

Article

Effective Training Evaluation: The Role of Factors Influencing the Evaluation of Effectiveness of Employee Training and Development

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Abstract: If an organisation is to develop in today's highly competitive environment, it cannot do so without continuous training and development of its employees. The benefit to the individual can be assessed by a measurable degree of his knowledge, mastering a certain operation, etc. Evaluating the effectiveness of training is not easy, because very often we work with quantities that are difficult to quantify, and therefore difficult to measure. The prerequisite is the precise definition of educational goals and ensuring the controllability of educational results (training). This article aims to find factors influencing evaluation of effectiveness of employee training and development. The data was obtained from a questionnaire survey in which 207 organisations operating in the Czech Republic participated. The results show that when evaluating the effectiveness of employee training, organisations prefer methods based on subjective evaluation by an evaluator (direct supervisors, colleagues), but also on their own self-evaluation regarding the number of training days. Due to the coronavirus pandemic, current human resources (HR) trends and priorities for 2021 have changed significantly. The systematic process of evaluating employee training effectiveness depends on the business sector (p -value 0.022), on the fact that the organisation is or is not a part of a larger group (p -value 0.000), on (non)existence of an HR department (p -value 0.000), and on the organisation size (p -value 0.000).



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1. Introduction

Employee training in organisations is a tool by which employers can shape employees' competencies and develop their potential. It is a systematic process of changing work behaviour and level of competencies (knowledge, abilities, and skills) including employee motivation [1,2] which helps to reduce the gap between subjective qualifications (the ability to act and use the competencies to meet the organisation's goals) and objective qualifications (the highest level of education completed and requirements imposed on employees) and to increase labour productivity [3]. Training activities that organisations can use can be performed either in the workplace or in other settings.

Organisations that emphasise the employee training and development prepare strategic training plans that must be in line with the strategy of the entire organisation and set personnel policy [4,5]. Nevertheless, with the situation with COVID-19, it is more important to solve the setting up of HR activities in every organisation, and training and development is becoming more influenced. Authors [6] agree that HR management practices should be considered more holistic. There are few studies that address individual

perceptions of the impact of HR practices on employees, which often vary widely among employees [7,8]. These strategic plans further result in training and development plans that should respect differences by employee groups, by positions, and by individual employee needs [9]. Training and development programmes are related to direct financial costs, time of employees devoted to training, training planning, and time of managers. Many researchers agreed in the 1990s that most investments in training were wasted [10,11]. More recent studies by e.g., [12,13] see these practices as a long-term investment in employees who are committed to responsible behaviour.

According to [14], mere investment is not enough; it is necessary to manage educational programs more effectively to ensure the highest possible return. Given that costs are not minimal, the management of organisations needs to increasingly demonstrate the influence of employee training and development on the success of the entire organisation and on business performance of organisations [6]; therefore, it is necessary to look into the effectiveness of organisational training and development [15] all the more because their results are, in many cases, immeasurable or difficult to measure. Determining the effectiveness of processes helps to make subsequent changes in training and development programmes, i.e., to optimise processes and increase yields or outputs in every organisation (i.e., knowledge, skills, attitudes) (e.g., [15–19]). The author of [20] even emphasises that training should serve as a catalyst to manage change and achieve business goals. Skill development and advanced training techniques are crucial for gaining a competitive advantage [17,21]. E.g. authors [22] examined HR skills development practices and their impact on customer satisfaction. The outcome of training itself is widely determined and primarily depends on the accuracy of the effectiveness evaluation [23].

However, there may be different views of the effectiveness of training and development within branches. Investments are then reflected in the increasing level of knowledge, skills, and abilities of employees (competencies) and consequently the knowledge base of the entire organisation [22,24]. Some studies [25,26] have shown a significant correlation between training costs and organisational performance. In a study [23], the authors deal with professional approach to training that corresponds to practice. In another study [17], the authors state that the evaluation of training in many companies is not carried out professionally or does not exist at all (lack of funds, time, measuring systems for determining the changes that result from training). To sum up, the effectiveness of training and development is the relationship between the effects of training, resources, and employee efforts associated with achieving it.

