

# Correlation Between Training and Education of Human Resources and Business Performance of Small and Medium Enterprises

Iva Klepić

University of Mostar, Rectorate, Bosnia and Herzegovina  
iva.klepica@sum.ba

## Abstract

Human resources (HR) represent a crucial resource of enterprises. This especially applies to small and medium-sized enterprises (SMEs), in which HR can create a competitive advantage and affect survival and development. Changes in the business environment, the need for new knowledge, skills and abilities due to changes in the market and business all lead to widening the gap between existing and required competencies of employees. In the process of training and education of HR, employees acquire the necessary knowledge, refine their skills and/or acquire new skills, and experience. More to the point, they obtain the competencies they need to stay and/or become successful in their job and future jobs that they will perform in the enterprise. The principal aim of this research is to determine the correlation between training and education of HR and business performance of SMEs. The survey was conducted in SMEs in the Federation of B&H from August to September 2020. An original questionnaire was created for the research, used for collecting the views on the HR training and education of top managers as well as four business performance perspectives of companies based on the Balanced Scorecard model. Data were analysed using SPSS 20.0. The following were used from the statistical procedures: Pearson's coefficient of correlation, t-test for independent samples, Spearman's correlation of coefficient and Mann-Whitney U test (depending on the results distribution). The results of the survey showed that there is a correlation between training and education of HR and business performance in SMEs. In addition, the survey results indicated differences among the enterprises in terms of their size; i.e., between small and medium-sized enterprises. However, those differences are not statistically significant.

**Keywords:** Business performance, correlation, education, small and medium enterprises, training

## Introduction

Small and medium enterprises (SMEs) represent the main driver for the development, competitiveness, innovation, and employment in many

ORIGINAL SCIENTIFIC PAPER

RECEIVED: FEBRUARY 2021

REVISED: MAY 2021

ACCEPTED: JULY 2021

DOI: 10.2478/ngoe-2021-0013

UDK: 658.3:0052

JEL: M53, O15, L25

**Citation:** Klepić, I. (2021). Correlation between Training and Education of Human Resources and Business Performance of Small and Medium Enterprises. *Naše gospodarstvo/Our Economy*, 67(3), 1-16. DOI: 10.2478/ngoe-2021-0013

**NG  
OE**

**NAŠE GOSPODARSTVO  
OUR ECONOMY**

Vol. 67 | No. 3 | 2021

pp. 1–16

countries. Growth in Europe and thus in Bosnia and Herzegovina (B&H) is unthinkable without SMEs, because they play a crucial role in delivering innovative products, strengthening competitiveness, and creating new jobs. The European Union has placed a particular emphasis on the development of entrepreneurship and SMEs in the last decade. In a modern business environment, SMEs fight for their survival and development in the context of increasing and more globalized competition (Klepić, Klepić & Mabić, 2020, p. 263).

As economies globalize and organizational environments become increasingly complex, learning organizations and adaptive workers are becoming more important for organizational performance. Theory and research suggest that in the presence of global competition and rapid technological advancements, modern organizations must be flexible, efficient, and continually adapt to changing environments to sustain a competitive advantage and survive (Gully & Phillips, 2005, p. 2). In their effort to survive and develop, SMEs mostly rely on human resources (HR). Employees are the ones who, with their knowledge, skills, ability, motivation, loyalty, and creativity, using and managing material, financial and information resources to the greatest extent, affect the business results, development and survival of every enterprise. This is especially true for HR in small and medium-sized enterprises, which due to their size require effective use of human resources: quality, motivation, innovation, and creativity in competition on the globalized market. They are unique for any enterprise, and they represent the living factor of every organization making the highest contribution to the achievement of objectives and business performance with their know-how, abilities, motivation, loyalty, and creativity (Klepić, Mabić & Madžar, 2020, p. 12). Changes in the business environment, the need for new knowledge, skills, and abilities due to changes in the market and business all lead to widening the gap between existing and required competencies of employees. In the process of training and education of HR, employees acquire the necessary knowledge, refine their skills and/or acquire new skills and experience. More to the point, they obtain the competencies they need to stay and/or become successful in their job and future jobs that they will perform in the enterprise.

Facing large companies as competitors that procure the best employees, smaller companies must invest in the development of their employees and create unique knowledge that will make a breakthrough and strive for innovation. SMEs do not have developed systems like large enterprises and thus developed human resource management, understanding that human resources are not a cost but an investment. After hiring people, they need to identify shortcomings and the necessary competencies to know how to fix those difficulties. Most problems can be addressed through training and education, though in some cases, employees are either laid off or redeployed.

Training and education through HR are one of the main roles of human resources departments. Training is the systematic

approach that affects individuals' knowledge, skills, and attitudes particular to a specific occupation, and, if it is based on the science of training and learning, it should lead to changes in cognition, behaviour, and affect (Susomrith, Coetzer & Ampofo, 2019, p. 497). On the other side, education means the expansion of the overall knowledge, skills, and abilities of a person that enable him to make independent decisions and act in different situations. It qualifies for various jobs and creates a basis for further development (Bahtijarević-Šiber, 1999, p. 721). There are numerous methods of training and development, and different authors have their differences, but mostly it comes down to on-the-job and off-the-job training, and manager and non-manager training. SMEs mostly opt for on-the-job training because it is more difficult for them to access training educations outside the company.

Robert Kaplan (Biazzo & Garengo, 2012) in his book dealing with the implementation of BSCs in SMEs points out that it is incorrect to observe that the BSCs can be applied only in large and global companies, emphasising the need for SMEs to use this approach to measuring success. Nair (2004) points out that a corporation, both big and small, can fail for several reasons. But the most significant cause of failure is not a lack of strategy, but the incapacity to execute a balanced strategy. The BSC exists to serve this incapacity (Klepić, 2019, p. 15).

The main goal of this study is to determine whether and to what extent the training and education of human resources are in correlation with the performance of small and medium enterprises.

Business performance of enterprises was observed according to the balanced scorecard model. A BSC looks at an organization from four different perspectives to measure its success: the financial perspective, the customer perspective, the internal business processes perspective, the learning and growth perspective. Each of these perspectives focuses on a different side of a company, creating a balanced view of an organization.

## Theoretical Background

### Training and education of human resources

In the past (and in many continental European countries possibly until the first PISA study), educational and training institutions were often seen as providers of necessary skills for national economies, but this view has changed dramatically, with education and training now being seen as a key ingredient for international competitiveness, and with institutions that provide education being a main ingredient that help secure competitive positions (Dustmann, Fitzenberger & Machin, 2007, p. 1). Any institution of higher learning or business whose goals are to survive and prosper in this present day diverse and regressed economy has found it imperative to invest in ongoing training and development to improve proficiencies in production as well as to acquire

the greatest return on investment of human capital (Truitt, 2011, p. 1). Both corporations and businesses need to grow and innovate continuously, pursue sustained development, and cope with rapid changes in their external environments as well as increasingly competitive international markets. That is the reason why organizations need to strengthen or expand the knowledge base, skills, and abilities of their employees. For this purpose, education and training must be incorporated into a systematic and formal system if the goals of employees and corporation are to be attained (Truitt, 2011, p. 1-2). Well-designed training is impactful as continuous learning and skill development are now a way of life in modern organizations. Training and development activities allow organizations to adapt, compete, excel, innovate, produce, be safe, improve service and reach goals. Organizations invest in training because they believe a skilled workforce represents a competitive advantage (Salas, Tannenbaum, Kraiger & Smith-Jentsch, 2012, p. 74). Training is the systematic approach that affects individuals' knowledge, skills, and attitudes particular to a specific occupation, and, if it is based on the science of training and learning, it should lead to changes in cognition, behaviour, and affect (Susomrith, Coetzer & Ampofo, 2019, p. 497). According to Truitt (2011, p. 2) training is planned intervention that is designed to enhance the determinants of individual job performance and it is related to the skills an employee must acquire to improve the probability of achieving the organization's overall business and academic goals and objectives. Positive training offered to employees may assist with reduction of anxiety or frustration as well as with a higher level of job satisfaction that has a positive effect on their performance. Saks, Haccoun and Belcourt (2015, p. 8) concluded that training refers to formal and planned efforts to help employees acquire knowledge, skills and abilities to improve performance in their current job, but also that it usually consists of short-term focus on acquiring skills to perform one's job.

Development, on the other hand, refers to systematic efforts aimed at affecting individuals' knowledge, skills, and attitudes for the purposes of personal growth or future jobs and/or roles (Susomrith, Coetzer & Ampofo, 2019, p. 497).

