

## Article

# Strategic Instrument for Sustainability of Human Resource Management in Small and Medium-Sized Enterprises Using Management Data

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**Abstract:** Quality human resources are an integral part of corporate strategy. Human capital development is an essential step towards the success of the business on the market. This paper fills the hole by providing the information about the ways how to motivate employees in terms of occupational classification and the age. The aim of the research was to determine whether there are statistically significant differences in the level of importance of employee motivation in terms of occupational classification and the age of respondents and the studied areas of motivation. A total of 3720 employees in small and medium-sized enterprises were analysed all over Slovakia using the method of simple random sampling. Descriptive statistics were used to describe sampling units. The differences in the values of the importance of motivation factors of individual groups were tested using the method of Tukey's HSD at the level of significance  $\alpha = 5\%$ . Following the results, the fact that there are significant differences in terms of occupational classification and the age in the analysed areas of motivation can be stated. Therefore, the managers have to motivate employees in different ways that result in the more complicated management of human resources associated with meeting enterprise goals. Thus, the issue of individual motivation programmes created for individual employees tailored to employees' needs must be discussed.

**Keywords:** human resource management; motivation; strategy; corporate sustainability; SMEs

## 1. Introduction and Background

Small- and medium-sized enterprises (SMEs) are irreplaceable in developed and transition economies [1,2]. They are considered the driving force of the economy, as they considerably contribute to enhancing innovation activities, the flexible introduction of new products, and the creation of job opportunities. They are adaptable and react very sensitively to changes [3,4].

SMEs represent a significant part of the Slovak economy, having the highest growth potential, and the effects on economic stabilization and balanced regional development [5]. According to OECD, more than 99% of all Slovak businesses are SMEs [6]. The significance and positive effects of SMEs on regional development are discussed more frequently and intensely due to the gradual implementation of various national and transnational development concepts. Regional development has been a major topic of discourse not only among professionals but has also received the attention of a broad public [7,8]. Interest in the given issue in the Slovak Republic has grown not only due to an

increase in regional differences after 1991, but also due to the accession of the Slovak Republic to the European Union [9,10].

Sole traders and self-employed people are the decisive representatives of SMEs. In the Slovak Republic, a business segment producing more than 60% of added value and providing more than 70% of jobs is concerned [1]. Creation of adequate business conditions, i.e., favourable business environment is a key precondition for the favourable development of SMEs.

Nowadays, businesses are facing a number of challenges due to the dynamic environment [11–14]. Successful implementation of sustainable practices through entrepreneurial activities is crucial to a more sustainable economy [15]. The same view was presented in a survey published by Alonso-Almeida et al. [16] suggesting the benefit of proactive sustainable practices, as they improved competitiveness even in difficult times.

The objective to succeed, ensure sustainability, remain competitive, and to increase business efficiency can only be ensured by satisfying the needs of employees by providing them with good working conditions [17,18]. Additionally, Al Mamun et al. [19], Cantele, and Zardini [20], Delmas, and Pekovic [21], Pintão et al. [22], and Dongho [23] referred to employee satisfaction as one of many challenges, since the productivity of employees was crucial to the company's success or failure.

The statement that quality human resources represent an inseparable part of a corporate strategy has been more and more supported so far [24–27]. Investing in human capital, i.e., the intangible assets of a company, is becoming necessary to ensure the survival of businesses on the market, and human resources play the key role in implementing the overall development strategy of their company [28]. The future belongs to the businesses paying attention to effective human resource management, as it is a crucial precondition for improved performance and competitiveness of a company [29–35].

Human resource management (HRM) is a part of the management strategy of a company [36]. A considerable amount of management-related data that enable hiring the right persons for the right positions are used in management [37,38]. Such people should be retained by the company. Strategic advantage on the market can be gained subsequently [39]. Management-related data in SMEs are collected by a rather smaller number of managers [40,41]. This indicates that a good manager has to be able to work in the demanding environment of business management in order to ensure its sustainable growth. Employee motivation is one of the essential parts of HRM [42]. Current research [43–58] shows that it is necessary to motivate with respect to different socio-demographic characteristics. Considering the scope of individual factors included in our research, we dealt with differences in motivation in terms of occupational classification and the age.

In the SME context, the quality of work life positively and significantly influences employee job satisfaction, and job commitment [59]. Creating a culture that fosters individual motivation is not easy because it takes time to learn the factors motivating each employee. The literature defines different types of traditional motivational practices that are seen as connected to the system of rewards such as promotion, holidays, pay-for-performance and personal achievements [60]. Milne [61] found that reward and recognition programmes could positively affect motivation, performance, and interest within an organization. Ghimire et al. [62] identified the five most important motivating factors for a healthy workforce, including working environment, financial reward, praise and acknowledgment, the opportunity for career development, and job security. However, nowadays this issue has become even more important and difficult because people are motivated by other things than money [60]. According to Amabile, and Kramer [63], progress is the most motivating factor for employees. Professional support received from managers and image in the social profession is important according to the research of Mirzabeigi et al. [64]. Based on the research results of Brnad et al. [65] job security was the most motivating factor.

In this context, the crucial role of the managers is to find appropriate instruments motivating employees [60] because according to Yoon, and Suh [66] motivated employees exert great effort to achieve the goals of their organization. Employees satisfied with their rewarding and work environment do not have a need to leave the company. It is optimum when employees are satisfied with

their conditions and work environment, and long-term motivation at the same time [67–69]. The same view was presented by Chang et al. [70], Chatterjee et al. [71], Gianni et al. [72], Roxas et al. [73], and Chandrasekar [74], who argued that an organization needed to pay attention to creating a work environment that enhanced the ability of employees to become more productive in order to increase corporate sustainability performance.

Following the research, we want to contribute to the scientific development in the area of motivation based on endogenous relationships in organizations with an endogenous way of decision-making process [75]. The paper fills the hole by designing the motivation programmes for employees in SMEs in terms of occupational classification and the age. We suppose that various occupations (manager, BCW, WCW) are motivated in different ways in terms of motivation factors. At the same time, we suppose that the motivation factors preferred by employees of various age groups will differ. Considering the size of enterprises (up to 250 employees—European Commission Recommendation defining the size of enterprises), employees can be modified in different ways [76]. Employee individuality affecting the differences in motivation is highlighted. Managers are people responsible for evaluating the gathered data and making decisions associated with enterprise management [77].

Slovakia is a leader in economic development within Central Europe. From gathered data in Slovakia, there are many companies with foreign direct investment where western management practices mix with Slovak diligence and the interest of Slovaks in education [6]. Such gathered data in Slovakia are reliable and accessible. Our research studies within Central and Eastern Europe [78–80] show that the motivation in selected areas in terms of the gender and age corresponds and, therefore, we suppose that they can be generally applied in Central and Eastern Europe.