The negative development of the situation around COVID-19 could slow down plans of the organisations in the area of training and development. Nevertheless, the online form of training and development is one possible way to develop employees and organisations in this pandemic situation.

The structure of the article is as follows: the first chapter entitled Theoretical Background includes a detailed description of theoretical knowledge and description of the knowledge gap; the chapter on Materials and Methods describes the research methods used; the results obtained and their interpretation can be found in the Results and Discussion chapter, and the summary recommendations are given in the Conclusion. At present, due to COVID-19, it is even more necessary to evaluate benefits at the organizational level in the area of monitored variables of effective training. The principle of novelty lies in finding factors influencing the evaluation of the effectiveness of employee training and development through factor analysis.

2. Literature Review

Measurement of training effectiveness was first introduced by Donald L. Kirkpatrick, who published it in an article for the US Development and Training Journal in 1959 [17,27]. This important model includes four levels or aspects of training, namely the level of satisfaction with training activities, evaluation of impact of training in terms of progress in skills, knowledge, and attitudes, changes in performance observed after training, and

evaluation of business results. According to [28], the most important thing is to examine the last aspect, i.e., increasing productivity, sales, reducing costs, which proves whether the training fulfilled its targeted purpose. A number of studies [15,29,30] have examined the modified Kirkpatrick framework. Due to the complexity of training evaluation, high costs, and lack of direct methods [15], the fourth level is often not evaluated. Studies [15,29,31] have primarily focused on the long-term impact of training effectiveness and on the effectiveness of career goals in terms of objective and subjective career success. A study in [32] shows the connection between participation of employees in planned training activities and development of motivation. The level of employee motivation and its relation to employee training is also examined in a number of other studies where training is conceived as a tool by which employee competencies and potential can be formulated [33–37].

Organisations have the opportunity to reduce differences between subjective (the ability to act and use competencies to meet the organisation's goals) and objective (the highest level of education completed, and requirements imposed on employees) qualifications through employee training and development. There is a wide range of tools evaluating impacts of education according to employee performance or on the basis of feedback [14,17,38] in order to modify the requirements for work as performed. Re-modelling work requirements based on evaluation of employee efficiency is one of the practical benefits of evaluation tools [39].

Organisations use a variety of training methods, and currently coming to the fore are the methods using internet and digital technologies, such as e-learning and self-education, or e.g., methods of providing enhanced education and training in a virtual reality environment [40]. Their advantages are mainly in availability and time flexibility [36]. The self-education method, which has become a part of the learning process and the basis for knowledge transfer, belongs to the commonly used ones [41–44]. The correct use and grasp of basic principles lead to a proper decision whether the employee training is important in the organisation [23]. Their research has identified four approaches of organisations to the use of training methods and two ways of evaluating the training process. The authors of [14] emphasise that organisations should see training as a way of creating intellectual capital that includes the skills needed for the profession and advanced skills.

Evaluation of effectiveness in research studies is primarily based on the strategy of setting the desired learning goal or achieving the desired competencies [45]. E.g. studies [15,29] mention factors that affect the effectiveness of training, namely lack of support from top management, individual attitudes of employees, shortcomings in training practice, and work-related factors. In contrast, the authors of [46] found that immediate superior support was strongly correlated with training effectiveness. Digital technologies, which currently have a significant impact on the course and evaluation of learning, make it possible to use mathematical evaluation of learning using developed software and further evaluate the results in terms of learning effectiveness and motivation [47]. The authors of [48] state that the most significant aspects of evaluation include the system, method, and instrument of learning, and the relationship between emotion, motivation, learning style, and knowledge is also assessed. The author of [49] highlights the problem of evaluating training effectiveness within methods that include practical knowledge transfer. Goals required from this form of training are wide-ranging. Testing and evaluating all aspects to be achieved in practical training is very time-consuming and costly [49]. Optimising worker requirements leads to more efficient work processes and is closely linked to work commitment. Optimisation of requirements can be passed among colleagues and is the goal of education in organisations [2]. This article aims to find factors influencing the evaluation of effectiveness of employee training and development. The finding of factors will be performed both by a thorough literature search (see below), and by statistical evaluation of data through factor analysis. The following hypotheses were tested:

- H_{01} : The systematic process of evaluating the effectiveness of employee training does not depend on the business sector.

