in various economic, social and security dimensions, and destroying the human environment. This period is not weak, but it is expanding, and if it is not controlled, it will pose significant and dangerous social harms to society.

## Introduction

For nearly four months in a row, people around the world have been living in disarray despite the Covid 19 virus. Traffic was stopped, businesses were disrupted, schools and universities were closed. Human mortality has affected many government officials and physicians. In general, the situation is not normal, and countries must end this unfavorable situation with empathy and cooperation. Country officials must expend maximum material and spiritual strength to defend their nation. At this point in time, which will inevitably be linked to the history of nations in the future, war with the dangerous virus is taking place, and the weapon in the fight against this enemy is health facilities, Social distance, and Observance of personal hygiene. Despite the closure of many businesses, offices and organizations, and the lack of citizens leaving the house, the virus still exists and is taking the lives of some people. Country officials declared a public holiday for several days and fought the virus with all their might, but businesses could not be shut down due to lack of knowledge about the timing of the discovery of the antiviral drug. Rather, resistance strategies must be discovered and implemented. Many jobs were damaged at this time, and the risk to social classes and employers varies. Therefore, it is necessary to provide a classification in identifying the degree of risk-taking of different jobs and, given the extent of the damage they have

suffered in the past few months, provide a solution for the future of business owners, as well as people who suffer more psychological and economic damage. They have seen that people who are more prone to disease need to be identified. In this regard, In addition to the authorities, the people must help make this important case a reality. The important question is, what jobs and people are most vulnerable to others? It seems, Some employees, such as the National Security Forces, are at risk. Also, it seems, Drivers, workers, and students who do not have high-speed Internet access are more vulnerable to social and economic harm than other groups.

## Theoretical Foundations

**Virus Accumulation Center.** This theory can be proved by citing the theory of the crime center. Generally, The extent to which crimes have accumulated is called the crime scene. John, EK and his colleagues believe: Researchers use the term in a variety of ways. A group like Sherman, Gartin and Berger, criminal addresses, and some, such as Taylor, Burr, and Green, call it a neighborhood or a collection of crime blocks. In addition, neighborhoods or complexes with high levels of crime or delinquency are monitored and try to relate this situation to social conditions (EK et al., 2011: 18).

So it can be said that public places such as subways, means of transportation, restaurants, cinemas, clubs and schools and universities, etc. are places where a large number of people gather. Therefore, the number of people infected with the virus in these places is increasing. Even if one person is infected, it can infect 20 people, and this chain continues, creating a virus-gathering center. Therefore, these gathering centers should be considered and further examined by the authorities. According to Sherman, given which areas are in the hands of criminal groups (infected) and which areas are not, the implementation plan in the analytical unit varies, security measures at different levels have different spatial accuracy. Because it is generally in large areas (Sherman, 1989: 58). The situation is more difficult.

## -Logical Selection Theory

This theory was put forward by Corinthians and Clark in 1993. This theory is more important for security officials in countries. Here we can cite this theory: "Given that some people infected with the Covid 19 virus decide to be in the community without knowing their disease or even knowing their disease, this is a wrong decision and an irrational choice." In this view, it is assumed that the perpetrator (sufferer) makes a completely logical and wise decision, and for this purpose, he fully thinks about the type of passivity, time, attractions and facilities of the place to perform the action. The absence of a guard, the possibility of quick access and escape from the crime scene, the existence of criminal targets are opportunities that increase the likelihood of wrongdoing. Therefore, logically, the existence of more opportunities in one place increases and decreases these opportunities, reduces the amount of error action (Pour Gholami and Sarvandani, 2018: 5; quoted by Lokayito, 1998: 6). Thus, security schemes make it difficult for criminals to commit crimes and commit illegal acts, and as a result of these schemes, individuals face difficulties

and insecurities in performing their actions. Thus, the theory of rational choice is valid for both the patient and the health advocate; that is, when, in what area, or in what practice, it is more successful, and the plan is more successful. According to Guterres, the outbreak of the coronavirus in Wuhan, China, and its transformation into a global epidemic has been the worst global crisis since the founding of the United Nations in 1945.

