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# The global health pandemic and its impact on the motivation of employees in micro and small enterprises: a case study in the Slovak Republic

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## ABSTRACT

The COVID-19 pandemic has negatively influenced all areas of human life across the world. Economic downturn is evident in almost every country. However, the biggest impact has crisis on micro and small enterprises (MaSEs). As the change of regime and rhythm of work is coming, the important task of employees in management is to retain their subordinates in the state of positive setting and motivation. The aim of the research is to define the impact of pandemic COVID-19 on the level of employee motivation in MaSEs operating in Slovak Republic. The development of employee motivation was investigated in three fields, financial, working and relationship one. A total of 848 respondents were asked in 2017 to 2020 by means of stratified selection. There was a significant decrease of preferences of respondents in all investigated motivation factors. Testing confirmed the existence of statistically significant differences during 2020 in comparison with previous years in investigating the following motivation factors: basic salary, job security, good working team, communication at work and superior's approach. The main contribution of the research is the finding that pandemic COVID-19 has the influence except of other impacts also on the area of employee motivation.

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## 1. Introduction

Globalisation, as Kirton (2020), Savych and Molchanova (2019), Smyslov (2019), and Deming (2017) agree, is currently considered as the key factor in the future development of the world economy. At the same time, it evokes significant discussions in theoretical circles as well as in governmental ones together with all society. Globalisation is entrepreneurship specific mainly to the growing range of cross-border economic activities, i.e., penetration of competitors to domestic markets and opening

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foreign markets, international acquisitions, strategic alliances as well as their influence on the restructuring of industry. Globalisation itself carries unprecedented growth of competition on both the micro and macro level. Developing economies also had to join to the process of globalisation and adapt their entrepreneurial strategy accordingly. The last two decades saw the development of the economies of developing countries, typically by their improvement and mainly building distribution systems within expanding international trade. Brazil, Russia, China, India and South Africa can be considered as the main developing economies. When it comes to central Europe, Slovakia is a significant case of a developing economy, where micro and small enterprises (MaSEs) create a significant part of the economic potential of the country, as well as in other developed EU countries. In Slovakia, micro enterprises (0 to nine employees) represent about 93% of all enterprises, 6% is created by small enterprises (10–49 employees), 0.8% is created by medium-sized enterprises (50–249 employees) and only 0.2% is created by large enterprises (with more than 250 employees). MaSEs significantly engage in the creation of added value, provision of workplaces, whereby their progress and success create new working opportunities and strengthens the economy (SBA, 2020).

Over the last 100 years, there have been four worldwide pandemics. The worst was Spanish flu, when 17.4 million people died between 1918 and 1919 (More et al., 2020). Other big pandemics happened in 1957–1958 (Asian flu, 1.1 million victims) and in 1968–1969 (Hong Kong flu, around 1 million victims) (Yoshikura, 2014). The situation changed again in December 2019, when the world was attacked by another global pandemic of corona virus COVID-19, which is caused by the transfer of an acute respiratory syndrome, SARS-CoV-2 (Bobdey & Ray, 2020).

Worldwide, the COVID-19 pandemic has negatively influenced all areas of human life as well as the area of human resources management. An economic downturn is evident in almost every country (Codagnone et al., 2020). The level of unemployment overcomes historical highs, and many enterprises are going bankrupt. GDP is decreasing in countries. The forecast of the future development is not positive. Regarding this situation, The European Union submits the proposal of a new tool of renewal named Next Generation EU to the amount of €750 billion. It is proposed to be an extension of the restructured long-term E.U. budget, the Multiannual financial framework to the amount €1.1 billion. Next Generation EU, together with the basic Multiannual financial framework, will reach, according to the proposal of the Commission, €1.85 billion. It is going to be added to three safety nets to the amount of €540 billion, which has been already approved by Parliament and Council. The final amount for the renewal will be €2.4 billion (<https://www.consilium.europa.eu>).

It is difficult to estimate the economic impacts of these pandemics (Zhang, 2020). The consequences of Spanish flu cannot be separated from the consequences of World War I. As far as Asian and Hong Kong flu are concerned, their economic impact was restricted enough so it is possible to explain mainly by relatively isolated big world economies at that time and small volume of global trade with goods and services (Siche, 2020). However, today's global economy looks completely different (Bonenberg et al., 2019; Dobrodolac et al., 2016; Gejdos & Potkany, 2017; Stacho et al., 2019; Xu et al., 2017). All countries are interconnected with a thick, and well-

structured network of suppliers and customers (Kan et al., 2019; Lizbetinova, 2017). Whatever happens in one input of the network will somehow be expressed through many outputs. The closure of factories in China in connection to the global pandemic first appeared on the side of offer. Workers stayed at home and machines were not being used to build consumer goods. Customers purchasing Chinese-made computers, mobile phones, toys, sporting goods and parts experienced shock as the first to be affected. However, as the virus spread across the world, the shock to manufacturing changed very quickly to a shock on demand; the demand for goods and services was decreasing (Song & Zhou, 2020). Different scenarios assume that the majority of states are not able to keep the spread of the virus under control which can cause significant changes in the behaviour of consumers (Loucanova & Olsiakova, 2020). Demand shock can reduce the growth of global GDP by half, following a slowdown of economies. It is also expected that manufacturing and demand shocks will have the biggest impact on MaSEs, as well as less developed economies. Many enterprises could face financial ruin (Beck & Hensher, 2020; Papik et al., 2020).