- H_02 : The systematic process of evaluating the effectiveness of employee training does not depend on whether the organisation is part of a larger group of organisations.
- H_03 : The systematic process of evaluating the effectiveness of employee training does not depend on the market in which the organisation operates.
- H_04 : The systematic process of evaluating the effectiveness of employee training does not depend on the existence of an HR department in the organisation.
- H_05 : The systematic process of evaluating the effectiveness of employee training does not depend on the size of the organisation.

3. Materials and Methods

Quantitative data was obtained by a questionnaire survey done in Czech organisations ($n = 207$; quota-based selection). The results can only be generalised for the research sample. In total, 860 emails to owners or management of organisations were sent out, 207 replies were received (return rate 24.06%). The sample was based on the ALBERTINA database of organisations (contains important data of more than 2,700,000 organisations registered in the Czech Republic). The questionnaire was completed by mid-tier or higher management of the organisations, in case of smaller organisations by the owner itself (thus the responses reflected the point of view of their heads/owners/managers).

The questionnaire was designed to comply with ethical rules and with the requirement for anonymity, and contained 18 questions: 13 for identification and 5 for research. The questions were close-ended (allowing only the provided response options) and with more response options. The structure of the organisations, participating in the research ($n = 207$), was as follows (see Table 1):

Table 1. Organisations that participated in the research—basic data.

Characteristics	Categories			
Sector	Private 81.6%		Public 18.4%	
Market	Global 45.4%	Local 12.6%	National 27.5%	Regional 14.5%
Part of a larger group of organisations	Yes 44.9%		No 55.1%	
The size of the organisation (number of employees and %)	1–9 21.3%	10–49 26.1%	50–249 23.2%	>250 29.4%
Existence of an HR department	Yes 54.6%		No 45.4%	

The results were analysed using statistical tools—the dependence test (χ^2) and the power of dependence test (Cramer's V). The significance value level chosen was $\alpha = 0.05$. Good approximation requirements were always met in the computations, i.e., theoretical frequencies were larger than or equal to 5 in 80% of instances, and never dropped below 2 even in the remaining 20%. The dependence strength was calculated using the Cramer's V measure that is within $0 \leq V \leq 1$. In cases where the determined p -value was below the significance threshold of $\alpha = 0.05$, the null hypothesis was rejected because the research demonstrated statistical dependence between the qualitative variables. In such cases, the strength of the dependence was determined using Cramer's V coefficient. The results of the strength of correlation were interpreted in accordance with the categories in [50]. For the purposes of the dependence test, the responses in the questionnaire were merged into a simplified “yes—neutral—no” structure.

To identify the mutual relationships between variables, we followed up on the results of descriptive statistics with factor analysis (multivariate statistics). In the factor analysis

(after correlation analysis and principal component analysis), we used the Varimax method and the Kaiser-Guttman rule for selection of substantial factors according to [51]:

$$V = \frac{1}{p} \sum_{j=1}^m \left\{ \sum_{i=1}^p \left(\frac{\hat{l}_{ij}}{\hat{h}_i} \right)^4 - \frac{1}{p} \left(\sum_{i=1}^p \left(\frac{\hat{l}_{ij}}{\hat{h}_i} \right)^2 \right)^2 \right\}, \quad (1)$$

V = Varimax value,

p = specific variance,

\hat{l}_{ij} = estimated factor loads,

\hat{h}_i = communality for the i -th variable.

The data was processed only if the value of substantial factors was greater than 1; values exceeding 0.3 were considered significant. The factor analysis model describes the observations by the following equations:

$$\begin{aligned} X_1 &= a_{11}F_1 + a_{12}F_2 + \cdots + a_{1m}F_m + U_1 + \mu_1, \\ X_2 &= a_{21}F_1 + a_{22}F_2 + \cdots + a_{2m}F_m + U_2 + \mu_2, \\ &\quad \dots \\ X_p &= a_{p1}F_1 + a_{p2}F_2 + \cdots + a_{pm}F_m + U_p + \mu_p, \end{aligned} \quad (2)$$

where:

X_1, \dots, X_p = observed variables,

F_1, \dots, F_m = latent common factors,

a_{11}, \dots, a_{pm} = factor loads,

U_1, \dots, U_p = specific factors representing random deviations,

μ_1, \dots, μ_p = constants.

