The Impact of Employees' Training on Their Performance Improvements

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ABSTRACT

Purpose: Performance management is an increasingly important part of strategic human resources management. Employee performance is related to many factors, but education and training are two of the most significant. So far, literature has confirmed that a strategic focus on the employee training leads to the successful achievement of an organization's goals, development, and ultimately to performance. However, there is no consensus about the right level of the training.

Methodology/Approach: The objective of this article is to analyze the impact of training programs on employees' performance in case of 839 analysts in a Mexican public financial institution. The research was carried out over a two-year period and the data were evaluated using descriptive statistics and ANOVA.

Findings: The results reveal that low number of training hours, together with excessive training of more than 166 hours per year has limited or no impact on the performance. In fact, when employees had more than 166 hours of training, the training was negatively related to their performance.

Research Limitation/Implication: Management of organizations should carefully plan the amount of provided training hours per each employee. The impact of training varies based on seniority and number of hours spent on training, but there are no significant differences between employees' gender.

Originality/Value of paper: The originality of this article lies in the identification and evaluation of impact of employee training hours on performance in organization, as well as in the identification of breaking point of number of training hours which may lead to actual decrease of performance.

Category: Research paper

Keywords: employee assessment; performance; training adaption; seniority; workplace

1 INTRODUCTION

Current growing importance of information and innovation in today's competitive environment, especially now when dealing with impact by COVID-19 has started faster process of interrelated changes with impacts on each employee of an organization, as well as on an organization as a whole (Cerne, Jaklic and Skerlavaj, 2013). To develop skills, competences and potential of employees, each organization needs to improve and train their knowledge, skills and abilities to support development of productivity across different conditions and innovation potential of each individual (Na-Nan and Sanamthong, 2019). Every employee is a bearer of knowledge and has potential that an organization needs to use to its own development, but research shows that organizational development is usually limited by lack of educated and qualified human resources (Diesel and Scheepers 2019; Acebo and Viltard, 2018).

Employee knowledge, skills and abilities must be continuously developed through continuous training, increasing their qualifications, and thus increasing their productivity (Cerne, Jaklic and Skerlavaj, 2013; Avolio, Walumbwa and Weber, 2009). According to current studies, impact of training assessment significantly affects performance of the employees and plays a positive role in improving employees' performance (Mahmud, Wahid and Arif, 2019). Also, Guan and Frenkel (2019) found that work engagement mediates the relationship between training and in-role task performance. Furthermore, relationships between task performance and organizational citizenship behavior are moderated by type of human resource management in an organization.

Adequate focus on to human resources and their remuneration, benefits, motivation and stimulation are considered as a key area of management of every organization worldwide (Fajčíková, Urbancová and Kučírková, 2018; Turner and Kalman, 2015). Currently, we can see significant change in social responsibility of organizations towards to an active approach to employees and their remuneration management (Jain and Bhatt, 2015). It is important to realize that efficient remuneration management contains tangible and intangible rewards that leads to better employer branding and talent attraction (Jain and Bhatt, 2015; Vnoučková, Urbancová and Smolová, 2018). Festing and Schäfer (2014) proved that it is crucial to pay attention to employees' motivation through adequate remuneration and benefit system to reach positive psychological contract with employees and to increase their retention. Wilden, Gudergan and Lings (2010) state that today's high competition in the labor market, requires strategic investments in employee satisfaction. Talent management can be understood as a group of processes to attract, develop, motivate and retain employees to make them perform better (Swailes and Blackburn, 2016).

Farndale et al. (2014) pointed out that talent management is a strategic resource integration including proactive identification, development and strategic deployment of key employees with a high potential. As a result, talent management is crucial for organizations to remain competitive (Collings and

Mellahi, 2009; Goldstein and Ford, 2002) although it is sometimes unclear how the talent is translated to performance levels in organizations (McCracken, Currie and Harrison, 2016). As it is increasingly hard for companies to attract and retain talented workers, particularly those who are young and highly skilled, it is vital to offer benefits that capture employees' preferences no matter of the size of an organization, or its industry (Salgado, Flegl and Fejfarová, 2020). In this sense, talent management is a process through which it is possible to ensure that organizations have employees of required quantity and quality in accordance with current and future priorities of the organization (Collings and Mellahi, 2009).