Slovakia has also experienced a distortion of global chains of production and trade. The development of the Slovak economy in the last months of 2019, as well as advance indicators of eurozone at the beginning of 2020, originally led to a more positive estimation of GDP growth. However, the situation has changed significantly with regard to the global pandemic. The shock to the Slovak economy is significant. It does not represent the same shock as the global financial crisis and to estimate its overall influence is very difficult because the situation has been developing every day and the length of restriction measures cannot be known in advance. Regarding the fact that the massive restrictions in many parts of economy, not only in Slovakia but also abroad, it is possible to expect that not only domestic demand, but also foreign demand will reduce (Chen et al., 2020). The Slovak labour market will also experience the influence of a difficult economic situation, despite the fact that state measures can moderate impacts. There is also the assumption of growth of the unemployment rate, and it is likely there will be only moderate growth of salaries, in comparison to the dynamic growth of previous years.

The aim of this research is to define the impact of the COVID-19 pandemic on the levels of employee motivation in MaSEs performance in Slovakia.

## 2. Literature review

COVID-19 has been characterised as a pandemic by the World Health Organization (W.H.O.) due to the high numbers of confirmed cases and deaths; the pandemic has posed an unprecedented health crisis to human beings (Chan et al., 2020; Stier et al., 2020; World Health Organization, 2020). As of 1 October 2020, the pandemic has caused over 33 million confirmed cases and over 1 million deaths globally. Restrictions on the use of public spaces, quarantine and social distancing are key measures which have been implemented to tackle the pandemic and protect public health (Dehui et al., 2021).

Countries across the world have introduced policies such as stay-at-home lockdowns, restrictions on public events, social gatherings and public transport, the

**Table 1.** Types of enterprises.

Type of enterprise	Number of employees	Annual turnover	Balance
Micro enterprise	<10	<2 mil. EUR	<2 mil. EUR
Small enterprise	<50	<10 mil. EUR	<10 mil. EUR
Medium enterprise	<250	<50 mil. EUR	<43 mil. EUR

Source: SBA, 2020.

closure of schools and workplaces, and public COVID-19 information campaigns (Honey-Roses et al., 2020; Ritchie et al., 2020). In Slovakia, the tourism sector has been influenced most by the pandemic. Many more significant economic impacts can be expected in connection with decreasing activities in key sectors of the economy, for example, the production of vehicles and consumer electronics, as well as the building industry. Seeing that within the scope of global networks, Slovakia specialises on supplies of vehicles and their parts (including tyres, plates, plastic parts, or electrical components), a decreasing demand for vehicles with Slovak-made parts can manifest in a cessation of production, not only in Slovak vehicle factories, but in hundreds of sub-suppliers and in other decreasing sectors of the economy, trade, gastronomy, agriculture, etc. As the recovery of economy may take several years, the task of management employees is to manage this crisis and adapt to new conditions (Neykov et al., 2018; Paunescu & Matyus, 2020).

However, the biggest impact is the one on MaSEs. It concerns serious social, economic and psychological impacts (Cowling et al., 2020). As many MaSEs are family enterprises, loss of revenue is obvious. Nevertheless, enterprises that are not family-run also feel the impact of the pandemic. In the scope of psychology, a crisis is a phenomenon that has been investigated in detail. Various patterns of surviving and managing crises from various traumatic losses, catastrophe or endangerment of life are well known. These principles can be used also for dealing with stress, which the world is currently faced with and may face in the future (Dobrodolac et al., 2018). There is a change of regime and rhythm of work coming, and the important task of management employees is to retain and motivate their staff and encourage positive thinking (Ursakii & Kubitskyi, 2020).

About 23 million enterprises exist in the European economic space, which employ about 135 million people. About 96.9% of them are micro enterprises and 2.4% are small enterprises (SBA, 2020). Regarding the fact that there was not a unified definition of enterprises in member states, in 2003 the European Commission decided to recommend the definitions of micro, small and medium enterprises by means of quantitative characteristics, which are number of employees and annual turnover or balance (Table 1).

In Directive No. 2003/361/EC the division of enterprises is further adjusted also according to quality marks, as for example independency of proprietorship, whereby economically independent and individual entrepreneur is understood as an entrepreneur who (SBA, 2020):

- is completely independent, i.e., he/she does not own a stake in other enterprises and no other enterprise has a stake in his/her enterprise;

**Table 2.** The structure of enterprises in Slovakia in 2019.

Size categories / Legal forms	Enterprises	Sole proprietors	Liberal professions	Self-employed farmers	Total	
					abs.	%
Micro enterprises (0–9 employees)	178,095	315,182	17,657	4,302	515,236	96.9
Small enterprises (10–49 employees)	11,721	1,215	39	9	12,984	2.4
Medium enterprises (50–249 employees)	2,780	63	0	0	2,843	0.5
Large enterprises (more than 250 employees)	666	0	0	0	666	0.1
Total MaSEs (0–49 employees)	189,816	316,397	17,696	4,311	528,220	99.3
Enterprises in total	193,262	316,460	17,696	4,311	531,729	100.0

Source: SBA, 2020.