This paper fills the hole by providing the information about the ways of how to motivate employees in terms of occupational classification and age and, therefore, the aim of the research was to find out whether there are statistically significant differences between the importance of employee motivation in terms of occupational classification of the participants (manager, BCW, and WCW) and the age (under 30 years, 31–40, 41–50, and over 50), and the analysed areas of motivation (related to finances, social status, work, career, and relationships).

## 2. Materials and Methods

The research was conducted in 2017. Total of 5107 questionnaires were distributed to employees working in SMEs all over Slovakia. The response rate was 72.84%. Structure of 3720 participants in the research is shown in Table 1.

**Table 1.** Sample size in SMEs.

Age/Occupational Classification	Manager	BCW	WCW
under 30 years	86	449	364
31–40 years	124	479	540
41–50 years	127	440	516
over 50 years	70	192	333

Note: BCW-blue collar worker, WCW-white collar worker. Source: Authors' compilation.

The questionnaire consists of two parts. The first part dealt with the socio-demographic characteristics of the participants in the research. The importance of employee motivation with reference to remuneration (basic salary, fringe benefits, fair appraisal system), social security (social benefits, mission of the company, name of the company, region's development, relation to the environment, free time), working conditions (physical effort at work, safety in the workplace, job security, workload and type of work, information about performance result, working hours, work environment, job performance, mental effort), applicability in career (opportunity to apply one's own ability, career advancement, competences, prestige, individual decision-making, self-actualization,

personal growth, recognition), and to interpersonal relations (atmosphere in the workplace, good work team, communication in the workplace, supervisor's approach) are defined in the second part. All our data represent ordinal level of measurement (one category is higher than the next one). The level of motivation was expressed by one of the five levels of importance based on the Likert scale (5 = very important; 4 = important; 3 = neutral; 2 = little important; 1 = not important).

The existence differences were tested by the following working hypotheses:

Hypotheses 1: Between various occupations (manager, WCW, BCW), there are differences in individual analysed motivation areas.

Hypotheses 2: In terms of the age, there are differences in individual analysed motivation areas.

Descriptive statistics were used to describe the sampling units. Basic differences between motivation factors, occupation and age were defined using the arithmetic mean. With regard to the sampling character of the obtained data, differences between the arithmetic means of the values of the importance of the motivation factors for individual groups were tested by Tukey's HSD (honest significant difference). Tukey's HSD test is a single-step multiple comparison procedure suitable also for different numbers of observations in individual groups. Independence between the levels of factors, homogeneity of variance and normality is assumed. It can be used on raw data or in conjunction with an ANOVA (Post-hoc analysis) to find means that are significantly different from each other. The level of significance was set at 5%. If the  $p$ -value falls below the chosen significance level ( $p < 0.05$ ), the null hypothesis is rejected and an alternative hypothesis is accepted. This general statement is applied for the established working hypotheses. If the null hypothesis is rejected, the difference between real and expected abilities is so large that it cannot be random, i.e., there is dependence between the nominal variables.

In the following step, Pearson  $\chi^2$  test was used as one the most commonly used nonparametric tests concerned with the nominal or ordinal level of measurement. It is used to test the null hypothesis that the two categorical variables in question are independent. On the base of the corresponding  $p$ -level, the null hypothesis is accepted or rejected.

The maximum-likelihood chi-square tests the same hypothesis as the Pearson chi-square statistic; however, its computation is based on Maximum-Likelihood theory. In practice, the M-L Chi-square is usually very close in magnitude to the Pearson Chi-square statistic.

Correlation coefficient and Cramer V are measures of correlation (contingency) between two categorical variables. They both indicate the strength of the contingency. They can assume any value from 0 to 1 (0–0.3 weak; 0.3–0.8 medium; 0.8–1 strong contingency).

To verify out working hypotheses Pearson  $\chi^2$  test was used. It is one of the most commonly used nonparametric tests concerned with the ordinal level of measurement. It is used to test the null hypothesis that the two categorical variables in question are independent. By any words that the differences between the observed and expected frequencies are due to chance. On the basis of the corresponding  $p$ -level, the null hypothesis is accepted or rejected.

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### 3. Empirical Results

Firstly, the importance of the level of the motivation of 3720 respondents participating in the research in terms of occupational classification (manager, BCW, WCW) and the age (under 30 years, 31–40 years, 41–50 years, and over 50 years) was analysed. The importance of the level of motivation in the groups of factors related to managers, BCW and WCW are shown in Table 2.

**Table 2.** The importance of the level of motivation in the groups of factors related to managers, BCW, and WCW.

Occupational Classification	Age/Aspect	Financial	Social	Work	Career-Related	Relational
Managers	under 30 years	4.65	4.25	4.38	4.33	4.62
	31–40 years	4.51	4.20	4.29	4.31	4.53
	41–50 years	4.43	4.10	4.20	4.25	4.50
	over 50 years	4.36	4.00	4.06	4.12	4.44
BCW	under 30 years	4.41	3.92	4.06	3.95	4.39
	31–40 years	4.46	4.00	4.13	3.98	4.42
	41–50 years	4.45	3.98	4.11	3.95	4.41
	over 50 years	4.40	4.05	4.11	3.95	4.37
WCW	under 30 years	4.44	3.96	4.14	4.07	4.50
	31–40 years	4.49	3.96	4.12	4.03	4.46
	41–50 years	4.48	3.86	4.08	3.94	4.43
	over 50 years	4.54	4.03	4.20	4.08	4.56

Source: Authors' compilation.

The results shown in Table 2 indicate that finances are the most important for managers under 30 years of age. The second most important aspect for managers was the motivation factor related to relations followed by the work. The career-related and social aspects were declared the least important for managers under 30 years of age. The importance rank in individual aspects was the same for managers between 31–40, 41–50, and over 50 years of age. The relational aspect was the most important for these participants, followed by the financial and career-related aspects. The work and social aspects were declared the least important for managers between 31–40, 41–50, and over 50 years of age. The results further showed that the social area represented the least important aspect for the managers of all age categories.

The analysis of the opinions of BCW on the importance of the level of motivation provided similar results (Table 2). The financial aspect was the most important for the BCW of each age category. The second most important aspect was the relational aspect, followed by the work aspect. The least important aspects for BCW between 31–40, 41–50, and over 50 years of age were the social and career-related aspects. BCW under 30 years of age ranked the career-related aspect fourth in importance. The least important was the work aspect.

The relational aspect was declared more motivating for WCW under 30 and over 50 years of age than the financial aspect (Table 2). WCW between 31–40 and 41–50 years of age gave top priority to the financial aspect, followed by the relational aspect. The third most important aspect for the WCW of all age categories was the work aspect. The WCW of all age categories declared the career-related and social aspects the least important.

