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Analytical view of the relation between training & development and organizational performance

Key words: *human resource management; human resource practice; training and development; organizational performance.*

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Introduction

At present, human capital is considered to be the main premise of the performance and competitiveness of organizations. Increased attention to HRM has been reflected in the number of different empirical research studies aimed to study the impact of various HRM practices on organizational performance [Theriou & Chatzoglou 2009: 614-646]. One reason for implementation of the research in this area is the assumption that HRM practices can create a source of sustainable competitive advantage, especially when they are in line with the competitive strategy of the organization. When a HRM strategy is properly configured, it brings visible and econom-

ically significant contribution to organizational performance [Wang & Shyu 2008: 92-110]. A growing number of studies suggest that HRM practices, such as performance-based remuneration, training & development (T&D), may be associated with higher financial performance of the organization [Huselid 2005: 635-672, in Cehlárová, Svetozárovová & Vavrek 2012: 119]. Some authors point to the HRM practices that can support certain inimitable attributes in human resources, such as those that can help an organization to gain competitive advantage and increase its performance [Huselid 2005: 635-672, MacDuffie 2005: 197-221, Ahmad & Schroeder 2003: 19-43]. Katou [2008, in Yazam & Aqeel 2011: 11] states that HRM practices have a direct effect or impact on attributes such as human skills, attitudes and behavior, the so-called HRM outcomes, which affect the performance of the organization. Also Pfeffer [1998: 96-124] states that the field of HRM is essential for the maintenance of organizational performance.

One of the HRM practices frequently discussed in terms of impact on organizational performance is training & development (T&D). Skilled workforce with the necessary supply of knowledge, abilities, skills, talents and creativity is becoming a major source of success of organizations [Ali Taha & Sirková 2011: 15-27]. Education can and should be a powerful means to facilitate the expansion of the company and its development capabilities, thereby increasing profitability [Cosh et al. 1998, in Huang 2001: 132-151]. There is no doubt that very knowledgeable and experienced employees increase productivity, improve quality of goods and services, bring positive changes in processes and help create high-quality services for clients. It can be assumed that T&D is one way to increase the competitiveness of the organization and its performance. T&D brings tangible results, such as increased productivity, quality of products and services. It also generates intangible results, such as high self-esteem, increased morale and satisfaction of employees, which are due to other skills and knowledge acquired during T&D programs. Given the importance of T&D, the company should invest in training of its employees on the effective implementation of customer-oriented strategy. Similarly, Blair & Sisakhti [2007, in Yazam & Aqeel 2011: 11] argue that investment in training produces huge benefits.

Zeithmal & Bitner [2004, in Yazam & Aqeel 2011: 11] confirm, that spending on development and training provides a strategic competitive advantage of organizations. A dynamic environment requires that organizations invest heavily in training of its employees because it helps to develop organizational skills that allow them to respond positively to new challenges. Other studies have also found that comprehensive T&D programs correlate positively with staff retention, productivity and organizational effectiveness. Delaney & Huselid [1996: 949-969] have confirmed the positive relationship between T&D and organizational performance.

Although it was generally accepted that HRM is positively related to organizational performance, there is still a need for further research.

Material and Methods

The literary review of previous research has created the background for carrying out the research in Slovakia. The aim of the research is to verify a correlation between the T&D – as one of the important HRM practices and the organizational performance measured by company's financial situation and labor productivity.

Data collection was conducted by using a questionnaire. 180 companies operating in Slovakia were questioned by e-mail and in person in January 2014. The questionnaires were answered by 45 respondents (HR and financial managers of companies), the response rate is thus 25%.

Data on T&D in the sample of Slovak companies were taken on 3 items in which we investigated:

1. Whether there are some differences in the number of employees participating in T&D in 2012 and 2013.
2. What percentage of employees participated in T&D in 2013.
3. Whether the effectiveness of T&D is evaluated by companies.

These items of questionnaire were designated for HR managers of Slovak companies.

Measurement of the real performance of the organization is very difficult for several reasons. The first reason is that there is a wide range of performance indicators and the other is that companies are reluctant to provide specific internal data that would allow determination of selected

performance indicators. Therefore, data on organizational performance was assessed through a five-point Likert-type scale and the performance was monitored through the following indicators:

1. **Labor productivity** (defined as total output divided by labor inputs). We focused on labor productivity because connections between human capital and productivity, especially labor productivity, were relatively direct, the face validity of this measure of firm success was also relatively high [Dyer & Reeves 1995: 656-670]. Finally, productivity has been the most frequently used outcome variable in a large body of work in the HRM literature [Wang & Shyu 2008: 92-110].