Training activities have a positive impact on the performance of individual, teams and organizations (Aguinis and Kraige, 2009; Mpofu and Hlatywayo, 2015). For this reason, training programs have become an enormous business in terms of both the amount of effort expended and the money spent (Goldstein and Ford, 2002). The problem is that the benefit of the training is not evident on a daily basis and, thus, the expenses are hard to justify. Due to high costs of the training programs, organizations need to control and demonstrate their added value (Goldstein and Ford, 2002). According to Aguinis and Kraige (2009), U.S. organizations alone spend more than \$126 billion annually on employee training and development. Most of the money in training is spent on developing technical skills (due to its importance to get specialized employees) and managementsupervisory skills, which helps to develop leaders with the capacity to impact the business outcomes through producing extraordinary bottom-line results (Goldstein and Ford, 2002). Nevertheless, talent training must not only build new capabilities, but also continue to support and strengthen already gained capabilities (Joyce and Slocum, 2012). Therefore, our first hypothesis is developed as follows:

 H_{01} : Training has a positive effect on employees' performance.

In this case, the more training an employee takes, the better the measurable improvement.

As Farjad (2012, pp.2838) pointed out, "training evaluation is a critical component of analyzing, designing, developing, and implementing an effective training programme". However, many organizations do not collect the information to determine the usefulness of their own training programs. Usually, companies evaluate the impact of training using employees' reactions at the end of each course (Alcázar and Flegl, 2019; Goldstein and Ford, 2002). As a result, organizations fail to capitalize on the opportunity that talent management can bring them (Joyce and Slocum, 2012). So, how can we know that we have well-designed training programs? Aguinis and Kraige (2009) suggest that the effects of training on performance, although subtle, can be verified to the extent that a program created new knowledge, skills or it led to a positive change in the work environment. Furthermore, organizations must ensure that training programs meet the expectations of both organizations and individual learners, facilitate

collection and interpretation of information, in order to make responsible decisions (Abdala, 2009; Goldstein and Ford, 2002). In this sense, the main challenge for any organization is to create an objective, reliable and hard databased training evaluation. Qualitative evaluation might not be reliable since the impressions are not enough to know the effectiveness of the educational process.

To evaluate the training process, it is necessary to first check the degree of practical application that the acquired knowledge could have had in a certain period of time, reflected in the improvements in the skills and competences of the employees who took it. This leads us to think of employee performance evaluation as a fundamental element to evaluate the training, since it works as one of the main sources of information about the effects on the business or environment resulting from the improved performance of the trainee measured by the business or organizational key performance indicators (Gökhan, 2015). According to Berke (2001), performance evaluation is present at three main levels:

- Organizational, which is linked to strategic planning, both in its component areas and their interrelation, and in the processes they will carry out;
- 2. Processes, which is focused on measuring the effectiveness and coherence of the processes established at the organizational level;
- 3. Individual, whose purpose is the establishment of goals and indicators at the level of employees, in order to plan and evaluate individual's performance and to establish strategic contribution that each employee has regarding his/her position.

Also, Musriha (2019) and Su (2020) state that strategy improving employees training, compensation, motivation and organizational commitment positively affect their performance.

The performance evaluation is a continuous process for all members of the organization, in which all are evaluated by their results (quantitative objectives) and by their attitudes (qualitative objectives or competencies), in order to discover how they could be more productive in the future (Aswathappa, 2005; Gan and Trigné, 2006). All this taking into account, the evaluation must be based on objective criteria to identify what has been done well to recognize it and what has been done wrong to correct it (Gan and Trigné, 2006). In this sense, it must be clear that it is necessary that both the employee and the supervisor understand the requirements of the position, as well as the expectations to be covered, since without this, it would be impossible to perform the evaluation (Daley, 1992). If the training is not evaluated, then we have no arguments to know whether the given training is adequate, or whether the contents of the training are precise and updated. The evaluation of the training is a critical component to analyze, design, develop and implement an effective program (Farjad, 2012), which can be differentiated by age, gender and hierarchical level allowing each employee to

receive specific training necessary to improve his/her performance, avoiding frustration and unnecessary stress of employees (Gursoy, Chi and Karadag, 2013). Based on above mentioned, the second hypothesis is the following:

 H_{02} : Training has a positive effect on employees' performance regardless employees' gender (H_{02a}), age (H_{02b}) and seniority (H_{02c}).

