

Job Diagnostic Survey - Longitudinal Study on the Balkan Countries - Macedonia, Bulgaria and Kosovo

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Abstract

Effectiveness of the workplace is one of the most contemporary topics in the modern organizations. In era of increased competition and globalization, it is of paramount importance for organizations to increase loyalty and efficiency of their employees, i.e. to increase the motivation of its employees. To motivate the employee and to get maximum output of them is the first key to success of the organization. The second key is to reduce the turnover, especially the voluntarily one. The idea is that turnover is costly to organizations.

This paper seeks to explore the impact of job design, job enlargement and job enrichment on job satisfaction and motivation with employees from business sector and public administration. Three countries are taken into consideration and compared – Macedonia, Bulgaria and Kosovo, using the Job Diagnostic Survey. The sample includes 285 respondents. The study has been conducted as a start of a longitudinal study of which two datasets from 2010 and 2013 are presented in the paper. Being one of the first studies investigating this topic in the countries in question, this study clarifies the similarities and differences among Balkan countries.

The findings presented in the paper suggest that the highest result for Motivational Potential Score (MPS) can be observed in the public administration sector in Kosovo (MPS=153.5), followed by Macedonia's business sector (MPS=133.6) and public administration (MPS=132.4). Lowest MPS score is for the Kosovo's business sector (MPS=106.7). Bulgaria scores MPS=114.4 and MPS=112.7 in the public administration and privates sector respectively.

Keywords: Job diagnostic survey, job design, employee motivation, Balkan Region, job satisfaction



1. Introduction

A deeper appreciation for the worker's psychological state, as well as the motivational properties of social relationships on the job, came into prominence as a result of the now famous Hawthorne Studies (Roethlisberger and Dickson, 1941). In the early studies of the concepts of organizational behavior and job satisfaction it is noted that in the Western world, the need for improvement of organizational effectiveness leads to concept of job redesign (Ford, 1972; Maher, 1971). To this extent, Davis and Taylor (1972) introduced the sociotechnical systems approach according to which the practical job design stems from the combination of organizational and technical requirements and organizational behavior and thus can be used as a strategy for organizational change. Favorable employee attitudes and employee - centered supervision were indicated as spurs to greater production.

It is in this tradition that many of the modern theories of and experiments in organizations were formulated (McGregor, 1960; Viteles, 1953; Argyris, 1960; Likert, 1961). In fact, some (Blau, 1999) argues that "*[job satisfaction] has probably been the most often researched work attitude in the organizational behavior literature*" (p.1). Since then, continuous research in the area of job satisfaction proves that there is a close correlation between job satisfaction and organizational results (Meier and Hicklin, 2008). In addition, theory distinguishes two types of factors that drive employee behavior – hygienic and motivational factors (Herzberg, 1959).

Prior studies have shown that there is a close connection between job satisfaction and the intention to leave the organization (Meyer et al., 1989), organizational outcomes (Bitner, 1990; Tett and Meyer, 1993; Locke and Latham, 1990) and personal outcomes like workplace turnover and life satisfaction (Judge and Bono, 2001; Dickter, Roznowski and Harrison, 1996; Morrison, 1997; Hom and Griffeth, 1991).

Even though some (Cranny, Smith and Stone, 1992) argue a decade ago that more than 5 000 papers on various aspects on job satisfaction have been published until that day, the research on this topic done in the Balkan region is scarce. We could use the relevancy of studies done using the Job Diagnostic Survey (JDS) or variations of the model in other parts of Europe – for example UK (Lee-Ross, 1998), Austria (Couger et al. 1990), Spain (Martinez-Gomez, Marin-Garcia, and Giraldo-O'Meara, 2013), or Estonia (Kamdron, 2005). In the Balkan region, recent more in-depth analysis has been done in Greece (Platis, Reklitis and Zimeras, 2015; Belias and Koustelios, 2014), Romania (Nicolescu, Dima, Pnghel and Paun, 2009) and in Slovenia (Raskovic and Morec, 2012).