2. **Overall financial situation of the company.** Due to the very large number of different indicators of financial performance and, as mentioned above, due to the unwillingness of respondents to provide the specific internal data, we aimed to determine the overall financial situation through evaluation of respondents (financial managers of Slovak companies).

To verify the relation between performing of T&D and organizational performance, five hypotheses were tested, using the Spearman correlation coefficient.

Results

In the first part of the research we focused on the relation between performing of T&D and financial situation of Slovak companies.

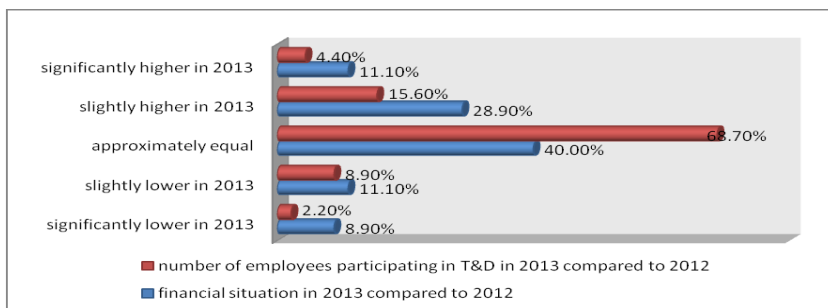
H1: It can be assumed that growth in the number of employees participating in T&D positively correlates to the financial growth.

First, we focused on comparing the two monitored periods, namely years 2013 and 2012. The aim was to determine how the examined variables (the number of employees participating in T&D and the financial situation) differ in the two studied years and whether a change in one variable is associated with a change in the second variable. According to the research results, in most of the cases the number of employees participating in training activities was unchanged in 2013 compared to 2012, based on the numbers of 68.7% of respondents remaining the same. A positive find-

ing is that only 11.11% of Slovak companies reported a lower proportion of employees in education in 2013 compared to 2012. In regards to the second variable, the financial situation of companies, results of research are favorable, as only 20% of Slovak companies confirmed the deterioration of the financial situation in 2013 compared to 2012. A relatively high proportion of respondents (40%) confirmed, that the financial situation is more or less unchanged when comparing the two years, and exactly 40% of companies reported improvement in their financial situation since 2012. When comparing the two variables in the two years, it can be argued that their value remain mostly stable, as shown in Graph 1.

To verify the H1 hypothesis, the Spearman correlation coefficient was used. According to the results of correlation $p = 0.049$, respecting $p < 0.05$, thus hypothesis H1 was accepted. The research results confirmed that the growth of employees participating in T&D is in a positive correlation with the growth of the financial situation of the company.

Graph 1. Comparison of the number of employees participating in T&D and the financial situation in 2013 compared to 2012



Source: own research.

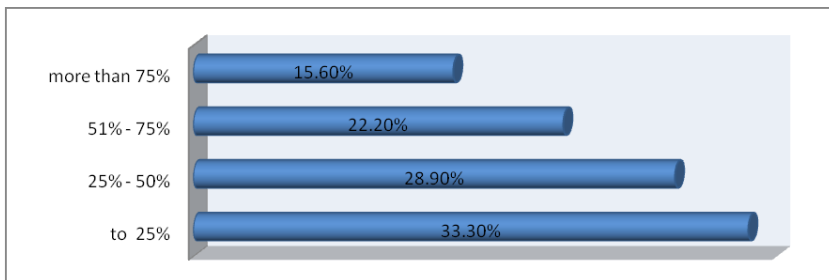
However it can be assumed that just financial situation is the factor which determines how many employees are involved in T&D, because if a company is in a better financial situation, it is usually more willing to invest in the education of employees. Therefore, even if we can talk about the correlation between the changes in the workforce participating in T&D and the financial situation, we cannot unequivocally confirm that a higher

number of employees participating in T&D lead to the better financial situation. The correlation coefficient $r = 0.295$ shows a low correlation.

The relation between the T&D and the financial situation was also examined through another hypothesis H2, when we worked with the variable of the percentage of employees participating in T&D in 2013 and the variable of the financial situation of the company in 2013.