Therefore, the objective of this article is to analyze the impact of training programs on employees' performance, considering employees' personal characteristics.

2 MATERIALS AND METHODS

2.1 Sample

The analysis is based on results from 839 employees from analysts' position in a Mexican public financial institution. More precisely, the sample only includes employees that worked in the institution during 2018 and 2019 and were evaluated regarding their performance in both years. The sample consists of 344 (41%) female and 495 (59%) male employees. The average employees' age was 36.25 years (Standard Deviation 8.86 years), in case of females the average age was 35.11 years (SD 8.85) and males 37.04 years (SD 8.86). The average employees' seniority was 11.47 years (SD 9.44), in case of females the average age was 9.97 years (SD 9.44) and males 12.50 years (SD 9.45). In order to be able to apply the statistical analysis, the sample was divided into ten categories regarding employees' age and seniority (Fig. 1 and Tab. 1).

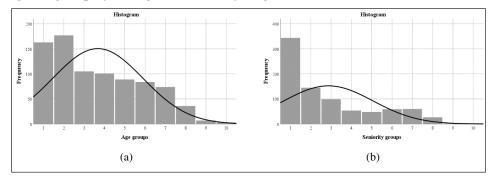


Figure 1 – Sample Distribution and Its Categories Regarding Employees' Age
(a) and Seniority (b)

Age			Seniority		
Category	N	%	Category	N	%
<23-27>	163	19.43%	<1.6-5.2>	304	36.23%
(27-31>	177	21.10%	(5.2-8.8>	152	18.12%
(31-35>	105	12.51%	(8.8-12.4>	87	10.37%
(35-39>	101	12.04%	(12.4-15.9>	69	8.22%
(39-43>	89	10.61%	(15.9-19.5>	40	4.77%
(43-47>	84	10.01%	(19.5-23.1>	38	4.53%
(47-51>	74	8.82%	(23.1-26.7>	58	6.91%
(51-55>	36	4.29%	(26.7-30.3>	45	5.36%
(55-59>	7	0.83%	(30.3-33.9>	42	5.01%
(59-63>	3	0.36%	(33.9-44.0>	4	0.48%

Table 1 – Frequency Distribution of Employees' Age and Seniority

2.2 Employees' Performance Evaluation

To evaluate the effect of training on employees' performance, we used information related to number of hours each employee took of any kind of training during the year 2019. This information was taken from the internal information system of the institution. The training is divided into five basic instruments: Diploma and Specialty courses, Specific courses, Language courses, Study commissions and Internal courses. For the purpose of our analysis, the first instrument was split into two instruments. Similarly, the Internal courses were divided into three separate instruments: Leadership, Culture and Other courses. Thus, at the end, the analysis included information related to eight specific training instruments:

- 1. Diploma courses: Framed within formal education, these studies are organized by universities and allow employees to update their knowledge for the efficient performance of the tasks according to their job profile. Each employee receives a diploma after the satisfactory completion of his/her studies. The duration of these studies is less than one year.
- 2. Specialty courses: Framed within formal education, these studies are organized by universities and allow employees to update their knowledge for their efficient performance of job tasks according to their job profile. Each employee receives a diploma after the satisfactory completion of his/her studies. The duration of these studies is more than one year.
- Specific courses: Framed within non-formal education, these are events such as courses, conferences, congresses, seminars, symposia and meetings, among others, organized by associations, institutes, universities,

specialized centers and other public or private entities. These courses aim at specific employees' needs. After the completion, employee does not achieve any academic degree.