To assess the suitability of using factor analysis, the Kaiser-Meyer-Olkin (*KMO*) measure of selection adequacy was used, i.e., an index comparing the magnitudes of the observed correlation coefficients and the magnitude of the partial correlation coefficients. All assumptions (cardinal variables, low cross-correlations, the degree of adequacy of *KMO* selection higher than 0.7 and non-zero correlations (Bartlett's sphericity test) are met. The statistical software used to evaluate the data was IBM SPSS Statistics 24.

4. Results

Based on the existing research, it can be stated that without evaluating the training effectiveness, the managements of organisations are not willing to invest in employee training and development. For this reason, we examined the methods of evaluating the training effectiveness used by the organisations surveyed (Table 2).

Table 2. Use of methods for evaluating training effectiveness (multiple answers).

Method for Evaluating the Training Effectiveness	Absolute Frequency	Relative Frequency (%)
Evaluating employees' responses immediately after the training	41	24.1
Evaluating the attainment of goals set in the employee training plan	40	23.5
Informal feedback from direct supervisors	33	19.4
Informal feedback from employees	20	11.8
Observing employees while working	19	11.2
Measurement of job performance before and immediately after the training	9	5.3
Measurement of job performance before and after the training at the interval of several weeks or months	8	4.7

The results show that organisations most often prefer to evaluate employees' responses immediately after the training (24.1%) and then to evaluate the attainment of goals set in the employee training plan (23.5%). The results were further subjected to multidimensional

statistics and two factors (groups of methods for evaluating the training effectiveness) have been identified that explain almost 62% of the sample behaviour (see Table 3).

Table 3. Factor analysis of the selected variables of methods for evaluating the training effectiveness the organisations use.

Factor	Total Variance	Total % of Variance	Cumulative % of Variance
1	3.793	47.417	47.417
2	1.096	13.697	61.114

The first factor explains more than 47% of the sample behaviour and the second one explains nearly 14%. The first factor values range from 0.450 to 0.892, indicating a very strong dependence that is also high with the second factor, where the values range from 0.699 to 0.835. The first factor characterises organisations that prefer, when evaluating the training effectiveness, methods based on subjective evaluation of the evaluator (direct supervisors, colleagues), but also their own self-evaluation with regard to the number of days that employees can spend by training. On the contrary, the second factor involves only quantified methods, such as measuring job performance at various time intervals. The first factor can be called “Subjective Evaluation” and the second one “Quantified Feedback” (see Table 4).

Table 4. Detailed results of the factor analysis.

Variable—Benefits	Factor 1	Factor 2
Recording the total number of training days per employee	0.450	0.346
Evaluating the attainment of goals set in the employee training plan	0.623	0.430
Evaluating employees’ responses immediately after the training	0.795	0.286
Measuring the job performance before and immediately after the training	0.209	0.699
Measuring job performance before and after the training at the interval of several weeks or months	0.025	0.835
Informal feedback from direct supervisors	0.892	0.091
Informal feedback from employees	0.849	0.196
Observing employees while working	0.697	0.003
Total % of variance	47.417	13.697
Name of factor	Subjective Evaluation	Quantified Feedback

The first factor that impacts more than 47% of the sample behaviour characterises organisations that prefer methods based on subjective evaluation of the evaluator when evaluating the training effectiveness, such as informal feedback from direct supervisors, informal feedback from employees, evaluation of employees’ responses immediately after the training, and observing employees when working. On the other hand, these organisations do not use methods that have comparative and quantified elements. These are primarily methods of measuring job performance before and immediately after the training, measuring job performance before and after the training at certain intervals. Given the nature of the prevailing evaluation methods, it can be concluded that Factor 1, which primarily focuses on the subjective evaluation, chiefly influences organisations where teamwork, control from direct supervisors, and sharing work experience with other colleagues prevail. Disadvantages of these methods mainly include the introduction of subjective evaluation of the evaluator or of a given team, or injecting an opinion into the overall evaluation of the training effectiveness. Given the overall impact on employees in terms of their motivation, career growth, and team position, it is better and more valuable to form an evaluation of the training effectiveness, at least in part, based on a quantifiable method. The subjective evaluation can be a source of conflict in the workplace and frustration of the employee or the whole team.

