



FACTORS FORMING EMPLOYEE MOTIVATION INFLUENCED BY REGIONAL AND AGE-RELATED DIFFERENCES

Miloš HITKA^{1*}, Zoltán RÓZSA², Marek POTKÁNY³, Lenka LIŽBETINOVÁ⁴

^{1, 3}*Department of Business Economics, Faculty of Wood Sciences and Technology, Technical University in Zvolen, T. G. Masaryka 24, 960 53 Zvolen, Slovak Republic*

²*Faculty of Social-Economics Relationship, Alexander Dubcek University of Trenčín, Studentska 1638/3, 911 50 Trenčín, Slovak Republic*

⁴*Faculty of Corporate Strategy, The Institute of Technology and Business in Ceske Budejovice, Czech Republic*

Received 20 November 2018; accepted 02 April 2019

Abstract. The aim of the paper is to define and quantify the differences in employee motivation depending upon the selected regions and the age of employees. The research was carried out in 2017. Sampling unit consisted of 7,594 respondents – employees from the selected eastern European countries, members of the European Union, mainly the Slovak and Czech Republic, as well as selected regions outside the European Union, Russia and China. Data gathered from the questionnaires were evaluated using descriptive statistics and tested by Tukey's HSD at the level of significance of 5%. The ANOVA Variance Analysis was used to compare each sampling unit in relation to the age and the country. Most of the differences in motivation factors were found in the countries of China and Russia. It can be due to different cultural values, especially because of the power gap and the preferred principle of seniority and collectivism in China. Differences in the level of motivation, i.e. motivation factors especially in relation to the age were observed in the analysed regions. Incentive plans for intercultural teams in order to enable employers to choose motivation factors effectively were designed following the conclusions presented in the paper. Fundamental patterns of cultural differences as well as age-related differences predicting motivational preferences can be taken into consideration when selecting the motivation factors.

Keywords: employee motivation, age-related differences, Slovak Republic, Czech Republic, Russia, People's Republic of China.

JEL Classification: M12.

Introduction

The nature of work changes with new technology arrival and growing globalisation (M. M. Bergman, Z. Bergman, & Berger, 2017). Demands for product quality are growing to meet

*Corresponding author. E-mail: hitka@tuzvo.sk

the customers' needs at the highest level. In the context of human resource management, the main task is to work with people at various levels and in various areas (Olšovská, Mura, & Švec, 2016; Vondrackova, Vostova, & Nyvlt, 2016; Lizbetin & Bartuska, 2017; Kucharčíková & Mičiak, 2017; Nyvlt, 2018). Managers at all levels are required to be skilled to lead and manage staff of different generations. They should contribute to organisation goals and to achieve higher level of performance (Rajnoha, Lorincová, & Bego, 2015; Nyvlt & Pruskova, 2017; Kubala & Vetráková, 2018). Since each generation has its peculiarities and different standards, it is a highly demanding process (Gursoy, Maier, & Chi, 2008). Each generation affects mutual relationships in a specific way, e.g. the elderly want proximity and cohesion and, on the other hand, autonomy and independence attract the young (Caganova, Starecek, Bednarikova, & Hornakova, 2017). Therefore, they tend to reject the values and traditions of other generations. In organisations hiring different generations, successful leaders should be familiar with specific features, attitudes, values, needs and behaviour of various generations in the workplace (Kirchmayer & Fratričová, 2018) as well as with the motivation needs of each generation. The values of older employees are different than those of younger ones. Moreover, the approach of younger employees to work and education is different as well (Gursoy, Maier, & Chi, 2008; Kolarova, Bediova, & Rasticova, 2016; Němec, Krišťák, Hockicko, Danihelová, & Velmovská, 2017).

At the present time, enterprises face several challenges due to dynamic environment (Wisnesner, Chadee, & Best, 2018; Zaborova, Glazkova, & Markova, 2017; Chatzopoulou, Vlachvei, & Monovasilis, 2015). Successful implementation of sustainable practices through entrepreneurial activities is crucial for more sustainable economy. The same opinion is mentioned in the publication of Alonso-Almeida, Bagur-Femenias, Llach, and Perramon (2018). Benefit of small companies using proactive sustainable practices to improve competitiveness even in tough times is suggested there.

The needs of employees providing good working conditions must be met by the enterprises in order to achieve success, stay competitive as well as to improve enterprise effectiveness (Dirisu et al., 2018; Raziq & Maulabakhsh, 2015). According to Cantele and Zardini (2018), Pintão, Chaves, and Branco (2018), Jelačić, Grladinović, Pirc, and Oblak (2010) too, meeting the needs of employees is one of the various challenges especially because the enterprise success depends on employee productivity.

The research is aimed at comparing the motivational preferences of Czech and Slovak employees to selected non-EU regions (Russia, China). Trade relations between mentioned countries deepen; therefore international teams as well as intense trade connections are created. At the same time, differences in employee motivation in these countries can be determined. The preferences are analysed in terms of the country and the age of employees.

Differences in employee motivation in terms of various factors (gender, education, job position) were shown in our previous research studies. The research provides further view into the issue in terms of comparing the differences in employee motivation in selected regions of Europe (the Slovak and Czech Republic) and Asia (Beijing province and Sverdlov region). The ways to deal with the issues in our research are unique, too. What is the difference in motivation of employees in selected regions depending on their age and their regional affiliation?

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 with Turkey's HSD test and ANOVA are used. It is followed by the research findings and discussion. Finally, conclusions, limitation and future research direction are offered.

1. Theoretical background

Employee motivation is defined as a psychological process that energises and maintains human activity in relation to work, task or project. Employee motivation is a significant factor affecting job satisfaction and willingness to use knowledge and skills for the benefit of the employer. Therefore, it is essential for organisations to pay attention to work motivation (Sumita, 2004; Chromjaková, 2016). Theories of employee motivation are most often linked to goal setting, organisational justice and social cognitive theory. Employee motivation differs from person to person and is affected by various motivation factors. The different individual motivational profile is the result of the uniqueness of the personality of each employee. The values of the national culture of the employee as well as characteristic features of a certain generation reflect on the individual profile. Therefore, it is very challenging for managers to motivate employees in multicultural environment properly (Eskildsen & Nussler, 2003; Kmecová, 2018).

A generation is an identifiable group that has a common birth year and shares the same significant life events at critical stages of its development (Curry, 2015). They affect how people in a given generation evolve and differ from the other generation (Kupperschmidt, 2000; Jenkins, 2007).

