



THE IMPACT OF AGE, EDUCATION AND SENIORITY ON MOTIVATION OF EMPLOYEES

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Abstract. Motivation can be changed significantly in dependence on meeting human needs, life situations, internal and external environment, etc. It is caused by different factors which affect motivation in different ways. These factors do not act separately but they are a part of mutually connected network of specific relations. In the paper we show the possibility of the impact of age, education and seniority on the motivation of employees. The level of employee motivation and employee performance can be influenced by means of their detailed knowledge.

Keywords: motivation, motivational programme, t-test, age, education, seniority.

JEL Classification: M12.

Introduction

Human resource management is one of the newest approaches of personnel management which, as well as changed approach to personnel, results from social changes at the end of the 20th century that affects all private and public spheres of life. The basis of this management consists in an effort of senior managers to change personality traits of supervised employees following the objectives of an enterprise (Bolfiková *et al.* 2010), to create positive approach to their work, work team and at last also to identify with the corporate culture, its strategy and with the objectives of an enterprise (Blašková, Grazulis 2009). The issue of human resource management is connected to the issue of its utilisation in the context of outsourcing principles (Potkány 2011; Vetráková *et al.* 2011) and process audit (Závodská *et al.* 2013). Personnel controlling tries to find its position in the area of motivation too. In a narrow sense, its character is quantitative and operative and it evaluates efficiency of personnel processes. In a broad sense, it monitors

the quality of human resource management, its tools and practices (Kucharčíková 2014). Different parameters and indicators are required by personnel controlling to manage different personnel processes (Potkány *et al.* 2012).

A man became the most important and the most expensive factor of production in an enterprise, its main asset which, if an enterprise wants to exist, run and develop, must be used to achieve goals very carefully. In order to meet these requirements, employees must be motivated by the enterprise (Bivainis, Morkvėnas 2008). If we want to achieve successful results when managing people, negotiating or their reaction predicting we must respect differences among people (Stacho *et al.* 2013; Teplická 2004). It means their intrinsic motivation must be influenced by motivational tools, methods and techniques (Skačkauskienė, Kiselevskaja 2014). The aim of the paper is to define terms like age, education and seniority and their impact on the level of employee motivation and in case of some significant differences to propose the way of employee motivation. Some changes

in the area of motivation could be observed in the research conducted in Slovenia and Croatia (Kropivšek *et al.* 2011). The research was carried out in the year 2012. We also tried to prove or to disprove the statement that considering the age, completed education and seniority the motivation requirements of employees change. Following the Maslow's hierarchy of needs we suppose that requirements of employees that are fulfilled will become unnecessary. Hereby, we suppose that employees with better education and greater seniority will prefer different motivation factors than employees with lower education and less seniority. Main hypothesis is the presumption that mentioned factors affect the level of employee motivation and employers can affect employee performance actively through their knowledge. Mentioned facts are described also by Blašková (2010) and by Jelačić, Moro, Drábek, Sujová (2012).

1. Issue

Motivation is one of the essential elements of human resource management. Without appropriate level of motivated behaviour and activity we cannot determine goals and require their meeting. Motivation is an important term commonly used to encourage people to carry out the assigned work with sincerity, dedication, and enthusiasm. Motivation is the tonic to provide additional energy to overcome the fatigue, disinterest and feelings to drop the job (Srivastava, Kakkar 2008). Considering the employee motivation their working results can be expected. Statement that the performance depends mainly on human motivation is simplified especially because motivation is not the only factor affecting the performance. Other factors affecting the employee performance are abilities, knowledge and skills of a man determining their career growth potential (Korsakienė 2011). Motivation can deviate depending upon meeting human needs, life situations, internal and external environment, etc. It can be caused by effect of different factors which influence motivation in different ways. In addition, these factors do not act separately but they create a system of specific relations that are mutually interconnected. At the present time the financial crisis in enterprises and countries' economies makes the process of motivation more difficult. Recession is a difficult period not only for employees but for employers as well. Employees with the key competences, responsibilities should be able to motivate their team also during recession. When the first signs of the financial crisis appear in the organisation, most of traditional methods applied by the enterprise in the area of employee motivation before this period are not suitable for new situation or cannot be carried out at all. Incentives, extra holidays, corporate entertaining and rewards as the most commonly used tools of motivation seem to be less important in the atmosphere of insecurity. During the recession employees lose mainly

