

## MOTIVATION PROGRAM IN SMALL AND MEDIUM-SIZED MANUFACTURING ENTERPRISES BASED ON THE PREFERENCE FOR NEEDS

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**Abstract.** Motivation and meeting the employee needs as a part of human resource management fundamentally affect the improvement of job performance and corporate culture. The research fills in the research gap in the field of the definition of the level of motivation factors in small and medium-sized manufacturing enterprises following the preferences for their motivation needs in terms of the selected socio-demographic characteristics such as gender, age, completed education, and job position. A questionnaire was used to determine the level of motivation needs. The proposal of motivation factors as a part of the motivation programme is defined according to selected socio-demographic factors. Findings that a significant increase in motivation needs relating to finance, and work conditions occurred due to the COVID-19 pandemic can be considered a result of the study. The level of motivation does not vary in terms of gender and age. The differences are determined in terms of job position and education. The proposed motivation programme is tailored to the preferences of employees.

**Keywords:** economic development, enterprise success, small and medium-sized enterprises, strategic HRM, motivation, motivation programme.

**JEL Classification:** Q01, J24, O15.

### Introduction

These days businesses must face global and national trends. Economic development is becoming necessary to achieve an enterprise success. Human resources are considered a key element necessary to achieve enterprise economic development. High-quality technology is not enough when there are no people creating added value for an enterprise and ensuring

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the appropriate use of technological advances. Human resources are a valuable manufacturing factor in an enterprise. They are the driving force activating the material, financial and other enterprise sources and determining its success. People with unique personalities have potential, willingness, motives, interests, and other characteristics special only to them. Other sources used in an enterprise possess nothing similar. Therefore, human resource management is a complicated process with more demanding requirements imposed on managers. Managers must concentrate not only on product and service innovations, technological changes, but also on the tasks relating to employees, especially, the way to motivate them. It is a key activity affecting enterprise development, its competitiveness as well as whole success, particularly in this global world. The competition among enterprises is intense and the businesses must face various difficulties, such as the COVID-19 pandemic. Therefore, employee motivation is considered the most significant. The novelty value of this paper is defining the level of motivation needs of employees in the small and medium-sized manufacturing enterprises in Slovakia following the selected socio-demographic factors and to find whether due to the COVID -19 pandemic a significant change occurred. One of the key aspects is to be familiar with employees, their needs in the workplace, and what they are motivated to do their best which results in the economic growth of an enterprise and subsequently the economy of the entire country.

The structure of the paper is as follows: firstly, the review of the literature associated with the issue is presented. Then, the aim of paper is defined and research methods such as Cronbach's alpha, two-sample t-test, Wilks' lambda were used. It is followed by the research findings and discussion. Finally, conclusions, limitation and future research direction are offered.

## **1. Theoretical framework**

Economic development is considered the main driving force (Zhu et al., 2021; Zhou et al., 2020; Ližbetinová et al., 2020; Nedeliakova et al., 2020). It is analysed in the present research from different point of views. Mi et al. (2020) observed the relation the economic development and carbon footprints. Li et al. (2021) investigated whether the foreign direct investment can promote high-quality economic development under environmental regulation. The phenomenon of regional economic development was explained in the research of Navickas et al. (2021). The research of Pimonenko et al. (2021) deal with the cointegration between economic, ecological and tourism development. Entrepreneurship as a strategy for economic development was measured in the research of Mwatsika (2021). Bajzikova and Bajzik (2020) deal with the employment of foreigners and economic development. Following the present research studies (Alshubiri, 2022; Cheng et al., 2022; Ahmad et al., 2021; Badulescu et al., 2021; Nasir et al., 2021; Song et al., 2021; Myskova & Hajek, 2016), it can be stated that there are various ways to achieve economic development in different branches.