However, the research interests of this paper are the countries of the Balkans where very limited research has been done so far. For Macedonia, Bulgaria and Kosovo in particular, the paper builds up on previous research done in the fields of motivational theories (Bojadjiev and Krliu, 2006) and succeeds an earlier study done by Bojadjiev et al. (2010) which explores the factors, considerations and aspects from the jobs of white collar employees that contribute to their satisfaction and motivation.



2. Methodology

2.1 Sample

The research conducted cross referenced analysis among the countries and sectors using JDS. The analysis has been conducted in three countries: Macedonia, Kosovo and Bulgaria, in two sectors: business sector and public administration. A sample of 285 respondents of all three countries representing the business sector and the public administration (PA) employees is presented. The research uses a non-probability convenience sampling technique as suggested in the works of Anderson, Sweeney and Williams (2009). It is commonly used in behavioral research since it allows for selecting a sample that is located near or where the researcher works (Gall, Gall & Borg, 2003) and therefore it is employed in many studies investigating employee motivation (Mowen, 2000; Nyaude, 2008). The countries selected for this research were chosen to reflect the employees' perceptions from the aspect of EU integration. Bulgaria is a recent EU member state, Macedonia being a candidate for membership in the EU and working intensively on complying with EU legislation, and Kosovo - a newly formed independent state which aspires to become a part of the EU. All countries have similar history and their national culture is has been developing and been influenced from historic events in a comparable way, however today they are in three different stages of EU integration. This is a part of the wider research conducted for a doctoral dissertation (Krliu-Handjiski, 2014). The sample structure is given in Table 1.

2.2 Research Instrument

The research and is based on the Job Diagnostic Survey (JDS) proposed in the works of Hackman and Oldham (1974). This research method is widely accepted tool for comparative studies related to job creation. The model suggests that there is a positive correlation between personal and work outcomes (high internal motivation, high job satisfaction). The questionnaires were translated into the native language of the respondents through forward and backward translation methods to validate authenticity.

Even though some (Idaszak, Bottom and Drasgow, 1988) argue that a sixth factor appeared in the loadings of their research, this paper rejects the findings due to incompatible sample with the one explored herewith.

2.3 Purpose of research

Aim of this study is to examine:

- The impact of job design on job satisfaction and motivation;
- Impact of job enlargement and job enrichment on job satisfaction;
- Impact of turnover on efficiency

Affective and behavioral reactions of individuals to the environment.



Data Analysis and findings

3.1 Descriptive Statistics

The sample demographic characteristics are presented in Table 1.

Table 1. Sample characteristics

	Macedonia		Bulgaria		Kosovo	
	number	number % nu		%	number	%
Sample size	85	29.8	100	35.1	100	35.1
Gender Male : Female	23:62	27:73	48:52	48:52	54:46	54:46
Age						
< 29	33	38.9	45	45	46	46
30-59	52	61.1	52	52	50	50
60 <	-	-	3	3	4	4
Education						
Other	17	17	16	16	33	33
Some College Education	9	9	12	12	19	19
Bachelor Degree	47	47	53	53	37	37
Master degree or higher	12	12	19	19	11 11	

According to Hackman and Oldham (1974), the Job Diagnostic Survey (JDS) can be used for measurement of the levels of satisfaction and motivation in almost all industries. That includes the public administration as well.