In the further testing process, the importance of the level of employee motivation was examined separately according to individual aspects of motivation—financial, social, work, career-based, and relational.

### 3.1. Importance of the Level of Motivation in Financial Aspect

The importance of the level of employee motivation was examined through three motivation factors (basic salary, fringe benefits, and fair appraisal system). The existence of dependence between occupational classification and the age was examined and subsequently, the level of dependence. The results are presented in Table 3.

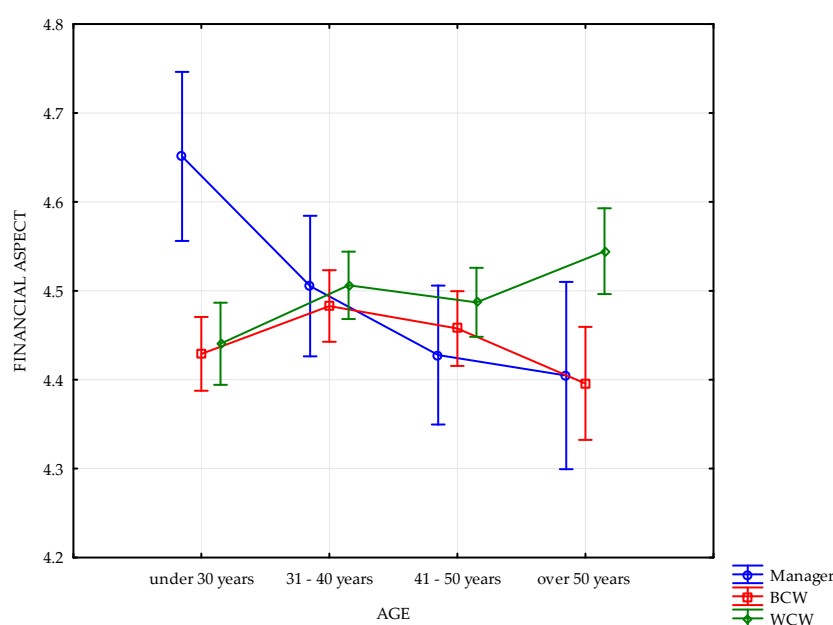
**Table 3.** Testing of dependence between occupation and age within the financial aspect.

Occupational Classification		Chi-Squared	df	p-Level
Manager	Pearson's chi-squared	33.22	df = 12	<b><math>p = 0.001</math></b>
	M-V Chi-squared	36.00	df = 12	<b><math>p = 0.000</math></b>
	Contingency coefficient		0.16	
	Cramer's V		0.10	
BCW	Pearson's chi-squared	11.45	df = 12	$p = 0.491$
	M-V Chi-squared	11.35	df = 12	$p = 0.499$
	Contingency coefficient		0.05	
	Cramer's V		0.03	
WCW	Pearson's chi-squared	26.44	df = 12	<b><math>p = 0.009</math></b>
	M-V Chi-squared	28.11	df = 12	<b><math>p = 0.005</math></b>
	Contingency coefficient		0.07	
	Cramer's V		0.04	

Note: Statistically significant differences are highlighted in bold. Source: Authors' compilation.

Statistical verification (Table 3) confirmed statistically significant dependence between age and the financial aspect of the occupational category manager ( $p = 0.001$ ). Contingency coefficient and Cramer's V confirmed weak dependence. No statistically significant dependence between age and the financial aspect was recorded in the occupation of BCW ( $p > 0.05$ ). Contingency coefficient and Cramer's V confirmed weak dependence. The results provided in Table 3 showed statistically significant dependence between the age and the financial aspect in the occupation of WCW ( $p = 0.009$ ). Contingency coefficient and Cramer's V demonstrated weak dependence.

Detailed examination presented in Figure 1, Table 4 showed that statistically significant differences were confirmed only in two cases—for managers under 30 and BCW over 50. The second statistically significant difference was confirmed in the importance of the level of employee motivation of BCW under 30 and WCW over 50.

**Figure 1.** Multiple comparison analysis test—occupational category, age, financial aspect.

**Table 4.** Differences in the importance of the level of employee motivation in the financial aspect.

Occupational Classification/Age	Manager under 30 Years	BCW under 30 Years	WCW under 30 Years	Manager between 31–40 Years	BCW between 31–40 Years	WCW between 31–40 Years	Manager between 41–50 Years	BCW between 41–50 Years	WCW between 41–50 Years	Manager over 50 Years	BCW over 50 Years	WCW over 50 Years
Average	<b>4.65</b>	<b>4.43</b>	<b>4.44</b>	<b>4.51</b>	<b>4.48</b>	<b>4.51</b>	<b>4.43</b>	<b>4.46</b>	<b>4.49</b>	<b>4.41</b>	<b>4.40</b>	<b>4.55</b>
Manager under 30 years		0.054	0.088	0.603	0.369	0.611	0.051	0.169	0.410	0.054	<b>0.011</b>	0.925
BCW under 30 years	0.054		1.000	0.974	0.821	0.297	1.000	0.999	0.738	1.000	1.000	<b>0.043</b>
WCW under 30 years	0.088	1.000		0.993	0.982	0.713	1.000	1.000	0.964	1.000	0.998	0.112
Manager between 31–40 years	0.603	0.974	0.993		1.000	1.000	0.971	1.000	1.000	0.976	0.747	1.000
BCW between 31–40 years	0.369	0.821	0.982	1.000		1.000	0.998	1.000	1.000	0.997	0.760	0.835
WCW between 31–40 years	0.611	0.297	0.713	1.000	1.000		0.966	0.908	1.000	0.975	0.402	0.995
Manager between 41–50 years	0.051	1.000	1.000	0.971	0.998	0.966		1.000	0.996	1.000	1.000	0.645
BCW between 41–50 years	0.169	0.999	1.000	1.000	1.000	0.908	1.000		0.998	1.000	0.973	0.342
WCW between 41–50 years	0.410	0.738	0.964	1.000	1.000	1.000	0.996	0.998		0.995	0.701	0.890
Manager over 50 years	0.054	1.000	1.000	0.976	0.997	0.975	1.000	1.000	0.995		1.000	0.796
BCW over 50 years	<b>0.011</b>	1.000	0.998	0.747	0.760	0.402	1.000	0.973	0.701	1.000		0.054
WCW over 50 years	0.925	<b>0.043</b>	0.112	1.000	0.835	0.995	0.645	0.342	0.890	0.796	0.054	

Note: Statistically significant differences are highlighted in bold. Source: Authors' compilation.