Corona is the worst crisis in the world because it threatens all the peoples of the world and has led to a recession that has not been seen in the last 75 years.

In addition to these two reasons, as well as the risk of widespread unrest, rising violence and growing conflict, we believe that Corona is the worst crisis we have faced since World War II. Ending this crisis requires the solidarity of all human beings and the elimination of differences.( From the United Nations)

Stuart (1971) lists four types of collective action:

- 1- A commotion caused by a group of people and its purpose is often sabotage.
- 2- Behavioral chaos full of anger of a group that has little organization.
- 3- Social fear of collective behavior that arises due to the feeling of danger.
4. Collective hysteria is a type of collective action that occurs when a group of people lose control and behave unreasonably (Stewart, 1971).

It's worth noting that sometimes people may get tired of the situation and protest.

Taylor (2000) believes that the most important reason for the violation of social norms by the protesting community is the cause of infection (Taylor, 2000).

However, conditions in some countries may be such that people feel deprived in epidemic conditions. Several factors make you feel deprived:

- 1- Unfulfilled promises of government officials
2. Creating high expectations in citizens
- 3- Not providing the conditions for meeting the needs

Therefore, what causes collective action is not absolute deprivation and failure, but relative deprivation (Berkoitz, 1993).

In difficult circumstances, there are various indicators and components for estimating maps and solutions, and how successful we have been in dealing with the crisis. As: Motivational needs (success, strength, and acceptance), resilience, coping strategy (from the conflict resolution model), and integration complexity and scoring systems (Mcclhand & Koestner, 1992). Springens claims that the thinking of

thinkers of each era is strongly influenced by and responds to problems and crises. They try to provide a comprehensive picture and a relative understanding of politics. Thomas Springs' theory of Bahrain has four stages.

1. Witnessing disorder and crisis.
2. Diagnosis of causes and rooting of problems.
3. Order and imagination; reconstruction of society.
4. Provide solutions and treatments.

## Research Methodology

The present study is applied in terms of purpose and in terms of method, it is a descriptive-survey research. The statistical population is the employers and the vulnerable strata of the society, such as the workers, who have been selected based on the random sampling method through Cochran's formula with a level of error of 0.05% of 500 people. In this study, the data collection tool was a researcher-made questionnaire and an archive (library-internet). The validity of the questionnaire has already been confirmed by experts and experts and its reliability through Cronbach's alpha test with "0.801" percent. In this study, test (T) was used to determine the effect or non-effect of the independent variable on the dependent variable. Software such as Chart and SmartArt are used to draw shapes and diagrams to better understand concepts.

### Research findings

## 1. Descriptive Findings

The most important goal of this research is to assess the risk of various jobs, and this assessment is obtained through questionnaires that are answered by citizens and employees, and statistics are obtained and data analysis. The types of jobs are in the general group and these groups are examined in general. (Fig. 2).

It should be noted that employees are divided into two categories: mandatory and non-mandatory. Some have to go to work and have government jobs. Of course, half of them teach virtually like teachers, but doctors and the armed forces and others must always serve. These people seem to be at greater risk. Some do not have to work, or stay at home, or have to stay at home. Like drivers, workers, etc., these people are more economically and economically disadvantaged, and their lives become more difficult.

The statistical population of business owners was considered to be more at risk, as evidenced by the statistical sample with the questionnaire tool. Our statistical sample was randomly selected from individuals and employees who work in the city of Tehran. Of course, 90% of the people are men and 10% are women. Of course, this number is due to the fact that both female staff in general are less than men

Table (1), and that at times they were not willing to answer questions. Therefore, it can be said that men are more susceptible to the virus than women.