Conversely, Factor 2, which impacts nearly 14% of the sample behaviour, characterises organisations that prefer quantified methods to evaluate the training effectiveness, such as measuring job performance before and after the training at certain intervals, measuring performance before and immediately after the employee training. Based on the prevailing evaluation methods, it can be concluded that organisations are characterised by work activities that are quantifiable, measurable, and can be compared at different time intervals. This implies that the training evaluation completely lacks the subjective view of supervisors, sharing work experience, or training evaluation by the team. Methods for evaluating the training effectiveness focused on objective evaluation can have a significant impact on employee motivation, allowing for assessing every employee individually with respect to the gained and newly acquired skills. They enable the manager, or more precisely the evaluator, to further assess the potential and talent of the employee, to elaborate a career plan. Therefore, it is appropriate to supplement the methods of evaluating the training effectiveness, which are based on quantified elements, with other methods that would lead to employee development and elimination of employee turnover.

Furthermore, statistically significant dependences were examined between the existence of a systematic process of evaluating the employee training effectiveness and the characteristics of the organisation that pursues employee training and development. Dependencies were evaluated in pivot tables and the following organisation characteristics were tested: the sector of the organisation, whether it is a part of a larger group, its market, the existence of a human resources department (HRD) in the organisation, and the size of the organisation (see Tables 5 and 6).

Table 5. Systematic evaluation of the employee according to sector and part of a larger organisation.

Systematic Evaluation of the Employee Training Effectiveness in the Organisation	Σ	Sector of the Organisation		Part of a Larger Organisation		HR Department	
		Private	Public	Yes	No	Yes	No
Yes	146	125	21	52	94	50	96
No	61	44	17	41	20	44	17
Total	207	169	38	93	114	94	113

Table 6. Systematic evaluation of the employee according to size of the organisation and market activities.

Systematic Evaluation	Size of the Organisation (Number of Employees)				Market of Activities			
	1–9	10–49	50–249	>250	International	Local	National	Regional
Yes	41	47	30	28	62	18	42	24
No	3	7	18	33	32	8	15	6
Total	44	54	48	61	94	26	57	30

Of all the organisations examined (207), 146 organisations systematically evaluate the employee training effectiveness in the organisation (Table 5). In terms of their scope of activity in the public or private sectors, the results have shown a significant difference, where the number of organisations systematically evaluating the employee training effectiveness in the private sector is 125 and the number of organisations in the public sector is 21. The results confirm the emphasis on the systematic evaluation of the employee training effectiveness in the organisations operating in the private sector as well as in terms of the total number of organisations examined operating in the private sector: of the 169 private-sector organisations surveyed, 125 systematically evaluate the effectiveness of employee training in the organisation; of the 38 public-sector organisations surveyed, the number of organisations that systematically evaluate the effectiveness of employee training is only 21.

The research results on whether the systematic evaluation of employee training effectiveness in an organisation is influenced by the fact that the organisation is part of a larger organisation have shown (Table 5) that, of all the organisations systematically evaluating the effectiveness of employee training, 36% monitored organisations are part of a larger organisation and 64% operate independently.

The total share of organisations that do not systematically evaluate the effectiveness of employee training within the organisation is 29%, of which 67% organisations are part of a larger organisation and 33% organisations operate independently. Both values lead to the conclusion that independent organisations are more likely to carry out a systematic evaluation of the employee training effectiveness in the organisation.

The results of the contingency table showing the existence of the HR department demonstrate (Table 5) that 96 organisations, i.e., 46%, conducting a systematic evaluation of the employee training effectiveness in the organisation, do not have an HR department. On the contrary, of the total of 61 organisations that do not systematically evaluate the effectiveness of employee training in the organisation, 44, i.e., 72%, have confirmed the existence of the HR department. This result confirms that nearly two-thirds of organisations that systematically evaluate the effectiveness of employee training in the organisation do not have an HR department and, conversely, 72% of organisations that have an HR department do not systematically evaluate the effectiveness of employee training in the organisation.