### 3.2. Importance of the Level of Motivation in Social Aspect

The importance of the level of employee motivation in the social aspect was analysed through six motivation factors—social benefits, the mission of the company, name of the company, region's development, relation to the environment, and free time. Results of testing of dependence between occupational classification and the age within the social aspect are presented in Table 5.

**Table 5.** Testing of dependence between occupational classification and the age within the social aspect.

Occupational Classification		Chi-Squared	df	p-Level
Manager	Pearson's chi-squared	53.76	df = 12	<b><math>p = 0.000</math></b>
	M-V Chi-squared	53.43	df = 12	<b><math>p = 0.000</math></b>
	Contingency coefficient		0.15	
	Cramer's V		0.09	
BCW	Pearson's chi-squared	37.27	df = 12	<b><math>p = 0.000</math></b>
	M-V Chi-squared	37.29	df = 12	<b><math>p = 0.000</math></b>
	Contingency coefficient		0.06	
	Cramer's V		0.04	
WCW	Pearson's chi-squared	49.55	df = 12	<b><math>p = 0.000</math></b>
	M-V Chi-squared	49.70	df = 12	<b><math>p = 0.000</math></b>
	Contingency coefficient		0.07	
	Cramer's V		0.04	

Note: Statistically significant differences are highlighted in bold. Source: Authors' compilation.

The results of a test of goodness of fit provided in Table 5 confirmed statistically significant dependence between the age and the social aspect in the occupation of managers ( $p = 0.000$ ). Contingency coefficient and Cramer's V demonstrated weak dependence. Statistically significant dependence was revealed between age and the social aspect of BCW ( $p = 0.000$ ). Contingency coefficient and Cramer's V confirmed weak dependence. Statistically significant dependence was repeatedly confirmed between age and the social aspect in occupational category WCW. Contingency coefficient and Cramer's V indicated weak dependence.

Tukey's HSD test confirmed statistically significant differences between the following occupations and age groups (Figure 2, Table 6):

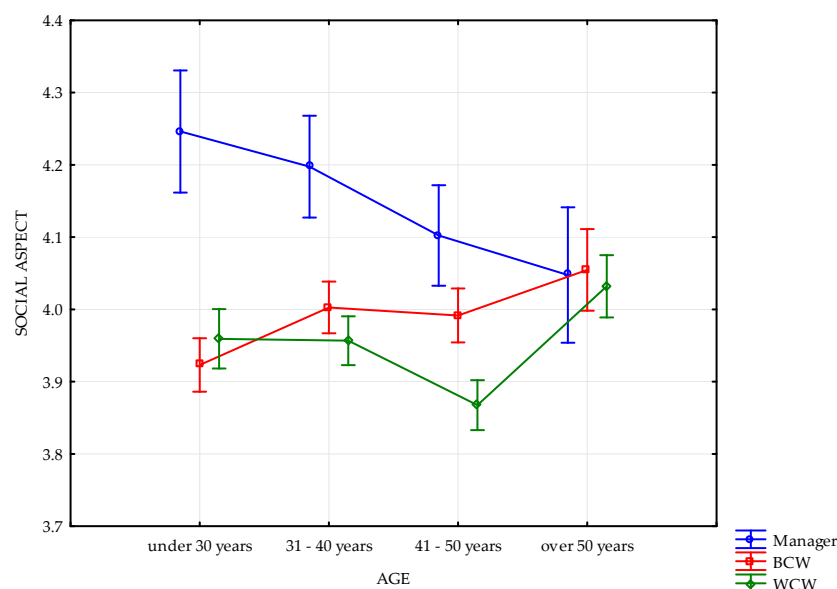
- between managers under 30 years of age, and BCW under 30 up to 50 years of age and WCW in all age groups;
- between BCW under 30 years of age, and managers in age groups 31–40 and 41–50, and WCW over 50 years of age;
- between WCW under 30 years of age, and managers in the age group 31–40;
- between managers in the age group 31–40, and BCW, and WCW in age groups 31–40 and 41–50;
- between BCW, and WCW in the age group 31–40, and WCW in the age group 41–50;
- between managers and BCW in the age group 41–50, and WCW in the age group 41–50; and
- between WCW in the age group 41–50, BCW, and WCW over 50 years of age.



**Table 6.** Differences in the importance of the level of employee motivation in the social aspect.

Occupational Classification/Age	Manager under 30 Years	BCW under 30 Years	WCW under 30 Years	Manager between 31–40 Years	BCW between 31–40 Years	WCW between 31–40 Years	Manager between 41–50 Years	BCW between 41–50 Years	WCW between 41–50 Years	Manager over 50 Years	BCW over 50 Years	WCW over 50 Years
Average	4.25	3.92	3.96	4.20	4.00	3.96	4.10	3.99	3.87	4.05	4.06	4.03
Manager under 30 years		0.000	0.000	1.000	0.004	0.000	0.435	0.002	0.000	0.128	0.073	0.023
BCW under 30 years	0.000		0.988	0.000	0.113	0.984	0.018	0.314	0.635	0.795	0.057	0.023
WCW under 30 years	0.000	0.988		0.000	0.949	1.000	0.159	0.995	0.084	0.978	0.449	0.442
Manager between 31–40 years	1.000	0.000	0.000		0.007	0.000	0.775	0.003	0.000	0.536	0.174	0.051
BCW between 31–40 years	0.004	0.113	0.949	0.007		0.829	0.704	1.000	0.000	1.000	0.983	0.999
WCW between 31–40 years	0.000	0.984	1.000	0.000	0.829		0.140	0.980	0.018	0.973	0.407	0.387
Manager between 41–50 years	0.435	0.018	0.159	0.775	0.704	0.140		0.545	0.000	1.000	0.999	0.964
BCW between 41–50 years	0.002	0.314	0.995	0.003	1.000	0.980	0.545		0.000	1.000	0.928	0.979
WCW between 41–50 years	0.000	0.635	0.084	0.000	0.000	0.018	0.000	0.000		0.244	0.000	0.000
Manager over 50 years	0.128	0.795	0.978	0.536	1.000	0.973	1.000	1.000	0.244		1.000	1.000
BCW over 50 years	0.073	0.057	0.449	0.174	0.983	0.407	0.999	0.928	0.000	1.000		1.000
WCW over 50 years	0.023	0.023	0.442	0.051	0.999	0.387	0.964	0.979	0.000	1.000	1.000	

Note: Statistically significant differences are highlighted in bold. Source: Authors' compilation.



**Figure 2.** Multiple comparison analysis test—occupational classification, age, and social aspect.

### 3.3. Importance of the Level of Motivation in Work Aspect

The importance of the level of employee motivation in the work aspect was examined in the second step. The following factors were studied: physical effort at work, safety in the workplace, job security, workload and type of work, information about performance result, working hours, work environment, job performance, and mental effort.