Table 1  
Demographic information of statistical sample

Man	Female	Number of persons	Types of jobs	
65	35	100	Physicians	1
90	20	110	Disciplinary forces	2
90	10	100	Drivers	3
50	20	70	Workers	4
50	20	70	Shopkeepers	5
30	20	70	Restaurant owners and hotels	6
375	125	500	Total sample population	

Source (author's calculations)

Table 2. Frequently Asked Questions and Distributions

Questionnaire questions	Liquor spectrum	absolute frequency	Percentage of absolute frequency
<b>The effect of the virus on people's Economy</b>	very little	10	0/02
	Low	20	0/04
	medium	20	0/04
	Much	200	0/040
	very much	250	0/050
	Total	500	0/0100
<b>The effect of the virus on social status</b>	very little	50	0/05
	Low	200	0/042
	medium	80	0/09
	Much	100	0/024
	very much	70	0/020
	Total	500	0/0100
<b>The impact of the virus on people's culture</b>	very little	50	0/010
	Low	100	0/020
	medium	150	0/032
	Much	120	0/022
	very much	80	0/016
	Total	500	0/0100
<b>The impact of the virus on politics and security</b>	very little	40	0/03
	Low	60	0/012
	medium	100	0/020
	Much	100	0/020
	very much	200	0/045
	Total	500	0/0100
<b>The impact of the virus on the environment</b>	very little	80	0/012
	Low	100	0/020
	medium	250	0/050
	Much	50	0/010

very much	20	0/08
Total	500	0/0100

#### Source (author's calculations)

According to Table (2), we conclude that jobs that are in the economic dimension are more vulnerable. Ranked in two political occupations, such as the armed forces or political departments, which have been forced to reduce their forces. After that, the social strata and, ultimately, the culture and the environment, are at risk of independent variable harm (Covid 19).

**Table3 - Statistics of the statistical community regarding high-risk jobs**

Percentage of absolute frequency	absolute frequency	Vulnerable jobs in terms of security and health	Percentage of absolute frequency	absolute frequency	Vulnerable jobs economically
0/045	45	Law enforcement	0/040	40	drivers
0/035	35	Doctors	0/035	35	Workers
0/020	20	Bank employees	0/025	25	Hoteliers and restaurants

#### Source (author's calculations)

According to statistics, economic and political jobs are more vulnerable to the virus. Research shows that drivers, workers, restaurant owners and hoteliers are more at risk between economic occupations and should be supported. But among the political and security jobs, law enforcement and doctors are more vulnerable than any other job and should

## 2. Esthetic Findings

In this study, to determine the effect or non-effect of the independent variable (Covid 19) on the dependent variable (business owners), the test (T) has been used. The results of this test are as follows: Table (4), The result of the T-test for the effect of the independent variable on the dependent variable



Table 4  
T-test result for the effect of the independent variable on the dependent variable

Sig	Df	T	Standard deviation	Average	Number	The dependent variable
0/000	99	-549/801	1/66969	8/2000	500	Economy
0/000	99	-444/197	2/12878	5/4400	500	Culture
0/000	99	-432/131	2/14796	7/1800	500	Politics
0/000	99	-559/083	1/64520	8/0800	500	Health
0/000	99	-514/219	1/80896	6/9800	500	the environment

#### Source (author's calculations)

According to Tables (4), the effect (independent variable) on each of the dependent variables was measured by the mean test of a society and since the significance level was less than 0.05, Therefore, it can be concluded that the effect of the independent variable with a confidence level of 0.95 is confirmed. It can also be said that economics and health, with averages of 2.8 and 0.82, have the highest averages compared to the averages of other variables; therefore, the virus has the greatest impact on economic damage and public health.

According to Figure (3), April has been the peak of virulence and vulnerability in various aspects of society, and especially the economic dimension and related jobs, and the political dimension and related jobs are at greater risk. According to statistics, economic and political jobs are more vulnerable to the virus. Research shows that drivers, restaurant owners and hoteliers are more at risk between economic jobs and should be supported. But among political jobs and the security of the armed forces, they are more vulnerable than other jobs and must be supported by the government. The first category of doctors and Disciplinary forces: the risk of disease

The second category of drivers and workers: livelihood risk and social and economic vulnerability

In general, statistics from statistical samples show that many people believe that the Covid 19 virus has greatly affected people's lives and caused many problems in addition to mortality and disease.