- owns less than 25% of capital or voting rights in one or more different enterprises; or all third parties own in enterprise no more than 25% of the capital or voting rights (depending on which value is higher);
- is not inter-connected with another enterprise by means of a natural person according to Art. 3, part. 3 of the issued recommendation.

MaSEs are an important and inseparable part of the Slovak economy. Mura and Buleca (2014) state that they are significant also for national economies, because they are engine that hide behind development, partly because of their flexibility and ability to adopt and use progressive technologies and create workplaces, and they are the main initiators in the growth of living standards. They act mainly in non-financial enterprise economics. On average, Slovakia has more enterprises in the area of MaSEs (99.3%) in comparison with Europe, where micro enterprises prevail unambiguously. Changes in the entrepreneurial environment are reflected with spacing as well as the quantitative characteristics of MaSEs. In 2019, MaSEs provided 55.4% of workplaces and participated in 40.5% on the creation of added value (SBA, 2020).

According to Statistical Office of the Slovak Republic in Slovakia around 560,000 new enterprises were set up inter-annually in 2019. In the same year, a 6% decrease was recorded in the number of active enterprises, however this could be caused to a large extent by the influence of introducing the new methodology of the Statistical Office of the Slovak Republic for the setting of the subject's activity. However, the change of methodology does not have any influence on the fact that the biggest increase was recorded in micro enterprises where natural persons and legal entities belong to. Sole proprietors have the biggest representation among natural persons, but also liberal professions or independently-operating farm workers belong here. More than one quarter of active sole proprietors performed their main activity in the area of trade, approximately one fifth acted in the area of construction and the third largest sector is industry. Almost 6% of sole proprietors acted in the sector of transport, information and communication, and 7% of sole proprietors acted in other services (SBA, 2020). The structure of enterprises in Slovakia in 2019 is illustrated in Table 2.

The majority of newly established enterprises begin to run business in the small amount, and they keep this status in the future, too. Usually, they enter into business,

because they come with new ideas, products or service, that would fulfill the niche market (Horak, 2017). They possess mostly private ownership. In 2015 approximately 36% of small enterprises were recorded, and were legal entities (SBA, 2020). In the majority of cases, those enterprises are possessed by the owner, or a small family circle, management is independent, and the owner does not have to be responsible to anybody, unless other family members participate in the running of the enterprise. As Kössler (2008) states, although owners, resp. managers are generally experts in the production of their chosen product or service provision, they usually miss the knowledge and experience with management and entrepreneurship. Organisational structure in small enterprises is usually very simple. Sometimes, managerial positions are filled by family members and this makes the enterprise a real family business. Employees are responsible for different tasks and this is what gives the enterprise more flexibility than larger enterprises. The majority of small enterprises are established with the purpose of employing the owner. This is connected with the risk that if the owner of the enterprise is satisfied with their earnings, they do not have the motivation to grow the enterprise (Myskova & Doupalova, 2015). As Odehnalová (2008) states, regarding the character of ownership, it is typical for small enterprises to often suffer with the lack of capital. Capital is often supplied by owner or family members. The provision of sufficient capital for growth or a short-term loan for the survival of bad times is difficult (Shan et al., 2020; Yemelyanov et al., 2020). According to Glückler (2012) the reason for the problematic gain of long-term capital is the fact that a large part of the assets of a small enterprise include short-term equipment and accessories. Many small enterprises do not have enough source materials and references which are required by banks when providing loans (Krišťáková et al., 2020; Tong et al., 2019). They also suffer from the lack of human resources, which hinders them from attracting the interest of more qualified and experienced managers and professionals (Tureková et al., 2017; Vetrakova et al., 2016). As Haksever (1996) states, the more an enterprise extends, the more this disadvantage is reduced.

The influence of the COVID-19 pandemic on the regime and rhythm of work is coming, the task of employees in management is to retain their staff in a positive setting and provide motivation (Alfalih, 2021). The ability of a manager to motivate employees correctly represents the most significant and, at the same time, the most difficult ability. Satisfied and motivated employees are an inseparable part of a successful and competitive enterprise (Vydrová, 2018). However, every employee has different requirements which are needed to fulfill and motivate them. Some employees are driven by success, whereas for others job security is more important (Davidescu et al., 2020; Dwinanda et al., 2020). The importance of motivation factors significantly changes according to age, gender and other aspects (Campos-Garcia & Zuniga-Vicente, 2019; Joniakova & Blstakova, 2015; Lizbetinova et al., 2020; Mahmoud et al., 2020; Malchrowicz-Moško et al., 2019; Maqsoom et al., 2018). Motivation also depends on the level of education (Pancheva & Antov, 2017). During a period of unemployment, motivation factors such as the stability of the work position, resp. basic salary prevails more. With the growth of unemployment, relationships in the workplace are on the last position on the ladder of importance. On the contrary,