the sense of security. All employees are afraid of losing their jobs because mass layoff became one of the basic actions of the organisation to eliminate unfavourable impact of the crisis on the enterprise. If the organisation wants to keep employee productivity of its employees, their willingness to work, it is appropriate to offer them incentives and extra pay. However, we can say, in general, monetary incentives, as a motivation factor, have an important role only from a short-term point of view.

As the recession influences the workplace atmosphere, it is particularly difficult for each senior manager to increase employee motivation. But if employees also during the time of recession work with enthusiasm, it can also point out that the enterprise recovers from the recession faster and without any serious damage. No senior manager should forget the fact that his employees are motivated also by the way he communicates with them or by his body language. Other motivation factors can be *employee understanding, communication with employees, employee engagement, building loyalty and professional trainings* (Stachová, Stacho 2010).

According to the authors also other methods and types of motivation applied during the crisis can be distinguished: *creating teams, highlighting accomplishments, interaction with senior management, key suppliers and customers, developing communication skills within a team, cooperation between teams, acceptance of new ideas, harmonisation, new strategies and new trends.*

2. Methodology

Determination of the motivation level and the analysis of motivation factors in the enterprises in a particular time were carried out through a questionnaire which consists of 30 closed questions (Hitka 2009: 149). The questionnaire was divided into two parts. Socio-demographic and qualification characteristics of employees were searched in the first part. Basic data about respondents relating to their age, sex, seniority, completed education and job position were obtained in this part. The second part consisted of individual motivation factors through which information about work environment, working conditions, applied appraisal and reward system, about personnel management, health and social care system and system of employee benefits as well as information about employee satisfaction or dissatisfaction, value orientation, relation to work and enterprise or co-workers' relationship in the enterprise can be found out. Motivation factors are in alphabetical order not to affect respondents' decision. In the questionnaire respondents evaluated individual motivation factors by one of the five levels of importance from a pre-defined 5-point rating scale, 5 – the most important and 1 – unimportant (Table 1) from a pre-defined evaluation scale (Table 1).

Table 1. Scale of the order of motivation factors according to their importance (source: Hitka 2009: 149)

5	4	3	2	1
the most important	very important	medium important	slightly important	unimportant

Each motivation factor was marked by employees with one of five types of importance for required as well as for current conditions. The required condition can be defined as an idea of employees how the motivation should look like, i.e. what would motivate them to increase their performance. The current conditions represents the employees' opinion how they are satisfied with current motivation in the enterprise. The questionnaires were evaluated using the programme STATISTICA 7 (Statsoft 2004). Descriptive statistics was used to describe the primary sampling unit. Statistical characteristics, which compressed information about studied primary sampling units into smaller number of numerical characteristics and made mutual comparison of sampling units easier, were computed for each motivation factor. Each motivation factor was described in summary by basic characteristics of size and variability of quantitative features – average \bar{x} , standard deviations s_x and coefficients of variation. Subsequently the results of the enterprises were compared.