- 4. Language courses: These courses are offered by specialized institutes and educational centers (accredited by the institution). The objective is to satisfy employees' needs to improve level of foreign languages according to their job profile.
- 5. Study commissions: Courses, conferences, congresses, seminars, symposiums and meetings, among others, organized by associations, institutes, universities, specialized centers or other entities outside the position of assignment of workers, both in national territory and abroad, aimed at covering specific needs that do not confer any academic degree.
- 6. Leadership courses: Courses belonging to the internal offer of the Institution. These courses can be, at the consideration of each area, granted to those workers with an analyst level who, due to their performance, are considered with high potential in order to prepare them for a possible promotion.
- 7. Culture courses: Open access courses that belong to the internal offer of the institution of a transversal nature aimed at reinforcing the identity of the institution in topics such as values, ethics, risk prevention, or diversity and inclusion.
- 8. Other courses: Open access courses that belong to the internal offer of the institution of a transversal nature aimed at the development of soft skills established in an institutional way for all hierarchical levels.

During the year 2019, employees took between one and 777 hours of training, where the average was 66.56 hours (SD 93.68 hours). The most common level of training was of 3 hours (23.0% of employees), followed by 7 hours (6.1%) and 4 hours (2.4%). For the purpose of the analysis, the amount of training was also divided into ten categories (Fig. 2 and Tab. 2).

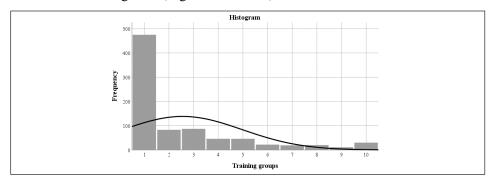


Figure 2 – Sample Distribution and Its Categories Regarding the Level of Employees' Training

Level of training					
Category	N	%			
<1-33.2>	475	56.62%			
(33.2-66.5>	83	9.89%			
(66.5-99.7>	87	10.37%			
(99.7-132.9>	46	5.48%			
(132.9-166.1>	46	5.48%			
(166.1-199.4>	22	2.62%			
(199.4-232.6>	19	2.26%			
(232.6-265.8>	20	2.38%			
(265.8-299.1>	11	1.31%			
(299.1-777>	30	3.58%			

Table 2 – Frequency Distribution of the Level of Employees' Training

The employees' performance was measured on a 5-point scale according to the internal annual evaluation process in which managers are asked to assign a score to each person on their team, based on their performance and achievement of their goals. The final grade is obtained by weighing hard skills by 90% and soft skills by 10%. The average evaluation in 2018 was 3.54 pts (SD 0.390) and in 2019 the average evaluation was 3.574 pts (SD 0.402).

2.3 Analysis of Variances (ANOVA)

Analysis of Variance (ANOVA) is based on the comparison of the variance due to the between-groups variability with that of the within-group variability. Under the null hypothesis (stating that there are no significant differences between groups in the population), the variance estimated from the within-group variability should be about the same as the variance estimated from the between-groups variability (Hinton, 2014). For our purpose, we used Multivariate ANOVA (MANOVA), concretely two-way ANOVA. This method compares the mean differences between groups that have been split into two independent factors (Hinton, 2014). The two-way ANOVA in this paper test if there is an interaction between the four independent factors (employees' gender, age and seniority and amount of training hours) on the dependent variables (performance evaluation in 2018 and 2019, and difference between the evaluation from 2018 to 2019). All the calculations were made using IBM SPSS Statistics 25.

3 RESULTS

3.1 Performance Evaluation in 2018

First, we analyze the characteristics of the performance evaluation in 2018 to obtain initial perspective about respondents' evaluation. The average evaluation of all analysts was 3.536 pts. Regarding the employees' gender, there is no statistically significant difference in the evaluation (p = 0.27), although females had an average evaluation of 3.489 pts compared to males 3.434 pts, i.e. the difference is +0.055. What is interesting, that females are much better evaluated in the youngest age group (between 23 and 27 years), where females have an average evaluation of 4.073 pts (+0.537 pts above the company average and 0.474 pts above males, p = 0.001). The youngest group of employees includes 19.4% of all employees in the company. Then, the older an employee is, the lower the evaluation. However, the evaluation is decreasing in a faster way in case of females (in average by -15.584% every age group compare to -4.035% in case of males).