during a period of high unemployment, the most important motivation factors are those connected to relationships among employees (Neykov et al., 2017). Employees in management have to find the right answer for the question why some employees work less and why others reach higher work performance (Volna & Papula, 2013). It is necessary for a manager to understand what motivation factors are important for employees (Fratričová & Kirchmayer, 2018). There does not exist strictly defined way of motivation that applies to every situation and for every employee. To be motivated means more than to be happy or satisfied at work. Motivated employees try to do the best job possible not for enterprise but for themselves. Motivation is a feeling that is hidden somewhere inside a person, it is something that cannot be forced (Bin Saeed et al., 2019). Motivation hides in the hearts of managers who break barriers by praising a job well done. The motivation of employees represents a difficult task, but if enterprise makes enough effort to satisfy its employees and tries to motivate them appropriately, it creates not only a positive atmosphere in the workplace but also a reliable base for enterprise growth and a way to reach success in a competitive environment (Dvorsky et al., 2020; Gazova et al., 2016; Lepold et al., 2018). However, in standard practice, the problems of motivation are often underestimated and perceived as something that is generally valid and not needed in practice (Carsrud & Brannback, 2011). If an enterprise wants to reach its stated results and aims, motivation represents one of the most significant tasks in regulation and management of employee behaviour. Its basic aim is to evoke in employees interest, willingness and desire to engage in fulfilling tasks assigned to them in accordance with the aims of enterprise. When creating the spectrum of motivation factors and tools that could be used by employees in management for motivating their subordinates, it also needs to be taken into account that that order of particular motivation factors changes under the influence of the current unstable and changing environment.

### 3. Methodology

The development of employee motivation was researched across three fields: financial, working and relationships. Each state was researched by means of motivation factors. Regarding the financial field, the subjects of the research were motivational factors such as fringe benefits, basic salary and a fair appraisal system. Job security, working hours and job performance were motivation factors that were researched in the working field. Lastly, the subjects of research in the relationship field were motivational factors, such as atmosphere in the workplace, good working team, communication in the workplace and the supervisor's approach. The importance of each motivation factor was evaluated according to a 5-point Likert scale, defined as 5 = the most important, 1 = irrelevant. By means of a stratified selection, a total of 848 respondents were asked during years 2017–2020 working in MaSEs in Slovakia, the structure of which is shown in Table 3.

By means of an ANOVA test zero hypothesis was tested  $H_0 \mu_1 = \mu_2 = \mu_3 = \mu_4$ , about the equality of average values of particular motivation factors on the level of significance  $\alpha = 5\%$  against the alternative hypothesis  $H_1 \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$ , provided equality of dispersions  $\sigma_1^2, \sigma_2^2, \sigma_3^2, \sigma_4^2$ . Then, Levene's test was used. This test is about



**Table 3.** The structure of research sample.

Year		2017	2018	2019	2020	total
Number of respondents		200	196	212	240	848
Gender	Female	80	94	95	108	377
	Male	120	102	117	132	471
Age	Up to 30 years	25	29	26	36	116
	31–40 years	85	67	66	54	272
	41–50 years	70	73	78	66	287
	50 years and more	20	27	42	84	173
Completed education	Primary	5	3	6	0	14
	Lower secondary	90	81	85	90	346
	Upper secondary	100	103	104	150	457
	Higher	5	9	17	0	31
Seniority	Less than 1 year	15	24	19	18	76
	1–3 years	25	27	30	24	106
	4–6 years	20	21	21	42	104
	7–9 years	45	36	34	72	187
	10 years and more	95	88	108	84	375
Work category	Managers	15	7	6	12	40
	Blue collar workers	185	181	201	204	771
	White collar workers	0	8	5	24	37

equality of dispersion in groups, by means of which the validity of zero hypothesis was verified  $H_0 \sigma_1^2 = \sigma_2^2 = \sigma_3^2 = \sigma_4^2$ . In case the value of testing statistics exceeded the critical value, which is quantile of Fisher F-division, then the zero hypothesis was denied.

Hypotheses tested:

- WH 1 – it is assumed that the COVID pandemic influences the levels of motivation of employees in MaSEs.
- WH 2 – it is assumed that if differences in the level of motivation factors exist in time, then they are not caused by the accidental variation of results.
- WH 3 – it is assumed that motivation factors of financial character will keep its position of importance in the order of importance.

#### 4. Results of the research and discussion

In the introduction, the level of importance (required status) of motivational factors in particular years were the subject of research. The results are presented in [Table 4](#) and confirm that for four years, there were changes in the level of preferences of motivational factors. The most significant change was in 2020, where not only the total decrease of average values happened in comparison with the years 2017–2019, but also the most significant movements in the order of importance.