		Macedonia Bulgaria		aria	Kosovo		
	Quality of the job	Business	$\mathbf{P}\mathbf{A}^{1}$	Business PA		Business	PA
1	Skill Variety	5.43	5.32	5.33	4.87	4.35	5.98
2	Task Identity	4.21	5.9	6.13	6.1	5.8	5.71
3	Task significance	4.77	5.31	5.43	5.01	5.11	4.9
4	Autonomy	5.69	5.09	4.87	5.29	4.3	4.87
5	Feedback from the job itself	4.89	4.72	4.11	4.06	4.88	5.7
6	Feedback from Agents	4.77	5.54	4.67	4.11	5.31	4.91
7	Dealing with Others	5.89	5.62	4.78	4.93	4.98	5.31
8	Experienced Meaningfulness of the Work Experienced	5.82	5.02	5.92	5.74	6.63	5.77
7	Responsibility for the Work	5.65	5.79	5.55	5.39	5.98	4.91
10	Knowledge of results	5.81	5.21	5.2	5.62	4.11	5.33
11	General satisfaction	4.78	4.93	5.75	5.19	5.32	5.78
12	International Work Motivation	5.02	4.85	5.88	4.84	5.54	5.72
13	Specific satisfaction "pay"	4.86	2.21	4.14	4.69	5.7	5.3
14	Specific satisfaction "Job Security"	4.3	4.2	5.32	5.23	4.87	4.8
15	Specific satisfaction "Social"	5.34	5.64	5.91	5.04	6.58	5.71
16	Specific satisfaction "Supervisory"	4.98	4.04	5.58	5.59	5.33	5.23
17	Specific satisfaction "growth"	5.55	4.51	5.72	5.82	5.9	4.93
18	"Would like format"	5.62	5.94	5.53	5.61	5.43	5.47
19	Job Choice Format	5.19	4.89	4.9	4.3	3.9	3.6
	Result for Motivational Potential Score (MPS)	133.6	132.4	112.7	114.4	106.7	153.5

The results from the survey point out the average scores of work place motivation and job

¹ PA is the abbreviation for public administration.



satisfaction from the business sector and the public administration sector in all three countries where the survey was conducted.

Discussion about the results is split in five categories, in accordance with the Hackman and Oldham study (1974). They are divided in five categories:

- 1) Job Dimensions (questions 1-7)
- 2) Critical Psychological States (questions 8-10)
- 3) Affective Reactions to the job (questions 11-17)
- 4) Individual Growth Need Strength (questions 18-19)
- 5) Results for the Motivational Potential Score (last row in Table 2.)

The first aspect, i.e. Job Dimensions, consists of the first seven elements of the Table2. and in specific: 1) Skill Variety; 2) Task Identity; 3) Task significance; 4) Autonomy; 5) Feedback from the job itself; 6) Feedback from Agents and 7) Dealing with Others.

3.2 Result analysis and discussion

3.2.1 Job Dimensions

Dimension "Skill Variety" refers to the degree to which job requires a variety of different activities in carrying out the work (Hackman and Oldham, 1974). It includes the various skills and talents of the employee.

Study results show that from the business sectors' perspective, the employees from Macedonia have the highest average score of perception that their job requires skills variety. They are followed by business sector in Bulgaria, and then the one in Kosovo. More detailed analysis points out that results for the (Job dimension) in the business sector in Macedonia and Bulgaria are on the similar level, unlike the business sector in Kosovo. It is worth mentioning that PA employees in Macedonia express the same level of "skill variety" as the respondents from the business sector. The two other countries report significant differences on this dimension.

Task Identity Second of the seven dimensions is Task Identity. It refers to importance of the "single sequence of work" (Hackman and Oldham, 1974). The research shows that Bulgarian respondents have the highest level of identification with the task (6.1), followed by Kosovo (5.7) and Macedonia (4.92).

From the **Task Significance** point of view, it is worth mentioning that employees in Kosovo and Macedonia have low variance amongst sectors (Business or PA) with relevance to the Task Significance. In the Republic of Bulgaria, Business sector has graded the significance of Task Identity higher than respondents in Kosovo and Macedonia. Business sector in Bulgaria, has also, ranked task significance, higher than PA in the same country.

Autonomy The most significant result on this dimension is low score on the PA Kosovo. This is a significant deviation from the average. Macedonia performs the highest on this dimension.



Feedback from the Job Itself - This dimension has similar results in all three countries, in both sectors. The Republic of Bulgaria has the lowest score here. The interpretation can be insufficient desire for feedback from the job itself.

Feedback from the Agents - Macedonia PA has the highest score, Kosovo business sector is very close, and the Republic of Bulgaria scores the lowest.

Dealing with others - Macedonian business sector scores the highest, while Bulgaria, the lowest, exactly like on the former dimension.