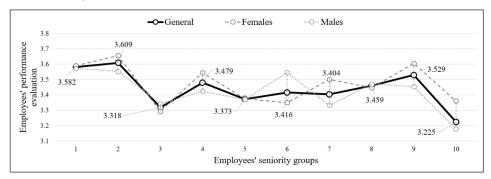


Figure 3 – The Effect of Employees' Seniority on Their Evaluation

Between 27 and 55 years of age, the evaluation of both genders is more less the same without any statistically significant difference. Males are much higher evaluated in the age group of 55 to 59 years (\pm 0.362 pts), however, due to the few observations (only 7 employees representing 0.8% of the company), this difference is not statistically significant (p = 0.312). This result corresponds to the overall effect of the employees' age. Younger employees have higher evaluation. The average evaluation of the youngest generation is 3.837 pts, which is significantly higher than the rest of the groups.

When we consider the employees' seniority (Fig. 3), the highest evaluation can be observed in case of employees between 1.5 and 8.8 years of seniority (3.582 pts, respectively 3.609 pts) and between 30.3 and 33.9 years of seniority (3.529 pts). The effect of gender in the seniority does not have statistically significant effect on the evaluation.

3.2 Performance Evaluation in 2019

Second, we analyze the characteristics of the performance evaluation in 2019 in order to discover possible differences in both years. Employees' gender has no statistically significant effect on the evaluation again (p = 0.119), although the difference between females and males increased to +0.062 pts (+0.007 pts) compared to the evaluation in 2018. The average evaluation in case of females is 3.609 pts, whereas the average evaluation of males is 3.546 pts. The growth in the difference corresponds to the overall evaluation growth. The pattern of better evaluation in case of younger female employees is not confirmed in this case. Contrary, the youngest male employees are better evaluated than females of the same age (3.745 pts compared to 3.69 pts), but this difference is not statistically significant (p = 0.559). What is confirmed is the negative effect of the employees' age on the evaluation. The older the employee is, the lower the evaluation is. Males lose in average -6.659% every age group and females lose -4.482% in the same way. Regardless employees' gender, younger employees have statistically higher evaluation. The average evaluation of the youngest employees is in average 3.716, which is higher by +0.519 pts (+13.97%).

Considering the employees' seniority, the effect is surprisingly negative. The more seniority each employee has, the lower the evaluation. The highest evaluation can be observed in case of employees with seniority between 12.4 and 15.9 years (3.647 pts). However, excluding this seniority group, then the effect is "linearly" negative. The employees with the least seniority have the average evaluation of 3.623 pts, where the following seniority groups lose in average 2.42% (-0.024 pts). This effect has no statistically significant differences when the employees' gender is considered. In both cases the effect is negative, male employees lose in average 3.20% (-0.116 pts) with the growth of seniority group, whereas the effect is slightly lower in case of female employees (-1.75%; -0.063 pts). The effect would be similar, but females report growth in their evaluation during seniority of 5.2 to 8.8 years and 12.4 to 15.9 years. However, these two blips do not eliminate the negative effect of seniority.

3.3 Effect of Employees' Training on the Evaluation in 2019

As the analyzed sample includes the information about the employees' training during 2019, we are able to analyze the effect of training on the evaluation. The results indicate that the level of training has a positive effect on the evaluation. The highest effect is reported for the level of training between 265 and 299 hours (3.712 pts) and 166 and 199 hours (3.708 pts), representing 1.3% and 2.6% of employees. The majority of employees (56.6%) took between 1-33 hours of training during the year, resulting in average evaluation of 3.483 pts (-0.091 pts below the overall average), followed by the group with 66 and 99 hours (10.4%, 3.577 pts). In majority of the cases, employees' gender and level of training has no effect on the evaluation. The only exception is in level of 166 to 199 hours of training, where females have statistically higher evaluation by +0.368 pts

(p = 0.086). Male employees have higher evaluation for excessive level of training between 199 and 265 hours of training (without statistical significance).

Considering the employees' seniority, we can observe several differences. The most hours of training courses were taken by the employees with few years in the company (in average 98.050 hours of training). Then, the amount of training hours has negative trend (Fig. 4). On average, each seniority level takes -10.06% less training. We can observe significant differences between females and males and their seniority. In general, males take more hours of training: especially between seniority of 8.7 and 12.3 years (+19.91 hours more of training), 15.9 and 19.5 years (+29.11 hours more) and 19.5 to 23.1 years (35.63 hours more). However, as observed before, more training hours did not lead to statistically higher evaluation of male employees.