In 2017–2019 employees preferred relationship motivation factors (good working team, supervisor's approach, communication in the workplace and atmosphere in the workplace). Financial motivation factors were represented mainly by basic salary. In 2020, because of the influence of the pandemic other fringe benefits were added to a basic salary as employees' fear about providing security for their families increased. Relationship factors such as good working team, communication in the workplace,

**Table 4.** The order of importance of research motivation factors in years 2017–2020.

	2017	2018	2019	2020	$\bar{x}$
1.	Basic salary	4.50	4.46	4.53	4.26
2.	Good working team	4.46	4.45	4.46	4.17
3.	Supervisor's approach	4.45	4.39	4.45	4.17
4.	Communication in the workplace	4.38	4.39	4.44	4.15
5.	Job security	4.35	4.35	4.36	4.15
6.	Fringe benefits	4.26	4.35	4.29	4.11
7.	Job performance	4.25	4.26	4.25	4.08
8.	Atmosphere in the workplace	4.18	4.22	4.24	4.06
9.	Working hours	4.16	4.17	4.22	4.05
10.	Fair appraisal system	4.15	4.11	4.20	3.95

**Table 5.** Average values of the importance of motivation factors in years 2017 to 2020.

Motivation factor	Average	Confidence interval		Standard deviation
		–95.00%	95.00%	
Basic salary	4.41	4.34	4.48	0.92
Supervisor's approach	4.40	4.35	4.45	0.72
Good working team	4.35	4.30	4.40	0.69
Job security	4.30	4.24	4.37	0.89
Communication in the workplace	4.29	4.23	4.35	0.73
Fringe benefits	4.27	4.22	4.33	0.71
Job performance	4.23	4.18	4.28	0.67
Atmosphere in the workplace	4.17	4.10	4.23	0.87
Working hours	4.16	4.10	4.22	0.75
Fair appraisal system	4.11	4.03	4.20	1.08

**Table 6.** Levene's test of homogeneity of dispersions.

Motivation factor	SS effect	MS effect	MS error	F	p-level
Atmosphere in the workplace	1.67	0.56	0.27	2.08	0.102
Good working team	0.14	0.05	0.12	0.39	0.762
Fringe benefits	0.08	0.03	0.16	0.16	0.924
Job security	0.92	0.31	0.32	0.96	0.412
Communication in the workplace	1.12	0.37	0.14	2.67	0.046*
Working hours	3.13	1.04	0.18	5.89	0.001*
Job performance	0.29	0.10	0.15	0.64	0.589
Supervisor's approach	0.01	0.00	0.15	0.03	0.994
Fair appraisal system	0.59	0.20	0.47	0.42	0.741
Basic salary	0.67	0.22	0.36	0.61	0.607

Note: Single asterisk (\*) indicates significance at 5%.

Source: Own research.

and atmosphere in the workplace (influenced by the introduction of a home office) are ceasing to be important. The supervisor's approach has become an important factor in 2020.

The aim of this research was the order the importance of motivation factors between 2017 and 2020. The aim was to define if the differences that were found in these years showed statistically significant differences (Table 5). Basic salary was the most important motivational factor in financial area from the point of view of fields. Respondents had the tendency to evaluate research factors with grades from 4.34 to 4.48. The highest importance in the group of working factors was given to job security. It was evaluated between 4.24 and 4.37. The supervisor's approach was the most important motivation factor in the relationship area. This researched factor was evaluated by respondents with grades from 4.35 to 4.45.

The next aim was to test the equality of dispersions of motivational factors by means of Levene's test of homogeneity (Table 6).

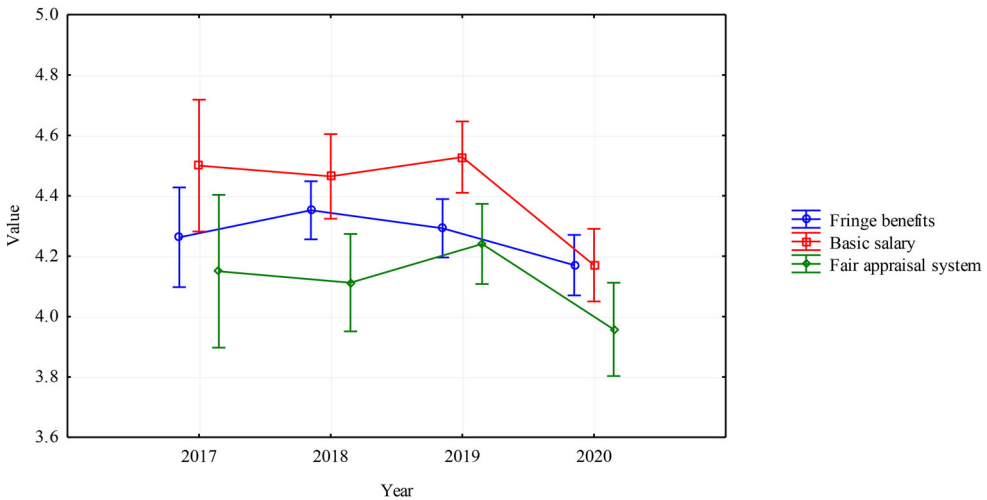
Based on the results, it is possible to conclude that in the case of motivation factors, communication in the workplace and working hours were of equal importance  $\alpha < 0.05$  zero hypothesis  $H_0$  was rejected and alternative hypothesis  $H_1$  was adopted. Then, it follows from the other results, that dispersions of motivational factors in particular periods are not constant.