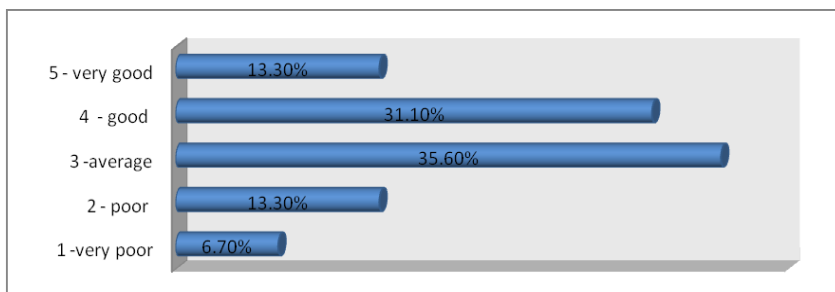
H2: It can be assumed that there is a correlation between the share of employees participating in T&D and the financial situation. One goal of the research was also to investigate the approximate proportion of employees participating in training in Slovak companies in 2013. As Graph 2 shows, the results are not very positive, since more than 60% of Slovak companies involved have less than half of their staff enrolled in educational activities in 2013.

Graph 2. Share of employees participating in T&D in 2013



Source: own research.

In the validation of the H2 hypothesis, the variable financial situation was investigated through the Likert scale on which the respondents (financial managers of Slovak companies) rated the financial situation for the year 2013 on the scale from value 1 – very poor to value 5 – very good.

Graph 3. Ratings the financial situation for the year 2013

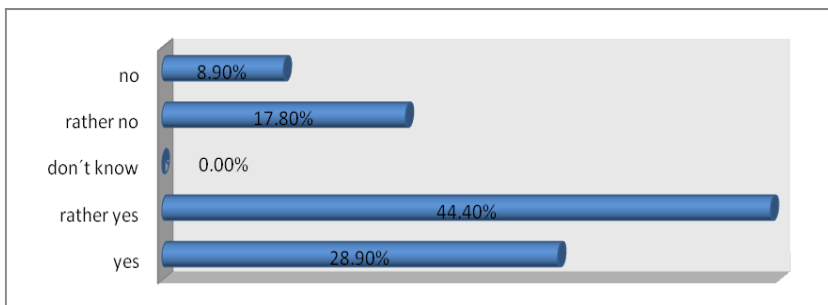
Source: own research.

As Graph 3 shows, most of the financial managers evaluate the financial situation of their company in 2013 as average. What is positive is the fact that 44.40% of respondents rated the financial situation positively. In the H2, it was assumed that companies with a higher number of employees participating in T&D have a better financial situation. The assumption was verified by using the Spearman correlation coefficient. The resulting p-value was 0.175, the hypothesis H2 was thus rejected. In this case, there is no statistically significant relationship between performing of T&D and financial situation.

One of the prerequisites for the effective implementation of T&D is the evaluation of this HRM activity's effectiveness. If the company does not evaluate the efficiency, it cannot determine whether T&D has served its purpose and whether the sources spent on this activity are not in vain. The evaluation of the effectiveness of education has been also considered as a variable that is in correlation to the financial situation.

H3: It can be assumed that there exists a statistically significant correlation between the evaluation of the effectiveness of T&D and financial situation.

According to the results, the vast majority of Slovak companies sampled evaluates the effectiveness of staff training, see Graph 4.

Graph 4. Evaluating the T&D effectiveness

Source: own research.

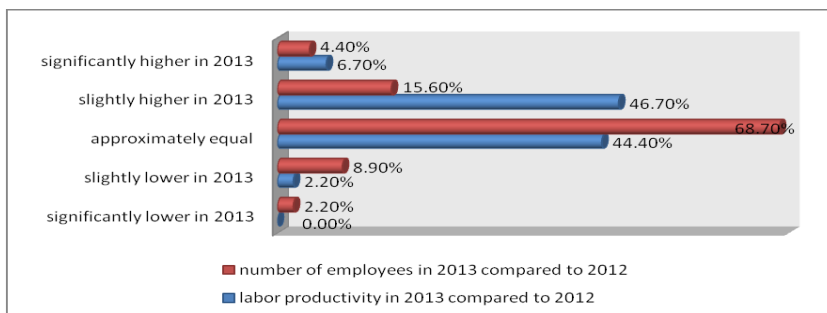
The relation between evaluation of the effectiveness of T&D and financial situation was investigated by the correlation analysis, which did not confirm the hypothesis H3 ($p = 0.184$). Therefore, the evaluation of the effectiveness of T&D cannot be considered as a factor affecting organizational performance, as measured by the financial situation of the company.