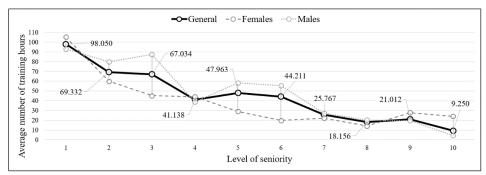


Figure 4 – The Effect of Employees' Seniority on Level of Training

3.4 Effect of Employees' Training on the Evaluation Improvements

In the previous section, we explored the characteristics of employees' evaluation and the effect of the training on the evaluation in 2019. As the results reveal, the effect of the training is positive. The more training, the better the evaluation. However, so far, we have not considered whether this effect leads to improvements over time. Therefore, in this section, we consider as a dependent variable the difference between the evaluations from 2018 to 2019. The working hypotheses states that training improves the evaluation and that the more training an employee takes, the better the improvement should be (H_{01}) .

The average change in the evaluation is +0.0379 pts, and 95% of employees have the difference in the evaluation between +0.0116 and +0.0643 pts. In general, training has positive effect on the employees' improvements. For example, employees who took between 1 and 33 hours of training improve their evaluation by +0.047 pts. This is important as 56.6% of the employees belong to this group. As Fig. 5 indicates, the effect increases by +0.028 (p = 0.648) in the group of 33 and 66 hours of training (9.9% of employees), but then the effect is lighter and lighter. For employees between 133 and 166 hours of the training (5.5% of employees) the effect is almost zero (+0.01 pts) and the biggest negative effect is reported by employees with level of training between 166 and 199 hours (-0.188

pts). This negative effect is statistically significant compare to most of the other groups. The peak of the improvement by +0.252 pts in case of the group between 265 and 299 hours is only statistically significant to group 6 and 10 due to the low number of employees in this group (11 employees representing 1.3% of the sample). As a summary, training had positive impact on 88.3% of employees, but no strong correlation is observed (r = 0.0263) between the hours of training and evaluation improvements.

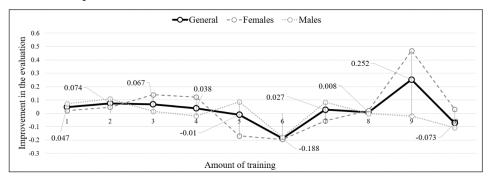


Figure 5 – The Effect of Training on Employees' Evaluation Improvement

Considering the employees' gender (H_{02a}), there is no statistically significant difference in the improvements (p=0.838), as females have the difference higher by only +0.008 pts (0.043 pts versus 0.035 pts). However, if we consider the amount of training hours, differences can be observed. Female employees have peak in the improvements between 66 to 133 hours of training (+0.139 pts and +0.121 pts), which is followed by a significant drop resulting in negative change in the evaluation. Male employees report the peak evaluation between 33 and 66 hours of training (+0.109 pts) and 133 and 166 hours (+0.086). For both genders, there is the absolute bottom in for 166 and 199 hours of training (Fig. 5). Although females and males have different effect of the training, the only statistically significant difference occurs in the level of 133 to 166 hours of training (p=0.067), where males have higher effect by +0.254 pts, and in the level of 266 to 299 hours (p=0.048; +0.489 pts for females).

Regardless the gender, the effect of age (H_{02b}) on the improvements is rather positive, which is in contradiction to the basic characteristics of the 2018 and 2019 evaluation. In this case, the older the employee is, the bigger the effect of training is (although the effect is not statistically significant). The youngest group of employees took the highest amount of training (Fig. 6), but the improvement is negative (-0.029 pts). After, the level of improvements grows until the age group of 51-55 years (+0.124 pts), but no statistically significant differences can be found. Further, if we consider employees' gender, significant differences occur. Negative effect (-0.148 pts) is observed in case of youngest females (age 23 to 27 years), resulting in males' higher improvement by +0.248 pts (p = 0.005). Males have negative improvements in age group of 35 to 39 years (-0.067 pts), but the difference compared to females -0.146 pts is not statistically significant, as the

rest of the groups are not statistically significant. Moreover, there is no correlation at all (r = -0.00007) between the employees' age and the evaluation improvements.