Employees affect the enterprise success to a great extent (Smerek & Vetráková, 2020). According to present studies (AlQershhi et al., 2022; Grecnikova et al., 2022; Lucas & Mai, 2022; Bulinska-Stangrecka & Bagienska, 2021; Polas et al., 2021; Tuan, 2021; Wisawapaisarn & Yodmongkol, 2021; Stacho et al., 2020), employees are, owing to their knowledge, ideas, experience, and skills, considered a strategic management tool in many enterprises. According

to Machova et al. (2022), Amin et al. (2021), and Janovac et al. (2021), motivation contributes to employee satisfaction and willingness to improve job performance. Motivation is often defined as an inner power that controls, generates energy, and modifies behaviour over time (Diefendorff & Seaton, 2015). The activity of employees is affected by it and subsequently, it results in meeting their needs and achieving the company goals (Kurata et al., 2022; Vrabcova & Urbancova, 2021a; Vetrakova & Smerek, 2019). Being familiar with the level of employee motivation can be used in enterprises as a tool to actively affect the job performance of employees and enterprise economic development.

There are various motivation theories focusing on getting familiar with the process of motivation and studying the motivation reasons (Khalifa & Truong, 2010). Different reasons for instigating employee behaviour are analysed (Parijat & Bagga, 2014). The research carried out by Khalifa and Truong (2010) searched for the answer to the question “What are the employees motivated by?” The research by Boadi et al. (2020), and Diamantidis and Chatzoglou (2019) discussed the effort of employers to motivate their employees to improve their performance and productivity. Ideas and solutions in motivation can offer the timeless theories of Maslow, Herzberg, and others (Kontodimopoulos et al., 2009). On this subject, the qualified approach of the managers at all levels is required as the level of motivation differs and depends on many factors (Kovačević et al., 2020). Stereotypes in terms of gender are shown in the research by Arnania-Kepuladze (2010). It was observed that the goals and needs of men and women are different therefore, they are motivated in a different way. Men need to be independent in their workplace and want to have power, a good job position, be popular, and be successful. In particular, they are motivated by factors relating to finance and performance assessment and responsibility (Hofstede, 2001). On the other hand, women prefer to be a part of a team in the workplace, a friendly atmosphere, prestige, job security, and cooperation (Hofstede, 2001). Women are especially motivated by good relationships, social benefits, and feeling safe (Meece et al., 2006). Gender differences can relate to the changes in the life of a woman – she becomes a mother, and her priorities can change after career interruption (Inceoglu et al., 2012).

Managers should be qualified and able to work not only with employees of different gender but also of different ages, i.e., different generations, as the generations are specific with their features, attitudes, values, needs, and different standards (Vrabcova & Urbancova, 2021b; Kirchmayer & Fratričová, 2018; Belás & Sopková, 2016). Employees of the generation of Baby Boomers (1946–1964) are often determined as highly motivated and hardworking (Egri & Ralston, 2004). Egri and Ralston (2004) mentioned in the research that this generation is motivated by job position, benefits, and prestige. A typical feature of the employees belonging to this generation is to be hired by one employee throughout their entire career. An individual approach and direct and open communication are very important. According to Close and Martins (2015), employees prefer self-actualization in the workplace. Generation X (1965–1980) is defined as independent, entrepreneurial, and cynical (Deal et al., 2013). These employees must have the chance to make a decision and choose the way of fulfilling tasks by themselves. They must feel to be supported and engaged. According to Murphy et al. (2010), employees of generation X prefer flexible working hours, autonomy in the workplace, a creative but demanding workload, and career advancement. Generation X put an empha-

sis on work-life balance (Williams et al., 2010). Employees from generation Y (1980–1995) highlight the social relationships in the workplace. Moreover, they need to be flexible. They appreciate mentoring, and training in the organisation because they can master their skills this way (Sturges et al., 2002). According to Montana and Petit (2008), the most motivating factors are good salary, recognition, good relationships, career advancement, creativity in the workplace, personal growth, and development. Currently, Generation Z (1996–2010) is studying at universities but some of them enter their career (Seemiller & Grace, 2016). Typical motivation factors driving this generation are career advancement, meaningful work, and higher salary. Due to the fact that members of this generation are in a different stage of their life (probably they do not have children, house, or mortgage) it can be assumed that their behaviour completely differ from the behaviour of older generations (Mahmound et al., 2021).