The goal of development is to prepare individuals for promotions and future jobs as well as additional job responsibilities (Saks, Haccoun, & Belcourt, 2015, p. 8).

Education means the expansion of the overall knowledge, skills and abilities of a person that enable him to make independent decisions and act in different situations. It qualifies one for various jobs and creates a basis for further development (Bahtijarević-Šiber, 1999, p. 721). The general goals of education according to Bahtijarević-Šiber (1999, p. 737) are to raise the competitiveness of the organization, improve work performance, update the knowledge and skills of employees, avoid managerial obsolescence, direct new employees, prepare for them for promotion and managerial succession and meet individual growth needs.

Training and development are a part of a larger field, known as human resource development (HRD), which involves systematic and planned activities that are designed by an organization to provide employees with opportunities to learn necessary skills to meet current and future job demands. The main functions of HRD are training and development, organization development, and career development. The core of all three functions is learning (Saks, Haccoun & Belcourt, 2015, p. 9).

Employee training is a complex process that is usually realized through four basic phases (Buble, 2000, p. 413): identification of training needs, planning of necessary training, conducting training, and evaluation of completed training. Desler (2015 p. 293) also divided the training process into four steps: needs analysis, instruction design, program implementation, and program performance evaluation.

Rowden and Conine (2005) indicate that there is limited research on HR development in SMEs and Truitt (2011, p. 1) has written that a slowly growing number of authors are currently doing more research in the areas of training and development and its effects on employees that have not been seen in past literature.

To enhance job performance, training skills and behaviours must be transferred to the workplace, maintained over time, and generalized across contexts. Consequently, specific job training is a complicated matter. More specifically, in addition to the exact nature of job training, training is seen as relevant to fostering a positive relationship between learning satisfaction and the effectiveness of applied learning. Both formal and informal training opportunities are thought to provide a forum for the development of talent. When talent is fostered and nurtured, competitive advantages in performance are untainted. Furthermore, the organizational commitment or the relative strength of an individual's identification and involvement in a particular organization depends on effective training and development programs. Also, training and education have been shown to have a significant positive effect on job involvement, job satisfaction, and organizational commitment (Truitt, 2011, p. 3).

An important factor for the success of education is the choice of an appropriate method, which depends on the educational program and its goals. The most appropriate method needs to satisfy the following: motivate students to improve their performance, clearly illustrate the desired skills and knowledge, provide participants with active participation, provide the opportunity to practice, provide feedback on performance during learning, use some means of motivation and support during learning, structure the material from simpler to more complex tasks, adapt to specific needs and enable participants to transfer what they have learned to other situations, especially to the work they do (Bahtijarević-Šiber, 1999, p. 753).

Different authors point out different methods and, in most cases, divide them into off the the-job and on the-job training methods. Off the-job training methods according to Saks, Haccoun and Belcourt (2015, p. 175) are: lecture method, discussion method, case study method, case incident method, behavior method, role play, simulations, games, action learning, and instructional media; on the-job training methods are: job instructions training, performance aids, job rotation, apprenticeships, coaching, and mentoring. Desler (2015) presented in his book a number of training methods including internship training, non-formal learning, business process learning, lectures, programmed learning, training using audiovisual materials, training near the workplace, distance training and video conferencing, electronic work efficiency support system, computer training, simulated learning, online training, virtual classroom, and online learning. According to Bahtijarević-Šiber (1999, p. 745) methods of education at work are: individual instructions, job rotation, apprenticeship or professional practice, internship, mentoring, student practice, and methods of out-of-work education are: lectures, audiovisual techniques, programmed learning, computer-assisted learning, interactive video, conferences and discussions, training in stimulated working conditions and case methods.

The literature suggests that commitment results from adequate training and development for successful job completion and an increase in job performance. In addition, the larger the gap between the skills required to perform a task and the actual skills available for performing a task, the greater the lack of job satisfaction and the greater the increase in employee turnover within the organization. Conversely, not having the skills to perform a job correctly can set up employees for failure and put the business at a less-than-competitive disadvantage. The resulting high turnover would predict the need for even more training that would then have a direct impact on the bottom line of any business. Moreover, poor performance reviews due to inadequate job training can produce employee dissatisfaction and conflict (Truitt, 2011, p. 3).

Reviews of T&D literature have identified the multiple benefits of T&D for individuals, teams, organisations, and society. Small firm employees are less likely to obtain access to formal T&D events than are employees in large firms. Studies have identified several "barriers" to the provision of firm-sponsored, formal T&D in smaller firms. Thus, small firms have a strong preference for and are highly reliant upon informal learning processes. However, in some types of jobs, informal learning activities would not be sufficient to acquire the depth of understanding necessary for complex work activities that require high level conceptual knowledge. Furthermore, opportunities for formal learning stimulate participation in informal learning activities. Medium-sized businesses tend to be more similar to large businesses than small businesses, and thus they are managed in a relatively more formalised, professionalised and structured manner compared to small businesses (Susomrith, Coetzer & Ampofo, 2019, p. 498). Both employees and the organization benefit from training and development. An individual

develops his competencies and is more valuable in the labour market, has better compensation, progresses faster, and the organization increases its efficiency and effectiveness. Organizations find it easier to attract new employees and retain them and reduce unwanted departures from the organization.

There is a calculable benefit to training employees. Trained employees can do more and better work, make fewer errors, require less supervision, have more positive attitudes, have lower rates of attrition and they produce higher-quality products and services. These benefits have a positive effect on an organization's competitiveness and performance. The link between training and an organization's performance is strongly supported by research. A survey conducted by the American Management Association found that companies that expanded their programs showed gains in productivity and larger operating profits. In another study, a 10 percent increase in training produced a 3 percent increase in productivity over two years. A review of research on training and organizational effectiveness found that training is positively related to human resource outcomes (e.g., employee attitudes, motivation, behaviors), organizational performance outcomes (e.g., performance and productivity) and financial outcomes (e.g., profit, financial indicators) (Saks, Haccoun & Belcourt, 2015, p. 9-10).

In addition, research has found that companies that invest more in training have higher revenues, profits, and productivity growth than firms that invest less in training. Research by the Conference Board of Canada found that those companies that spend the most on training and development believe they outperform their competitors according to a number of performance indicators, such as employee satisfaction, customer satisfaction, profitability, and productivity, compared with those that spend the least on training and development. A study of companies in South Korea found that those that invest more in workplace learning achieve higher levels of learning outcomes (i.e., employee competence, labour productivity, and employee enthusiasm) and financial performance. In other words, investment in workplace training influences organizational performance through learning outcomes (Saks, Haccoun & Belcourt, 2015, p. 9-10).

### **Balanced Scorecard**

Balanced Scorecard is a framework designed by Professor Robert Kaplan and David Norton. As the name implies, Balanced Scorecard is a methodology to solve challenges in balancing the multiple perspectives demanded of strategy with its execution. In a nutshell, BSC is a methodology for translating strategy into action. (Nair, 2004, p. 30). Smith (2007, p. 106) points out that a Balanced Scorecard is a management tool that provides senior executives with a comprehensive set of measures to assess how the organization is progressing toward meeting its strategic goals. Balanced Scorecard is a new framework for integrating measures derived from strategy (Kaplan and Norton, 1996, p. 18).

It is important to mention that BSC provides a balance between leading and lagging indicators, as well as internal and external influences. Balanced Scorecard retains traditional financial measures. But financial measures tell the story of past events, an adequate story for industrial age companies for which investments in long-term capabilities and customer relationships were not critical for success. Those measures are inadequate, however, for guiding and evaluating the journey that information age companies must take to create future value through investment in customers, suppliers, employees, processes, technology, and innovation. The BSC complements financial measures of past performance with measures of the drivers of future performance. The objectives and measures of the scorecard are derived from an organization's vision and strategy (Kaplan & Norton, 1996, p. 7-8). The framework digests strategy but also focuses it into four perspectives of objectives. These perspectives may contain more than one strategic theme, and each theme is measured using performance measures (Nair, 2004, p. 31). Each theme is also related to the others regarding cause and effect. The balanced scorecard approach helps organizations manage the implementation of their strategies. The BSC measures an organization's performance from four key perspectives: financial, customer, internal business processes, and learning and growth (Von Bergen & Benco, 2004, p. 3). The BSC is an instrument of strategic corporate management, with the help of which a strategy is translated into concrete, operational measures. For this purpose, different perspectives of strategic objectives are determined, which are stored with key figures, target values, and measures. The objectives defined in this way are checked for consistency using cause-effect chains and the links are visualized (Schäfer & Teuber, 2007, p. 39). These four perspectives provide for a more comprehensive evaluation of the organization than the traditional emphasis on tangible and financial assets of the organization (Von Bergen & Benco, 2004, p. 15).