3.2.2 Psychological states

The following discussion of results refers to the three critical psychological states which occur in between the basic job dimensions and its output. They are: 1) Experienced Meaningfulness of the Work; 2) Experienced Responsibility for the Work and 3) Knowledge of results. This part of the research analysis personal perceptions of the employee related to the way he / she feels about the job. This is actually a powerful managerial tool for motivation.

Experienced Meaningfulness of the Work - As it can be seen from the results, the employees in the business sector in Kosovo have the highest score on the work they do as significant, useful and valuable. If we compare public administration in Kosovo and Macedonia, Kosovo civil servants have much higher score than Macedonia. This is probably due to the importance of "creating a new state".

Experienced Responsibility for the Work - This indicator brings us to interesting conclusion: Sense of responsibility for work is not directly correlated with the experienced meaningfulness of work. For instance PA employees in Macedonia score 5.2 on the "meaningfulness of the work", while they score 5.7 on "responsibility for the work".

Knowledge of results - This, "third" psychological state being part of the survey indicates the following:

a) PA employees in the three countries score similarly.

b) Business sector employees have differences country by country, with Macedonian employees "having a clearest picture about the results from the job they do (Krliu-Handjiski, 2014).

3.2.3 Affective reaction to the job - satisfaction

General satisfaction JDS questionnaire is powerful tool for measuring job satisfaction.

On the "general" scale, Macedonia scores lower than Bulgaria and Kosovo. On the dimension "pay" Macedonian PA employees score the lowest in the whole JDS.

The dimension "internal work motivation "is considered to be a link between job satisfaction and motivation. This is the basis of Herzberg theory (Herzberg et al., 1959). Internal work motivation is the highest in Bulgarian business sector. Once again, Kosovo PA sector scores higher than business sector.



The dimension **pay** is not considered a motivator according to Herzberg et al. (1959). However, results in lower income countries, like Macedonia, show that pay is still considered a very strong motivating factor. (Bojadjiev and Krliu, 2006). Employees in Macedonian PA score extremely low on this item.

Job Security - General conclusion may be that "job security "is very important for employees. In Macedonia, **job security level** is far more important motivator than pay itself.

Social dimension of security is high in all three countries.

Specific dimension of job satisfaction **"Supervisory"** refers to direct impact of the supervisor and the impact on the job satisfaction.

The **"growth"** dimension of security refers to the developmental potential of the job itself. Highest score has Kosovo business sector and in Bulgaria PA sector.

3.3 Individual growth need

The growth dimension of security I strongly correlated with the other two aspects that are classified as Individual Growth Need Strength.

The results indicate that level of satisfaction from the growth potential is in line with the "**would like effects of the work**". Thus, we may conclude, that results of the individual attitude towards the job effects is on the same level with the satisfaction for the job development.

The **"job decision format"** Macedonia has the highest score, in both sectors. Kosovo PA scores the lowest. The discussion may be directed towards the fact that the country is still in early stage of existence and diversity of jobs is still insufficient.

3.3.1 Motivational potential score (MPS)

Motivational Potential Score - MPS, as presented in the works of Hackman and Oldham (1974) is calculated with the following formula:

MPS = (Skill Variety + Task Identity + Task Significance) / 3 * Autonomy * Feedback

This represents the final outcome of the JDS instrument, which gives us an indication about the reflections of the job design related to the organizational effectiveness.

We can draw some general conclusions with the regards of MPS:

1) MPS scores the highest in Macedonia (average 133), followed by Kosovo (average 130) and Bulgaria (average 114).

2) MPS results in Macedonia and Bulgaria have insignificant differences between Business sector and PA.

3) MPS result in Kosovo for PA is significantly higher than the result for the business sector (Index 1.44).



3. Comparison with previous research

JDS is a widely accepted tool. In our settings it has been used by the University American College Skopje (UACS) team in 2010 (Bojadjiev et al., 2010). In 2014, it has been used a part of the research conducted for a doctoral thesis of Krliu-Handjiski (2014).