Baby Boom Generation consists of people born in the years 1946–1964. It is almost 35% of the workforce approaching retirement. This generation is more financially demanding and acquires new skills harder, especially in the area of new technology. It is a post-war generation still vital in the labour market; therefore, it is necessary to keep them in the labour market as long as possible (Collier, 2017). Generation X consists of people born between 1965 and 1981. Its members are career-oriented placing great emphasis on work-life balance, i.e. they try to divide their after-work time evenly between work and private life (Ng & Schweitzer, 2010). People of the Generation X like freedom. Therefore they are often considered difficult to be managed and the flexible workplace is an essential condition for them (Tolbize, 2008; Parthasarathy & Ramalingam, 2015). Comparisons, openness to new possibilities, career advancement, financial independence, competitiveness, ferocity and perseverance belong among the positive features of Generation X. On the other hand, disappointment, frustration, frequent disgust, pessimism, and workaholism are negatives (Hoole & Bonnema, 2015; Shirish, Boughzala, & Srivastava, 2015). Generation Y are people born between the years 1982 and 2000 (Curry, 2015; Duh, 2016). According to some sources, people born by the year 2003 are included in this generation (Hadijah & Badaruddin, 2015). These people are also known as children of technology and make up to one half of the workforce by 2020 (Grencikova & Španková, 2016). Comparing to previous generations, this one prefers Web delivery and working from home rather than traditional lectures or trainings. Flexibility, mobility, sociability and learning new ideas can be considered the positives of

the Generation. Egocentrism, hedonism, self-confidence, irresponsibility, and excessive use of social networks are the negatives (Ng & Schweitzer, 2010). Generation Z, also called the winter generation, consists of people born from 1995 to 2020 (Ozkan & Solmaz, 2015). They are flexible, sensitive, nonconflicting people focused on their inner world. It is the last and, at the same time, the first generation experienced digitisation. Their features are more reserved than the Generation Y. The use of technology, adaptability, individuality and ability to seek new opportunities belong among the benefits of this generation. The negatives of Generations Z are egocentrism, isolation to the outside world, acting in personal interest, and social network addiction (Berkup, 2014; Ng, 2010).

Motivated, satisfied and committed employees can influence the performance of the organisation positively (Cequea & Nuñez Bottini, 2011; Lorincová, 2015; Stachová, Stacho, & Vicen, 2017). With the new technology arrival and growing globalisation, the nature of work is changing as the economy relies more on intellectual skills than on physical work (Alexander, Markos, Forbes, Salmons, & Williams, 2014; Lorincová, Schmidtová, & Balážová, 2016). Employee performance is affected by various factors. The age of employees referring to a group of individuals who share common work experience or life experience is one of them. Generation is usually considered a large, socially differentiated group of people with the same style of thinking and acting resulting from the ways of living in specific period. Each generation has a different culture and, therefore, the behaviour and leadership of their managers differ, too (Curry, 2015).

As people live longer now, individual generations share more common years. It provides space for intragenerational and intergenerational contacts, interaction and learning (Meece, Glienke, & Burg, 2006). Every generation has its values, needs and expectations that need to be understood to ensure their harmonious and successful integration into the organisation. There are several critical factors to understand the generations diversity: external values and rewards, an exciting and motivating environment, workplace entertainment, education and diversity, continual growth and workplace progress (Nnamboozee & Parumasur, 2016).

2. Methodology

The aim of the paper is to define and quantify differences in employee motivation depending on the selected regions and the age of employees. A questionnaire was used to determine the level of motivation and to analyse motivation factors in analysed enterprises. Non-probability sampling technique (Quota Sampling) was used to select respondents and to create comparable sampling units in terms of structure. Subsequently, the acquired data were processed using statistical tools. The survey was conducted through questionnaires containing thirty motivation factors in the year 2017. Closed questions were used. The first part of the questionnaire examined the socio-demographic and qualification characteristics of the employees in the compared enterprises. In this section, necessary data on respondents' age, gender, number of years of work in the enterprise, completed education and employment were acquired. The second part of the questionnaire was focused on individual motivation factors to find the characteristics of the work environment, working conditions, on the system of evaluation and remuneration in the company, on the personal work in the company, social care system and employee benefits, satisfaction or

dissatisfaction of employees, value orientation, relationship to work, colleagues and the enterprise as a whole. In order not to influence respondents, motivation factors are in alphabetical order. Respondents could assign each question to one of five levels of importance from the Likert scale, where five was the maximum and one the minimum value.

Non-participant observation, data collection method was used in the research. We analysed the motivational factors in terms of financial evaluation (*basic salary, fringe benefits, fair appraisal system*), social security (*social benefits, company vision, company name, regional development, company relationship to the environment, work-life balance*), working conditions (*physical demand for work, workplace safety, job security, workload, getting familiar with the results, working time, work environment, work performance, mental effort*), career advancement (*Opportunity to apply one's own ability, prestige, individual decision-making, selfactualisation, education and personal growth, employee recognition*) and interpersonal relationships (*work atmosphere, good work team, communication in the workplace, supervisor's approach*).

Following theoretical findings and previous empirical studies dealing with the given issue, the following hypotheses were formulated:

H1 – We assume that the level of motivation in the analysed regions will be different.

H2 – We assume that the analysed regions will have a different level of motivation in relation to age.

Data acquired in the questionnaires were processed using statistical software STATISTICA 12 (StatSoft, Inc., 2014). Descriptive statistics was used to describe the sampling units. Due to selective nature of data, the differences between the arithmetic means of the values of importance of the motivation factors in each country were tested using the Turkey's HSD (Turkey's honest significance test) at the level of significance $\alpha = 5\%$.

Turkey's HSD test is a single-step multiple comparison procedure. It is also adapted for different numbers of observations in each group. The independence between the levels of factors, the variance of consistency and the 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 analysis of variance (ANOVA) was used to compare sampling units in relation to the age and the country. The aim of the test is to help us determine whether a null hypothesis should be rejected or an alternative hypothesis accepted (Statistic How To, 2019).

The analysis of variance ANOVA was used in order to compare individual selected sampling units in terms of age and nationality. The aim of the analysis of variance is to divide the observed variability into parts which can be assigned to individual reasons of variability. When multifactor analysis of dispersion is conducted two cases can be observed – mutual interaction between factors does not occur – they do not affect each other, or the mutual interaction occurs, it means factors are affected by each other.

3. Results

The total number of respondents participating in our research was 7,594. 3,720 of them were employees from the Slovak Republic (SR), 1,774 from the Czech Republic (CR), 1,201 from Sverdlovsk region of Russia (RU-Sve), and 899 from the Chinese province of Beijing

(PRC-Pe). Respondents were of various age and education, with different seniority and job positions. The structure of respondents in the analysed regions is presented in Table 1.

Table 1. Structure of sampling units according to the regional affiliation

Country	SR		CR		RU-Sve		PRC-Pe	
Gender	Total	%	Total	%	Total	%	Total	%
Men	1,869	50	817	46	468	39	434	48
Women	1,851	50	957	54	733	61	465	52
Age	Total	%	Total	%	Total	%	Total	%
Up to 30	899	24	617	35	535	45	460	51
31–40	1,143	31	453	26	195	16	233	26
41–50	1,083	29	416	23	339	28	153	17
51+	595	16	288	16	132	11	53	6

Average values of the Likert scale of the analysed motivation factors are shown in Table 2. The gathered values indicate the importance of individual factors for employees in the studied regions. The results show that in case of all studied regions, the factors “work atmosphere” and “Good work team” are among the four most important factors. For non-EU regions, “Good work team” is the most important factor at all, followed by the factor “Basic salary” in the Sverdlovsk region of Russia and the 5th in order in the Beijing city. On the other hand, this factor is considered the most important in the SR (Slovak Republic) and the 4th most important in the CR (Czech Republic).