Further, the differences among median values were researched in more detail, by means of the ANOVA test. Zero hypothesis  $H_0$  was tested about the equality of

**Table 7.** Single-factor dispersion analysis.

Motivation factor	SS effect	MS effect	MS error	F	p-level
Atmosphere in the workplace	3.85	1.28	0.75	1.71	0.164
Good working team	10.54	3.51	0.46	7.58	0.000*
Fringe benefits	3.30	1.10	0.49	2.22	0.084
Job security	14.10	4.70	0.77	6.09	0.000*
Communication in the workplace	13.40	4.47	0.52	8.63	0.000*
Working hours	0.86	0.29	0.56	0.51	0.675
Job performance	1.57	0.52	0.45	1.15	0.328
Supervisor's approach	5.41	1.80	0.51	3.56	0.014*
Fair appraisal system	8.11	2.70	1.15	2.34	0.072
Basic salary	15.00	5.00	0.83	6.00	0.000*

Note: Single asterisk (\*) indicates significance at 5%.  
 Source: Own research.



**Figure 1.** Financial motivation factors. Source: Own research.

median values of particular motivation factors on the level of importance  $\alpha = 5\%$  against the alternative hypothesis  $H_1$ , providing equality of dispersions. The zero statistical hypothesis assumed that during analysed years there does not exist a statistically significant difference of the level of single motivation factors. The result of analysis of dispersions are motivation factors, where significant change was observed, when p-value was lower than the set level of importance  $\alpha < 0.05$ . Motivation factors where the significant change was observed are highlighted by a single asterisk in Table 7.

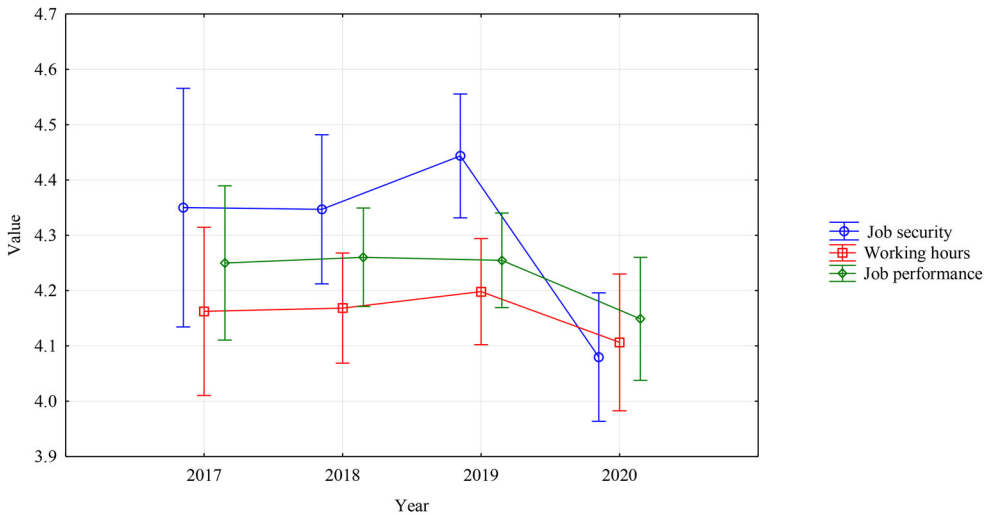
It follows from the results of single-factor dispersion analysis (Table 7), that from the 10 most important analysed motivation factors, five experienced a significant change in the value of importance from the point of view of the year. Based on the reached results in the level of importance  $\alpha = 0.05$ ,  $H_0$  was rejected and alternative hypothesis  $H_1$  is adopted. In motivation factors good working team, job security, communication in the workplace, supervisor's approach and basic salary, there was a statistically significant difference of the level.

**Table 8.** The results from testing the motivation factor – basic salary.

Year	2017	2018	2019	2020
Average	M = 4.50	M = 4.46	M = 4.53	M = 4.17
2017	–	0.739	0.792	0.003*
2018	0.739	–	0.578	0.006*
2019	0.792	0.578	–	0.002*
2020	0.003*	0.006*	0.002*	–

Note: Single asterisk (\*) indicates significance at 5%.

Source: Own research.

**Figure 2.** Working motivation factors. Source: Own research.

When researching motivation factors in motivation groups, it is possible to conclude that in the financial field in 2020 there was a change in the level of motivation of employees. It follows from Figure 1 that in all investigated motivation factors, there was a significant decrease in recorded preferences of respondents. Testing confirmed the existence of statistically significant differences in investigation of the motivational factor of basic salary in 2020 in comparison with previous years (Table 8).

Similarly, when investigating motivation factors in working field, the change in the level of motivation happened in 2020 (Figure 2). The level of all researched motivation factors from the working group significantly decreased in comparison with previous years. When testing the existence of statistically significant differences among years, statistically significant differences in the motivational factor of job security were confirmed in 2020 in comparison with previous years (Table 9).