Testing (Table 7) confirmed statistically significant dependence between the age and work aspect in category managers ( $p = 0.000$ ). Contingency coefficient and Cramer's V confirmed weak dependence. Statistically significant dependence was repeatedly revealed between age and the work aspect of BCW ( $p = 0.000$ ). Contingency coefficient and Cramer's V confirmed weak dependence. Statistical verification further confirmed statistically significant dependence between age and the work aspect in the occupational category WCW ( $p = 0.000$ ). Contingency coefficient and Cramer's V revealed weak dependence.

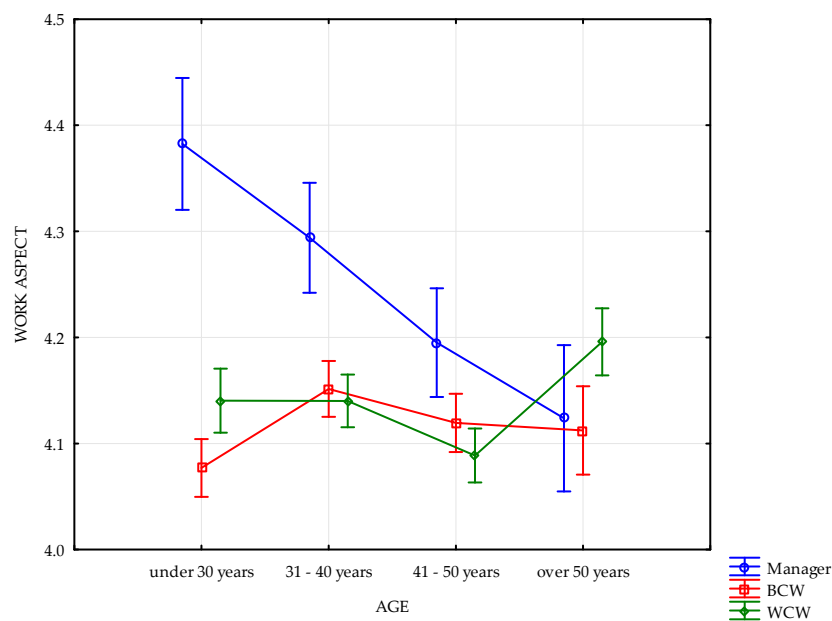
**Table 7.** Testing of dependence between occupational classification and the age within the work aspect.

Occupational Classification		Chi-Squared	df	p-Level
Manager	Pearson's chi-squared	103.71	df = 12	<b><math>p = 0.000</math></b>
	M-V Chi-squared	104.99	df = 12	<b><math>p = 0.000</math></b>
	Contingency coefficient		0.17	
	Cramer's V		0.10	
BCW	Pearson's chi-squared	56.03	df = 12	<b><math>p = 0.000</math></b>
	M-V Chi-squared	56.24	df = 12	<b><math>p = 0.000</math></b>
	Contingency coefficient		0.06	
	Cramer's V		0.04	
WCW	Pearson's chi-squared	45.29	df = 12	<b><math>p = 0.000</math></b>
	M-V Chi-squared	45.92	df = 12	<b><math>p = 0.000</math></b>
	Contingency coefficient		0.05	
	Cramer's V		0.03	

Note: Statistically significant differences are highlighted in bold. Source: Authors' compilation.

More detailed Tukey's HSD test confirmed statistically significant differences between the following (Figure 3, Table 8):

- managers under 30 years of age, and managers between 41–50 years of age, and BCW, and WCW in all age groups;
- BCW under 30 years of age, and managers and BCW between 31–40 years of age, and WCW over 50 years of age;
- managers between 31–40 years of age, and BCW, and WCW in age groups 31–40 and 41–50, and managers and BCW over 50 years of age;
- BCW in the age group 31–40, and WCW in the age group 41–50; and
- BCW and WCW in the age group 41–50, and WCW over 50 years of age.



**Figure 3.** Multiple comparison analysis test—occupational category, age, and work aspect.

**Table 8.** Differences in the importance of the level of employee motivation in the work aspect.

Occupational Classification/Age	Manager under 30 Years	BCW under 30 Years	WCW under 30 Years	Manager between 31–40 Years	BCW between 31–40 Years	WCW between 31–40 Years	Manager between 41–50 Years	BCW between 41–50 Years	WCW between 41–50 Years	Manager over 50 Years	BCW over 50 Years	WCW over 50 Years
Average	4.38	4.08	4.14	4.29	4.15	4.14	4.20	4.12	4.09	4.12	4.11	4.20
Manager under 30 years		0.000	0.000	0.712	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.002
BCW under 30 years	0.000		0.138	0.000	0.008	0.059	0.062	0.593	1.000	0.999	0.991	0.000
WCW under 30 years	0.000	0.138		0.002	1.000	1.000	0.946	0.998	0.427	1.000	0.999	0.385
Manager between 31–40 years	0.712	0.000	0.002		0.008	0.002	0.255	0.000	0.000	0.031	0.000	0.266
BCW between 31–40 years	0.000	0.008	1.000	0.008		1.000	0.990	0.904	0.045	1.000	0.979	0.730
WCW between 31–40 years	0.000	0.059	1.000	0.002	1.000		0.944	0.997	0.177	1.000	0.999	0.376
Manager between 41–50 years	0.002	0.062	0.946	0.255	0.990	0.944		0.660	0.148	0.957	0.518	1.000
BCW between 41–50 years	0.000	0.593	0.998	0.000	0.904	0.997	0.660		0.927	1.000	1.000	0.039
WCW between 41–50 years	0.000	1.000	0.427	0.000	0.045	0.177	0.148	0.927		1.000	1.000	0.000
Manager over 50 years	0.000	0.999	1.000	0.031	1.000	1.000	0.957	1.000	1.000		1.000	0.954
BCW over 50 years	0.000	0.991	0.999	0.000	0.979	0.999	0.518	1.000	1.000	1.000		0.187
WCW over 50 years	0.002	0.000	0.385	0.266	0.730	0.376	1.000	0.039	0.000	0.954	0.187	

Note: Statistically significant differences are highlighted in bold. Source: Authors' compilation.

### 3.4. Importance of the Level of Motivation in Career-Related Aspect

Motivation factors such as the opportunity to apply one's own ability, career advancement, competences, prestige, individual decision-making, self-actualization, personal growth, recognition were to uncover the importance of the level of motivation in the career-related aspect.