Besides simple comparison of descriptive characteristic values, considering the selected type of obtained data, testing the equality of averages and standard deviations of primary sampling units was carried out. The purpose of testing was to verify statistical significance of differences in averages and standard deviations of individual motivation factors in studied enterprises so that the fact, that detected differences of descriptive characteristics at the selected level of significance α were not caused only by the mistake made by representative sampling, was eliminated. Two-sample t-test was used to test the equality of averages of motivation factors of two primary sampling units (Scheer 2007). When calculating t-test three cases depending upon the fact whether the variances of compared primary sampling units are equal or not ($\sigma_1^2 = \sigma_2^2$, $\sigma_1^2 \neq \sigma_2^2$) or whether the studied attributes X_1 , X_2 are dependent or not can occur so the test of equality of variances, i.e. F-test had to be carried out at first. Following the results of F-test, the two-sample T-test for independent selection at the same or different variances was used. The null hypothesis vs. the alternative hypothesis was tested, they were as follows:

$$H_0 : \sigma_1^2 = \sigma_2^2 \text{ vs. } H_1 : \sigma_1^2 \neq \sigma_2^2.$$

H_0 : we suppose that averages of studied motivation factors (required, current) in terms of maximum of 10 years of seniority are equal to averages of studied motivation factors in terms of more than 10 years of seniority and at the same time we suppose that the difference between them, if any, is caused only owing to the random variation of results.

H_1 : we suppose that averages of studied motivation factors (required, current) in terms of the age of maximum 50 are not equal to averages of studied motivation factors in terms of the age over 50 and at the same time we suppose that the difference between them, if any, is not caused only owing to the random variation of results.

H_2 : we suppose that averages of studied motivation factors (required, current) in terms of completed education (primary education and lower secondary education) are not equal to averages of studied motivation factors in terms of completed education (upper secondary education and higher education) and at the same time we suppose that the difference between them, if any, is caused only owing to the random variation of results.

The random variable t was used as a test criterion. The Student's t distribution was as follows:

if $\sigma_1^2 = \sigma_2^2$; X_1 and X_2 are independent:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{n_1 \cdot s_1^2 + n_2 \cdot s_2^2}{n_1 + n_2 - 2} \cdot \frac{n_1 + n_2}{n_1 \cdot n_2}}}, \tag{1}$$

if $\sigma_1^2 \neq \sigma_2^2$; X_1 and X_2 are independent:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n_1 - 1} + \frac{s_2^2}{n_2 - 1}}}. \tag{2}$$

In the end of the test we compared t to $t_{\alpha/2;f}$, in a case $t \leq t_{\alpha/2;f}$, H_0 was accepted and the difference was not considered significant but in a case $t > t_{\alpha/2;f}$, H_0 was rejected at the level of significance α % and the alternative hypothesis H_1 was accepted.

3. Results

The analysed enterprise is a limited company dealing with processing of wood and wood products processing situated in the centre of Slovakia. It is an enterprise with long history and experience in line of business. Fluctuation of skeleton staff is at the minimum level (approx. 1.5%) that is a sign of employee stability. At the present time employees are motivated through basic salary, further financial reward and different forms of trainings, job security and social policy. Mentioned motivation factors are in terms of increasing employee performance inadequate.

Motivation questionnaire was submitted to 60 respondents (3 females). Questionnaire response rate was 100%. In terms of age 36 employees (60.00%) belonged to the group of maximum 50 years old and 24 employees (40.00%) over 50 years old. In terms of education the large group was a group of 33 employees with primary and lower secondary education (55.00 %). The second group with 27 employees was a group with upper secondary education (45.00%). In

terms of seniority 13 employees were employed for less than 10 years (21.67%). Remaining 47 employees (78.33%) were employed in the enterprise for more than 10 years. It is a sign of reliable approach to work on the part of employers but also on the part of employees who are identified with the corporate culture and philosophy and are loyal to the employer.

3.1. Impact of seniority on motivation

Motivation factors *basic salary* and *further financial reward* were preferred by staff employed for less than 10 years on average. These factors were significantly followed by the third motivation factor in the order – *fair appraisal system*. The fourth motivation factor with the highest preference was *job security*; the fifth one was *good work team*. *Basic salary* was the most important motivation factor also for the staff employed for more than 10 years. The second highest ranked motivation factor was *job security* and the third one in ranking was *fair appraisal system*. The fourth most important motivation factor *good work team*. The second group of the staff shows higher interest in all motivation factors. The fifth motivation factor that affects the employee performance markedly was *further financial reward* (Table 2).