Table 2. Average values of analysed motivation factors

Motivation factor	SR	CR	RU-Sve	PRC-Pe
	Mean	Mean	Mean	Mean
Atmosphere in the workplace	4.54	4.51	4.56	4.17
Good work team	4.52	4.50	4.65	4.19
Fringe benefits	4.41	4.27	4.58	4.14
Physical demand for work	3.82	3.65	3.04	3.80
Job security	4.41	4.40	4.31	3.95
Communication in the workplace	4.34	4.36	4.21	4.08
Company name	3.97	3.80	4.16	3.90
Opportunity to apply one’s own ability	4.06	4.04	4.45	4.03
Workload	4.14	4.14	4.54	4.05
Getting familiar with the results	4.03	3.97	4.23	3.95
Working time	4.26	4.12	4.47	4.00
Work environment	4.23	4.13	4.52	3.95
Work performance	4.16	4.08	4.37	4.03

End of Table 2

Motivation factor	SR	CR	RU-Sve	PRC-Pe
	Mean	Mean	Mean	Mean
Career advancement	4.04	3.90	4.44	4.08
Competences	3.93	3.75	4.22	4.04
Prestige	3.83	3.80	4.27	3.91
Supervisor's approach	4.43	4.47	4.46	4.07
Individual decision making	4.03	4.01	4.34	3.94
Selfactualisation	4.04	3.97	4.47	3.97
Social benefits	4.21	3.93	4.48	3.85
Fair appraisal system	4.43	4.41	4.43	4.01
Workplace safety	4.15	4.23	4.45	4.05
Mental effort	4.06	3.99	4.19	3.97
Company's vision	3.91	3.74	3.96	3.92
Regional Development	3.81	3.48	3.97	4.01
Education and personal growth	4.07	3.94	4.50	3.99
The relationship of the company to the environment	3.88	3.66	3.74	3.89
Free time	4.12	4.14	4.33	4.03
Recognition	4.19	4.14	4.37	4.14
Basic salary	4.58	4.46	4.63	4.11

Statistical data of selected motivation factors are presented in Table 3 and Figure 1. The selection was based on the preferences of motivation factors in the analysed regions (five the most preferred). Following three motivation factors fulfil the needs: atmosphere in the workplace, good work team and basic salary.

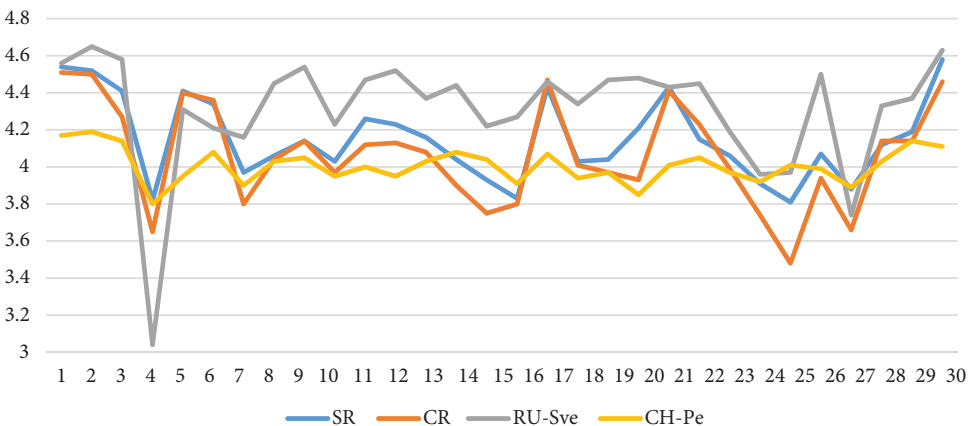


Figure 1. Analysed motivation factors

Table 3. Descriptive statistics of analysed motivation factors

Motivation factor	SR					CR				
	n	Mean	Standard deviation	Confidence interval 95%		n	Mean	Standard deviation	Confidence interval 95%	
				Low limit	Top limit				Low limit	Top limit
Work atmosphere	3,720	4.54	0.70	4.51	4.56	1,774	4.51	0.71	4.48	4.54
Good work team	3,720	4.52	0.69	4.50	4.55	1,774	4.50	0.72	4.46	4.53
Basic salary	3,720	4.58	0.75	4.56	4.61	1,774	4.46	0.80	4.42	4.50
Motivation factor	RU-Sve					PRC-Pe				
	n	Mean	Standard deviation	Confidence interval 95%		n	Mean	Standard deviation	Confidence interval 95%	
				Low limit	Top limit				Low limit	Top limit
Work atmosphere	1,201	4.56	0.69	4.52	4.6	899	4.17	0.95	4.11	4.23
Good work team	1,201	4.65	0.60	4.62	4.68	899	4.19	0.96	4.13	4.25
Basic salary	1,201	4.63	0.71	4.59	4.67	899	4.11	1.00	4.04	4.17

3.1. Analysis of the level of motivation in relation to respondents’ country of origin

Motivation factors “atmosphere in the workplace”, “good work team” and “basic salary” were selected for deeper analysis due to their level of importance. Using the ANOVA test, selected motivation factors were compared.

Motivation factor “Basic salary”

Despite minimum differences in values of individual countries, based on the statistical analysis the significant difference between the Czech Republic and China can be observed. Following the ANOVA test, we can confirm with 95% probability that the values of the motivation factor “Basic salary” are similar in Slovakia and Russia (Table 4).

Motivation factor “Work atmosphere”

Concerning the motivation factor “Work atmosphere”, statistically significant differences between China and other countries can be stated. Results in the Slovak Republic are similar to those in the Czech Republic and Russia (Table 5).

Table 4. Motivation factor “Basic salary”

Country	Unequal N HSD; variable:30; The marked differences are significant at the level $p < .05000$			
	SK {1} M = 4.58	CZ {2} M = 4.46	RU-Sve {3} M = 4.63	PRC-Pe {4} M = 4.11
SK {1}		0.000	0.394	0.000
CZ {2}	0.000		0.000	0.000
RU-Sve {3}	0.394	0.000		0.000
PRC-Pe {4}	0.000	0.000	0.000	

Note: Significantly important values are in italic.

Table 5. Motivation factor “Atmosphere in the workplace”

Country	Unequal N HSD; variable:1; The marked differences are significant at the level $p < 0.05000$			
	SK {1} M = 4.54	CZ {2} M = 4.51	RU-Sve {3} M = 4.56	PRC-Pe {4} M = 4.17
SK {1}		0.732	0.782	0.000
CZ {2}	0.732		0.278	0.000
RU-Sve {3}	0.782	0.278		0.000
PRC-Pe {4}	0.000	0.000	0.000	

Note: Significantly important values are in italic.

Motivation factor “Good work team”

Using the statistical analysis, significant differences between countries were confirmed at the level of significance $\alpha = 5\%$. 95% confidence interval for the motivation factor “good work team” shows that the level of importance of mentioned factor is similar in the Slovak and Czech Republic. On the other hand, it is different in Russia and China. Motivation factor “good work team” is more preferred in these countries (Table 6).

Table 6. Motivation factor “Good work team”

Country	Unequal N HSD; variable:2; The marked differences are significant at the level $p < 0.05000$			
	SK {1} M = 4.52	CZ {2} M = 4.50	RU-Sve {3} M = 4.65	PRC-Pe {4} M = 4.19
SK {1}		0.693	0.000	0.000
CZ {2}	0.693		0.000	0.000
RU-Sve {3}	0.000	0.000		0.000
PRC-Pe {4}	0.000	0.000	0.000	

Note: Significantly important values are in italic.