## Conclusion

Based on the data, it can be concluded that in most countries, disciplinary forces and doctors are more at risk in terms of the virus, drivers and workers in terms of economic damage. Also, bank employees.

Hoteliers and restaurant owners are jobs that are secondary to the risk of infection. Shopkeepers and shops are also in third place. But drivers are at the forefront of economic damage, and workers are in second place. Of course, business owners can work online and earn less. But vulnerable groups are drivers who have minibuses or buses and people are reluctant to use public transportation. Therefore, the

Ministry of Health, which emphasizes the use of private vehicles, must consider the issue and those who make a living from public transport.

All countries can use the results of this study; Because the corona virus behaves in the same way in all places and with all occupations, there is no exception.

## Suggested Solutions

1- Providing loans and monthly allowances to drivers, workers and hotel owners

2- Creating internet relief groups in places that do not have internet

3- Creating special clothes for law enforcement forces and doctors and bank employees to prevent the risk of infection

4 - Make masks and gloves that have a layer of zinc containing disinfectant that will be killed as soon as the virus comes in contact with gloves and mask the virus.

5- Observing social distances

6- Holding educational classes for illiterate people

## Declarations

## Appreciation

Thanks to everyone who helped us set up and answer the questionnaires.

All manuscripts must contain the following sections under the heading 'Declarations':

**Ethics approval and consent to participate:**

Not applicable'

**Consent for publication:**

applicable'

**Availability of data and materials :**

applicable'

Competing interests: applicable'

Funding: Not applicable'

Authors' contributions: : applicable'