The results in the contingency table depicting the market of the organisations' activities show (Table 6) that almost half of the organisations (45%) surveyed operate in the international market. More than half of them conduct a systematic evaluation of employee training effectiveness in the organisation. Twenty-eight percent monitored organisations surveyed operate in the national market, and more than half of them conduct a systematic evaluation of employee training effectiveness in the organisation. As for the organisations with regional scope, 80% organisations surveyed are systematically involved in evaluating the employee training effectiveness within the organisation, and as for the organisations with the local scope only, 69% surveyed pursue this effectiveness. Overall, across the different markets, the results show that the proportion of organisations implementing a systematic evaluation of the employee training effectiveness in the organisation is above 50% in all types of markets.

The contingency table of the organisation's size by the number of employees (Table 6) shows that most of the organisations surveyed had 250 or more employees. This group of organisations, which accounted for 29% of the total, showed the lowest number (28; 19%) of organisations that systematically evaluate the effectiveness of employee training across the four groups. A group of organisations with size ranging from 50 to 249 employees, consisting of 48 organisations, also shows a higher number of organisations (18; 30%) that do not systematically evaluate the effectiveness of employee training in the organisation. On the contrary, organisations with fewer employees (1–9 and 10–49) show a high number of organisations that conduct systematic evaluation of the employee training effectiveness in the organisation. In case of organisations with 1–9 employees, the proportion of organisations implementing the systematic evaluation of the employee training effectiveness in the organisation is 93%; in organisations with 10–49 employees, it is 87%.

The results have shown that there is a statistically significant dependence between the existence of a systematic process of evaluating the employee training effectiveness and the business sector, the fact whether the organisation is part of a larger group, the existence of an HR department, and the size of the organisation. There was no evidence of dependence on the market in which the organisation operates (see Table 7).

Table 7. *p*-value and Cramer's *V* for a selected characteristic.

Characteristics	Sector	Part of a Larger Group	Market	HR Department	Size
	<i>p</i> -value/Cramer's <i>V</i>				
Setting the systematic evaluation of employee training effectiveness	0.022/0.157	0.000/0.287	0.469/-	0.000/0.328	0.000/0.390

The results can only be generalised for the research sample. With respect to the results obtained, it can be summarised that:

- H_01 is rejected: the systematic process of evaluating the employee training effectiveness depends on the business sector (the strength of dependence is 0.157, weaker).
- H_02 is rejected: the systematic process of evaluating the employee training effectiveness depends on whether the organisation is part of a larger group of organisations or not (the strength of dependence is 0.287, medium).
- H_03 is not rejected: the systematic process of evaluating the employee training effectiveness does not depend on the market in which the organisation operates.
- H_04 is rejected: the systematic process of evaluating the employee training effectiveness depends on the existence of an HR department in the organisation (the strength of dependence is 0.328, medium).
- H_05 is rejected: the systematic process of evaluating the employee training effectiveness depends on the size of the organisation (the strength of dependence is 0.390, medium).

It can be summarised that evaluating employee training effectiveness is a key point from which the subsequent planning of employee training and development of the entire organisation is further developed. Training is a costly investment for the organisation, but strategic development of human resources is closely linked to growth of the entire organisation and reduction in staff turnover. The article results show that the most frequently used methods for evaluating employee training effectiveness include evaluating the employees' responses immediately after the training and evaluating the fulfilment of goals set in the employee training plan. The results also point out that organisations prefer to work with training plans that enable strategic development of the plan or, if necessary, re-making the plan based on the feedback to achieve the desired result. Preferring the method of training evaluation immediately after the training implementation is important, especially for motivation and willingness of employees for further training. For example, it may draw attention to some shortcomings that employees perceive during the training and which may have a demotivating aspect.