Following the previous results, the hypothesis H1 can be accepted. Moreover, we can confirm that there are differences in the level of motivation in selected regions, i.e. differences in selected motivation factors.

3.2. Analysis of the level of motivation in relation to the age

Three most important motivation factors for employees in relation to the age were used for statistical analysis. The variance analysis at the level of significance 5% was used to determine statistically significant differences between regions and age groups.

Motivation factor “Basic salary”

Statistically significant differences between age groups associated with the motivation factor “Basic salary” were confirmed. Significant difference was found in the age group of employees 31–40, 41–50 and 51+ in the Slovak Republic. The age group of employees up to 30 in the Czech Republic shows different level of importance; their requirements on this factor are lower. It can be due to the awareness about limited skills and the need to get relevant experience for further career advancement. Another significant difference in the given factor is in the age group of 41–50 in Russia, they prefer this factor. Similar result was observed in China. Employees aged up to 30 years, 31–40 years and 41–50 years prefer this motivation factor, too. Requirements on basic salary of the employees at the age up to 50 are considerably lower. On the other hand, the salary claims of the age group 51+ in China is higher that relates to high power distance index based on the principle of seniority. Based on this principle, respect and career growth are closely linked to the age of the employee. Despite the strong impact of Western culture on Beijing area, seniority principle is still strongly present

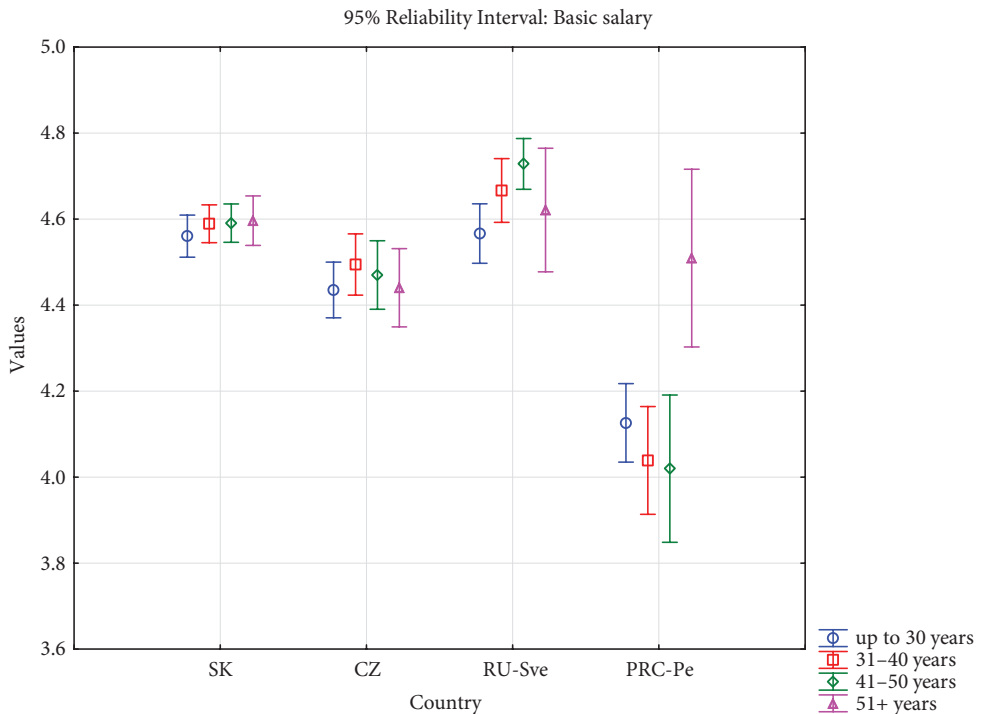


Figure 2. “Basic salary” interactions and age groups

in corporate cultures (Ližbetinová & Hudečková, 2015; Hofstede Insights, 2018). Differences were confirmed at a level of significance $\alpha = 5\%$ (Figure 2).

Motivation factor “Atmosphere in the workplace”

Interdependence between four countries, age groups and motivation factor “Work atmosphere” was identified using the statistical analysis. With 95% probability, statistically significant differences in the motivation factor “Atmosphere in the workplace” in employees aged up to 30, 31–40 and 41–50 in China can be confirmed. Therefore, the fact that requirements of Chinese employees on atmosphere in the workplace are generally lower can be stated. This finding can result from the collective attitude within companies and across Chinese society. They are aware of the necessity to adapt to the needs and objectives of the whole team (Ližbetinová & Hudečková, 2015; Hofstede Insights, 2018). In case of European countries is the situation different, the culture of individualism prevails (Figure 3).

Motivation factor “Good work team”

Statistically significant differences were confirmed in the motivation factor “Good work team”, especially in Russia and China. Employees aged 41–50 in Russia and up to 30, 31–40 and 41–50 in China prefer good work team, therefore significant differences were found. Similar preferences in relation to age groups in the Slovak Republic and the Czech Republic