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## Figures

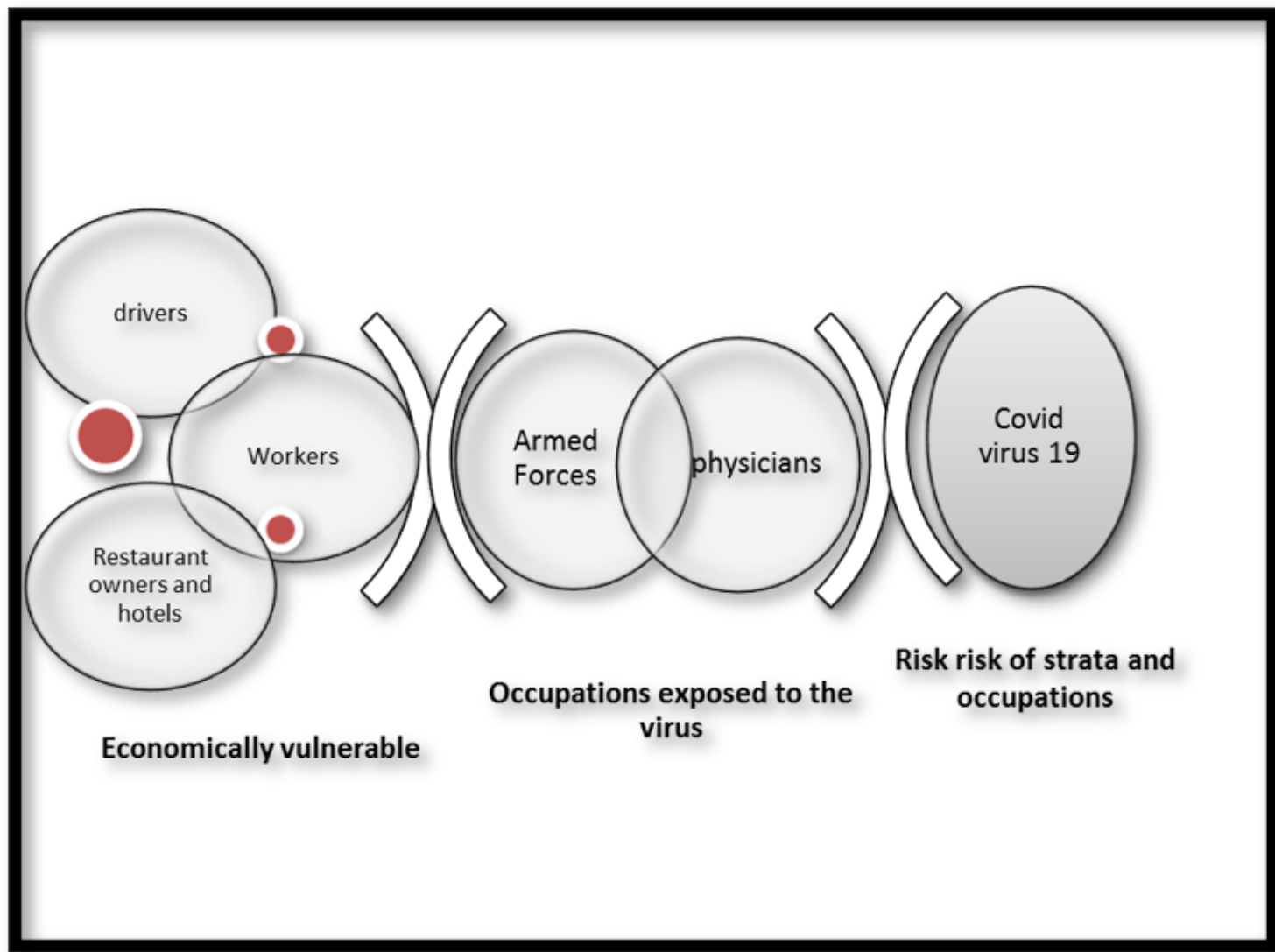


Figure 1