Table 2. The most important motivation factors in terms of seniority (source: own data processing)

Employed less than 10 years			Employed more than 10 years		
SN	Motivation factor	Ø	SN	Motivation factor	Ø
1	Basic salary	4.68	1	Basic salary	4.85
2	Further financial reward	4.67	2	Job security	4.72
3	Fair appraisal system	4.58	3	Fair appraisal system	4.70
4	Job security	4.50	4	Good work team	4.59
5	Good work team	4.42	5	Further financial reward	4.52

3.2. Impact of the age on motivation

When comparing the age of employees we divided them into two main groups – employees under the age of 50 and over 50. For the group of employees under 50 the most important motivation factor was *basic salary*. Next higher ranked motivation factors were *further financial reward* and *fair appraisal system*. The fourth motivation factor with the highest preference was, for the former group of employees, *job security* and the fifth one *good work team*. For the latter group of employees, with the age over 50, the most important motivation factor was *basic salary* followed by *job security*. Next higher ranked motivation factors were *good work team*, *social benefits* and *fair appraisal system* (Table 3).

Table 3. The most important motivation factors in terms of age (source: own data processing)

under 50			over 50		
SN	Motivation factor	Ø	SN	Motivation factor	Ø
1	Basic salary	4.83	1	Basic salary	4.78
2	Further financial reward	4.71	2	Job security	4.65
3	Fair appraisal system	4.71	3	Good work team	4.61
4	Job security	4.69	4	Social benefits	4.61
5	Good work team	4.51	5	Fair appraisal system	4.61

3.3. Impact of the completed education on motivation

Analysis of motivation factors in terms of the completed education was carried out in two groups of employees – group of employees with primary and lower secondary education and group of employees with upper secondary and higher education. Results of the analysis show that *basic salary* was the most important motivation factor for the former group of people in 2012. The second highest ranked motivation factor was *job security* and the third one was *social benefits*. Next higher ranked motivation factors were *work performance* and *further financial reward*. The latter group of employees, i.e. employees with upper secondary and higher education, preferred same motivation factors as the former group, besides work performance. The highest ranked motivation factor was *basic salary* followed by *social benefits*. The third higher ranked motivation factor was, for the latter group of employees, *job security* and the fourth one was *good work team*. The last mentioned motivation factor shows the importance of good relationship and positive atmosphere in the workplace that can affect communication and fulfilling prescribed work task in positive way. The fifth most important motivation factor was *further financial reward* (Table 4).

Table 4. The most important motivation factors in terms of completed education (source: own data processing)

Primary + Lower secondary			Upper secondary + Higher		
SN	Motivation factor	Ø	SN	Motivation factor	Ø
1	Basic salary	4.69	1	Basic salary	4.96
2	Job security	4.59	2	Social benefits	4.81
3	Social benefits	4.56	3	Job security	4.77
4	Work performance	4.47	4	Good work team	4.73
5	Further financial reward	4.46	5	Further financial reward	4.65

4. Discussion

Considering the independence of selected sampling units and their big sizes a two-sample T-test for independent selection at the same or different variances was used to review the significance.

The null hypotheses about the equality of two averages of compared sampling units were tested. Null hypothesis testing about the equality of averages of motivation factors in the time was carried out at the level of significance $\alpha = 0.5$. Results are shown in Tables 4, 5, 6. Criteria for comparison were the level of employee motivation regarding the

age, seniority and completed education. Following achieved results we can state that significant differences at the level of significance $\alpha = 0.5$ did not occur.

Two-sample T-test was used to determine significant dependence. Following the results (Table 5) we can state that in spite of different order of motivation factor importance there are no differences in the level of employee motivation employed for less or more than 10 years. Two-sample T-test was used to determine significant dependence. Following the results (Table 6) we can state that only in case of the motivation factor *further financial reward* there is significant difference.