The underpinnings of the BSC approach are as relevant to the small firm as to the large. Small firms have employees performing operational tasks and processes. If the employees are effective and efficient (i.e., sufficiently trained and motivated), then internal business processes will be efficient. Efficient operations run by effective employees should generate higher quality output, which will attract and retain satisfied customers. Repeat customers contribute marginally more to the firm's bottom line than do new customers who must be wooed. In short, the BSC can work as well for the small firm as for the large firm. The BSC's complexity may be reduced and its formality may be relaxed in the context of a small firm, but neither its importance nor its utility suffers negative consequences related to firm size (Von Bergen & Benco, 2004, p. 15).

The BSC is characterized by "...goals, measurement parameters and strategic measures are each assigned to a specific point of view, the so-called perspective." In addition to the financial perspective, "which ultimately only shows the results of the entrepreneurial activity", "she reveals the value drivers for important, long-term and competitive services"

from the customer, process and potential perspective. The equal consideration of the perspectives, which can also be adapted to specific sectors and companies, leads to a balanced management system (Schäfer & Teuber, 2007, p. 40).

The financial perspective represents the financial outcome elements of the strategy. The financial goals serve as a focus for the goals and key figures of all other perspectives. From a financial perspective, it becomes clear whether the chosen strategy has a positive effect on the discounted free net cash flow and whether this increases the company's value. The financial perspective contains goals and key figures from the following elements: income growth and income mix; increase in productivity and reduction in costs; use structure of assets; investment and acquisition strategies and cost of capital (WACC18) (Schäfer & Teuber, 2007, p. 41).

The customer perspective is the second perspective of BSC. Companies are increasingly attempting to replace product-orientated strategies with customer-orientated strategies. For this reason, the quantification of customer relations within the scope of the BSC is increasingly achieving significance as an implementation instrument for strategies and as a supplement to classic product profitability analysis (Schmeisser, Clausen & Lukowsky, 2008, p. 3). The customer perspective contains goals and key figures on: market share; customer acquisition, and new customers; customer satisfaction; customer loyalty and loyalty; customer profitability and customer value (CLV) (Schäfer & Teuber, 2007, p. 42).

The internal-business-process perspective; executives identify the critical internal processes in which the organizations must excel. These processes enable the business unit to: deliver the value propositions that will attract and retain customers in targeted market segments and satisfy shareholder expectations of excellent financial returns (Kaplan & Norton, 1996, p. 26). Processes to be analysed are usually the innovation process, the order acquisition, order processing, and customer care process. In addition to classic aspects such as quality, time, and costs, the goals and key figures are derived directly from external performance requirements and factors (Schäfer & Teuber, 2007, p. 42). Organizational learning and growth come from three principal sources: people, systems, and organizational procedures. The financial, customer, and internal business-process objectives of the BSC typically will reveal large gaps between the existing capabilities of people, systems, and procedures and what will be required to achieve breakthrough performance. To close these gaps, businesses will have to invest in enhancing employee skills, information technology, systems, and aligning organizational procedures and routines (Kaplan & Norton, 1996, p. 26).

### **Small and medium enterprises**

Small and medium-sized enterprises (SMEs) represent more than 99% of all enterprises in the EU. They provide two-thirds of jobs in the private sector and are responsible for

more than half of the total added value realized by companies in the EU. Growth in Europe is unthinkable without SMEs, and they play a crucial role in delivering innovative products, strengthening competitiveness, and creating new jobs. In the last decade, the European Union has placed a particular emphasis on the development of entrepreneurship and SMEs (Klepić & Klepić, 2020, p. 62).

The European Commission has identified a major role for SMEs in developing the innovative and exporting capacity of the EC, either directly or indirectly through subcontracting with larger enterprises. At the same time SMEs face particular difficulties related to their size. Accordingly, the EC has an important role to play in reducing the burdens on SMEs and in assisting them through advice and support structures (Dyson, 1990, preface).

SMEs in Bosnia and Herzegovina are even more important given the fact that the economy during the war and afterwards has significantly collapsed. It is expected that SMEs could and should be the backbone of Bosnia and Herzegovina's development, which could enable faster growth and development (Klepić, Klepić & Mabic, 2020, p. 266).

Bosnia and Herzegovina is a complex state that consists of two entities, the Federation of B&H and Republika Srpska, and the Brčko District. The definition of SMEs is not fully harmonized and each entity, as well as the Brčko District, has its definition and classification (Klepić, 2019, p. 17).

**Table 1.** Classification of SMEs in Bosnia and Herzegovina

| Classification criteria            | Federation of BH |         |          | Republic of Srpska |         |          | District Brčko |          |
|------------------------------------|------------------|---------|----------|--------------------|---------|----------|----------------|----------|
|                                    | Small            |         | Medium   | Small              |         | Medium   | Small          | Medium   |
|                                    | Micro            | Small   |          | Micro              | Small   |          |                |          |
| Number of employers                | 1 - 9            | 10 - 49 | 50 - 249 | 1 - 9              | 10 - 49 | 50 - 249 | 1 - 49         | 50 - 249 |
| Income in KM (000)                 | 400              | 4,000   | 30,000   | 10,000             |         | 50,000   | 2,800          | 11,000   |
| Balance Sheet (Assets) in KM (000) | 400              | 4,000   | 40,000   | 10,000             |         | 43,000   | 1,400          | 5,500    |

Notes: NEG – negative employment growth, PEG – positive employment growth, PPG – positive productivity growth, NPG – negative productivity growth

When defining small and medium-sized enterprises in the Federation of Bosnia and Herzegovina,<sup>1</sup> the Law on Accounting and Audit in the Federation of Bosnia and Herzegovina is not harmonized with the Law on Encouragement of Small Business. The differences are only in terms of value thresholds that define small and medium enterprises.

SMEs in the Federation are developing in a complex environment burdened by bureaucratic company registration procedures, fragmentation of institutional infrastructure for SME development, high administrative burdens, difficult access to finance especially for start-ups, inconsistent education system in terms of economic needs, inadequate level of entrepreneurship culture, and the lack of a strategic framework for the adoption and development of innovations, etc. All this is reflected in the competitiveness of SMEs, which results in slowing economic growth, or reducing the potential of the SME sector in generating new jobs.

The importance of SMEs in its economy was confirmed by the European Union through the adoption of the European Charter for Small and Medium Enterprises from 2000 and, as an upgrade, the Small Business Act from 2008, for the implementation of which B&H together with other Western countries Balkans, including Turkey.

## Methodology of Research

### Setting hypotheses

The defined problem has also defined the underlying objective of this research, which is to gain insight into the correlation of the training and education of human resources on the business performance of small and medium-sized enterprises. The sub-goals of this research are determined whether and to what extent the training and education of human resources are in correlation with each of the four perspectives of business performance based on the balanced scorecard model: the financial perspective, customer perspective, the internal business processes perspective, and the learning and growth perspective.

The problem and the objectives set for this study determined the content of the two main hypotheses and four sub-hypotheses which state:

H1 – “There is a significant correlation between training and

education of human resources and business performance of small and medium-sized enterprises”.

H 1a – A correlation exists between training and education of human resources and the business performance of small and medium-sized enterprises from a financial perspective;

H 1b – A correlation exists between training and education of human resources and the business performance of small and medium-sized enterprises from a customer perspective;

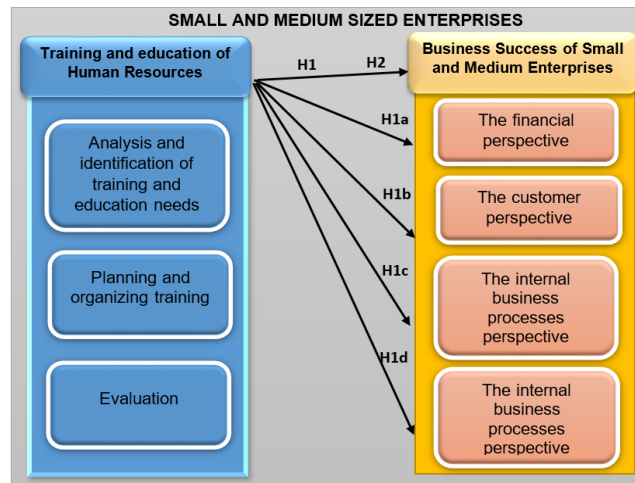
H 1c – A correlation exists between training and education of human resources and the business performance of small and medium-sized enterprises from the internal business processes perspective;

H 1d – A correlation exists between training and education of human resources and the business performance of small

and medium-sized enterprises from the learning and growth perspective.