The outcomes provided in Table 9 further revealed statistically significant dependence between age and the career-related aspect in the occupation of the manager ( $p = 0.000$ ). Contingency coefficient and Cramer's V demonstrated weak dependence. Statistically significant dependence was also recorded between age and the career-related aspect in the occupational category BCW ( $p > 0.018$ ). Testing through Contingency coefficient and Cramer's V confirmed weak dependence. The results further confirmed statistically significant dependence between age and the work aspect of WCW ( $p = 0.000$ ). Contingency coefficient and Cramer's V confirmed weak dependence.

**Table 9.** Testing of dependence between occupational classification and age within the career-related aspect.

Occupational Classification		Chi-Squared	df	p-Level
Manager	Pearson's chi-squared	53.86	df = 12	<b><math>p = 0.000</math></b>
	M-V chi-squared	53.63	df = 12	<b><math>p = 0.000</math></b>
	Contingency coefficient		0.13	
	Cramer's V		0.07	
BCW	Pearson's chi-squared	24.12	df = 12	<b><math>p = 0.020</math></b>
	M-V chi-squared	24.41	df = 12	<b><math>p = 0.018</math></b>
	Contingency coefficient		0.04	
	Cramer's V		0.03	
WCW	Pearson's chi-squared	88.19	df = 12	<b><math>p = 0.000</math></b>
	M-V chi-squared	87.75	df = 12	<b><math>p = 0.000</math></b>
	Contingency coefficient		0.08	
	Cramer's V		0.05	

Note: Statistically significant differences are highlighted in bold. Source: Authors' compilation.

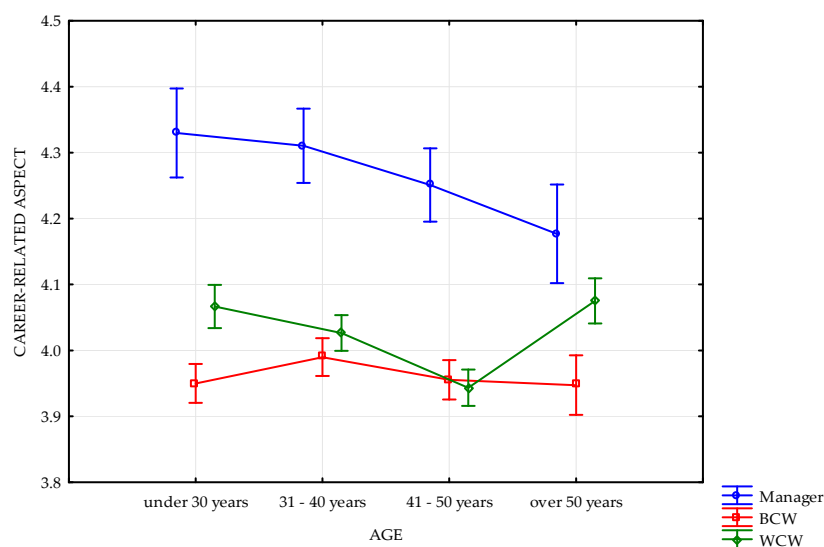
Detailed Tukey's HSD test proved the greatest number of statistically significant differences between all examined aspects (financial, social, work, career-related, and relational). Differences were confirmed between (Figure 4, Table 10):

- managers under 30 years of age, and BCW, and WCW in all age groups;
- BCW under 30 years of age, and WCW under 30 years of age, and managers and WCW between 31–40, 41–50 and over 50 years of age;
- WCW under 30 years of age, and managers between 31–50 years of age, and BCW between 41–50 and over 50 years of age, and WCW between 41–50 years of age;
- managers in the age group 31–40, and BCW, and WCW over 30 up to 50 years of age;
- BCW between 31–40 years of age, and managers in the age group 41–50, and WCW over 50 years of age;
- WCW in the age group 31–40, and managers, BCW, and WCW in the age group 41–50;
- managers in the age group 41–50, and BCW, and WCW from 41 up to over 50 years of age;
- BCW in the age group 41–50, and managers and WCW over 50 years of age;
- WCW in the age group 41–50, and managers over 50 years of age;
- managers over 50 years of age, and BCW over 50 years of age; and
- BCW over 50 years of age, and WCW over 50 years of age.

**Table 10.** Differences in the importance of the level of employee motivation in the career-related aspect.

Occupational Classification/Age	Manager under 30 Years	BCW under 30 Years	WCW under 30 Years	Manager between 31–40 Years	BCW between 31–40 Years	WCW between 31–40 Years	Manager between 41–50 Years	BCW between 41–50 Years	WCW between 41–50 Years	Manager over 50 Years	BCW over 50 Years	WCW over 50 Years
Average	4.33	3.95	4.07	4.31	3.99	4.03	4.25	3.96	3.94	4.18	3.95	4.08
Manager under 30 years		0.000	0.000	1.000	0.000	0.000	0.902	0.000	0.000	0.165	0.000	0.000
BCW under 30 years	0.000		0.000	0.000	0.776	0.017	0.000	1.000	1.000	0.002	1.000	0.000
WCW under 30 years	0.000	0.000		0.000	0.054	0.869	0.000	0.000	0.000	0.666	0.013	1.000
Manager between 31–40 years	1.000	0.000	0.000		0.000	0.000	0.950	0.000	0.000	0.355	0.000	0.000
BCW between 31–40 years	0.000	0.776	0.054	0.000		0.834	0.000	0.910	0.510	0.027	0.979	0.028
WCW between 31–40 years	0.000	0.017	0.869	0.000	0.834		0.000	0.046	0.002	0.186	0.388	0.716
Manager between 41–50 years	0.902	0.000	0.000	0.950	0.000	0.000		0.000	0.000	0.968	0.000	0.001
BCW between 41–50 years	0.000	1.000	0.000	0.000	0.910	0.046	0.000		1.000	0.002	1.000	0.000
WCW between 41–50 years	0.000	1.000	0.000	0.000	0.510	0.002	0.000	1.000		0.001	1.000	0.000
Manager over 50 years	0.165	0.002	0.666	0.355	0.027	0.186	0.968	0.002	0.001		0.001	0.770
BCW over 50 years	0.000	1.000	0.013	0.000	0.979	0.388	0.000	1.000	1.000	0.001		0.005
WCW over 50 years	0.000	0.000	1.000	0.000	0.028	0.716	0.001	0.000	0.000	0.770	0.005	

Note: Statistically significant differences are highlighted in bold. Source: Authors' compilation.



**Figure 4.** Multiple comparison analysis test—occupational classification, age, and career-related aspect.

### 3.5. Importance of the Level of Motivation in Relational Aspect

The importance of interpersonal relations was uncovered through the following factors: the atmosphere in the workplace, good work team, communication in the workplace, and the supervisor's approach.