Table 5. Reviewing of significant dependence in terms of work practice (source: own data processing)

Motivation factor	\bar{x}_1	\bar{x}_2	t-value	p	S_{x_1}	S_{x_2}	F	p
Atmosphere in the workplace	4.23	4.36	-0.6	0.544	0.44	0.74	2.81	0.056
Good work team	4.38	4.6	-1.2	0.236	0.51	0.58	1.3	0.646
Further financial reward	4.69	4.53	0.7	0.483	0.85	0.69	1.55	0.283
Physical effort at work	3.77	3.68	0.3	0.754	1.09	0.84	1.7	0.195
Job security	4.38	4.72	-1.7	0.101	0.96	0.54	3.17	0.005
Communication in the workplace	4.23	4.4	-0.8	0.426	0.83	0.65	1.65	0.223
Name of the company	3.77	4.26	-1.8	0.071	0.73	0.87	1.44	0.499
Opportunity to apply one's own ability	4.15	4.19	-0.2	0.855	0.55	0.68	1.5	0.451
Workload and type of work	3.77	4.21	-2	0.055	0.73	0.72	1.01	0.906
Information about performance results	4.08	4.21	-0.5	0.616	0.86	0.86	1.01	0.911
Working time	4	4.21	-0.9	0.364	0.82	0.72	1.28	0.520
Work environment	4.08	4.53	-1.7	0.088	1.26	0.69	3.34	0.003
Work performance	4.15	4.4	-1.3	0.210	0.69	0.61	1.26	0.549
Moving up corporate ladder	4.31	4.47	-0.7	0.468	0.85	0.65	1.71	0.193
Competences	3.69	3.77	-0.3	0.791	0.75	0.91	1.48	0.469
Prestige	3.77	3.81	-0.1	0.888	0.73	0.92	1.62	0.364
Supervisor's approach	4.15	4.45	-1.3	0.194	0.9	0.65	1.89	0.121
Individual decision making	3.92	4.19	-1.4	0.172	0.64	0.61	1.09	0.778
Self-actualization	3.77	4.02	-1.1	0.293	0.83	0.74	1.27	0.531
Social benefits	4.15	4.49	-1.4	0.176	0.9	0.75	1.44	0.363
Fair appraisal system	4.54	4.7	-0.7	0.504	0.88	0.75	1.37	0.430
Stress /limitation of stress in the workplace/	4.23	4.43	-0.8	0.456	0.93	0.8	1.34	0.460
Mental effort	4	4.4	-1.6	0.113	0.82	0.8	1.05	0.851
Mission of the company	4.15	4.3	-0.5	0.628	1.07	0.91	1.39	0.413
Region's development	3.92	4.32	-1.5	0.139	0.76	0.86	1.29	0.657
Education and personal growth	3.92	4.34	-1.9	0.067	0.49	0.76	2.37	0.106
Company relation to the environment	4.08	4.4	-1.3	0.192	0.64	0.83	1.66	0.343
Free time	4.15	4.19	-0.1	0.892	0.8	0.9	1.26	0.686
Recognition	4.08	4.34	-1.2	0.243	0.86	0.67	1.66	0.214
Basic salary	4.69	4.85	-0.7	0.458	0.85	0.62	1.87	0.128

Note: Data marked number 1 characterise respondents with work practice up to 10 years, data marked number 2 characterise respondents with work practice over 10 years; differences in arithmetic means of examined motivation factors significant at the level of significance 5% are written in cursive.

Two-sample T-test was used to determine significant dependence. Following the results (Table 7) we can state that in spite of different order of motivation factor importance there are no differences in the level of employee motivation in dependence on their education.

Conclusions

Creating motivational programmes is a difficult and expensive activity for each enterprise. Its effectiveness is influenced by exact employee analysis. Based on our analyses (Vetráková *et al.* 2007; Hitka *et al.* 2005) we can say

following findings: in spite of employee heterogeneity in terms of age, seniority and level of completed education it is possible to create a *unified motivational programme* for the analysed enterprise that will suit all employees regardless of their age, seniority or education. Its main items are following factors: *basic salary, job security, good work team, further financial reward and fair appraisal system* in different order according to preferences of specific group of employees.