H 2 – “There is a difference in the correlation between training and education of human resources and business performance of small and medium-sized enterprises in terms of their size.”

**Figure 1.** The model of the correlation between the training and education of human resources and business performance of small and medium-sized enterprises



Source: Author’s work

The scope of the research, methods of collecting and processing data model

The empirical research was conducted in the Federation of Bosnia and Herzegovina from August to September in the year 2020. The research was conducted in 46 companies. According to the distribution of the enterprises, based on the size of the enterprise, the sample consisted of 30 (65.2%) small and 16 (34.8%) medium-sized enterprises. The criterion for defining SME-s was one-dimensional. Small businesses are those up to 49 employees and medium between 50 and 249 employees.

An original questionnaire was created for the study, which consisted of three parts, in the context of which the views of top managers were collected on the training and education of HR as well as four business performance perspectives of companies based on the Balanced Scorecard model. In the first part of the questionnaire, basic questions were asked about the characteristics of the enterprises, while in the second part of the questionnaire questions were asked about the training and education of human resources in the companies. In order to measure and evaluate the training and education of human resources, a Likert scale type 1 to 5 is offered for answers of questions.

To measure the performance of the company for this paper, a modified BSC method with four perspectives was used. For each of the perspectives, four indicators were selected from a group of possible indicators for that perspective. Qualitative indicators were used in such a way that managers or owners

were asked to give a subjective rating of performance for each indicator in four perspectives by assessing the movement over the last three years (on a scale ranging from 1 (strongly decreased) to 5 (strongly increased)). The questionnaire was created using the Google forms option and the link to the survey questionnaire was sent to companies via mail. Enterprise responses were recorded in Microsoft Excel. The data collected was encoded and entered into the SPSS database.

Data were analysed using IBM Statistic SPSS 25.0. Pearson's and Spearman's coefficients of correlation were used to examine the correlation. T-test for independent samples and Mann-Whitney U test were used for testing differences significance according to firm size.

The significance limit was set at  $p = 0.05$ . P values that could not be expressed up to three decimal places were expressed as  $p < 0.001$ .

### Operationalization of variables

The variable training and education of human resources in hypotheses was measured through analysis and identification of training and education needs; planning and organizing training and evaluation.

Analysis and identification of training and education needs is measured by setting questions which refer to methods of analysis and identification which are used in enterprises. Planning and organizing training was measured by setting questions which refer to: planning and organizing training and education - goals, content and programs; organizing and conducting training and education of employees, methods and techniques of employee education and methods and techniques of managers’ education that are used in the enterprises. Evaluation is measured by the means of evaluations in enterprises.

The other variables are the business performance of SMEs viewed from four perspectives that the Balanced Scorecard method focuses on: the financial perspective, the customer perspective, the internal business processes perspective, and the learning and growth perspective.

The financial perspective of SMEs is measured by the following indicators: income, profit, costs and loss;

The customer perspective of SMEs is measured by: market share, retention of existing customers, retrieving new customers, and customer satisfaction.

The internal business processes perspective of SMEs is measured by: introducing innovations to business process, percentage of made errors, finishing production, and supplying the product/service to customers in time and after-sales service/customer service.

The learning and growth perspective of SMEs is measured by: investments in training and education of employees,



enabling employees to use new technologies, mutual employee collaboration and knowledge sharing and empowerment and consideration of employee suggestions

## Research Results and Discussion

### General information on research enterprises

The results of the research on the characteristics of the enterprises involved in the research are presented in a few words. The largest share of the researched companies has wholesale and retail, followed by Insurance, IT, etc. The largest number of companies (47.8%) was founded from 1996 to 2010 and then 26.1% from 1991 to 1996. Concerning the number of employees, 65.2% of them are in small businesses, those with less than 50 employees, while 34.8% of them are in medium-sized companies with between 50 and 250 employees. Most companies (67.4%) are legally organised as a limited liability company. In private ownership is 89.1% of all researched companies.

Table 2 shows the characteristics of the enterprises involved in the research.

**Table 2.** Sample characteristics

|                            |   | Number of enterprises | %    |
|----------------------------|---|-----------------------|------|
| Activity of the enterprise | Agriculture                                     | 0                     | 0    |
|                            | Manufacturing                                   | 4                     | 8.7  |
|                            | Energy production and supply                    | 0                     | 0    |
|                            | Construction                                    | 4                     | 8.7  |
|                            | Wholesale and retail                            | 8                     | 17.4 |
|                            | Tourism and hospitality                         | 4                     | 8.7  |
|                            | Finance   | 1                     | 2.2  |
|                            | Insurance                                       | 5                     | 10.9 |
|                            | Other   | 16                    | 34.8 |
|                            | Information Technology (IT)                     | 4                     | 8.7  |
| Date of establishment      | Before 1991                                     | 6                     | 13.0 |
|                            | From 1991 to 1995                               | 12                    | 26.1 |
|                            | From 1996 to 2010                               | 22                    | 47.8 |
|                            | After 2010                                      | 6                     | 13.0 |
| Enterprise size            | Small   | 30                    | 65.2 |
|                            | Medium  | 16                    | 34.8 |
| Legal form                 | Limited liability company                       | 31                    | 67.4 |
|                            | Joint stock company                             | 11                    | 23.9 |
|                            | Crafts and related activities                   | 3                     | 6.5  |
|                            | Other   | 1                     | 2.2  |
| Ownership structure        | Private property                                | 41                    | 89.1 |
|                            | State ownership                                 | 2                     | 4.3  |
|                            | Mixed ownership with majority state ownership   | 1                     | 2.2  |
|                            | Mixed ownership with majority private ownership | 2                     | 4.3  |

Source: Own research

### Research results on training and education of human resources

Table 3 shows descriptive statistics for assessing the analysis and identification of training and education needs. The results of the survey show that the average rating in the surveyed companies for “analysing the work performance of employed individuals” is 3.89, for “identifying organizational needs for training and education” it is 3.70 and for “analysing indicators of certain problems in the organization” it is 3.59.

**Table 3.** Analysis and identification of training and education needs

|   | M    | SD   |
|---|------|------|
| Do you analyse the efficiency and effectiveness of the organization (performance and efficiency indicators)?  | 3.50 | 1.03 |
| Do you analyse indicators of certain problems in the organization (problems of productivity, lagging behind competitors, dissatisfaction and pressure of consumers and customers, dissatisfaction and complaints of employees, technological changes, restructuring, absenteeism, fluctuations, accidents)? | 3.59 | 1.05 |
| Do you analyse the work performance of employed individuals in each workplace (productivity, fulfilment of plans, absences and delays, customer complaints, etc.)?  | 3.89 | 0.99 |
| Do you analyse and / or check the knowledge of employed individuals in each workplace (professional, functional, general business ...)?   | 3.35 | 1.16 |
| Do you analyse and / or check the abilities and skills of employed individuals in each workplace (intellectual, communication, interpersonal, problem, analytical, teamwork, creativity, innovation ...)?   | 3.43 | 0.98 |
| Do you analyse and / or check the personality traits of the employees employed in each workplace (motivation, energy level, ethics, self-confidence, character, etc.)?  | 3.30 | 1.17 |
| Do you identify organizational needs for training and education?  | 3.70 | 0.96 |
| Do you identify and define the individual education needs of each employee individually?  | 3.43 | 1.03 |
| Do you set different goals for different educational needs, groups and programs of individual employees or more of them?  | 3.39 | 1.06 |

M – Mean; SD –Standard Deviation  
Source: Own research

The tables 4, 5, 6, 7 and 8 refer to the second phase of the training and education process - planning and organizing of training. Table 4 shows the average grades for planning and organizing training and education (goals, content, and programs) in the researched companies.