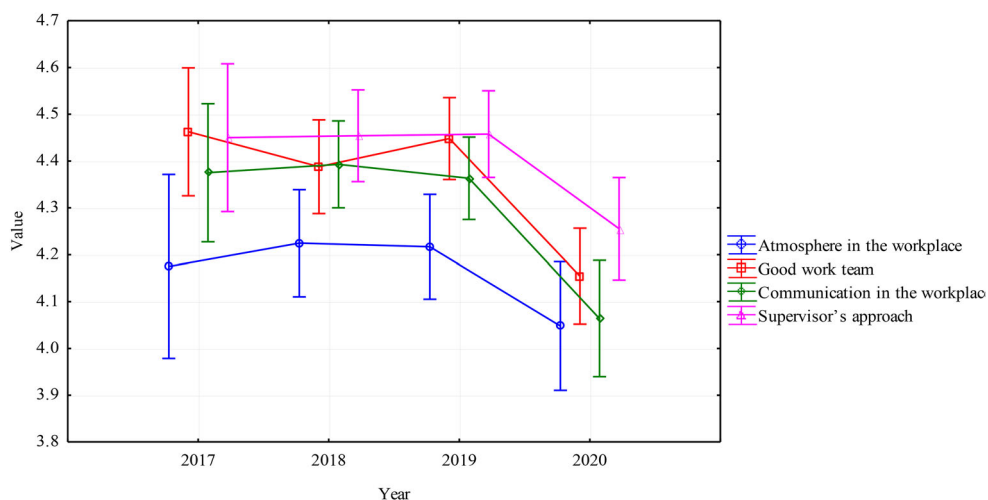
Figure 3 represents motivation factors in relationship field. The year 2020 had a significant influence on the development of motivational factors in this field, too. The decrease in preferences of respondents was recorded in all researched motivational factors. At the same time, the most statistically significant differences were confirmed. Those were confirmed in researching the motivational factors good working team,

**Table 9.** The results from testing motivation factor – job security.

Year	2017	2018	2019	2020
Average	M = 4.35	M = 4.35	M = 4.44	M = 4.08
2017	–	0.976	0.366	0.012*
2018	0.976	–	0.383	0.010*
2019	0.366	0.383	–	0.001*
2020	0.012*	0.010*	0.001*	–

Note: Single asterisk (\*) indicates significance at 5%.

Source: Own research.

**Figure 3.** Relationship motivation factors. Source: Own research.**Table 10.** The results of testing relationship motivation factors.

Motivation factor	Year	2017	2018	2019	2020
Good working team	Average	M = 4.46	M = 4.39	M = 4.45	M = 4.15
	2017	–	0.382	0.857	0.000*
	2018	0.382	–	0.451	0.004*
	2019	0.857	0.451	–	0.000*
	2020	0.000*	0.004*	0.000*	–
Communication in the workplace	Average	M = 4.38	M = 4.39	M = 4.36	M = 4.06
	2017	–	0.833	0.889	0.000*
	2018	0.833	–	0.744	0.000*
	2019	0.889	0.744	–	0.000*
	2020	0.000*	0.000*	0.000*	–
Supervisor's approach	Average	M = 4.45	M = 4.45	M = 4.46	M = 4.26
	2017	–	0.961	0.933	0.020*
	2018	0.961	–	0.967	0.023*
	2019	0.933	0.967	–	0.025*
	2020	0.020*	0.023*	0.025*	–

Note: Single asterisk (\*) indicates significance at 5%.

Source: Own research.

communication in the workplace and supervisor's approach in 2020 in comparison with other researched years (Table 10).

Many governments implemented responses to COVID-19 rapidly. Near real-time information (such as the number of new cases each day) has been accompanied by

dramatic changes in societal behaviour (Hockings et al., 2020). Previous studies (Brooks et al., 2020; Desclaux et al., 2017) indicated that confinement and reduced social and physical contact with others during major health crises tended to cause boredom, frustration, depression and a sense of isolation from friends and family, which further distresses people psychologically and physiologically.

The motivation of employees is an essential influence on employee performance. It is not only a psychological aspect, but also an economic one, while both are equal from the point of view of importance. Motivation is a part of motivation programmes, which it is possible to create individually for each employee or for groups of employees which work similarly and are motivationally oriented (Santirso et al., 2020; Mylona & Mihail, 2020). As Dewayani et al. (2020) present, motivation programmes are a part of stabilisation personal programmes in enterprises and at the same time as a part of programmes of personal downsizing of an enterprise. However, the system of knowledge of motivation factors and its influence and changes in time is necessary to continuously monitor and evaluate periodically. It influences the future forecast of the development of motivation programmes.

In the research, the level of motivation in MaSEs in Slovakia in the period between 2017 and 2020 was defined. Based on the results we can conclude that the impact of COVID-19 has negatively influenced motivational factors in MaSEs in Slovakia. The change in order of importance is taking place, as well as statistically significant differences in perception of financial, relationship and working area. It is a negative decrease. It means the decrease of influence of stated factors on the employee performance. It can be seen from the results that the influence of global impact of COVID-19 on the local level of MaSEs in Slovakia in the area of human resources management. These findings are confirmed also by the research conducted by An and Han (2020) and Jafari-Sadeghi (2020). As Ruiz-Palomino & Zoghbi-Manrique-de-Lara (2020) state, this impact has a social level not only from the point of view of health and economy, but also society. Therefore, when many businesses are moving to home offices, managers should pay attention to motivation factors relating to mutual relationships, and to social needs. The manager should strive for contact with the employee so that the employee has contact with the workplace.