Apart from considering socio-demographic characteristics (Belas & Sopkova, 2016; Kobuzíková et al., 2015), managers must take into account the job position of an employee as well, as it is another factor affecting employee motivation. It is confirmed also by the research by Smékalová et al. (2014), Deal et al. (2013), and Gentry et al. (2011). It stated that organisational hierarchy resulted in differences in the employee attitude, management expectations, and learning desires. Senior job positions provide greater freedom than junior job positions (Deci & Ryan, 2000). It cannot be forgotten that workload and work environment change also as a result of external factors such as globalisation, new technology, health crisis caused by the COVID-19 pandemic, etc. (Kristofik & Medzihorsky, 2022; Delibašić et al., 2021). Therefore, we must weigh the fact whether the effect of the motivation factors is the same as in the past. The aim of the study is to define the level of motivation factors following the selected socio-demographic factors and to find whether due to the COVID-19 pandemic, a significant change in the motivation factors occurred. Raising the level of motivation can result in the improvement of the work performance, enterprise economic development as well as the economy of the entire country.

## **2. Methodology**

A questionnaire was used to determine the level of motivation needs of employees working in the small and medium-sized manufacturing enterprises. They are the backbone of the V4 countries' economies, dominating over large enterprises (Rozsa et al., 2022; Ližbetinová et al., 2020).

The questionnaire consisted of two parts. The first part was focused on the identification of the socio-demographic profile of a respondent. Employees of different gender, age, completed education, and job position from all regions of Slovakia working in the small and medium-sized manufacturing enterprises participated in the research in order to achieve representativeness of the sample.

The method Yamane Taro was used to determine the minimum range of selection. Using the method, the minimum size of the sample due to the size of the total population and selected estimation error can be calculated (Richterová et al., 2009). 394 respondents were determined as the minimum range of the selected sample. Totally, 1,494 respondents participated in the research. A description of the sample is given in Table 1.

Table 1. Description of the sample

Socio-demographic characteristics		Absolute frequency	Relative frequency
Gender	Men	1,012	67.74%
	Women	482	32.26%
Age	To 30 years	317	21.22%
	31–40 years	486	32.53%
	41–50 years	467	31.26%
	51+ years	224	14.99%
Completed education	Primary education	47	3.16%
	Lower secondary education	340	22.76%
	Upper secondary education	839	56.16%
	Higher education	268	17.94%
Job position	Blue collar worker	996	78.45%
	White collar worker	322	21.55%
	Manager	176	11.78%

The second part of the questionnaire consisted of 30 closed questions dealing with employee preferences in terms of motivation. Motivation factors relating to career aspiration (career advancement, competences, education and personal growth, individual decision making, opportunity to apply one's own ability, prestige, recognition, self-actualization) (marked in green), to finance (basic salary, fair appraisal system, fringe benefits) (marked in blue), to mutual relationships (atmosphere in the workplace, communication in the workplace, good work team, supervisor's approach) (marked in red), to social needs (company name, company's vision, free time, regional development, social benefits, the relationship of the company to the environment) (marked in pink), and to work conditions (getting familiar with the results, job safety, mental effort, occupational safety, physical demand for work, work environment, work performance, working time, workload) (marked in yellow) were analysed. To avoid influencing the respondents the motivation factors were arranged in alphabetical order. The proposal of motivation factors for the motivation program was based on the preferences of motivation factors of employees divided into monitored groups. The colors of the proposed factors for individual groups correspond to the colors of the groups of motivation factors (Figure 1). The order of factors in the motivation program for individual groups is given by the order of importance assigned to it by employees. The satisfaction was measured using the Likert scale from 1 to 5. The value of 1 meant unimportance and the value of 5 corresponded with the greatest importance of the motivation factor for a respondent. Motivation factors with the highest impact on employee motivation were selected. Increasing the number of motivation factors would make the motivation program too economically demanding, and the application of the motivation program could be problematic.

The primary data were processed using the programme Microsoft Excel. Further analyses were conducted using the programme STATISTICA 12. Besides the methods of descriptive statistics, the methods of inductive statistics, i.e., interval estimation and the methods of testing the hypotheses based on the dispersion analysis were used. Prior to the assessment of the

obtained results, the reliability test using the coefficient of Cronbach's alpha was carried out.