**Table 4.** Planning and organizing training and education (goals, content, and programs)

|   | M    | SD   |
|---|------|------|
| New employees are provided with the necessary information to do their job effectively (access to e-mail, necessary regulations, procedures, instructions, etc.)                       | 4.13 | 0.98 |
| New employees are enabled to get acquainted with the organization's past, present, vision and mission, strategy, goals, organizational culture, values, ways of doing business, etc.) | 3.74 | 1.00 |
| Socialization of new employees with organizational culture, values, etc. ...  | 3.80 | 1.05 |
| The general goals of employee training and education have been determined (raising competitiveness, improving work performance, updating knowledge and skills of employees, etc...)   | 3.65 | 0.95 |
| Specific goals have been identified that focus on the segment of behaviour or area of work performance that needs to be changed or improved   | 3.61 | 0.98 |
| Training is provided for the current job of the employee  | 3.89 | 0.97 |
| Employees are trained to expand and deepen knowledge and skills to adapt to changes in work and technology  | 3.65 | 0.92 |
| Training is provided for the basic knowledge and skills of employees  | 3.80 | 0.91 |
| Training is provided for technical or professional skills in individual professions   | 3.72 | 0.98 |
| Employees are trained in social or interpersonal skills   | 2.96 | 1.19 |
| Employees are trained in conceptual or strategic skills   | 2.72 | 1.11 |
| Training and education of employees for career development, preparation for advancement, and performing more complex and responsible tasks in the organization                        | 2.91 | 1.11 |
| Training and education of employees and their preparation for future changes and tasks (education for the future and flexibility)   | 3.09 | 1.15 |
| M – Mean; SD –Standard Deviation  |      |      |

Source: Own research

The studied companies to the greatest extent provide “new employees with the necessary information to do their job effectively (access to e-mail, necessary regulations, procedures, instructions, etc.)”, “training for the current job of the employee”, “socialization of new employees with organizational culture, values, etc.” and “training for the basic knowledge and skills of employees”. Companies rarely provide their employees with “training in conceptual or strategic skills” and “training and education for career development, preparation for advancement and performing more complex and responsible tasks in the organization”.

Table 5 shows how the studied companies organize and conduct training and education of employees.

**Table 5.** Organizing and conducting training and education of employees

|   | M    | SD   |
|---|------|------|
| Enables and encourages continuous lifelong learning for employees to enable them acquiring the necessary skills for the job as well as acquiring new and expand existing knowledge? | 3.17 | 1.20 |
| Encourages, benefit and values non-formal employee education?   | 3.39 | 1.24 |
| Sends its employees to train outside the company to acquire new competencies and those they lack (other companies, courses, specializations, etc.)?                                 | 3.17 | 1.30 |
| Enables the participation of employees in seminars, conferences, etc. in order to acquire the necessary and missing new and improve existing knowledge and competencies?            | 3.24 | 1.20 |
| Sends its employees for additional education in educational institutions in order to acquire the missing competencies?  | 2.93 | 1.29 |
| Sends its employees for education and certification in order to obtain the appropriate certificates to perform certain jobs?  | 3.17 | 1.35 |
| M – Mean; SD –Standard Deviation  |      |      |

Source: Own research

Researched companies to the greatest extent encourage, benefit and value non-formal employee education (3.39) and they enable the participation of employees in seminars, conferences, etc. in order to acquire the necessary and missing new and improve existing knowledge and competencies (3.24). They rarely they send their employees for additional education in educational institutions in order to acquire the missing competencies.

Table 6 shows descriptive statistics for assessing the frequency of using different methods and techniques of employee education. Research findings show that the most commonly used method and technique of employee education is “mentoring” with a score of 3.78 and it is followed by “a method of coaching subordinates when a more experienced employee or manager is teaching an employee” with rating 3.72. The “simulation learning” with score 2.41 and “Training in other companies, organizations, training centres” with score 2.46 are used very little and they have low ratings.

**Table 6.** Methods and techniques of employee education

|   | M    | SD   |
|---|------|------|
| A method of coaching subordinates when a more experienced employee or manager is teaching an employee           | 3.72 | 1.09 |
| Job rotation; i.e., moving employees according to a predetermined time schedule from one job to another         | 2.74 | 1.18 |
| Assignment of work tasks where lower levels are provided with experience working on specific problems and tasks | 3.15 | 0.99 |
| Mentoring   | 3.78 | 1.11 |
| Lectures  | 2.87 | 1.26 |
| Case study method; i.e. case study from practice  | 2.76 | 1.04 |
| Audiovisual materials that employees can watch, listen to, etc. (audio, video, power point, etc.)               | 2.87 | 1.38 |
| Simulation learning   | 2.41 | 1.29 |
| Education via the Internet and Internet platforms   | 3.43 | 1.22 |
| Participation in seminars, conferences, courses, and other forms of education outside the company               | 3.13 | 1.38 |
| Training in other companies, organizations, training centres...   | 2.46 | 1.38 |
| Education in educational institutions (schools, colleges, universities...)                                      | 2.54 | 1.28 |

M – Mean; SD –Standard Deviation  
Source: Own research

**Table 7.** Additional methods and techniques used to educate managers

|  | M    | SD   |
|--|------|------|
| Method of training by senior managers  | 3.57 | 1.19 |
| Manager rotation   | 2.46 | 1.22 |
| Assigning and teaching deputies (future leader)  | 3.09 | 1.19 |
| Mentoring  | 3.33 | 1.33 |
| Learning through participation in tasks and projects   | 3.85 | 1.15 |
| Case study method; i.e. case study from practice   | 3.26 | 1.14 |
| Participation in seminars, conferences, courses and other forms of education outside the company | 3.22 | 1.36 |
| Training in other companies, organizations, training centres...                                  | 2.80 | 1.38 |

Education in educational institutions (schools, colleges, universities...)  
M – Mean; SD –Standard Deviation

Source: Own research

Table 7 shows additional methods and techniques used to educate managers in the studied enterprises. Additional methods and techniques that are most commonly used to educate managers in researched companies are: “Learning through participation in tasks and projects”, “Method of training by senior managers” and “Mentoring”. On the other hand, additional methods and techniques that are least used to educate managers are: “Manager rotation”, “Education in

educational institutions (schools, colleges, universities...)” and “Training in other companies, organizations, training centres...”.

Table 8 shows average grades for evaluation - the process of checking the degree to which the set educational goals have been achieved and in which the education has achieved the desired effects.

**Table 8.** Evaluation - the process of checking the degree to which the set educational goals have been achieved and in which the education has achieved the desired effects

|   | M    | SD   |
|---|------|------|
| Performs evaluation by participants at the end of the training  | 2.85 | 1.25 |
| Performs evaluation by instructors / lecturers at the end of the training   | 3.00 | 1.25 |
| After the training, the participants are evaluated by the chief, colleagues, or subordinates  | 3.30 | 1.41 |
| During the training, it continuously surveys (monitors) the participants  | 2.91 | 1.21 |
| Performs tests before and after the program   | 2.46 | 1.28 |
| Evaluates the opinion and satisfaction of participants with training, educational program, conditions, teachers and content (survey questionnaire)  | 2.76 | 1.29 |
| Evaluates the degree to which participants have adopted and know the concepts, principles, facts, techniques, and skills presented by the program (knowledge tests)                                       | 2.70 | 1.17 |
| Monitors how much participation in the educational program has really changed behaviour at work,; i.e., whether a positive transfer of what has been learned to the work situation and work has been made | 3.00 | 1.07 |
| After the training, analyses the specific results and performance of employees who attended the training  | 3.33 | 1.16 |
| Uses quantitative criteria to evaluate training results (performance, sales volume, delivery time, increased productivity, absenteeism, fluctuation, etc.)  | 3.07 | 1.12 |
| Uses qualitative criteria to evaluate the training results (attitudes, perceptions, new ideas, different ways of thinking, dissemination of knowledge, etc.)  | 3.15 | 1.21 |

M – Mean; SD –Standard Deviation

Source: Own research

The overall scores for “the Evaluation” are on average lower than the scores for “Analysis and identification of training and education needs” and “Planning and organizing training”, so it can be concluded that this stage in the process was the least used. The techniques that the companies use the most are: “After the training, analysing the specific results and performance of employees who attended the training”, “After the training, the evaluating participants by the chief, colleagues or subordinates” and “Using qualitative criteria to evaluate the training results (attitudes, perceptions, new ideas, different ways of thinking, dissemination of knowledge, etc.).

### Estimation of business performance

Estimation of business performance was explored through a customised BSC method. Four perspectives for BSCs and trends for the past three years have been explored. Table 9 shows descriptive statistics for assessing enterprise's business performance on the BSC dimensions.