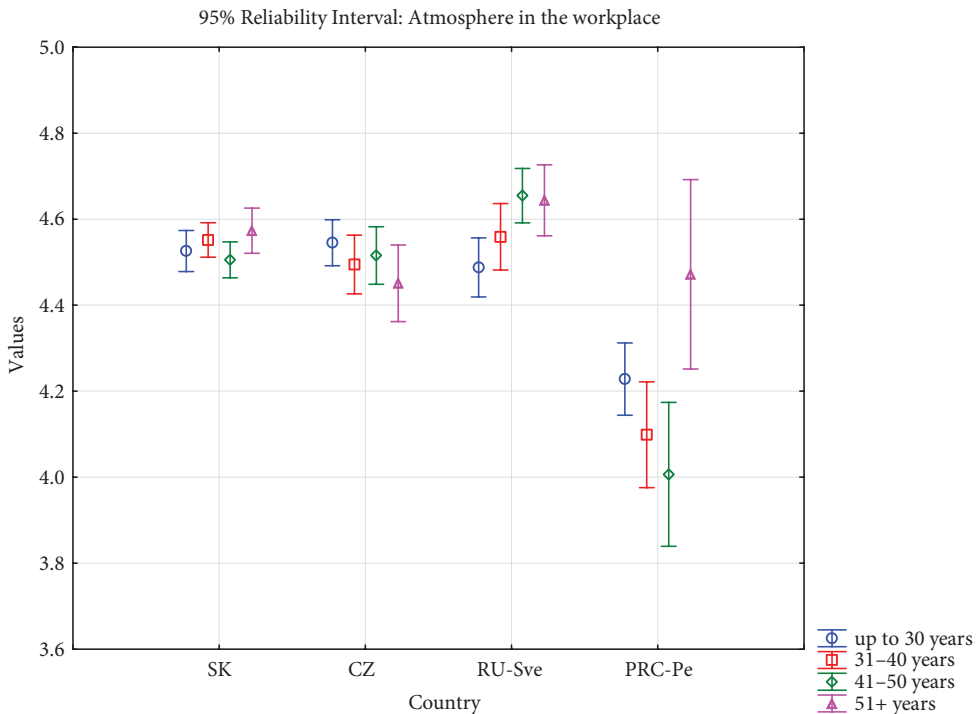


Figure 3. “Atmosphere in the workplace” interactions and age groups

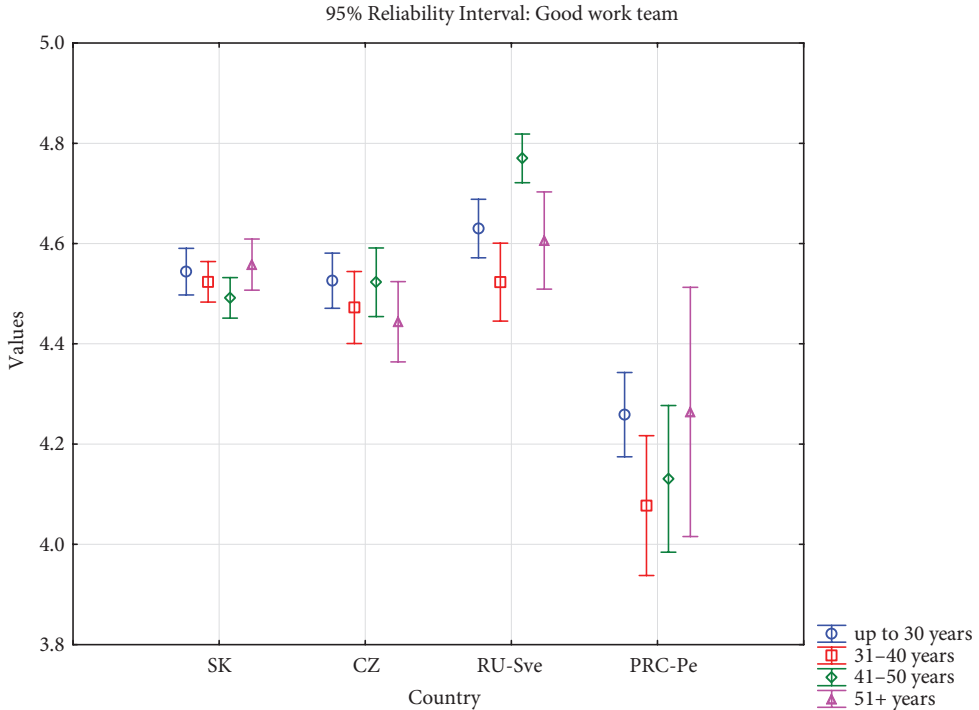


Figure 4. “Good work team” interactions and age groups

were observed. Moreover, age groups up to 30 and 31–40 in Russia and 51+ in China show similar preferences, as well as in the Czech Republic (Figure 4).

Following the previous results, the hypothesis H2 can be confirmed and thus, the fact that in the analysed regions are differences in the level of motivation in relation to the age, can be stated.

4. Discussion

The existence of trade relations provides space for creating the international teams and therefore, the enterprises have to reflect on preferences of employees coming from non-EU regions in an effective way. Different preferences in motivation factors in relation to the age can be assumed, especially due to different political situation as well as to different culture (Contiu, Gabora, & Olteana, 2012). The research was carried out in large urban agglomerations which are the economic centres of those areas. That is why higher standard of living and also cultural penetration of west is supposed. According to Hofstede’s theory of cultural differences, these areas are characterised by a high power distance index (RU 93 and CH 80). Both countries have strong centralised power and volume of financial potential (Hofstede Insights, 2018). They are characterised by a vast social gap between the poor and the rich, low-ranking and high-ranking, the younger and the older resulting in the significance of social status. In particular, the seniority principle within China can significantly affect the

motivational preferences of employees. Behaviour must reflect and represent the status quo in all areas of business interactions: visits, negotiations or cooperation; the approach should be from top to down and clear mandates for any task should be provided. On the other hand, central European countries such as the Czech Republic and the Slovak Republic do not have such a power distance index and the difference between the statuses in society (Bánociová & Martinková, 2017; Koiso, Masarova, & Habanik, 2018). Higher level of collectivism and collective thinking can be considered further feature of compared regions outside the EU. It is in contrast to the more individualistic culture in the countries within the EU. In the Russian Federation and the Czech Republic, the higher “uncertainty of avoidance” scores were measured, i.e. they avoid ambiguous situations, do not underestimate the strong bureaucracy, preparation for business negotiations, detailed information about the context and background (Ližbetinová & Hudečková, 2015; Hofstede Insights, 2018).

Following the arithmetic mean, the most important motivation factors preferred in all analysed regions were evaluated in the first part. The motivation factors “Basic salary”, “Work Atmosphere” and “Good work team” were statistically analysed using the ANOVA tests. Following the results, we found out that the values associated with the levels of motivation are in the Slovak Republic, the Czech Republic, Russia and China different. Motivation factor “Basic salary” is preferred by Slovak and Russian employees in a similar way. The salary evaluation is one of the essential attributes of motivation. In the Czech Republic, this factor is less preferred because of the lowest unemployment rate in comparison to analysed countries (in the Czech Republic the unemployment rate was 3.7% in Q1 2018, in the SR (May 2018) 5.5%, in Russia 4.7%, in China 3.89%) and the highest average salary per an employee (for Q1 2018 an average salary in the Czech Republic was 1,164.13 EUR, in the SR 955 EUR, in RU in May up to 596.37 EUR and in China 798.23 EUR – calculated using the exchange rate valid on 3rd July 2018) (Trading Economics, 2018a, 2018b, 2018c). Less flexible wage system in China can be one of the reasons why Chinese employees do not prefer this motivation factor. The level of motivation associated with the motivation factor “Good work team” is in Slovakia and the Czech Republic similar. The fact that the importance of the motivation factor “Atmosphere in the workplace” is the same in regions in the Slovak Republic, the Czech Republic and Russia, can be confirmed.

Compared to the work of the authors Lorincová, Schmidtová, and Javorčíková (2018), the consistency between individual motivation factors was found. In this work, the authors observed that the most important motivation factors in Slovakia and the Czech Republic are almost identical. Motivation factors are as follows: “Basic salary”, “Atmosphere in the workplace”, “Good work team”. Mentioned factors were analysed in our research as well. The difference in the motivation factor “Basic salary” in the Slovak Republic and the Czech Republic was observed. We confirmed that there are no statistically significant differences in motivation factor “Good work team” in analysed countries. The discrepancy in the results with the given work was found in the motivation factors “Atmosphere in the workplace” and “Supervisor’s approach”.

Statistically significant differences at the level of significance $\alpha = 5\%$ were confirmed in quantification of the differences in employee motivation in relation to the age of employees. When we analyse the results of the motivation factor “Basic salary” we can state that

requirements on salary of employees aged 31–40, 41–50 and 51+ in the Slovak Republic are significantly higher than those aged up to 30 in the Czech Republic. Other differences were found in the age group 41–50 in Russia and age groups up to 30, 31–40 and 41–50 in China. Following the mentioned results, the fact that the importance of the motivation factor “Basic salary” is for different age groups different, can be stated. It is especially generation X. Younger people are more motivated to strive for growth, profits, higher income, while older people are more motivated to keep what they already have, and that may result in differences in the importance of the factor for various generations. At the same time, they tend to leverage their knowledge and experience. Statistically significant difference in the motivation factor “Atmosphere in the workplace” was confirmed only in case of the age group up to 30, 31 to 40 and 41 to 50 in China, which may relate to strong collective thinking and the need to adapt to the culture. Therefore, the motivation factor “Atmosphere in the workplace” is important for all ages in the Slovak Republic, the Czech Republic and Russia. Motivating work environment and positive atmosphere are important for both younger and older employees. Statistically significant differences in motivation factor “Good work team” for employees aged up to 30, 31 to 40 and 41 to 50 in China and for age groups 41 to 50 in Russia, was confirmed. The values associated with other countries are at the similar level. It means that the motivation factor “Good work team” is considered important by all age groups. The most significant statistical differences in relation to age groups were observed in the motivation factor “Basic salary”. The fact that there were no differences in motivation factors “Atmosphere in the workplace” and “Good work team” in relation to the age can be stated. This shows that the positive work environment is considered to be important by Slovak employees, young and older as well.