MaSEs are more often endangered by risk of bankruptcy than medium or large enterprises. Similar impact on the level of motivation had also financial crisis, that started in 2008. The research (Hitka & Sirotiaková, 2011) confirmed that in wood-processing industry there was a significant change in the area of motivation in the period of financial crisis almost in all followed motivation factors. Research in industrial enterprises by Faletar et al. (2016) and Jelacic et al. (2013), came to similar conclusions. In research by Urbancova and Vnouckova, (2015), Lizbetinova (2014), Stacho et al. (2017), Fejfarova and Urbancová (2015), Kucharcikova et al. (2015), Bulińska-Stangrecka and Bagińska (2019), Lee et al. (2019), Pham et al. (2019), Bulińska-Stangrecka and Bagińska (2020) and Mazur and Walczyna (2020) the significance of human and human workforce is emphasised as at the most important manufacturing input and propulsion engine of an enterprise. Motivation programmes represent one tool of stabilisation of employees. In this area, current MaSEs should be creative enough to become important and attractive for current and also for future employees.

## 5. Conclusion

This research has analysed the association between the COVID-19 pandemic and motivation factors in MaSEs in Slovakia. Motivation integrates and organises overall psychological and physical activity of individual in the direction towards the set target. It shows itself as the selection or activation of a particular form and target of behaviour from the range of possible forms and targets of behaviour. Variability and subjectivity of whatever performance of people is connected to it. The core of productivity of employee work is their motivation. If a person is not motivated enough the results are not satisfying. Over-motivation often ends in destruction of performance, so the result is similarly dissatisfying. In comparison with over-motivation, adequate motivation heads toward the optimal level of performance. Motivation of employees is one of the key factors of the success of enterprise, because employees activate and use other resources of organisation because employees (material, financial and information) by their work performance and reach its targets. They become the core of management of enterprise and its most important part, which decides about the prosperity of enterprise and its competitiveness.

The result of the research is the findings that COVID-19 has had, as well as other influences, an impact on the area of human resources management in the field of motivation. In MaSEs in Slovakia in the period between 2017 and 2020 five out of 10 of the most important analysed motivational factors overcame the significant change in the value of importance from the point of view of the time studied.

It is possible to conclude, when investigating motivation factors within the scope of motivation groups, that in the financial field in 2020, the change in the level of employee motivation occurred. The significant decrease in respondent preferences was recorded in all researched motivation factors. The testing confirmed the existence of statistically significant differences in investigating the motivation factor – basic salary in 2020 in comparison with previous years. In investigating motivation factors in working field in 2020, the change of level of motivation occurred. The level of all investigated motivation factors from working field significantly decreased in comparison with previous year. When testing the existence of statistically significant differences among particular years, statistically significant differences in motivation factor – job security were confirmed. The year 2020 had a significant influence on the development of motivation factors also in the relationship field. The decrease of respondent preferences was recorded in all investigated motivational factors. At the same time, the most statistically significant differences were confirmed. Those were confirmed in investigating the motivation factor – good working team, communication in the workplace and supervisor's approach.

The main contribution of our research is the finding that COVID-19 has had, as well as other impacts, the influence on the field of human resources management, specifically on the employee motivation. It is necessary for managers dealing with the creation of motivation programmes to realise this fact and take into the account the change in employee preferences.

Nowadays, many businesses are moving to a home office. This fact can have a major impact on job creation and its retention in terms of workload, and scope of work in the future. Therefore, job security is an important motivation factor that can and does have the opportunity to motivate employees in these difficult times.



Managers should pay attention to motivation factors that have reduced the impact on employee performance (good working team, job security, communication in the workplace, supervisor's approach, basic salary). Manager should motivate the employee more intensely than when working in the workplace. This approach can increase co-ownership of the company and consequently the employee performance. When the employee feels the support and interest of a manager, in addition to increasing loyalty to the organisation and work performance, it can improve employee mental well-being.

The study has following restrictions. The first is the future development of pandemic COVID-19 and its impact on the economy of state. In case of long-term continuation of the pandemic, destruction endangers many MaSEs. The second restriction is, providing that the pandemic comes to an end, the ability of MaSEs to recover from economic problems and to establish themselves again on the market. Retaining current employees is connected to it. The future research should also focus on medium-sized and large enterprises and define if there is also a statistically significant change in the field of work motivation. Nowadays, competition operates not only regionally but its scope is national and with the influence of globalisation, more and more transnational. The status of enterprise on the labour market must have then system character, be complex and has to have long-term character. It is necessary to be patient enough, specifically in implementation of completely new, non-traditional innovations for the existing practice in enterprises, and to use long-term tools for the evaluation of their effectivity. If investments into employees are correctly aimed and objectively justified, they are always profitable. Defining the right motivation factors represents mutually balanced and inter-connected file of all items, that influence power, structure and direction of motivation of individuals or group.

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