The aim is to define the level of motivation factors of employees in small and medium-sized manufacturing enterprises in Slovakia following the selected socio-demographic characteristics and to find whether due to the COVID-19 pandemic, a significant change in the motivation factors occurred. To verify the aim, the following hypotheses were formulated:

- H<sub>1</sub>: It is assumed that there are differences in motivation of employees working in the small and medium-sized manufacturing enterprises due to the COVID-19 pandemic.
- H<sub>2</sub>: It is assumed that there are differences in the perception of motivation between the employees working in the small and medium-sized manufacturing enterprises due to the gender.
- H<sub>3</sub>: It is assumed that there are differences in the motivation values of employees working in the small and medium-sized manufacturing enterprises due to the age.
- H<sub>4</sub>: It is assumed that there are differences in the motivation of employees working in the small and medium-sized manufacturing enterprises due to the completed education.
- H<sub>5</sub>: It is assumed that there are differences in motivation of the employees working in the small and medium-sized manufacturing enterprises due to the job position.

### 3. Results of the research and discussion

The test using Cronbach's alpha with the value of 0.935 (it is a higher value than the determined condition of 0.80) was used prior to the result assessment. Therefore, it can be stated that the results of the research are reliable.

Subsequently, detailed analyses were carried out. Motivation factors divided into five groups were studied. By means of a two-sample t-test, the groups of motivation factors were compared before the crisis and during the crisis caused by the COVID-19 pandemic. The results are presented in Table 2 and Figure 1.

Table 2. The effect of the crisis caused by the COVID-19 pandemic on the level of motivation needs of employees in small and medium-sized manufacturing enterprises

Motivation factors relating to	Average	Average	t	df	p	Standard dev.	Standard dev.	F-rate	p
	Before	During				Before	During	Dispersion	Dispersion
Career aspiration	3.958	4.039	-1.960	1,492	0.050	0.780	0.738	1.117	0.153
Finance	4.428	4.557	-3.113	1,492	0.002	0.807	0.685	1.385	0.000*
Mutual relationships	4.426	4.463	-0.994	1,492	0.320	0.671	0.671	1.000	0.992
Social needs	3.954	4.004	-1.125	1,492	0.261	0.804	0.828	1.061	0.438
Work conditions	4.136	4.257	-3.131	1,492	0.002	0.733	0.670	1.199	0.020*

Note: \* p < 0.05.

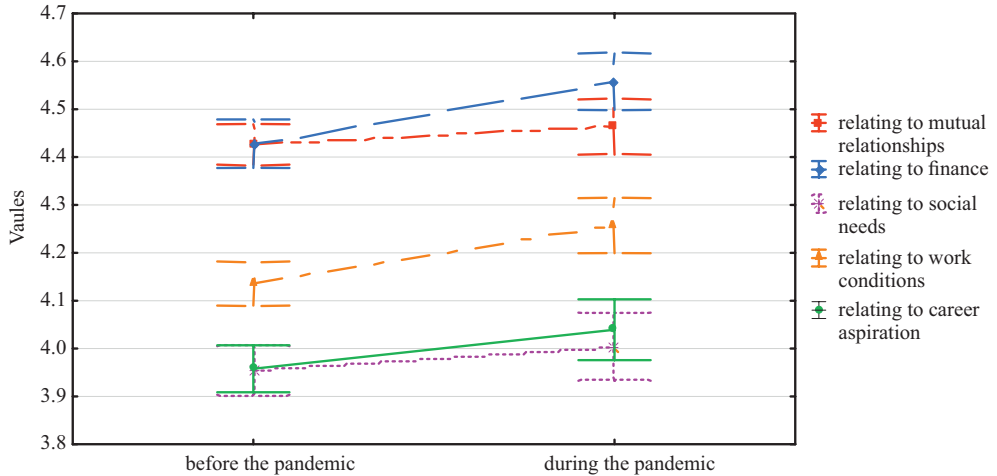


Figure 1. The effect of the crisis caused by the COVID-19 pandemic on the level of motivation needs of employees in small and medium-sized manufacturing enterprises

Following Table 2 and Figure 1, it can be seen, that there is an increase in the importance of all groups of motivation factors. At the same time, it can be stated that statistically significant differences occurred in the motivation factors relating to finance, and those relating to work conditions. When studying the motivation factors relating to mutual relationships, to career aspiration, and to social needs, no statistically significant differences were confirmed.