The values associated with individual generations are different, while the younger generations are team players, technologically capable, want to feel valued and recognised in the workplace, want to learn and want to grow with different values in comparison to older generations influenced by post-war perception, loyal to their employers and with strong social skills but lack of technical skills. These different values of different age groups may be the reason for the differences observed in our research.

All enterprises in the market economy are aware of the fact that if they want to survive, their results must be better than those of competitors (Urbancová, 2013). Productive, loyal and, especially, motivated employees are the essential condition to achieve the company goals (Dongho, 2006; Bartuska, Hanzl, & Lizbetinova, 2016). Proper motivation must be in the centre of attention of enterprises aimed at changes in attitudes to work and behaviour of employees (Wong, Elliroma, Whitney, & Leah, 2008; Lorincová, Schmidtová, & Javorčíková, 2016). Research studies focused on the motivation factor preference were conducted across the EU (Dueñas, Iglesias, & Llorente, 2010; Kropivšek, Jelačić, & Grošelj, 2011; Ü. Almiaçık, E. Almiaçık, Akçin, & Erat, 2012; Chatzopoulou et al., 2015; M. C. Sanchez-Sellero, P. Sanchez-Sellero, Cruz-Gonzalez, & F. J. Sanchez-Sellero, 2013; Goetz et al., 2015; Lorincová, Schmidtová, & Javorčíková, 2018; M.C. Sánchez-Sellero, P. Sánchez-Sellero, Cruz-González, & F. J. Sánchez-Sellero, 2018). Following the research studies, the fact that the preference in motivation factors depends on many circumstances, but employees can fundamentally change the requirements on selected motivation factors over time, can be seen.

Conclusions

Preferences in employee motivation in selected regions of the European Union and selected regions outside the European Union in the context of their subsequent analysis in relation to the age of employees were studied in this paper. “Atmosphere in the workplace”, “Good work team” and “Basic salary” were considered the most important motivation factors. Following the results, the hypothesis H1 was accepted; therefore, there are differences in the level of motivation in the analysed regions, i.e. in selected motivation factors. The hypothesis H2 was also accepted; therefore, there are differences in the level of motivation in the analysed regions, i.e. in selected motivation factors in relation to the age.

There are no differences in the motivation factor “Atmosphere in the workplace” in terms of CZ, SVK, RU regions. The mentioned motivation factor is considered important by employees in analysed countries. There are statistically significant differences in the motivation factor “Basic salary” in the countries, except SVK and the RU. The importance of the motivation factor “Good work team” is similar in CZ and SVK. Other countries show statistically significant differences. We also found that the motivation factor “Basic salary” was described with most statistical differences in relation to the age and, on the other hand, the motivation factor “Atmosphere in the workplace” was that with small number of differences. Forasmuch as the current workforce consists especially of Generations of Veterans, Baby Boomers, X and Y, there are considerable differences in the expectations and motivations of individual age groups, especially concerning finances. Regardless of the fact which group does a person belong to, he/she has the right to get a decent wage and to be motivated appropriately. Successful managers should be familiar with all types of generations and their specific needs, with their features, skills and needs to increase workplace efficiency and success of the organisation. They should be able to communicate correctly with each generation and to understand the importance of diversity. Most of the differences were recorded in all motivation factors in China and Russia. It is likely linked to different cultural values, especially the power gap, the principle of seniority and collectivism in China. The motivation factors “Atmosphere in the workplace”, “Good work team” show no differences in relation to the age of employees in the Slovak Republic. It implies that these factors are considered important by employees at all ages. Young or older employees, the atmosphere they work in and the team they are a part of, are important for everyone. That is why it is important for senior staff to ensure the good work environment motivating for all generations. The most important and interesting results are as follows: there are differences between analysed countries that can be caused by cultural, territorial, economic differences as well as differences in age and education. In the EU countries, the mentioned differences are at the minimum level. However, the differences can deepen in case of comparison to the eastern culture. The diversity of the motivation needs of employees is the limitation of our research. Territorial and cultural nature of the research can be considered another limitation.

Each generation can contribute to the development of the organisation in its specific way; older generations can contribute with their long life experience and younger generations with knowledge and technological advancement. In the future, we are planning to extend our research to other regions of the world, in relation to other potential variables such as gender, education, work experience and job category. Moreover, the size of enterprises and their specialisation can be another directions to extend the research.

Acknowledgements

The research was supported by VEGA project No. 1/0024/17, VEGA No. 1/0320/17 and APVV-16-0297.

Author contributions

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

Disclosure statement

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

References

- Alexander, K. M. (2014). *Generation Y knowledge workers' experience of work motivation: A grounded theory study* (Doctoral dissertation). Retrieved from ProQuest database (UMI No. 3682566).
- Almı̇cık, Ü., Almı̇cık, E., Akçın, K., & Erat, S. (2012). Relationships between career motivation, affective commitment, and job satisfaction. *Procedia – Social and Behavioral Sciences*, 58, 355-362. <https://doi.org/10.1016/j.sbspro.2012.09.1011>
- Alonso-Almeida, M. M., Bagur-Femenias, L., Llach, J., & Perramon, J. (2018). Sustainability in small tourist businesses: The link between initiatives and performance. *Current Issues in Tourism*, 21(1), 1-20. <https://doi.org/10.1080/13683500.2015.1066764>
- Bánociová, A., & Martinková, S. (2017). Active labour market policies of selected European countries and their competitiveness. *Journal of Competitiveness*, 9(3), 5-21. <https://doi.org/10.7441/joc.2017.03.01>
- Bartuska, L., Hanzl, J., & Lizbetinova, L. (2016). Possibilities of using the data for planning the cycling infrastructure. *Procedia Engineering*, 161, 282-289. <https://doi.org/10.1016/j.proeng.2016.08.555>
- Bergman, M. M., Bergman, Z., & Berger, L. (2017). An empirical exploration, typology, and definition of corporate sustainability. *Sustainability*, 9, 753. <https://doi.org/10.3390/su9050753>
- Berkup, S. B. (2014). Working with generations X and Y in generation Z period. *Mediterranean Journal of Social Sciences*, 5(19), 218-229. <https://doi.org/10.5901/mjss.2014.v5n19p218>
- Caganova, D., Starecek, A., Bednarikova, M., & Hornakova, N. (2017). Analysis of factors influencing the motivation of generations y and Z to perform in the educational process. In *Proceedings from the 15th IEEE International Conference on Emerging eLearning Technologies and Applications*, Smokovec, Slovakia. <https://doi.org/10.1109/ICETA.2017.8102471>
- Cantele, S., & Zardini, A. (2018). Is sustainability a competitive advantage for small businesses? An empirical analysis of possible mediators in the sustainability–financial performance relationship. *Journal of Cleaner Production*, 182, 166-176. <https://doi.org/10.1016/j.jclepro.2018.02.016>
- Cequera, M., & Nuñez Bottini, M. (2011). Human factors and their influence on productivity. *Revista Venezolana de Gerencia*, 16(53), 116-137.
- Chatzopoulou, M., Vlachvei, A., & Monovasilis, T. (2015). Employee's motivation and satisfaction in light of economic recession: Evidence of Grevena Prefecture-Greece. *Procedia Economics and Finance*, 24, 136-145. [https://doi.org/10.1016/S2212-5671\(15\)00633-4](https://doi.org/10.1016/S2212-5671(15)00633-4)