The results of testing presented in Table 11 revealed statistically significant dependence between the age and the relational aspect in the occupation of the manager ( $p = 0.000$ ). Contingency coefficient and Cramer's V confirmed weak dependence. The results further uncovered statistically significant dependence between age and the relational aspect in occupational category BCW ( $p = 0.001$ ). Contingency coefficient and Cramer's V demonstrated weak dependence. Statistical testing also confirmed significant dependence between age and the relational aspect in the occupational category WCW ( $p = 0.000$ ). Contingency coefficient and Cramer's V confirmed weak dependence.

**Table 11.** Testing of dependence between occupational classification and age within the relational aspect.

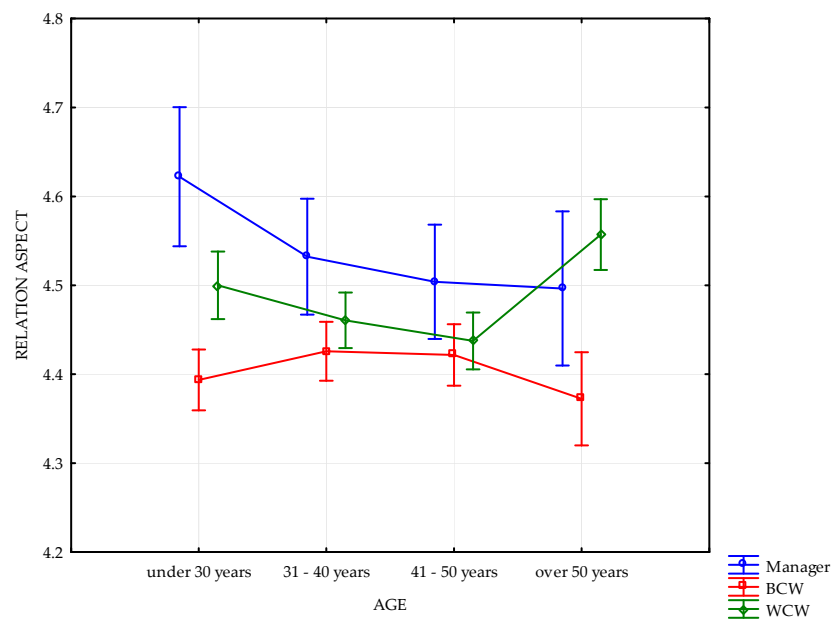
Occupational Classification		Chi-Squared	df	p-Level
Manager	Pearson's chi-squared	36.82	df = 12	<b><math>p = 0.000</math></b>
	M-V chi-squared	38.48	df = 12	<b><math>p = 0.000</math></b>
	Contingency coefficient		0.15	
	Cramer's V		0.09	
BCW	Pearson's chi-squared	32.92	df = 12	<b><math>p = 0.001</math></b>
	M-V chi-squared	32.51	df = 12	<b><math>p = 0.001</math></b>
	Contingency coefficient		0.07	
	Cramer's V		0.04	
WCW	Pearson's chi-squared	42.87	df = 12	<b><math>p = 0.000</math></b>
	M-V chi-squared	45.54	df = 12	<b><math>p = 0.000</math></b>
	Contingency coefficient		0.08	
	Cramer's V		0.05	

Note: Statistically significant differences are highlighted in bold. Source: Authors' compilation.



The outcomes presented in Figure 5 and Table 12 demonstrated statistically significant differences between the following:

- managers under 30 years of age, and BCW of all age groups, and WCW between 41–40 years of age;
- BCW under 30 years of age, and WCW under 30 and over 50 years of age;
- BCW between 31–40, 41–50, and over 50 years of age, and WCW over 50 years of age;
- WCW under 30 years of age, and BCW over 50 years of age;
- managers in the age group 31–40, and BCW over 50 years of age; and
- WCW in age groups 31–40 and 41–50, and WCW over 50 years of age.



**Figure 5.** Multiple comparison analysis test—occupational category, age, and relational aspect.

**Table 12.** Differences in the importance of the level of employee motivation in the relational aspect.

Occupational Classification/Age	Manager under 30 Years	BCW under 30 Years	WCW under 30 Years	Manager between 31–40 Years	BCW between 31–40 Years	WCW between 31–40 Years	Manager between 41–50 Years	BCW between 41–50 Years	WCW between 41–50 Years	Manager over 50 Years	BCW over 50 Years	WCW over 50 Years
Average	4.62	4.39	4.50	4.53	4.43	4.46	4.50	4.42	4.44	4.50	4.37	4.56
Manager under 30 years		0.003	0.576	0.912	0.025	0.155	0.627	0.020	0.049	0.687	0.001	0.992
BCW under 30 years	0.003		0.006	0.124	0.979	0.219	0.422	0.994	0.831	0.893	1.000	0.000
WCW under 30 years	0.576	0.006		1.000	0.224	0.957	1.000	0.156	0.491	1.000	0.035	0.700
Manager between 31–40 years	0.912	0.124	1.000		0.502	0.934	1.000	0.437	0.682	1.000	0.033	1.000
BCW between 31–40 years	0.025	0.979	0.224	0.502		0.952	0.877	1.000	1.000	0.993	0.961	0.000
WCW between 31–40 years	0.155	0.219	0.957	0.934	0.952		0.999	0.921	0.998	1.000	0.449	0.037
Manager between 41–50 years	0.627	0.422	1.000	1.000	0.877	0.999		0.832	0.958	1.000	0.166	0.993
BCW between 41–50 years	0.020	0.994	0.156	0.437	1.000	0.921	0.832		1.000	0.989	0.979	0.000
WCW between 41–50 years	0.049	0.831	0.491	0.682	1.000	0.998	0.958	1.000		0.999	0.857	0.002
Manager over 50 years	0.687	0.893	1.000	1.000	0.993	1.000	1.000	0.989	0.999		0.705	0.998
BCW over 50 years	0.001	1.000	0.035	0.033	0.961	0.449	0.166	0.979	0.857	0.705		0.000
WCW over 50 years	0.992	0.000	0.700	1.000	0.000	0.037	0.993	0.000	0.002	0.998	0.000	

Note: Statistically significant differences are highlighted in bold. Source: Authors' compilation.

#### 4. Discussion and Conclusions

Every business is based on knowledge, information technology, as well as innovation. Many businesses are struggling with existential concerns, and disregard the needs of their employees [1]. However, the interest in employees, their self-actualization, mutual expectations, and healthy labour relations are the preconditions for commitment, loyalty, and strong work ethic of employees and, thus, the success of the entire company [81–87].

Every sound business entity should focus its attention on increased effectiveness and sustainable economic growth, especially by using the possibilities to react quickly and appropriately to constantly changing stimuli in the business environment [88,89]. The reasons include a constantly changing business environment, technological progress, and economic globalization. More and more demanding customers are thus becoming the driving force, which increases competitiveness between business entities [90,91]. A suitable investment of an organisation in employees, or HRM, represents a crucial part of business development [92].