In the first part of the research, we verified the relations between T&D and the financial situation, as one of the indicators of organizational performance. In the second part of the research we focused on the detection of statistical significance of T&D and labor productivity, considered as another component of organizational performance. Reasons for the use of this indicator are given in the text above. Similarly to the first part of the research, the T&D was expressed by two variables, namely the number of employees participating in T&D in 2013 compared to 2012 and the percentage of employees participating in T&D in 2013.

H4: It can be assumed that the growth in the number of employees participating in T&D positively correlates to the growth of labor productivity.

As seen in Graph 5, labor productivity was rated very positively on the basis of comparison years 2013 and 2012, since more than 50% of respondents reported labor productivity growth, while its reduction was confirmed only by 2.20% of respondents.

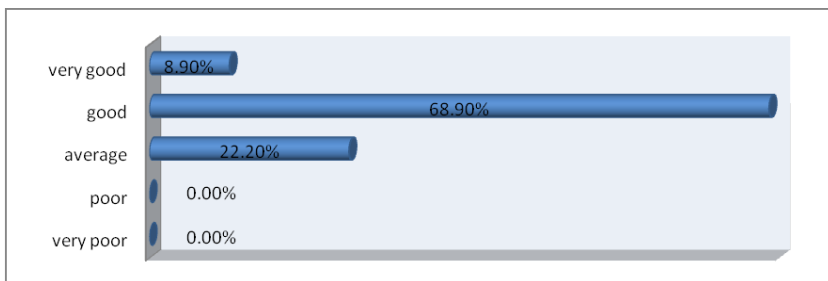
Graph 5. Comparison of the number of employees participating in T&D and labor productivity in 2013 compared to 2012



Source: own research.

In H4, we assumed that growth in the number of employees participating in T&D leads to growth of labor productivity. The correlation coefficient confirmed the H4 hypothesis ($p = 0.028$). The correlation coefficient ($r = 0.327$) shows medium statistical dependence between variables. We have found that with the growth of the number of employees participating in T&D, the labor productivity grows.

To verify the relation between T&D and labor productivity, we decided to use additional types of variables, namely the share of employees participating in training activities in 2013 and the labor productivity in the same year. Similarly to the case which investigated the financial situation, respondents evaluated labor productivity by using the Likert scale. The results of labor productivity evaluation are shown in Graph 6.

Graph 6. Ratings of the labor productivity for the year 2013

Source: own research.

Correlation analysis did not confirm the assumption about a correlation between the percentage share of employees participating in T&D and labor productivity ($p = 0.082$), thus H5 was rejected.

Summary

Training and development of workers is one of the most important HRM practices, it allows to increase the quality of human resources in an organization and that presents an opportunity to increase organizational performance. Therefore, this HRM practice was selected as the subject of the research, which aimed to verify the possible statistical relationship between T&D and the organizational performance expressed by the financial situation and the labor productivity. To achieve the objective, five statistic hypotheses were investigated, but only two hypotheses were confirmed. The research results are thus ambiguous.

In the first case, it can be stated that the growth in the number of employees participating in T&D positively affects organizational performance, because the staff growth is related to the growth of the financial situation and also with the growth of labor productivity. However different results have been found for the other variable relating to T&D – the percentage of employees participating in T&D in 2013. The results show that Slovak companies still involve a relatively small number of employees in training

activities. However, according to the results of the correlation analysis, the share of employees participating in T&D is unrelated to the financial situation and to the labor productivity. However it is important to point out certain limits of the research, since organizational performance was evaluated only on the basis of the perception of the respondents (financial managers), for reasons of protection of the internal data by companies.

Although the research has not confirmed expressly that T&D affects the organizational performance, it has pointed out certain issues in the research area and it has created the preconditions for further research, which may be beneficial for the field of HRM.

Summary

At present, human resources are considered the most valuable corporate resource, which help to achieve corporate objectives. Many employers are aware that only an employee who has the necessary skills and knowledge is a real asset to the company. This leads organizations to implement training & development activities for their staff. The paper deals with training & development as one of the important HRM activities that may affect the performance of the organization. It introduces the results of research conducted in Slovakia, aimed to verify the statistical relationship between training & development and organizational performance, as expressed by financial situation and labor productivity.

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The paper has been realized within the project VEGA /1/0513/14 Research of measurement and assessment of impact of HRM practices on organizational performance.