- Chromjaková, F. (2016). The key principles of process manager motivation in production and administration processes in an industrial enterprise. *Journal of Competitiveness*, 8(1), 95-110. <https://doi.org/10.7441/joc.2016.01.07>
- Collier, E. (2017). *Workplace warfare: Baby Boomers, Gen X and Gen Y*. Cources & Career Resources.
- Contiu, L. C., Gabora, M. R., & Olteana, F. D. (2012). Employee's motivation from a cultural perspective – a key element of the hospitality industry competitiveness. *Procedia Economics and Finance*, 3, 981-986. [https://doi.org/10.1016/S2212-5671\(12\)00261-4](https://doi.org/10.1016/S2212-5671(12)00261-4)
- Curry, G. D. (2015). *Supervising across generations*. In Security Supervision and Management. (4th ed., pp. 241-255). Oxford, UK: Elsevier. <https://doi.org/10.1016/B978-0-12-800113-4.00019-5>
- Dirisu, J., Worlu, R., Osibanjo, A., Salau, O., Borishade, T., Meninwa, S., & Atolagbe, T. (2018). An integrated dataset on organisational culture, job satisfaction and performance in the hospitality industry. *Data in Brief*, 19, 317-321. <https://doi.org/10.1016/j.dib.2018.04.137>
- Dongho, K. (2006). Employee motivation: "Just ask your employees". *Seoul Journal of Business*, 12, 19-35.
- Dueñas, D., Iglesias, C., & Llorente, R. (2010). Job quality, job satisfaction, and services in Spain. *Journal of Innovation Economics and Management*, 1(5), 145-166. <https://doi.org/10.3917/jie.005.0145>
- Duh, H. I. (2016). Childhood family experiences and young Generation Y money attitudes and materialism. *Personality and Individual Differences*, 95, 134-139. <https://doi.org/10.1016/j.paid.2016.02.027>
- Eskildsen, J. K., Nussler, M. L. (2003). The managerial drivers of employee satisfaction and loyalty. *Total Quality Management*, 11(4-6), 581-588. <https://doi.org/10.1080/09544120050007913>
- Goetz, K., Hasse, P., Campbell, S. M., Berger, S., Dörfer, C. E., Hahn, K., & Szecsenyi, J. (2015). Evaluation of job satisfaction and working atmosphere of dental nurses in Germany. *Community Dentistry and Oral Epidemiology*, 44(1), 24-31. <https://doi.org/10.1111/cdoe.12186>
- Grencikova, A., & Španková, J. (2016). Recent trends in international migration of young people in Slovakia. *Actual Problems of Economics*, 182(2), 229-236.
- Gursoy, D., Maier, T. A., & Chi, C. G. (2008). Generational differences: An examination of work values and generational gaps in the hospitality workforce. *International Journal of Hospitality Management*, 27(3), 448-458. <https://doi.org/10.1016/j.ijhm.2007.11.002>
- Hadijah, A., & Badaruddin, I. (2015). Leadership and the characteristic of different generational cohort towards job satisfaction. *Procedia – Social and Behavioral Sciences*, 204, 14-18. <https://doi.org/10.1016/j.sbspro.2015.08.104>
- Hofstede Insights. 2018. *Compare countries*. Retrieved from <https://www.hofstede-insights.com/product/compare-countries/>
- Hoole, C., & Bonnema, J. (2015). Work engagement and meaningful work across generational cohorts. *Journal of Human Resources Management*, 13(1), 11. <https://doi.org/10.4102/sajhrm.v13i1.681>
- Jelačić, D., Grladinović, T., Pirc, A., & Oblak, L. (2010). Motivation factors analysis in industrial plants. *Strojarstvo*, 52(3), 349-361.
- Jenkins, J. (2007). *Leading the four generations at work*. Retrieved from <https://hrcak.srce.hr/64430?lang=en>
- Kirchmayer, Z., & Fratričová, J. 2018. What motivates generation Z at work? Insights into motivation drivers of business students in Slovakia. In *Proceedings of the Innovation management and education excellence through vision 2020*, Norristown, Pennsylvania. Retrieved from <https://ibima.org/accepted-paper/what-motivates-generation-z-at-work-insights-into-motivation-drivers-of-business-students-in-slovakia/>
- Kmecová, I. (2018). Educational process and motivation factors of university students and its analysis. In *Proceedings of the Innovation Management and Education Excellence Through Vision 2020*, Milan, Italy.

- Koisova, E., Masarova, J., & Habanik, J. (2018). Regional differences in the labor market in Slovakia and the Czech Republic. *Journal of Competitiveness*, 10(2), 104-117. <https://doi.org/10.7441/joc.2018.02.07>
- Kolarova, I., Bediova, M., & Rasticova, M. (2016). Factors influencing motivation of communication between generation Y, generation X and baby boomers. In *Proceedings of the European Conference on Knowledge Management*, (pp. 476-484). Academic Conferences and Publishing International.
- Kropivšek, J., Jelačić, D., & Grošelj, P. (2011). Motivating employees of Slovenian and Croatian wood-industry companies in times of economic downturn. *Drvena industrija*, 62(2), 97-103. <https://doi.org/10.5552/drind.2011.1040>
- Kubaľa, J., & Vetráková, M. (2018). Reasons of the employees' stabilization in hotels in Slovakia. *Acta Oeconomica Universitatis Selye*, 6(2), 90-100.
- Kucharčíková, A., & Mičiak, M. (2017). Human capital management in transport enterprise. In *Proceedings of the MATEC Web of Conferences*, Ceske Budejovice, Czech Republic. <https://doi.org/10.1051/mateconf/201713400030>
- Kupperschmidt, B. R. (2000). Multigenerational employees: Strategies for effective management. *The Health Care Manager*, 19, 65-76. <https://doi.org/10.1097/00126450-200019010-00011>
- Lizbetin, J., & Bartuska, L. (2017). The influence of human factor on congestion formation on urban roads. *Procedia Engineering*, 187, 206-211. <https://doi.org/10.1016/j.proeng.2017.04.366>
- Ližbetinová, L., & Hudečková, Q. (2015). *Etika a obchodní jednání na čínských trzích* [Ethics and business negotiations in Chinese markets] (1st ed). České Budějovice: Vysoká škola technická a ekonomická v Českých Budějovicích.
- Lorincová, S. (2015). Improvement of the effectiveness in the recruitment process in the Slovak public administration. *Procedia Economics and Finance*, 34, 382-389. [https://doi.org/10.1016/S2212-5671\(15\)01644-5](https://doi.org/10.1016/S2212-5671(15)01644-5)
- Lorincová, S., Schmidtová, J., & Balážová, Ž. (2016). Perception of the corporate culture by managers and blue collar workers in Slovak wood-processing businesses. *Acta Facultatis Xylogologiae Zvolen*, 58(2), 149-163. <https://doi.org/10.17423/afx.2016.58.2.16>
- Lorincová, S., Schmidtová, J., & Javorčíková, J. (2016). Employee job satisfaction in furniture manufacturing companies in the Slovak Republic. *Drvena Industrija*, 67(4), 351-362. <https://doi.org/10.5552/drind.2016.1614>
- Lorincová, S., Schmidtová, J., & Javorčíková, J. (2018). The impact of the working position on the level of employee motivation in Slovak furniture companies. *Acta Facultatis Xylogologiae Zvolen*, 60(2), 209-221. <https://doi.org/10.17423/afx.2018.60.2.20>
- Meece, J. L., Glienke, B. B., & Burg, S. (2006). Gender and motivation. *Journal of School Psychology*, 44(5), 351-373. <https://doi.org/10.1016/j.jsp.2006.04.004>
- Němec, M., Krišťák, L., Hockicko, P., Danihelová, Z., & Velmovská, K. Application of innovative P&E method at technical universities in Slovakia. *Eurasia Journal of Mathematics Science and Technology Education*, 13(6), 2329-2349. <https://doi.org/10.12973/eurasia.2017.01228aa>
- Ng, E. S. W. (2010). New generation, great expectations: A field study of the millennial generation. *Journal of Business and Psychology*, 25(2), 281-292. <https://doi.org/10.1007/s10869-010-9159-4>
- Ng, E. S. W., & Schweitzer, L. (2010). New generation, great expectations: A field study of the millennial generation. *Journal of Business and Psychology*, 25(2), 281-292. <https://doi.org/10.1007/s10869-010-9159-4>
- Nnamboozie B. E., & Parumasur, S. B. (2016). Understanding the multigenerational workforce: are the generations significantly different or similar? *Corporate Ownership & Control*, 13(2), 224-237. <https://doi.org/10.22495/cocv13i2c1p4>