This can be, e.g., absence of activation elements, the way of training, perception of lecturer's personality. For an overall assessment of the training effectiveness, it would be appropriate to supplement this method with further evaluation at certain time intervals. The other two most commonly used methods point to a large degree of preference for using feedback from both direct supervisors and colleagues. Feedback from a direct supervisor is one of the building blocks of an employee career plan and has a significant impact on employee performance. Feedback from colleagues can have a very positive impact on teamwork, but can also be a source of frustration, demotivation, and conflict in the workplace if the feedback is not positive and the employee is not able to accept such a response in the team. The objectivity of others in the team is another issue. This objectivity is more likely to be ensured by the direct supervisor.

It can be further summarised that the factor analysis results have confirmed the preference of evaluating the training effectiveness by methods based on the evaluator's subjective assessment. Organisations that prefer subjective evaluation tend to use the self-evaluation method and attach importance to recording the total number of training days per employee. Furthermore, it has been demonstrated that, of the total number

of organisations (207), those that systematically evaluate the training effectiveness (146) predominate and of these 125 operate in the private sector. Furthermore, it has been proven that the majority of organisations that systematically evaluate employee training effectiveness in the organisation are not part of a larger group of organisations. The results have not demonstrated the influence of the market in which the organisation operates on the systematic evaluation of the employee training effectiveness. Of the total number of organisations that systematically evaluate the training effectiveness (146), 96 do not have an HR department. This leads to the conclusion that the existence of an HR department is not crucial for the systematic evaluation of the employee training effectiveness in the organisation. On the contrary, it has been proven that the systematic evaluation of the employee training effectiveness is more likely to be carried out in organisations with fewer employees. The results show that the relationship between the systematic setting of the training process and the organisation's size, the existence of the HR department, the fact whether the organisation is part of a larger group, and the business sector has been demonstrated.

5. Discussion

Training and development is a systematic process of change in work behaviour and level of competencies (knowledge, skills, abilities), including the employee motivation in the organisation. The author of [31] characterises career planning as having a positive impact on both the employee and the entire organisation in the long term. Organisations that emphasise their employee training and development focus their strategic training plans to be consistent with the strategy of the entire organisation [52]. The research results have confirmed that the majority (169) of 207 organisations surveyed also systematically conduct evaluation of training effectiveness. Employee training is closely related to motivation and work behaviour [31,32] and that is why attention is paid to evaluating training effectiveness.

Training is a tool to achieve the required competencies [33,34,36,53] and enables to formulate employee potential. The basic element of evaluating employee training effectiveness is to set the desired learning goal or competence [45]. These goals are then evaluated by evaluation methods. The authors of [48] state that written evaluation is still one of the most widely used methods used to assess the achievement of the goals set in an employee training plan. The evaluation of employees' responses immediately after the training and the methods based on the subjective evaluation by the immediate supervisor or colleagues may tend to be both written and oral. In a study, the author of [49] highlights the problem of evaluating the effectiveness of a practical knowledge transfer, and particularly stresses on the time-consuming character and high costs of evaluation methods. The author of [49] has shown that quantifiable methods of evaluating the training effectiveness are often used and organisations also use the evaluation methods of employee training effectiveness at different time intervals. The results thus confirm the importance of evaluating employee training effectiveness, as the training must focus on the goals and needs of the organisation, taking into account both the strategy of the entire organisation [52]. Management of organisations are asked to demonstrate the impact of employee training and development on the success of the entire organisation (due to costs of training) [35,53].

In many cases, learning outcomes are very difficult to measure [33,49,54]. The professional evaluation of employee training effectiveness was dealt with by the author of [23], who emphasise that the key element in training evaluation is the approach to training, which corresponds to practice. A systematic evaluation of effectiveness is a tool that can help effectively plan training and development, respond to changes from employees, organisations or the society, or more precisely is a very flexible tool for collecting data leading to the desired changes in the training strategy, so as to achieve the goals as effectively as possible.

In times of COVID-19 crisis, employee training and development will examine not only how employees manage to work with new technologies, but above all the skills and

experience of managers and leaders—how they manage their people and teams remotely. Digitization and online technologies are no longer just a question of the future. The offer of hour-long interactive webinars tailored to needs and internal tools is important. The main change is for the safety of employees, the transition from full-time to online education, where you can focus on running shorter courses in the form of webinars and e-learning [55]. The topic of online onboarding is also topical, where the manager can support a new team member remotely by preparing an online Welcome Day for new employees. Home office can be considered as an effective tool for ensuring business continuity in a period of home quarantine [56]. However, as it turns out, people in the home office lose ties to their colleagues and managers, their motivation and effectiveness decrease, and they often do not know what task to work on.