Conceptual model of research

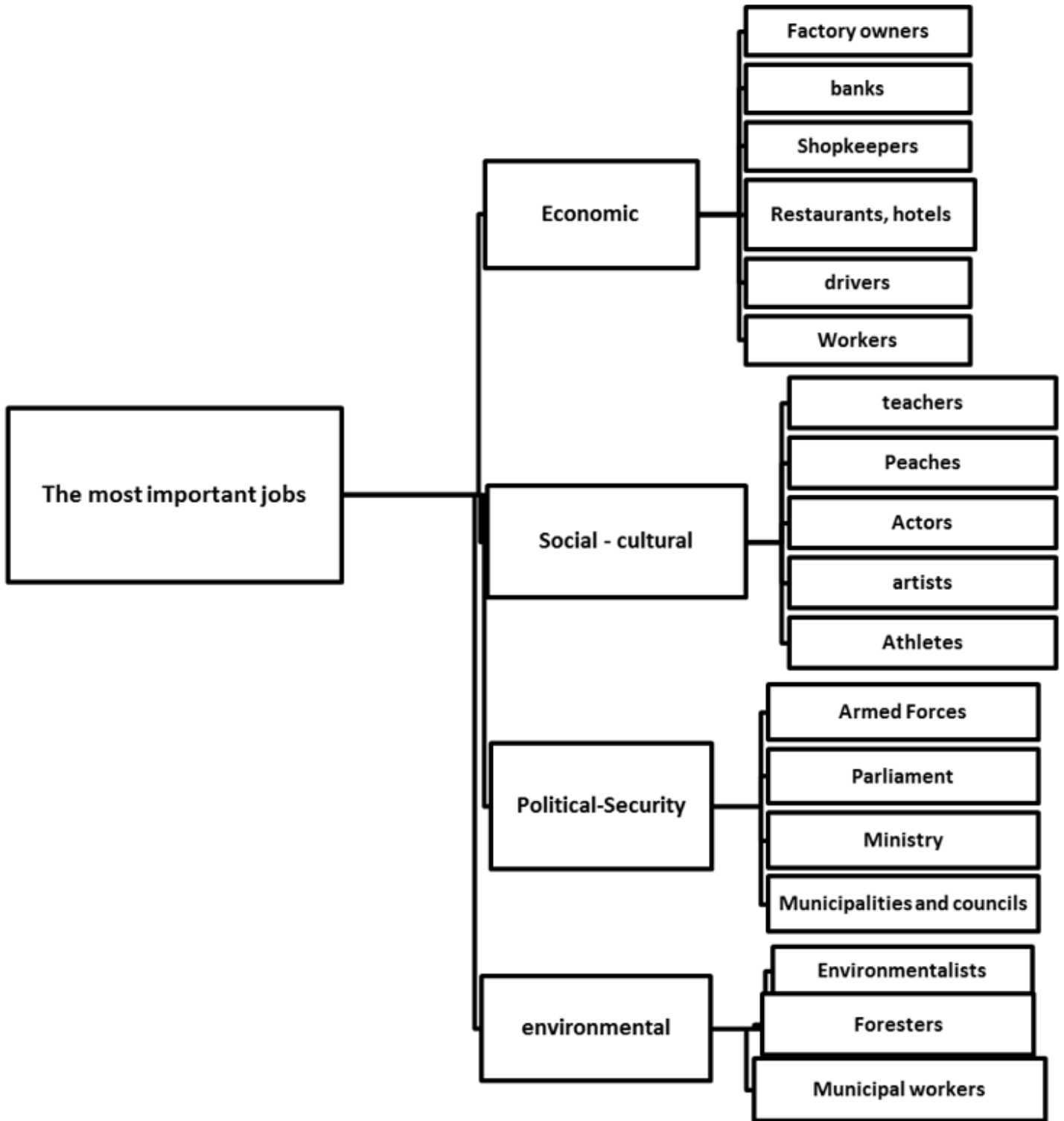
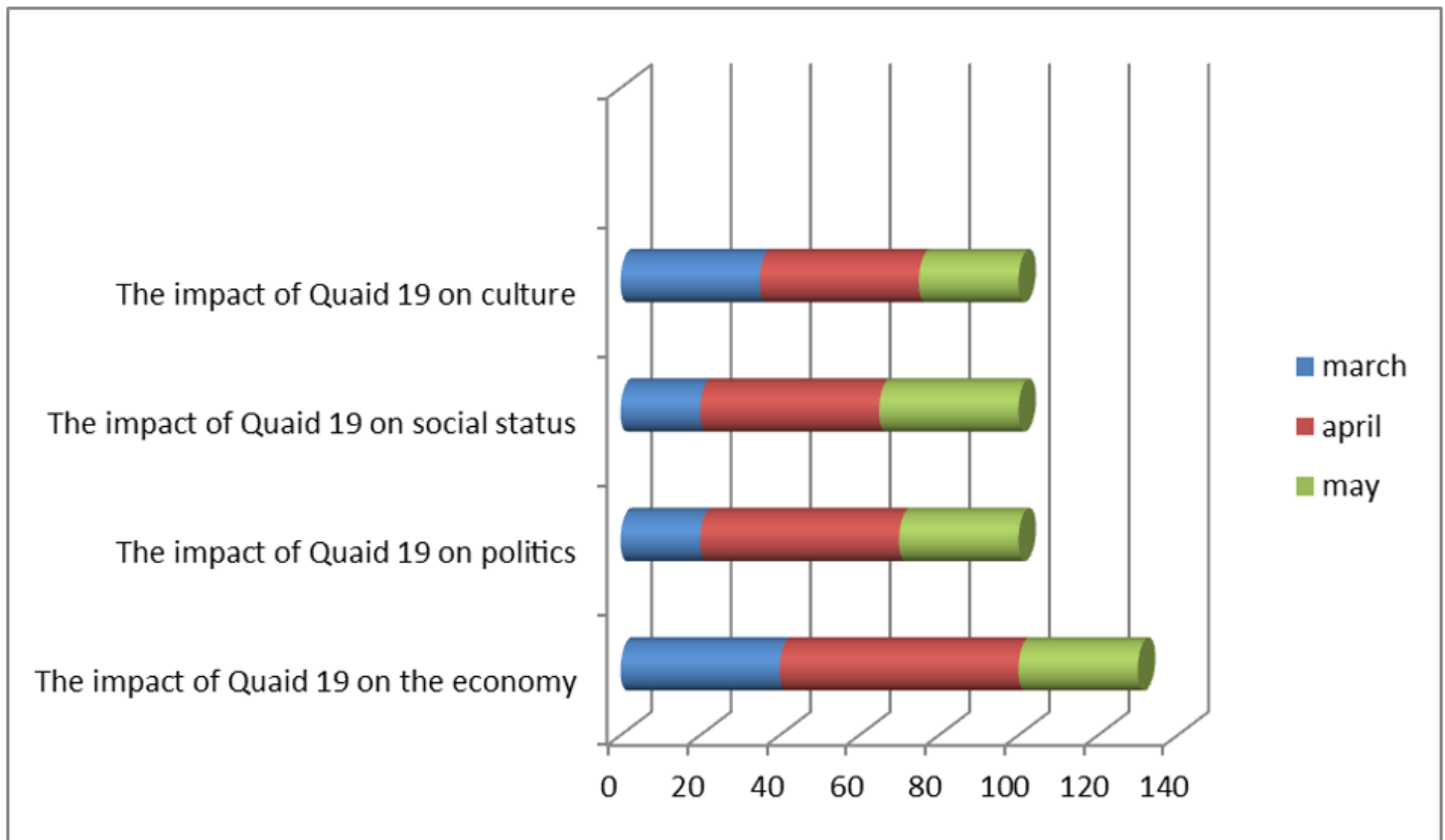