Before the crisis, the motivation factors good work team ( $X = 4.457$ ), atmosphere in the workplace ( $X = 4.440$ ), basic salary ( $X = 4.416$ ), fringe benefits ( $X = 4.333$ ) and fair appraisal system ( $X = 4.323$ ) were considered the most important by employees of the small and medium-sized manufacturing enterprises in Slovakia. Thinking about five motivation factors regarding as the most important before the crisis, the importance of the motivation factor good work team ( $X = 4.529$ ), atmosphere in the workplace ( $X = 4.490$ ), basic salary ( $X = 4.527$ ), fringe benefits ( $X = 4.443$ ) and fair appraisal system ( $X = 4.395$ ) increased during the crisis. Detailed analyses of statistically significant changes are presented in Table 3.

Table 3. The statistically significant changes in the importance of the motivation needs of employees working in the small and medium-sized manufacturing enterprises before and during the crisis caused by the COVID-19 pandemic

Motivation factor	Average		t	df	p	Standard deviation		Dispersion	
	Before	During				Before	During	F-rate	p
Basic salary	4.416	4.527	-2.352	1,492	0.019	0.897	0.820	1.199	0.020*
Free time	4.056	4.232	-3.415	1,492	0.001	0.963	0.928	1.077	0.341*
Fringe benefits	4.333	4.443	-2.407	1,492	0.016	0.856	0.797	1.155	0.064*

End of Table 3

Motivation factor	Average		t	df	p	Standard deviation		Dispersion	
	Before	During				Before	During	F-rate	p
Recognition	4.006	4.163	-3.104	1,492	0.002	0.926	0.939	1.029	0.708*
Supervisor's approach	4.283	4.389	-2.215	1,492	0.027	0.902	0.843	1.144	0.083*
The relationship of the company to the environment	3.967	4.113	-2.672	1,492	0.008	1.009	1.001	1.016	0.844*
Work environment	4.175	4.280	-2.294	1,492	0.022	0.844	0.837	1.017	0.831*
Working time	4.221	4.368	-3.175	1,492	0.002	0.886	0.783	1.279	0.002*
Workload	4.038	4.172	-2.860	1,492	0.004	0.889	0.820	1.175	0.038*

Note: \*  $p < 0.05$ .

Due to the crisis caused by the COVID-19 pandemic, there was an increase in the motivation factors basic salary, free time, fringe benefits, recognition, supervisor's approach, the relationship of the company to the environment, work environment, working time and workload. At the same time, statistically significant differences resulting from the crisis caused by the COVID-19 pandemic were confirmed in the case of mentioned motivation factors (Table 2). The hypothesis  $H_1$  was accepted.

Further part of the research was focused on the analysis of the motivation needs of employees in the small and medium-sized manufacturing enterprises in Slovakia following the selected socio-demographic factors, such as age, gender, completed education, and job position. The results are presented in Table 4.

Table 4. The effect of selected socio-demographic factors on the level of motivation needs of employees working in the small and medium-sized manufacturing enterprises

Socio-demographic factor	Test	Value	f-level	DF effect	DF error	p-level
Age	Wilks' lambda	0.933	1.148	90	4,373.102	0.163
Completed education	Wilks' lambda	0.861	2.479	90	4,373.102	0.000*
Gender	Wilks' lambda	0.978	1.072	30	1,463	0.363
Job position	Wilks' lambda	0.907	2.445	60	2,924	0.000*

Note: \*  $p < 0.05$ .