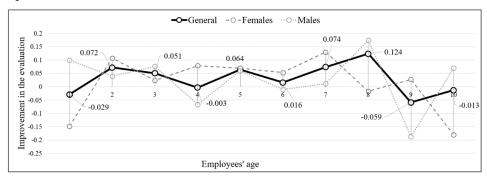


Figure 6 – Relation between Employees' Age and Evaluation Improvements

If we consider the employees' seniority (H_{02c}), we can observe significant drop in the case of 5.2 to 8.8 years of seniority (-0.082 pts), followed by a significant growth with more seniority (Fig. 7). The highest effect of the training is during the seniority of 8.8 to 12.4 years (+0.154 pts), which is statistically significant to most of the other groups of seniority. The effect of training losses its impact between 26.7 and 30.3 years of seniority (-0.001 pts). Different pattern can be observed if we consider employees' gender. Male employees follow the general patter, except the huge drop in seniority of 19.5 to 23.1 years (-0.064 pts), lower by -0.276 pts (p = 0.075) compared to females of the same seniority (in their case is the peak of the improvements). Females report lower growth of the improvements between 8.8 and 12.4 years of seniority (-0.160 pts compared to males, p = 0.125) and decrease in 15.9 to 19.5 years of seniority (-0.141 pts; p = 0.364). No correlation (p = 0.0056) between employees' seniority and evaluation improvements is observed.

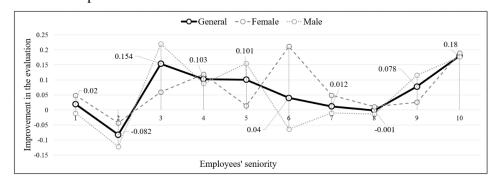


Figure 7 – Relation between Employees' Seniority and Evaluation Improvements

4 DISCUSSION

Nowadays, it is crucial for organizations to search areas for possible improvements in order to enhance their performance and remain competitive (Collings and Mellahi, 2009). Employees' training ensures an employee new skills and abilities, which is a valid and useful way to increase their performance and flexibility leading to a competitive advantage, which is beneficial for their organization (Pinzone et al., 2019). Employee's performance means that the employee has the capabilities and efficiency for their present job. What is more, competitive performance likely enables employees to feel satisfied or successful in their careers (De Vos, Van der Heijden and Akkerman, 2018), which is vital for long-term organization's goals. That is why, the employees' training and development has become one of the key aspects in improving organizational performance and growth (Mpofu and Hlatywayo, 2015) as investigated, correct training programs can have a positive impact not only on the individual performance, but also on teams and the whole organization (Aguinis and Kraige, 2009). Our results confirmed positive relationship between employee training and performance.

However, to secure the functionality of the training it is necessary to differentiate training programs regarding employees' characteristics, such as gender, seniority or their hierarchical level, as confirmed by our study. Ignoring such characteristics can lead to employees' frustration, greater tensions among employees and malfunctioned training programs (Gursoy, Chi and Karadag, 2013). The results detect that organizations must carefully evaluate the amount of provided training. Excessive training of more than 166 hours per year is the breaking point between positive and negative impact on the performance (Fig. 6). Thus, employee's requests for additional training hours should be critically evaluated as the added value can be negative.

Therefore, it must be clear what competences are required in each department of an organization (as well as in the organization as a whole) in order to capture current and future priorities of the organization (Collings and Mellahi, 2009) to maximize their impact. Similarly, organizations must understand their employees' characteristics to achieve maximum from the training. Our study shows the differences in gender, age and seniority as determinants of variability of employees and the necessity to treat them according to their characteristics to achieve desired output of education and training. Other researches, for example by Álcazar and Flegl (2019) observed that female training should be linked more to soft skills training (teamwork, communication, problem-solving and flexibility), whereas males' training should be linked more to hard skills (such as leadership, empathy and also communication, but in the way of typing, writing and software). Thus, managers should identify exact employees' needs and combine them with their personal characteristics to maximize the benefits from training. Moreover, employees must be ready and motivated for training. Organization should demonstrate the value of training before training begins, make sure employees are highly involved and engaged with their job (Aguinis