- Nyvt, V. (2018). The role of managing knowledge and information in BIM implementation processes in the Czech Republic. In *Proceedings of the 9th International Scientific Conference Building Defects*, Ceske Budejovice, Czech Republic. <https://doi.org/10.1051/mateconf/201814601003>
- Nyvt, V., & Pruskova, K. (2017). Building information management as a tool for managing knowledge throughout whole building life cycle. In *Proceedings of the World Multidisciplinary Civil Engineering-Architecture-Urban Planning Symposium*, Prague, Czech Republic. <https://doi.org/10.1088/1757-899X/245/4/042070>
- Olšovská, A., Mura, L., & Švec, M. (2016). Personnel management in Slovakia: An explanation of the latent issues. *Polish Journal of Management Studies*, 13(2), 110-120. <https://doi.org/10.17512/pjms.2016.13.2.11>
- Okzan, M., & Solmaz, B. (2015). Mobile addiction of Generation Z and its effects on their social lifes: (An application among University Students in the 18–23 Age Group). *Procedia – Social and Behavioral Sciences*, 205, 92-98. <https://doi.org/10.1016/j.sbspro.2015.09.027>
- Parthasarathy, K., & Ramalingam, S. (2015). An empirical study on organization culture and its impact on employee motivation with reference to industrial estates in Chennai. *International Journal of Applied Business and Economic Research*, 287-294.
- Pintão, S., Chaves, C., & Branco, M. C. (2018). Employees' recognition of corporate sustainability: a case study. *Corporate Governance (Bingley)*, 18(1), 104-118. <https://doi.org/10.1108/CG-01-2017-0016>
- Rajnoha, R., Lorincová, S., & Bego, M. (2015). Strategic business performance management system in wood processing industry in Slovakia. *Drvna Industrija*, 66(2), 137-146. <https://doi.org/10.5552/drind.2015.1504>
- Raziq, A., & Maulabakhsh, R. (2015). Impact of working environment on job satisfaction. *Procedia Economics and Finance*, 23, 717-725. [https://doi.org/10.1016/S2212-5671\(15\)00524-9](https://doi.org/10.1016/S2212-5671(15)00524-9)
- Sanchez-Sellero, M. C., Sanchez-Sellero, P., Cruz-Gonzalez, M. M., & Sanchez-Sellero, F. J. (2013). Stability and satisfaction at work during the Spanish economic crisis. *Prague Economic Papers*, 26(1), 72-89. <https://doi.org/10.18267/j.pep.596>
- Sánchez-Sellero, M. C., Sánchez-Sellero, P., Cruz-González, M. M., & Sánchez-Sellero, F. J. (2018). Determinants of job satisfaction in the Spanish wood and paper industries: A comparative study across Spain. *Drvna Industrija*, 69(1), 71-80. <https://doi.org/10.5552/drind.2018.1711>
- Shirish, A., Boughzala, I., & Srivastava, S. C. (2015). Bridging cultural discontinuities in global virtual teams: Role of cultural intelligence. In *Proceedings of the Thirty Sixth International Conference on Information Systems*, Fort Worth, Texas.
- Stachová, K., Stacho, Z., & Vicen, V. (2017). Efficient involvement of human resources in innovations through effective communication. *Business: Theory and Practice*, 18, 33-42. <https://doi.org/10.3846/btp.2017.004>
- Statistic How To. (2019). *ANOVA Test: Definition, Types, Examples*. Retrieved from <http://www.statisticshowto.com/probability-and-statistics/hypothesis-testing/anova/>
- Sumita, R. (2004). Motivational theories and incentives approaches. *Indian Institute of Management Bangalore Management Review*, 16(4), 43-50.
- Tolbize, A. (2008). *Generational differences in the workplace*. Minesota, USA: University of Minesota.
- Trading Economics. (2018a). *China Average Wages*. Retrieved from <https://tradingeconomics.com/china/wages>
- Trading Economics. (2018b). *Russia Average Monthly Wages*. Retrieved from <https://tradingeconomics.com/russia/wages>
- Trading Economics. (2018c). *Wages Europe*. Retrieved from <https://tradingeconomics.com/country-list/wages?continent=europe>

- Urbancová, H. (2013). Competitive advantage achievement through innovation and knowledge. *Journal of Competitiveness*, 5(1), 82-96. <https://doi.org/10.7441/joc.2013.01.06>
- Vondrackova, T., Vostova, V., & Nyvlt, V. (2016). The human factor as a cause of failures in building structures. In *Proceedings of the 8th International Scientific Conference Building Defects*, Ceske Budejovice, Czech Republic. <https://doi.org/10.1051/mateconf/20179303005>
- Wiesner, R., Chadee, D., & Best, P. (2018). Managing change toward environmental sustainability: A conceptual model in small and medium enterprises. *Organization and Environment*, 31(2), 152-177. <https://doi.org/10.1177/1086026616689292>
- Wong, M., Elliroma, G., Whitney, L., & Leah, C. (2008). Generational differences in personality and motivation: Do they exist and what are the implications for the workplace? *Journal of Managerial Psychology*, 23(8), 878-890. <https://doi.org/10.1108/02683940810904376>
- Zaborova, E. N., Glazkova, I. G., & Markova, T. L. (2017). Distance learning: Students' perspective. *Sotsiologicheskie Issledovaniya*, 2017(2), 131-139.