Regarding the seniority we can state that in spite of different order of importance of motivation factors there are no differences in the level of motivation of employees hired for less than 10 years and more than 10 years. Regarding the age

Table 6. Reviewing of significant dependence in terms of age (source: own data processing)

Motivation factor	\bar{x}_1	\bar{x}_2	t-value	p	S_{x_1}	S_{x_2}	F	p
Atmosphere in the workplace	4.361	4.292	0.38	0.702	0.683	0.690	1.02	0.932
God work team	4.500	4.625	-0.84	0.406	0.561	0.576	1.05	0.868
Further financial reward	4.722	4.333	2.10	0.040	0.615	0.816	1.76	0.126
Physical effort at work	3.667	3.750	-0.35	0.725	0.926	0.847	1.19	0.663
Job security	4.639	4.667	-0.16	0.875	0.723	0.565	1.64	0.215
Communication in the workplace	4.306	4.458	-0.84	0.404	0.710	0.658	1.16	0.713
Name of the company	4.167	4.125	0.18	0.856	0.737	1.035	1.97	0.068
Opportunity to apply one's own ability	4.167	4.208	-0.24	0.810	0.655	0.658	1.01	0.958
Workload and type of work	4.167	4.042	0.64	0.525	0.697	0.806	1.34	0.427
Information about performance results	4.139	4.250	-0.49	0.625	0.833	0.897	1.16	0.681
Working time	4.111	4.250	-0.71	0.481	0.820	0.608	1.82	0.134
Work environment	4.417	4.458	-0.18	0.854	0.874	0.833	1.10	0.822
Work performance	4.361	4.333	0.17	0.869	0.543	0.761	1.97	0.069
Moving up corporate ladder	4.417	4.458	-0.22	0.823	0.732	0.658	1.24	0.599
Competences	3.806	3.667	0.60	0.552	0.786	1.007	1.64	0.182
Prestige	3.861	3.708	0.66	0.514	0.798	0.999	1.57	0.226
Supervisor's approach	4.361	4.417	-0.29	0.771	0.683	0.776	1.29	0.485
Individual decision making	4.111	4.167	-0.34	0.738	0.622	0.637	1.05	0.882
Self-actualization	3.889	4.083	-0.97	0.335	0.820	0.654	1.57	0.256
Social benefits	4.278	4.625	-1.70	0.095	0.882	0.576	2.35	0.035
Fair appraisal system	4.694	4.625	0.34	0.737	0.786	0.770	1.04	0.932
Stress /limitation of stress in the workplace/	4.472	4.250	1.02	0.311	0.810	0.847	1.09	0.795
Mental effort	4.361	4.250	0.52	0.608	0.833	0.794	1.10	0.822
Mission of the company	4.306	4.208	0.39	0.697	0.980	0.884	1.23	0.609
Region's development	4.250	4.208	0.18	0.854	0.732	1.021	1.94	0.074
Education and personal growth	4.222	4.292	-0.36	0.721	0.681	0.806	1.40	0.358
Relation of the company to the environment	4.278	4.417	-0.66	0.512	0.849	0.717	1.40	0.400
Free time	4.194	4.167	0.12	0.905	0.822	0.963	1.37	0.389
Recognition	4.306	4.250	0.29	0.771	0.749	0.676	1.23	0.611
Basic salary	4.833	4.792	0.23	0.817	0.697	0.658	1.12	0.785

Note: Data marked number 1 characterise respondents of maximum 50 years old, data marked number 2 characterise respondents over 50 years old; differences in arithmetic means of examined motivation factors significant at the level of significance 5% are written in cursive.

we can state that only in a case of the motivation factor *further financial reward* there was seen a significant difference among employees. Regarding the completed education we can state that despite different order of importance of motivation factors there were not seen differences in the level of employee motivation, too. Finally we can state that at the present time the motivational programme can be proposed on the basis of the average importance of individual motivation factors unifiedly. However, differences are more likely to exist also among employees themselves. The differences can be analysed by cluster analysis to define groups of employees motivated in a similar way. Moreover, in the future

motivation requirements of employees can also change after meeting their needs. Therefore we suggest the enterprise to update motivational programme from time to time.