**Table 9.** Enterprise's business performance (data before the appearance of the COVID-19 virus)

|   | M    | SD   |
|---|------|------|
| Financial perspective   |      |      |
| Income  | 3.63 | 1.08 |
| Profit  | 3.57 | 1.05 |
| Costs   | 3.47 | 0.92 |
| Loss  | 3.70 | 1.02 |
| Customer perspective  |      |      |
| Market share  | 3.61 | 0.91 |
| Retention of existing customers   | 3.74 | 1.02 |
| Retrieving new customers  | 3.80 | 0.78 |
| Customer satisfaction   | 3.93 | 0.90 |
| The internal business processes perspective                                 |      |      |
| Introduces innovations in business process                                  | 3.70 | 0.92 |
| Percentage of errors made   | 3.17 | 0.80 |
| Finishes production and supplies the product / service to customers in time | 3.83 | 0.95 |
| After-sales service / customer service                                      | 3.83 | 0.93 |
| The learning and growth perspective   |      |      |
| Investments in training and education of employees                          | 3.33 | 0.87 |
| Enable employees to use new technologies                                    | 3.83 | 0.95 |
| Mutual employee collaboration and knowledge sharing                         | 3.93 | 0.95 |
| Empowerment and consideration of Employee Suggestions                       | 3.87 | 0.98 |
| M – Mean; SD –Standard Deviation  |      |      |

Source: Own research

The average grades are high for all perspectives and the highest average grades are customer perspective (Retrieving new customers and Customer satisfaction), the internal business processes perspective (Finishing production and supplies the product / service to customers in time, After-sales service / customer service, Enabling employees to use new technologies) and the learning and growth perspective (Mutual employee collaboration and knowledge sharing and Empowerment and consideration of Employee Suggestions).

Correlation of training and education of human resources and business performance of SMEs

The average scores for all observed variables are high (Table 10). Looking into the process of education and training of human resources in the studied enterprises, the managers rated best Analysis and identification of training and

education needs (3.51) and the lowest rated Evaluation (2.96). The managers rated best the customer's perspective in the enterprise with the rate 3.77 and then the learning and growth perspective with the rate 3.74. The worst is the perceived financial perspective with the rate 3.59 (Table 10).

**Table 10.** Average scores of the researched variables

|   | M    | SD   |
|---|------|------|
| Analysis and identification of training and education needs | 3.51 | 0.78 |
| Planning and organizing training                            | 3.22 | 0.74 |
| Evaluation  | 2.96 | 0.99 |
| Financial perspective                                       | 3.59 | 0.78 |
| Customer perspective  | 3.77 | 0.76 |
| The internal business processes perspective                 | 3.63 | 0.64 |
| The learning and growth perspective                         | 3.74 | 0.80 |
| M – Mean; SD –Standard Deviation                            |      |      |

Source: Own research

Table 11 presents correlation of studied variables in the whole sample. The correlation of training and education of human resources and small and medium-sized businesses has been calculated by determining the correlation coefficient between training and education of human resources and business performances. Business performance is calculated using a BSC model. It also calculated the correlation of training and education of human resources and each of the perspectives from the BSC model in particular.

According to the results of the research, it has been found that there is a significant correlation between the training and education of human resources and the business performance of small and medium enterprises. All correlations are also positive for each phase of the training and education process. Based on the results of the study it can be concluded that hypothesis number 1 is fully accepted.

The correlations between training and education of human resources and all four perspectives of BSCs are significant. According to the research results, it can be concluded that the hypotheses H1a, H1b, H1c, H1c are confirmed.

Table 12 shows the correlation of researched variables in the subsample of small enterprises. All correlations are positive and are significant for the customer perspective and the learning and growth perspective.

Table 13 shows correlation of researched variables in the subsample of medium enterprises. All correlations are positive and are significant for the customer perspective, the internal business processes perspective and the learning and growth perspective.

**Table 11.** Correlations of researched variables in the whole sample

|   |    | Financial perspective     | Customer perspective       | The internal business processes perspective | The learning and growth perspective |
|---|----|---------------------------|----------------------------|---|-------------------------------------|
| Analysis and identification of training and education needs | CC | <b>0.358<sup>*A</sup></b> | <b>0.539<sup>**A</sup></b> | <b>0.345<sup>*B</sup></b>                   | <b>0.476<sup>**B</sup></b>          |
|   | p  | 0.015                     | <0.001                     | 0.019                                       | 0.001                               |
|   | N  | 46                        | 46                         | 46  | 46                                  |
| Planning and organizing training                            | CC | <b>0.252<sup>A</sup></b>  | <b>0.602<sup>**A</sup></b> | <b>0.381<sup>**B</sup></b>                  | <b>0.513<sup>**B</sup></b>          |
|   | p  | 0.091                     | <0.001                     | 0.009                                       | <0.001                              |
|   | N  | 46                        | 46                         | 46  | 46                                  |
| Evaluation  | CC | 0.194                     | <b>0.379<sup>**A</sup></b> | <b>0.333<sup>*B</sup></b>                   | <b>0.446<sup>**B</sup></b>          |
|   | p  | 0.196                     | 0.010                      | 0.024                                       | 0.002                               |
|   | N  | 46                        | 46                         | 46  | 46                                  |

**\*\*.** Correlation is significant at the 0.01 level (2-tailed).

**\***. Correlation is significant at the 0.05 level (2-tailed).

CC - Correlation Coefficient; A-Spearman's rho; B-Pearson Correlation

Source: Own research

**Table 12.** Correlations of researched variables in the subsample of small enterprises

|   |    | Financial perspective | Customer perspective       | The internal business processes perspective | The learning and growth perspective |
|---|----|-----------------------|----------------------------|---|-------------------------------------|
| Analysis and identification of training and education needs | CC | 0.359 <sup>A</sup>    | <b>0.365<sup>*B</sup></b>  | 0.126 <sup>B</sup>                          | <b>0.515<sup>**B</sup></b>          |
|   | p  | 0.052                 | 0.047                      | 0.508                                       | 0.004                               |
|   | N  | 30                    | 30                         | 30  | 30                                  |
| Planning and organizing training                            | CC | 0.241 <sup>A</sup>    | <b>0.510<sup>**B</sup></b> | 0.270 <sup>B</sup>                          | <b>0.508<sup>**B</sup></b>          |
|   | p  | 0.200                 | 0.004                      | 0.149                                       | 0.004                               |
|   | N  | 30                    | 30                         | 30  | 30                                  |
| Evaluation  | CC | 0.133 <sup>A</sup>    | 0.287 <sup>B</sup>         | 0.261 <sup>B</sup>                          | <b>0.592<sup>**B</sup></b>          |
|   | p  | 0.484                 | 0.124                      | 0.164                                       | 0.001                               |
|   | N  | 30                    | 30                         | 30  | 30                                  |

**\*\*.** Correlation is significant at the 0.01 level (2-tailed).

**\***. Correlation is significant at the 0.05 level (2-tailed).

CC - Correlation Coefficient; A-Spearman's rho; B-Pearson Correlation

Source: Own research

**Table 13.** Correlations of researched variables in the subsample of medium enterprises

|   |    | Financial perspective | Customer perspective       | The internal business processes perspective | The learning and growth perspective |
|---|----|-----------------------|----------------------------|---|-------------------------------------|
| Analysis and identification of training and education needs | CC | 0.372 <sup>B</sup>    | <b>0.755<sup>**B</sup></b> | <b>0.612<sup>*B</sup></b>                   | <b>0.533<sup>*B</sup></b>           |
|   | p  | 0.156                 | 0.001                      | 0.012                                       | 0.034                               |
|   | N  | 16                    | 16                         | 16  | 16                                  |
| Planning and organizing training                            | CC | 0.226 <sup>B</sup>    | <b>0.695<sup>**B</sup></b> | <b>0.534<sup>*B</sup></b>                   | <b>0.589<sup>*B</sup></b>           |
|   | p  | 0.400                 | 0.003                      | 0.033                                       | 0.016                               |
|   | N  | 16                    | 16                         | 16  | 16                                  |
| Evaluation  | CC | 0.114 <sup>B</sup>    | 0.432 <sup>B</sup>         | 0.415 <sup>B</sup>                          | 0.421 <sup>B</sup>                  |
|   | p  | 0.675                 | 0.095                      | 0.110                                       | 0.104                               |
|   | N  | 16                    | 16                         | 16  | 16                                  |

**\*\*.** Correlation is significant at the 0.01 level (2-tailed).

**\***. Correlation is significant at the 0.05 level (2-tailed).

CC - Correlation Coefficient; B-Pearson Correlation

Source: Own research

**Table 14.** Differences in the researched variables regarding the size of the enterprise

|   | Enterprise size | M                 | SD                | p <sup>A</sup>     |
|---|-----------------|-------------------|-------------------|--------------------|
| Analysis and identification of training and education needs | small           | 3.37              | 0.70              | 0.099              |
|   | medium          | 3.77              | 0.88              |                    |
| Planning and organizing training                            | small           | 3.15              | 0.72              | 0.346              |
|   | medium          | 3.36              | 0.77              |                    |
| Evaluation  | small           | 2.75              | 0.94              | <b>0.046</b>       |
|   | medium          | 3.35              | 0.98              |                    |
| Financial perspective                                       | small           | 3.72 <sup>C</sup> | 1.25 <sup>D</sup> | 0.138 <sup>B</sup> |
|   | medium          | 3.88 <sup>C</sup> | 1.21 <sup>D</sup> |                    |
| Customer perspective  | small           | 3.73              | 0.72              | 0.575              |
|   | medium          | 3.86              | 0.85              |                    |
| The internal business processes perspective                 | small           | 3.58              | 0.61              | 0.501              |
|   | medium          | 3.72              | 0.70              |                    |
| The learning and growth perspective                         | small           | 3.80              | 0.66              | 0.488              |
|   | medium          | 3.63              | 1.04              |                    |

A-t test for independent samples; B-Mann-Whitney U test

M – mean; SD - standard deviation; C-medina; D-interquartile range

Source: Own research

Table 14 shows differences in the studied variables with regard to the size of the enterprise. A statistically significant difference between small and medium enterprises was found in the dimension of evaluation. Medium-sized enterprises have a significantly higher score on this dimension than small enterprises. No statistically significant difference was found in other dimensions of HRM and BSC perspectives regarding the size of the company. Despite that, it can be seen from the average grades that, except for the perspective of learning and growth, the average grades are higher in medium-sized companies.