Following the results of Wilks' lambda presented in Table 4, it can be stated that the level of motivation is affected by the completed education ( $p = 0.000$ ) and job position ( $p = 0.000$ ). Hypothesis  $H_4$  and hypothesis  $H_5$  were accepted. Statistically significant differences in the level of motivation of employees working in the small and medium-sized manufacturing enterprises do not occur in terms of gender ( $p = 0.363$ ) and age ( $p = 0.163$ ). Hypothesis  $H_2$  and hypothesis  $H_3$  were rejected. Therefore, following the analyses, it can be stated that in the process of creating the motivation programme for the employees working in the small and medium-sized manufacturing enterprises in Slovakia, gender must not be taken into account, i.e., the motivation programme for men does not differ from that prepared for women and also the motivation programme is the same motivation programme for all generations.

Following further analyses of the level of motivation in terms of the completed education (Table 5), it can be stated that the completed education affects almost all motivation factors besides competences, work performance and working time. In the case of mentioned motivation factors, the completed education must be considered. Subsequently, it is clear, that when creating the motivation programme in the small and medium-sized manufacturing enterprises, the completed education must be taken into account, as employees with higher education are motivated in a different way compared to employees with lower education.

Table 5. The effect of the completed education on the level of motivation needs of employees working in the small and medium-sized manufacturing enterprises

Motivation factor	SS effect	MS effect	f-level	p-level
Competences	3.290	1.097	1.166	0.321
Work performance	4.003	1.334	1.91	0.127
Working time	2.460	0.820	1.13	0.338

Table 6 shows the one-dimensional results of the effect of the job position on the level of the motivation needs of employees working in the small and medium-sized manufacturing enterprises.

Table 6. The effect of the job position on the level of motivation needs of employees working in the small and medium-sized manufacturing enterprises

Motivation factor	SS effect	MS effect	f-level	p-level
Communication in the workplace	6.44	3.22	4.17	0.016*
Company's vision	8.88	4.44	4.42	0.012*
Education and personal growth	14.27	7.14	7.18	0.001*
Individual decision making	8.71	4.36	4.82	0.008*
Occupational safety	8.48	4.24	4.37	0.013*
Opportunity to apply one's own ability	12.73	6.36	6.77	0.001*
Physical demand for work	9.02	4.51	4.75	0.009*
Self-actualization	9.96	4.98	5.80	0.003*
Workload	6.49	3.25	4.33	0.013*

Note: \*  $p < 0.05$ .

Following the multidimensional test of importance used to test the effect of job position on the level of motivation, hypothesis H<sub>5</sub> was accepted. The results show that job position significantly affects the level of motivation of employees working in the small and medium-sized manufacturing enterprises, especially the motivation factors such as communication in the workplace, company's vision, education and personal growth, individual decision making, occupational safety, opportunity to apply one's own ability, physical demand for work, self-actualization, and workload. At the same time, the mentioned motivation factors are from the groups relating to work conditions, career aspiration, and mutual relationships. Following the obtained results, it can be stated that job position, as well as the completed education must be taken into account when creating the motivation programme for employees working in the small and medium-sized manufacturing enterprises.

The research results show that there is no difference between men and women in the level of motivation of employees working in the small and medium-sized manufacturing enterprises in Slovakia. For the management of those employees, it is clear that no separate motivation programme for men and women must be created. Our findings do not agree with the results of the research by Arnania-Kepuladze (2010) which mentioned that men and women are motivated differently as their goals and needs differ. Men need to be independent in the workplace, have power, have good job position, and be popular and successful. They are mainly motivated by finance, being promoted, and having more responsibilities (Hofstede, 2001). On the other hand, women in the workplace prefer to be a part of a team, a friendly atmosphere, prestige, job security, and cooperation (Hofstede, 2001). Good relationships, feeling safe and social benefits are highly motivated for them (Meece et al., 2006).

Further analysed socio-demographic factor was age. There was no effect on the level of motivation observed. Therefore, in the case of employees in the small and medium-sized manufacturing enterprises, a motivation programme does not need to be tailored to a specific age or generation. Employees at the age of 30 are motivated by the same motivation factors as employees at the age of 50. Our findings do not agree with the results of the present research again (Mahmound et al., 2021; Kirchmayer & Fratričová, 2018; Close & Martins, 2015). The differences in the characteristics, values, attitudes, and behaviour are confirmed in the research.