The survey had been conducted in the same three countries. Thus we consider this, a begging of a longitudinal study which should take place once in every three years. If we compare the results from the 2010 study with the later one, we can conclude the following:

1) General satisfaction has been improved;

2) Autonomy scored higher in Macedonia three years back;

3) MPS in Macedonia and Bulgaria has similar scores in the both surveys. In Bulgaria there was no significant progress on this dimension, though it is an EU member,

4) MPS in Kosovo is almost doubled in the period of three years. We can discuss this as a result of the fact that Kosovo is a young country and the perception for the importance and significance for the jobs has apparently increased.



	Macedonia		Bulg	garia	Kosovo	
Quality of the job	2013	2010	2013	2010	2013	2010
Skill Variety	5.4	5.6	5.2	5.6	5.1	4.3
Task Identity	5.1	5.1	5.8	5.1	6.1	4.0
Task significance	5.0	4.2	5.0	5.3	5.2	4.1
Autonomy	5.4	5.1	4.6	5.3	5.1	3.6
Feedback from the job itself	4.8	5.1	5.3	5.3	4.1	5.4
Feedback from Agents	5.2	5.3	5.1	5.8	4.4	4.9
Dealing with Others	5.8	5.7	5.1	5.8	4.9	4.8
Experienced Meaningfulness of the Work	5.4	5.6	6.2	5.8	5.8	5.8
Experienced Responsibility for the Work	5.7	5.5	5.4	5.3	5.5	5.1
Knowledge of results	5.5	5.2	4.7	5.5	5.4	4.8
General satisfaction	4.9	5.0	5.6	5.5	5.5	5.0
International Work Motivation	4.9	5.4	5.6	5.4	5.4	5.3
Specific satisfaction "pay"	3.5	4.2	5.5	4.4	4.4	5.5
Specific satisfaction "Job Security"	4.3	4.9	4.8	5.2	5.3	5.1
Specific satisfaction "Social"	5.5	5.7	6.1	5.8	5.5	5.7
Specific satisfaction "Supervisory"	4.5	4.2	5.3	5.4	5.6	5.2
Specific satisfaction "growth"	5.0	5.2	5.4	5.3	5.8	5.0
"Would like format"	5.8	6.2	5.5	5.6	5.6	5.6
Job Choice Format	5.0	4.0	3.8	4.7	4.6	3.5
Result for Motivational Potential Score (MPS)	133.0	127.8	130.1	149.8	113.5	81.0

Table 3. Comparison of data from the 2013 and 2010 surveys

Source: (Krliu, 2014) and (Bojadjiev et al. 2010)

4. Limitations for future research

The research is limited in terms of sectors analyzed. Although it has a sufficient number of respondents it is difficult to make general conclusions based on the sample in question. In addition, the research is limited in terms of geographical characteristics. It can be broaden with other countries which have similar national cultures or come from similar cultural background and historic context. Such countries include: Slovenia, Croatia and Romania (as EU member countries) and Serbia, Bosnia and Herzegovina and Albania (as non-EU countries). Furthermore, the research could be enriched with the Baltic countries.

This research should be broadened from a statistical perspective in order to determine legalities and connections between specific aspects or elements.

Finally, the research should have at least three cycles of data in order to discuss the potential trends and to discover links, inhibitors or constraints in employees' behavior.



5. Conclusions and recommendations

This study is considered one of the first to explore this area. It is among the first research projects aimed to define levels of job satisfaction and motivation, both in public administration and in business sector in Macedonia. As mentioned before, this study is based on the JDS (Job satisfaction Survey) and the concept of MPS (Motivational Potential Score). The research was conducted in three countries: Republics of Macedonia, Bulgaria and Kosovo.

The main drive for conducting this research project was thee need of modern organizations to motivate their employees. We believe that the job design "per se", may act as a powerful motivator. Especially in the countries that are considered to be the poorest in Europe.

We believe that job satisfaction will increase when employees are encouraged to undertake new responsibilities and face new challenges.

We have been using the term "motivation" very often in this study. It is worth mentioning that it is derived from the Latin word "*movere*" meaning "to move". So it can be defined as a force within individual which causes desire to achieve something, direction and persistence towards achievement of a certain goal (Robbins and Judge, 2011).