According to the presented results in table 14 the hypothesis H2 - “There is a difference in the correlation between training and education of human resources and business performance of small and medium-sized enterprises in terms of their size” is partly confirmed because there is a difference in correlations, but it is not significant except for regarding the evaluation dimension.

From the presented research, it can be concluded that the best rated are the customer perspective and the learning and growth perspective, which is very positive for SMEs and their business performance in terms of the future, including financially. It is evident that in the studied companies the focus is on customers and on investing in training and education of employees, and through these two perspectives there are better results in all perspectives.

Companies mainly use training and education in companies, while a very small number of companies use education of employees and managers outside the company, which is not good and there should be more cooperation with educational institutions but also other modes of education outside the company.

The results of the study of SMEs implemented in the Federation of Bosnia and Herzegovina showed that a

significant positive correlation exists between training and education of human resources and the business performance of the small and medium enterprises. The results also show that all correlations are positive between each stage of training and education of HR and all BSC perspectives.

The results of the research also showed that in medium-sized enterprises there are higher average grades for all stages of the training and education process than those in small enterprises.

According to previous research, SMEs do not invest in training and education, nor in the development of HR as large corporations.

The results showed that companies should invest in all phases of the training and education process equally in order to achieve better results, because currently “the evaluation” stage has lower grades than other stages. The evaluation process, although it seems inconspicuous, is very important so that in the next process the HR department knows what mistakes were made and where the process should be improved. Also, it is very important to get feedback from employees.

## Conclusion

Training and education activities allow organizations to adapt to market changes and sudden crises, compete with increasing competition, improve themselves and others, innovate and introduce new technology, produce new products, increase safety, improve services and reach strategic goals. Organizations invest in training and education of human resources more and more because they believe a skilled and trained workforce represents a competitive advantage, especially for SMEs.

The authors suggested that investment in training and development enhances competitive advantage, yields a return through better production, allows organizations to adapt, compete, improve performance, innovate, produce, be secure, improve service, and achieve goals, has a positive effect on job involvement, job satisfaction and organizational commitment. There is a calculable benefit to training employees. Better trained employees can work more and better, make fewer errors, require less supervision, have more positive attitudes and lower rates of attrition, and produce higher-quality products and services. These benefits positively affect the competitiveness and success of organizations (Dustmann, Fitzenberger & Machin, 2007; Truitt, 2011; Salas, Tannenbaum, Kraiger & Smith-Jentsch, 2012; Saks, Haccoun & Belcourt, 2015). Reviews of T&D literature have identified the multiple benefits of T&D for individuals, teams, organisations, and society (Susomrith, Coetzer & Ampofo, 2019, p. 498). Both employees and their organizations benefit from training and development. The individual develops his competencies and is more valuable in the labor market, has better compensation, progresses faster, and the organization increases its efficiency and effectiveness. Organizations find it easier to attract and retain new employees and reduce unwanted departures from the organization.

Susomrith, Coetzer & Ampofo (2019) wrote that small firm employees are less likely to obtain access from formal T&D events than are employees in large firms. Studies have identified several “barriers” to the provision of firm-sponsored, formal T&D in smaller firms. Thus, small firms have a strong preference for and are highly reliant upon informal learning processes. However, in some types of jobs, mere informal learning activities would be sufficient to acquire the depth of understanding necessary for complex work activities that require a high level of conceptual knowledge. This study shows a similarity with that research because it shows that the surveyed companies more often use non-formal ways of education. Furthermore, a study of companies in South Korea presented by Saks, Haccoun & Belcourt (2015) found that those that invest more in on-job learning achieve higher levels of learning outcomes (i.e., employee competence, labour productivity and enthusiasm of employees), and financial performance. In other words, investment in on-job training influences organizational performance through learning outcomes. The aforementioned study can be related to the results of this research which shows that companies apply on-the-job training more than off-the-job training, and then this can be positive given that this Korean study has proven positive effects of it.

Since Susomrith, Coetzer & Ampofo (2019, p. 498) stated that medium-sized businesses tend to be more similar to large businesses than small businesses, and thus they are managed in a relatively more formalised, professionalised and structured manner compared to small businesses. This research has shown similar outcomes, as it has shown that medium-sized companies have higher scores than small ones (although it should be noted that this difference is not

significant according to the results of this survey). Some authors have investigated the effect of training and education on employees (Truitt, 2011), and some authors sought an impact on organizational performance (Saks, Haccoun & Belcourt, 2015). The link between training and organizational performance is strongly supported by research.

Past international research, presented in the theoretical section, that investigated the impact of training on the performance of companies, has shown that training and development affect productivity growth and higher operating profits (a survey conducted by the American Management Association), have a positive impact on human resources (e.g., employee attitudes, motivation, behaviour), organizational performance outcomes (e.g., performance and productivity) and financial outcomes (e.g., profit, financial indicators) (Research on training and organizational effectiveness). Likewise, these studies have shown that organizations that invest in training and education have higher revenues, profits, and productivity growth than companies that invest less in training. Research by the Conference Board of Canada found that those who spend the most on training and development believe they outperform their competitors in a number of performance indicators, such as employee satisfaction, customer satisfaction, productivity and profitability, compared with those that spend the least on training and development (Saks, Haccoun & Belcourt, 2015.). The research has not looked at training and education as a process and have not investigated the connection of individual phases of the training and education process on the business performance of companies. Hence the originality of this research, which observed the impact of all phases on the business performance of the company and concluded that companies do not pay enough attention to “evaluation”.

Also, the results differ and are improved compared to previous research, as it was concluded that the best rated are the customer perspective and the learning and growth perspective, and that in the surveyed companies the focus is on customers and investment in employee training and education, and through these two perspectives there are better results in all perspectives.

The results can be used for the owners of SME's, management of SME's and departments of HRM, all of whom can benefit from this research. The obtained results clearly and unequivocally point to the need to develop a human resources management function in enterprises, and in this context, that special attention is paid to training and education of human resources, because by having competitive staff, enterprises are able to achieve their business objectives and compete with competition and ensure survival and development. Enterprises with higher-quality attractiveness and staff selection achieve better business performance viewed from all four perspectives of the BSC. It is necessary to create an organizational climate and organizational culture that supports employee learning and development, where the company monitors its employees and invests in them as their most valuable resources.

By investing in training and education, the company will raise competitive abilities, improve work performance, update the knowledge and skills of employees, avoid managerial obsolescence, direct new employees, prepare them for promotion and managerial succession, and meet individual growth needs.

With more choices and higher expectations from their jobs, quality employees are studying potential employers more carefully than ever. HRM and organizations should provide employees with flexibility, good pay, career development and advancement, organizational culture, additional values and a learning culture. Doing so will attract quality candidates, develop them, and retain them, while also creating better business results. If employees are not allowed to learn and progress, they will be dissatisfied or they will go to a company that invests more in its employees.

Although learning and development brings certain costs in the short term, in the long run it is an investment in the business performances of every enterprise.

SMEs in Bosnia and Herzegovina, due to the bad general political and economic situation, large emigration of the population, and the lack of labour force in B&H, despite the high unemployment, have difficulties putting together quality staffs. They need to pay special attention to training and education of employees because they are competing for staff on the labour market.

A further aspect of the originality of this research is evinced by the statements of numerous researchers who indicated that there is limited research on human resource development in small and midsized businesses.

The size of the sample and the method of creating the research sample represent the limits of the research. In the study some qualitative data enabled subjectivity because a subjective evaluation of the state as well as of impacts has been conducted.