In our long-term research (Hitka et al., 2021b, 2020, 2018) the differences in motivation from the point of view of age and gender were confirmed. The results were related to areas in the forestry and wood processing industry, logistics companies, transport companies and agricultural companies. In the research, we focused on the small and medium-sized manufacturing enterprises, which influenced our results. Small and medium-sized enterprises are often based on family and personal relationships, which fundamentally affects the motivation needs of employees, which are fulfilled for the benefit and needs of the enterprise.

When searching for the effect of the completed education on the level of motivation, a statistically significant effect was observed in the case of employees in the small and medium-sized manufacturing enterprises. The effect of the completed education was mentioned in 27 motivation factors from 30 given in total. The most frequent differences were confirmed in the case of employees with primary education completed and employees with lower second-

ary education and employees with higher education completed. The results show that the main differences in the level of motivation were confirmed in the case of employees with lower education (primary and lower secondary education) and in the case of employees with higher education (upper secondary and higher education).

When analysing the job position, a statistically significant effect on the level of motivation of employees in the small and medium-sized manufacturing enterprises was confirmed. The results confirm that motivation programme for employees in the small and medium-sized manufacturing enterprises must reflect the education completed and job position of employees. It was confirmed in our previous research (Hitka et al., 2021a, 2021b, 2021c). Due to the relations between organisational system, employee preferences, and generations, the organisational system plays an important role in the research on the differences in employee attitudes. Individuals in senior positions are probably older, i.e., they belong to other generations than individuals in junior positions. Some differences explained across generations, in reality, can result from the organisational system (Deal et al., 2013). According to the research by Gentry et al. (2011), the organisational system resulted in differences in employee attitudes to work, management expectations, and learning desires. Senior job positions provide more chances to make decisions freely and delegate tasks. Probably, these employees are convinced that they can work in compliance with their beliefs, thus with their intrinsic motivation (Mura et al., 2021; Gagné & Deci, 2005). Senior job positions provide freedom, and private selection compared to junior job positions (Deci & Ryan, 2000). When searching for the differences in terms of age, the effect of the organisational system was rarely taken into account. However, organisational system is connected with the employee attitudes to work and thus, it will differ with dependence on the generation (Deal et al., 2013).

Following the obtained results of the research, a motivation programme focused on the needs of employees working in the small and medium-sized manufacturing enterprises can be created. Two factors affecting the level of motivation must be considered – education completed and job position. Other factors, such as gender, and age do not affect the level of motivation, therefore, they do not need to be taken into account in creating a motivation strategy. When creating a motivation programme for employees in the small and medium-sized manufacturing enterprises, preferences of employees with primary education, lower secondary education, upper secondary education, and higher education must differ. At the same time, there are also differences in the preferences of blue collar and white-collar workers as well as managers. Specific motivation factors preferred to motivate employees in the small and medium-sized manufacturing enterprises reflecting the needs in terms of the education completed and job positions are presented in Figure 2.

## **Conclusions**

Enterprise economic development relates to the progress in human resource management. The importance of human resources asks for a qualified attitude of the enterprise management. Employee motivation plays a key role in this process, as affecting employee behavior in the right way can result in the enterprise economic development. The aim of the re-