In this study we do tackle the challenges that arise from the design of the jobs as factors of job satisfaction and motivation. As an important factor in simulating motivation we can mention *recognition*. It can serve as a tool to stimulate employees to improve performance. In this study we have examined some of the relevant issues for motivation, such as: need to growth, need to be appreciated for what you do and need to do something meaningful with your life.

This is just the beginning of the research on this area on the Balkans. As mentioned previously Balkan is still in the lower part of the EU countries measured by wealth and quality of life. As researchers, we believe that, for us, meaningful job means: to improve the life of our nations and to improve the wellbeing of the employees.

Maybe this humble research study will help someone to design a better job, a better workplace. If it does, that will be our feedback, our task significance and our job satisfaction and of course, our motivation.

References

Anderson, D.R., Sweeney, D.J., and Williams, T.A. (2009). *Essentials of Statistics for Business and Economics*. Mason, OH: Thomson South-Western.

Belias, D., and Koustelios, A. (2014). Job Satisfaction and Job Burnout among Greek Bank Employees. *International Journal of Management*, 5(1), 33–45. ISSN 0976-6510.

Bitner, M. J. (1990). Evaluating service encounters: The effects of physical surrounding and employee responses. *Journal of Marketing*, *54*, 69-82. http://dx.doi.org/10.2307/1251871



Blau, G. (1999). Testing the Longitudinal Impact of Work Variables and Performance Appraisal Satisfaction on Subsequent Overall Job Satisfaction. *Human Relations*, 52(8), 1099-1113. http://dx.doi.org/10.1177/001872679905200806

Bojadjiev M., Mojsoska-Blazhevski N., Boshnakova D., Stefanovska M., Krliu V., Janakieva J. and Sarachini V. (2010). Work Place as Motivator – Comparative Study of Employees in Business and Public Administration in Macedonia and neighboring countries. 5th Annual International Conference on European Integration Europe after the Lisbon Treaty.

Bojadjiev, M., Krliu V. (2006). Application of the Herzberg Theory in eh emerging markets – the example of Macedonia. *Proceedings from the international conference Changes Arising from EU Member Status*, University American College Skopje, 7-30.

Couger, J.D., Adelsberger, H., Borovits, I., Zviran, M., Motiwalla, J. (1990). Commonalities in motivating environments for programmer/analysts in Austria, Israel, Singapore, and the U.S.A. *Information & Management*, *18*(1), 41-46. http://dx.doi.org/10.1016/0378-7206(90)90062-M

Cranny, C.J., Smith, P.C. and Stone. E.F. (1992). Job satisfaction: How people feel about their Jobs and how it affects their performance. New York: Lexington.

Cross-sectional and longitudinal analysis. *Journal of Applied Psychology*, 76(3), 350-366, http://dx.doi.org/10.1037/0021-9010.76.3.350

Davis, L.E., and Taylor, J.C. (1972). Design of jobs. London, UK: Penguin.

Dickter, D., Roznowski, M., and Harrison, D. (1996). Temporal tempering: An event history analysis of the process of voluntary turnover. *Journal of Applied Psychology*, *81*(6), 705-716, http://dx.doi.org/10.1037/0021-9010.81.6.705

Ford, R. N. (1969). *Motivation through the work itself*. New York: American Management Association.

Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research: An introduction*. (7th ed.). Boston, MA: A&B Publications

Herzberg, F., Mausner, B. and Snyderman, B.B. (1959). *The Motivation to Work*. New York: Wiley.