##### 4.1. *Proposals and Recommendations in Terms of Occupational Classification*

The aim of the research was to find out whether there are statistically significant differences in the level of importance of employee motivation in terms of occupational classification and the age of participants and the studied areas of motivation using management-related data within HRM. The results showed that a financial aspect of motivation (base salary, fringe benefits, and fair appraisal system) was the key aspect of maintaining the performance of all occupational classification (manager, BCW, and WCW). In this area, Tukey's HSD test confirmed the lowest number of statistically significant differences between the occupational classification and all age groups.

The second most important aspect of motivation was the relational aspect. The importance of interpersonal relations was reflected in the atmosphere in the workplace, good work team, communication in the workplace, and the supervisor's approach. The same research results were introduced by Raziq and Maulabakhsh [18]. The authors argued that human to human interactions and relations played a more dominant role in the overall job motivation than money, whereas management skills, time, and energy were all necessary to improve the overall performance of an organization.

Our research further demonstrated that the career-related aspect was deemed the least important by the participants. Our findings are in a disagreement with the findings of a survey conducted by Manzoor [93], who claimed that recognition and empowerment played an essential role in increasing employee motivation towards organizational responsibilities. Baah and Amoako [94] argued that motivating factors (the nature of work, the sense of achievement from work, recognition, responsibility delegated to them, and opportunities for personal growth and advancement) helped employees to find their value with respect to the value given to them by their organization. Moreover, this could increase the level of employee motivation, which would ultimately increase the internal happiness of employees, and the internal happiness would result in motivation. According to Kampkötter [95], formal appraisal linked with an external reward (financial consequences and career-related consequences) represented a powerful tool of human resource management, which was appreciated by employees. In a formal process, supervisors provide subordinates with feedback on their previous performance. Receiving positive feedback is perceived as recognition for their work. Negative feedback can also be deemed useful in a certain extent, as it may result in identifying potential development or training needs, which proves that the manager spent time and effort considering future development of the employee.

The outcomes confirmed the fact that finance ranked first for managers, BCW, and WCW, as they ensured the motivation of the basic needs. The importance of financial remuneration was also demonstrated by the research of Contiu et al. [60], Milne [61], Ghimire et al. [62], Vlacsekova, and Mura [96]. Similar results were presented by Kampkötter [95], who opined that appraisal without financial consequences had no favourable effects on job motivation. In addition, appraisal without financial consequences even reduced job motivation of particular types of employees, especially those

with high levels of openness to experience and internal checkpoints. It was, therefore, important to link appraisal with particular outcomes, such as a bonus, promotion, or salary increase.

Considering the inadequate performance appraisal of the employees in Central and Eastern Europe, finances are considered very important to meet their needs. This fact must be taken into account by managers when creating salary sacrifice scheme. Motivation factors related to relationships play an important role as well. This way the teambuilding can be supported in order to strengthen relationships in the workplace. Motivation factors related to career advancement and work are interesting only for the specific group of employees [97]. Motivation factors related to social status determining by the social policy of the government of the Slovak Republic are considered the least important. WH1 is confirmed.

#### *4.2. Proposals and Recommendations in Terms of the Age*

Each manager has to be familiar with the needs of employees in order to motivate subordinates effectively. Effective motivation results in achieving good results in the workplace. Personal differences have to be taken into account, i.e., the needs of employees are different, therefore, they are motivated by different motivation factors. Employees are not motivated by a specific motivation factor, usually, it is a combination of various ones. Right motivation affects not only the professional but also the private life of employees.

Working hours, job performance, job security, workload and type of work were of the greatest importance for managers under 30 years of age, and of the least importance for managers over 50 years of age. The work aspect was important for BCW between 31–40 years of age, and for WCW, and the least important for BCW, and WCW over 50 years of age. However, the survey of Chatzopoulou et al. [13] revealed that for both men and women, the most motivating factors were the nature of work and then work conditions, while earnings seemed to be less motivating, irrespective of gender, age, education, and hierarchy. Our results were partially confirmed by the findings of surveys conducted by Myšková, and Hájek [98], Khalid et al. [99], Yang [100], Monusova [101], which demonstrated that job characteristics such as the content of the work process and working conditions were among the most powerful factors of job motivation. Bakotic and Babic [102] found that for the workers who worked under difficult working conditions, working conditions were an important factor in job motivation, therefore, such workers were dissatisfied in relation to this factor. To improve the motivation of the employees working under difficult working conditions, it is necessary for management to improve their working conditions. This will make them as motivated as those who work under regular working conditions, and, in return, overall performance will increase.

Following our results, the fact that there are statistically significant differences in terms of the age in analysed areas of motivation can be stated. People up to 30 look for their life directions. In Slovakia, many of them live with their parents. They live the life of Generation Y [103]. People between 31 and 40 start their family lives and take care of children. Finances become the most important motivation factor them [104]. People between 40 and 50 have the position in the workplace and some of them deal with their career advancement [105]. People over 50 want to protect the living standard. Thus, there are differences in terms of age [106].

Each person is an individual. Managers have a difficult task to adapt to their requirements. Based on experience, they can motivate employees through group incentive programs, which may not work sufficiently for all employees. Individual incentive programs are time consuming and costly. Differences in the needs of employees may not be large, but their impact on motivation and subsequent satisfaction can be substantial. Identifying differences in motivational preferences is highly demanding for time and experience. Using statistical methods allows us to identify differences in employee motivation preferences. In our case, the results of the statistical analyses show that between employees (from the work category and age) it is necessary to distinguish different preferences individually for each group. Therefore, we do not recommend the application of group motivation programs because their effectiveness is insufficient. In motivational programs, there is a need to make partial targeted

adjustments according to the needs of each category. It is important to note that the needs of employees may change over time. Therefore, incentive programs need to be updated over a period of one year.

Finally, we can state that the essential role of management of any organization is to retain quality employees [107–109]. However, the age and occupational classification of employees need to be considered within HRM strategies. In the process of motivation, managers must take into account further social areas too (gender, education, seniority). It results in the more complicated management of human resources associated with meeting enterprise goals. Thus, the issue of individual motivation programmes created for individual employees tailored to employees' needs must be discussed.

Our research confirms and extends the research results of authors such as Brady, and King [110], Fernández-Muñoz, and Topa [111], Kooij [112], and Locke [113]. We broaden knowledge of HRM and employee motivation and recommend managers to consider not only the gender and education of employees but also their occupation and age in creating incentive schemes [55,114–119]. An advantage of SMEs is that managers can adopt an individual approach in human resource management. They should effort to encourage sustainable growth of their organization that can be achieved by the purposeful motivation of employees.

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