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Table 7. Reviewing of significant dependence in terms of completed education (source: own data processing)

Motivation factor	\bar{x}_1	\bar{x}_2	t-value	p	S_{x_1}	S_{x_2}	F	p
Atmosphere in the workplace	4.303	4.370	-0.38	0.706	0.81	0.49	2.71	0.011
God work team	4.455	4.667	-1.46	0.150	0.62	0.48	1.65	0.194
Further financial reward	4.424	4.741	-1.72	0.091	0.87	0.45	3.77	0.001
Physical effort at work	3.576	3.852	-1.20	0.234	1.00	0.72	1.94	0.086
Job security	4.545	4.778	-1.37	0.177	0.75	0.51	2.22	0.041
Communication in the workplace	4.364	4.370	-0.04	0.970	0.70	0.69	1.03	0.941
Name of the company	4.242	4.037	0.92	0.362	0.75	0.98	1.70	0.153
Opportunity to apply one's own ability	4.152	4.222	-0.42	0.679	0.62	0.70	1.27	0.511
Workload and type of work	4.000	4.259	-1.36	0.178	0.90	0.45	4.07	0.000
Information about performance results	4.182	4.185	-0.02	0.988	0.98	0.68	2.08	0.059
Working time	4.091	4.259	-0.87	0.385	0.80	0.66	1.51	0.288
Work environment	4.333	4.556	-1.01	0.318	1.02	0.58	3.13	0.004
Work performance	4.394	4.296	0.59	0.557	0.70	0.54	1.69	0.173
Moving up corporate ladder	4.485	4.370	0.63	0.532	0.71	0.69	1.07	0.861
Competences	3.788	3.704	0.37	0.714	0.89	0.87	1.06	0.895
Prestige	3.697	3.926	-1.00	0.320	0.95	0.78	1.48	0.305
Supervisor's approach	4.242	4.556	-1.71	0.092	0.79	0.58	1.88	0.102
Individual decision making	4.091	4.185	-0.58	0.565	0.63	0.62	1.03	0.955
Self-actualization	3.939	4.000	-0.31	0.761	0.70	0.83	1.40	0.368
Social benefits	4.303	4.556	-1.24	0.219	0.92	0.58	2.53	0.018
Fair appraisal system	4.545	4.815	-1.35	0.182	0.97	0.40	6.02	0.000
Stress /limitation of stress in the workplace/	4.364	4.407	-0.20	0.840	0.96	0.64	2.29	0.033
Mental effort	4.212	4.444	-1.10	0.274	0.93	0.64	2.10	0.057
Mission of the company	4.182	4.370	-0.77	0.442	1.07	0.74	2.10	0.056
Region's development	4.303	4.148	0.70	0.488	0.77	0.95	1.52	0.260
Education and personal growth	4.242	4.259	-0.09	0.930	0.71	0.76	1.16	0.677
Relation of the company to the environment	4.455	4.185	1.31	0.194	0.71	0.88	1.53	0.254
Free time	4.152	4.222	-0.31	0.758	0.87	0.89	1.05	0.888
Recognition	4.364	4.185	0.96	0.341	0.74	0.68	1.19	0.660
Basic salary	4.697	4.963	-1.53	0.131	0.88	0.19	21.07	0.000000

Note: Data marked number 1 characterise respondents with lower secondary education, data marked number 2 characterise respondents with upper secondary education; differences in arithmetic means of examined motivation factors significant at the level of significance 5% are written in cursive.

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