A recommendation for future research is to enlarge the sample. Furthermore, for some future research beside the qualitative data, certain quantitative data need to be used and the research should be repeated in a certain period to study any evident changes. Another suggestion for future research is to compare large enterprises or to conduct a similar study of company employees, since the research focuses only on the management of organizations.

#### Endnote

<sup>1</sup> Federation of Bosnia and Herzegovina (2009). Law on accounting and audit in the Federation of Bosnia and Herzegovina. Sarajevo: Federation of Bosnia and Herzegovina, Chapter I. General Provisions, Article 5, p. 3.

## References

- Bahtijarević-Šiber, F. (1999). *Management ljudskih potencijala*. Zagreb: Golden marketing.
- Barber, A. E. (1999). Implications for the design of human resource management—Education, training, and certification. *Human Resource Management*, 38(2), 177-181.
- Biazzo, S., & Garengo, P. (2012). *Performance Measurement with the Balanced Scorecard – A Practical Approach to Implementation within SMEs*. Heidelberg, Dordrecht, London, New York: Springer. <https://doi.org/10.1007/978-3-642-24761-3>
- Buble, M. (2000). *Management*. Split: Ekonomski fakultet Split.
- Dustmann, C., Fitzenberger, B., & Machin, S. (2007). The economics of education and training. *Empirical Economics*, 32(2-3), 255.
- Dessler, G. (2015). *Upravljanje ljudskim potencijalima*. 12. globalno izdanje. Zagreb: Mate d.o.o.
- Dyson, K. (1990). *Small and medium sized enterprises*. London, UK: Routledge in association with the University of Bradford and Spicers Centre for Europe Ltd.
- Federal Ministry of Development, Entrepreneurship and Crafts (November, 2019). *State of development of the SME sector in the Federation of Bosnia and Herzegovina for 2018*. Mostar, Bosnia and Herzegovina: Federal Ministry of Development, Entrepreneurship and Crafts.
- Federation of Bosnia and Herzegovina (2009). *Law on accounting and audit in the Federation of Bosnia and Herzegovina*. Sarajevo: Federation of Bosnia and Herzegovina.
- Federation of Bosnia and Herzegovina, Parliament of the Federation of B&H (2006). *Law on Encouragement of Small Business*. Sarajevo: Federation of Bosnia and Herzegovina, Parliament of the Federation of B&H.
- Gully, S. M., & Phillips, J. M. (2005). A multilevel application of learning and performance orientations to individual, group, and organizational outcomes. *Research in Personnel and Human Resources Management*, 24, 1-51.
- Kaplan, R. S., & Norton, D. P. (1996). *Translating Strategy into Action: The Balanced Scorecard*. Boston, Massachusetts: Harvard Business School Press.
- Klepić, I., & Klepić, Z. (2020). Intentions and perceptions of the entrepreneurial career among students. In M. Milkovic, K. Hammes, & O. Bakhtina, (Eds.), *Economic and Social Development: Book of Proceedings* (pp. 62-72). Varaždin, Croatia: Varazdin Development and Entrepreneurship Agency, Varazdin, Croatia / University North, Koprivnica,



- Croatia / Croatian Academy of Sciences and Arts, Zagreb, Croatia / Faculty of Management University of Warsaw, Warsaw, Poland / Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco.
- Klepić, I., Klepić Z., & Mabić, M. (2020). Correlation between organizational creativity and business performance of small and medium sized enterprises. In D. K. Dimitrov, D. Nikoloski, & R. Yilmaz, (Eds.), *Proceedings of XIV. International Balkan and Near Eastern Social Sciences Congress Series on Economics, Business and Management* (pp. 263-274). Plovdiv, Bulgaria: University of Agribusiness and Rural Development/Bulgaria; University "St. Kliment Ohridski" Faculty of Economics/Macedonia & IBANESS.
- Klepić, I. (2019). Correlation of Recruitment and Selection of Human Resources and the Performance of Small and Medium Enterprises. *Naše gospodarstvo/Our Economy*, 65(4), 14–26. DOI: 10.2478/ngoe-2019-0016
- Klepić, I., Mabić, M., & Madžar, D. (2020). Recruitment and selection of human resources and organizational creativity in small and medium-sized enterprises. *BH Economic Forum*, 12(1), 11-34.
- Lesko Bošnjak, L., & Klepić, Z. (2013). *Osnove menadžmenta ljudskih potencijala*. Mostar: University of Mostar, Faculty of Economics.
- Nair, M. (2004). *Essentials of Balanced Scorecard*. New Jersey, USA: John Wiley and Sons. <https://doi.org/10.1002/9781118386774>
- Rowden, R. W., & Conine, C. T. (2005). The impact of workplace learning on job satisfaction in small US commercial banks. *Journal of Workplace Learning*, 17, 216-230. DOI:10.1108/13665620510597176
- Saks, A. M., Haccoun, R. R., & Belcourt, M. (2015). *Managing performance through training and development*. 7th edition (Canadian ed.). Canada: Nelson Education.
- Salas, E., Tannenbaum, S. I., Kraiger, K., & Smith-Jentsch, K. A. (2012). The science of training and development in organizations: What matters in practice. *Psychological science in the public interest*, 13(2), 74-101.
- Schmeisser, W., Clausen, L., & Lukowsky, M. (2008). *Berliner Balanced Scorecard: Customer Perspective*. London: Bookboon.
- Schäfer, T., & Teuber, J. (2007). *Integrierte Lean Balanced Scorecard: Methoden, Instrumente, Fallbeispiele*. Wiesbaden, Germany: Springer-Verlag.
- Susomrith, P., Coetzer, A., & Ampofo, E. (2019). Training and development in small professional services firms. *European Journal of Training and Development*, 497-515.
- Smith F. R. (2007) *Business Process Management and the Balanced Scorecard Using Processes as Strategic Drivers*. Hoboken, New Jersey: John Wiley & Sons, Inc.
- Truitt, D. L. (2011). The effect of training and development on employee attitude as it relates to training and work proficiency. *Sage Open*, 1(3), 1-13.
- Von Bergen, C. W., & Benco, D. C. (2004). A balanced scorecard for small business. In *Proceedings of the United States Association for Small Business and Entrepreneurship Conference* (pp. 15-18).

## Povezava med usposabljanjem in izobraževanjem kadrov ter uspešnostjo malih in srednjih podjetij

### Izвлеček

Kadrovski oddelek (HR) je eden od ključnih oddelkov vsakega podjetja. To zlasti velja za majhna in srednja velika podjetja (MSP), kjer kadrovski oddelek pomeni konkurenčno prednost, ki vpliva na preživetje in razvoj. Spremembe v poslovnem okolju, potreba po novih znanjih, veščinah in sposobnostih zaradi sprememb na trgu in v poslu povečujejo vrzel med obstoječimi in zahtevanimi kompetencami zaposlenih. V procesu usposabljanja in izobraževanja kadrov zaposleni pridobijo potrebno znanje, izboljšajo svoje sposobnosti in/ali pridobijo nove veščine in izkušnje. Še pomembnejše pa je, da zaposleni pridobijo kompetence, ki jih potrebujejo da ostanejo (ali postanejo) uspešni pri svojem delu in prihodnjih delovnih mestih, ki jih bodo zasedali v podjetju. Glavni cilj te raziskave je ugotoviti povezavo med usposabljanjem in izobraževanjem kadrov ter uspešnostjo MSP. Raziskava je bila izvedena v MSP v Federaciji Bosne in Hercegovine med avgustom in septembrom 2020. Za raziskavo je bil ustvarjen izvorni vprašalnik, ki je bil uporabljen za pridobivanje mnenj o usposabljanju kadrov in izobraževanju višjega vodstva ter štirih perspektivah poslovanja podjetij na podlagi modela Balanced Scorecard. Podatke smo analizirali z uporabo SPSS 20,0. Iz statističnih postopkov so bili uporabljeni: Pearsonov koeficient korelacije, t-test za neodvisne vzorce, Spearmanov korelacijski koeficient in Mann-Whitneyjev U-test (odvisno od porazdelitve rezultatov). Rezultati raziskave so pokazali, da obstaja povezava med usposabljanjem in izobraževanjem kadrov ter uspešnostjo MSP. Poleg tega so rezultati raziskave pokazali razlike med podjetji glede na njihovo velikost, se pravi v majhnih in srednje velikih podjetjih. Vendar te razlike niso omembe vredne.

**Ključne besede:** poslovna uspešnost, korelacija, izobraževanje, majhna in srednje velika podjetja, usposabljanje