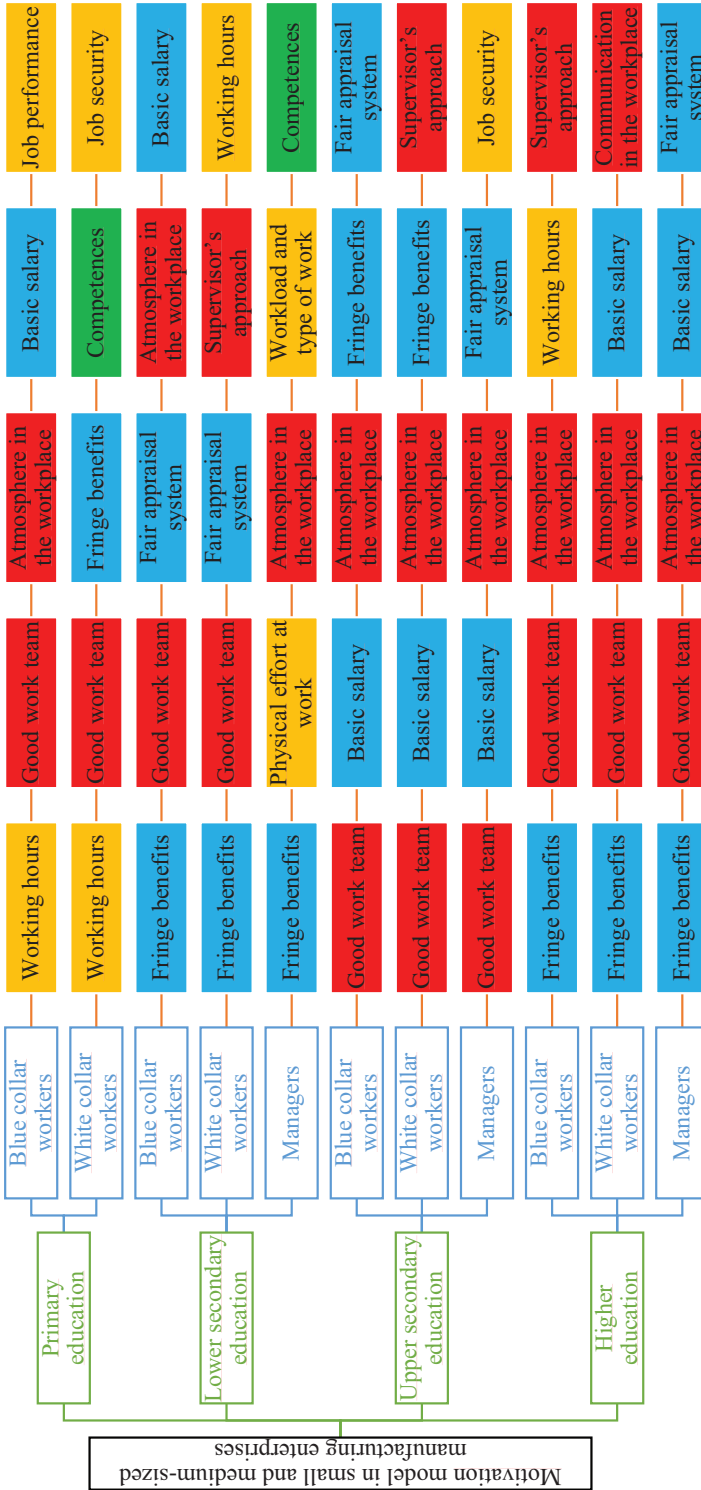


Figure 2. Proposal for the motivation factors in the motivation programme tailored for employees working in the small and medium-sized manufacturing enterprises

search was to define the level of motivation needs of employees working in the small and medium-sized manufacturing enterprises following the selected socio-economic factors and to find whether there was a significant change due to the COVID-19 pandemic. Such extensive research in the field of the small and medium-sized manufacturing enterprises in Slovakia has not yet been carried out. Limitations of the research are determined by further analysis of the influence of gender and age and further interdependencies between socio-demographic factors.

Following the results obtained, it can be stated that education completed as well as job positions must be considered when creating a motivation programme for employees working in the small and medium-sized manufacturing enterprises. At the same time, the results show that due to the COVID-19 pandemic, there was a significant increase in motivation needs relating to finance, and work conditions. As the result, a motivation programme focused on the needs of employees was created. This way, an enterprise can achieve the required long-lasting performance and economic growth.

The future research direction can be seen in the research of motivation needs depending on the economic development of the society over time, and in comparison with the other European countries. Using of cluster analysis, to define in more detail the motivation programme for similarly motivationally oriented employees.

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## **Author contributions**

MH, SL, ZR, and ML conceived the study and were responsible for the design and development of the data analysis. MH, SL, ZR, and ML were responsible for data collection and analysis. MH, SL, ZR, and ML were responsible for data interpretation. MH, SL, ZR, and ML wrote the first draft of the article.

## **Disclosure statement**

Authors declare no financial, professional, and personal interests from other parties.

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