Figure 2

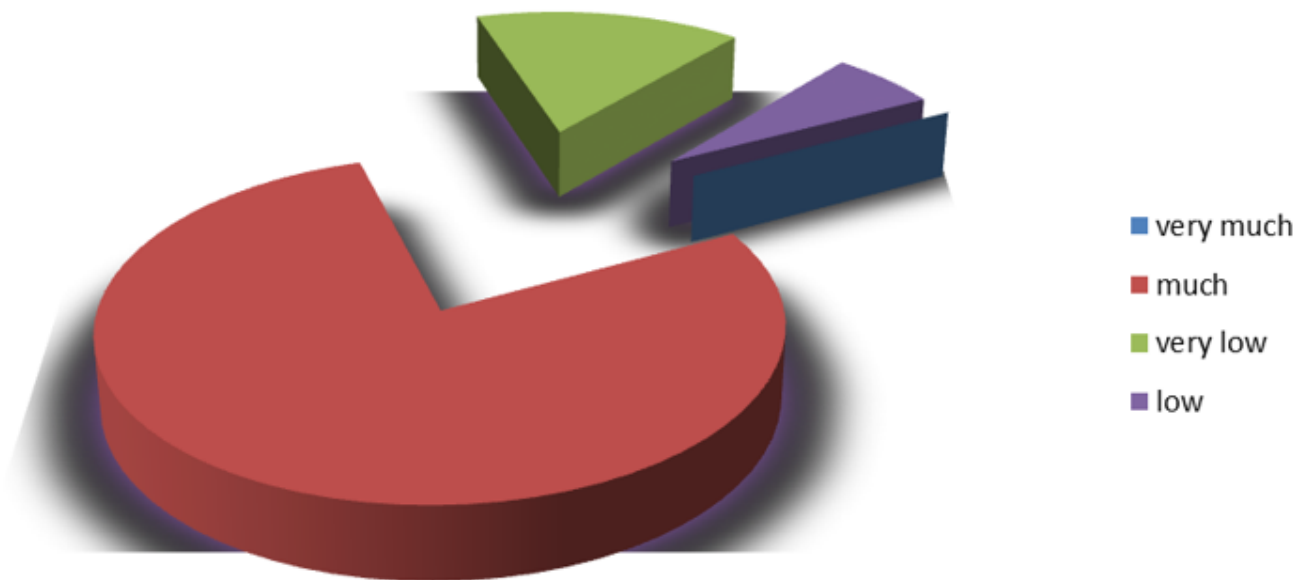
The most important jobs



**Figure 3**

Quantity of covid 19 virus

**The degree of vulnerability of society in different dimensions**



**Figure 4**

The effect of society on the virus