Hom, P.W., and Griffeth, R.W. (1991). Structural equations modelling test of turnover theory:

Idaszak, J.R., Bottom, W.P., and Drasgow, F (1988). A test of the measurement equivalence of the revised job diagnostic survey: Past Problems and Current Solutions. *Journal of Applied Psychology*, 73(4), 647-656, http://dx.doi.org/10.1037/0021-9010.73.4.647

Judge, T.A., and Bono, J.E. (2001). Relationship of core self-evaluations traits – self-esteem, generalized elf-efficacy, locus of control, and emotional stability – with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, *86*(1), 80–92, http://dx.doi.org/10.1037/0021-9010.86.1.80



Kamdron, T. (2005). Work Motivation and Job Satisfaction of Estonian Higher Officials. *International Journal of Public Administration*, 28(13/14), 1211-1240. http://dx.doi.org/10.1080/01900690500241085

Krliu-Handjiski, V. (2014). Workplace as a motivator and its effects on workforce fluctuation and organizational efficiency – similarities and difference between males and females. Doctoral dissertation thesis.

Lee-Ross, D. (1998). The reliability and rationale of Hackman and Oldham's Job Diagnostic Survey and Job Characteristics Model among seasonal hotel workers. *International Journal of Hospitality Management*, *17*(4), 391-406. http://dx.doi.org/10.1016/S0278-4319(98)00034-6

Locke, E.A., and Latham, G.P. (1990). Work motivation and satisfaction: Light at the end of the tunnel. *Psychological Science*, *1*(4), 240-246. http://dx.doi.org/10.1111/j.1467-9280.1990.tb00207.x

Maher, J. R. (1971). New perspectives in job enrichment. New York: Van Nostrand.

Martinez-Gomez, M., Marin-Garcia, J.A., and Giraldo-O'Meara, M. (2013). Validation of the work characteristics scales applied to educational university environments. *Intangible Capital*, *9*(4), 1170-1193. http://dx.doi.org/10.3926/ic.424

Meier, K.J., and Hicklin, A. (2008). Employee Turnover and Organizational Performance: Testing a Hypothesis from Classical Public Administration. *Journal of Public Administration Research and Theory*, *18*(*4*), 573–590. http://dx.doi.org/10.1093/jopart/mum028

Meyer, J., Paynonen, S.V., Gellatly, I.R., Goffin R.D. and Jackson, D.N. (1989). Organizational commitment and job performance; It's the nature of the commitment that counts. *Journal of Applied Psychology*, 74(1), 152-156. http://dx.doi.org/10.1037/0021-9010.74.1.152

Morrison, K.A. (1997). How franchise job satisfaction and personality affects performance organizational commitment, franchisor relations, and intention to remain. *Journal of Small Business Management*, *35*(3), 39-67. Retrieved from:

Mowen J. (2000). The 3M Model of Motivation and Personality. Norwell, MA: Kluwer Academic Press. http://dx.doi.org/10.1007/978-1-4757-6708-7

Nicolescu, L., Dima, A.M., Anghel, F., and Paun, C. (2009). Job satisfaction at the academic level: A Romanian case Study. *Global Journal of Business Research*, *3*(1), 83-90, ISSN: 2157-0191

Nyaude, A. (2008). *Manufacturing challenge: an employee perception of the impact of BEM variables on motivation*. Doctoral dissertation thesis. [Online] Available: https://books.google.mk/books?id=UmA26ah4hQwC&printsec=frontcover#v=onepage&q&f =false (April 8, 2015).



Platis, C., Reklitis, P., and Zimeras, S. (2015). Relation between job satisfaction and job performance in healthcare services. *Proceedings of the 3rd International Conference on Strategic Innovative Marketing (IC-SIM 2014),* (Ed. Kavoura, Sakas and Tomaras), *175*, 480-487. http://dx.doi.org/10.1016/j.sbspro.2015.01.1226

Raskovic, M., and Morec, B. (2012). Organizational Change and Corporate Sustainability in an Economic Crisis: Evidence from Slovenia. *Economic Interferences*, *14*(32), 522-536.

Robbins, S.P., and Judge, T.A. (2011). *Organizational Behavior by Robbins and Judge* (13th ed.). Prentice Hall.

Roethlisberger, F. J., and Dickson, W. J. (1941). Management and the Worker. *The Economic Journal*, *51*(202/203), 306-308. http://dx.doi.org/10.2307/2226267

Tett, R.P., and Meyer, J.P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, *46*(2), 259-293. http://dx.doi.org/10.2307/2226267

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