A number of online training platforms offer a very wide range of well-covered topics [57], thanks to which development can then be better individually tailored to the needs of individual employees, which is in line with research [58]. Online training is available anytime and from anywhere and is often more time and money efficient for both employers and employees. In addition, there are certain types of people (e.g., introverts) to whom online training can offer more comfort than a standard offline course.

With respect to the results achieved, the following recommendations can be summarised and made on the effectiveness of employee training and development:

- In order to evaluate the benefits at an organisational level, the implemented training and development programmes must correspond to the needs of the organisation, i.e., the management must determine areas in which it is necessary to monitor effectiveness. Observing effectiveness is required in all training activities, with no exceptions. The easiest way is to determine the financial costs, but it is also possible to use the nature of the training activity or the time expenditure of the training.
- The management of the organisation must determine the observed variables by which the training benefits will be evaluated, and these variables must be monitored even before the actual implementation of the training. It is necessary that all those involved are familiar with the goals and methodology of evaluating the training effectiveness and the effectiveness of evaluation itself cannot be separated from the identification of training needs and training planning.

6. Conclusions

This article aims to find factors influencing evaluation of effectiveness of employee training and development. The results have shown that the preferred methods for evaluating the training effectiveness include evaluating the employees' responses immediately after the training and evaluating the fulfilment of goals set in the employee training plan. The factor analysis results have shown that the first factor, "Subjective Evaluation," characterised mainly organisations that, when evaluating employee training effectiveness, prefer methods based on a subjective evaluation by the evaluator (direct supervisors, colleagues) and also methods based on a self-evaluation with regard to the number of training days of the employee, which is in line with research [58]. The second factor, "Quantified Feedback," mainly included methods based on a quantifiable factor, such as measuring the job performance at different time intervals, which is in line with research. It has been found that the evaluation method of the training effectiveness influences the evaluation of employee training and development effectiveness. The examined organisations mostly use informal feedback from direct supervisors, informal feedback from employees, evaluation of employees' responses immediately after the training, and evaluation of fulfilment of goals set in the training plan. When using a quantified method, it is most often an assessment of job performance at different time intervals.

The results have also shown the dependence of the systematic process of measuring the training effectiveness on the size of the organisation, the existence of the HR department, the business sector, and the fact whether the organisation is part of a larger organisation or not (see H_01 , H_02 , H_04 , H_05). On the contrary, there is no connection between the systematic

evaluation of the training effectiveness and the market in which the organisation operates (see H_03). The contribution of the article at the theoretical level is mainly the shift in the level of the examined topic, i.e., of evaluating the training effectiveness; in practical terms, the results may be implemented when creating a strategy of training plans and then in integrating it into the overall organisation's strategy. The results of the research are important not only for the managers of the organization, but also for the employees who want to develop further. In 2021, the HR departments of a number of companies will focus on improving internal communication and employee satisfaction and development, rather than on recruitment.

The ability to solve problems with employees and quality communication is an absolutely key competence at this time. The basis is the maximum use of visualization—projection on screens, bulletin boards, electronic company magazines. The COVID-19 pandemic is accelerating the digitization and exploitation of innovation, and online employee training and development. Employees help to manage non-standard and crisis situations. This situation helps with digitization in HR activities and setting online HR activities. The limits of the article can be seen in the specifics of the sample of organisations on which the research was conducted. The limitation of this research is that the results come from the data and answers provided by the representatives of the organizations in the questionnaire survey and in the interviews, while the impact of the problem was not assessed. It is necessary to interpret the observation in the context of the research sample and at the same time generalized the results in a given sample. Another limit is that reviewers may have a tendency to create a better picture of their organization and act more rationally. Further research should primarily focus on the implementation of training effectiveness results into organisations' strategic plans, training plans, and the career plans of employees themselves.

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