and Kraige, 2009; Hanaysha, 2016), which was confirmed by our research. Employees with high motivation express their performance through the effort they use to develop their activities. Nye et al. (2017) demonstrated that employees' interest is positively related to their training performance and on-the-job task performance. As the results of this paper show, organizations should not assign any number of training hours to all employees as it can have negative effect on their performance improvements. Instead, organizations should precisely identify employees' interest in specific areas, and target the training in this direction. Understanding employees' interests, particularly the degree of fit between individuals' interests and work environments, is useful for enhancing our understanding about how people do work, who excels, and who falls short at work (Su, 2020).

The key question is how to demonstrate the added value of such training. One of the ways how to demonstrate this is to analyze improvements in employees' skills/competences. Organizations are usually more interested in training transferable skills (communication, problem-solving and teamwork) and employee's personality over job-oriented skills and knowledge (Huq and Gilbert, 2013; McCracken, Currie and Harrison, 2016). This orientation creates mainly problems in soft-skills training evaluation as these skills are hard to measure. Thus, one of the possibilities is to use historical data and link the training effect to improvements in employees' performance evaluations. As the results demonstrated, the effect of training is different when one-year evaluation is considered, and when data across periods are considered. Historical comparison improves the interpretative capability. In a similar way, to be able to make the right conclusion about the added value of the training, the evaluation should consider employees with similar characteristics, such as employees from the same position, seniority, etc. In this case, these employees take very similar (if not the same) training courses and thus the improvements in performance should be very similar.

Moreover, it is important to remember that employee training is an investment into the organizational workforce and its results may not be visible immediately. In some cases, trained competence can have visible impact after a combination of several training programs, or after a period of expertise adjustments (experience). Furthermore, there is a risk of subjectivity when evaluating competences in a performance evaluation, as consequence of how managers respond in terms of their cognition, affectivity, and behavior (Fischer, 2010). Subjectivity is naturally included in any decision-making process and its effect can be both positive and negative. The accuracy of the performance evaluation then depends on decision-maker's experience. Still, although the added value of training includes many direct and indirect variables, all studies confirmed that training has positive effect on employees' performance, if carefully handled.

5 CONCLUSION

The results shown that focus on employee training brings improvements in performance over years and it forms prospective area for organizational development (H₀₁ was confirmed). It was found that inadequate number of training hours, together with excessive training of more than 166 hours per year has limited or no impact on performance. Employees who completed more than 166 hours of training had worsened their performance. Thus, number of training hours should be critically evaluated as high number of training limits actual job performance of defined tasks and its value is disputable. On the other hand, the most efficient training was proven in new cohorts of employees (shortly after they joined studied organization). Thus, it is highly recommended to invest in training of new employees as training hours of freshmen and newcomers has the highest impact on performance (H_{02c} was conformed). Organizational management or human resource department should carefully plan the amount and type of training provided to each employee. Overall, the impact of training varies based on seniority and number of hours spent on training. On the other hand, there are no significant differences among gender of employees (H_{02a} was rejected). Some slight differences in training perceptions were found among age, but those were not statistically significant (H_{02b} was not rejected).

A practical recommendation for organizations is the application of employee training with an emphasis on organizational development and ensuring knowledge continuity. Organizations can use training to increase the level of their internal employee performance. It has also impact on employer branding, retention of employees, continuous education of key employees, and maintaining knowledge within an organization. Furthermore, employee training improves reactions on crises, staff shortages, knowledge continuity problems, and stabilization of staff and harmonization of internal environment of an organization, organizational culture and climate.

The follow-up research may focus on investigation of types of training and their effect on employees based on their gender, age, and seniority. In terms of limitation of this study, the first one is focus on only one organization and type of employees. The second limitation is the process of interpretation of results by researchers, when mediating effect of other factors leading to performance were not considered. But due to the fact that outputs are based on real employee performance and training hours loaded in case organization it shall be reliable.

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CONFLICTS OF INTEREST

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.



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