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CHANGES IN EMPLOYEE MOTIVATION FOR EDUCATION IN COMPANIES BEFORE AND DURING THE COVID-19 PANDEMIC\*

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**Abstract.** This article is based on an extensive longitudinal quantitative and qualitative analysis of a wide sample of Czech companies of various types and sizes. The focus is on the development of trends in employee motivation for education within Czech companies (N=1114) in the years 2016 and 2021. The aim is to analyse changes in the application of individual motives in time and to examine in detail their relationship to company size. Whereas the majority of current research into this topic examines the intrinsic motivation for education directly among employees, this article deals with the extrinsic sphere and concentrates on motivation strategies from the point of view of companies in the examined period and the effects of the Covid-19 pandemic. Three external motives for employee motivation were examined in detail, namely career growth, financial remuneration, and the inclusion of education in regular evaluations. The research results suggest that large companies pay greater attention to motivating their employees to participate in further education, and that regardless of company size, companies prefer using non-financial means to do so, which is in line with current trends.

**Keywords:** employee motivation; motivation for education; Covid-19 pandemic; competence; career growth; employee evaluation; company size category

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## 1. Introduction

A qualified workforce is one of the most important factors of competition (Almotairi, et al., 2019). Mabey, et al. (1998) consider permanent education to be one of the five key components of human resources management. If an organisation is to develop in today's highly competitive environment, it cannot do so without the continuous training and development of its employees (Snieska et al., 2020; Urbancová, et al., 2021). Employee education is a continuous process, which leads to the adaptation of and changes in the work behaviour, knowledge, skills levels and motivation of employees by means of various strategies, styles and methods (Depesova, et al., 2015). Employees can only be competent at their work if they have the skills that the particular organisation requires, for which permanent education directly within companies is key. The European Commission (2018) states that education in the workplace can make an important contribution to both the work and private lives of adults by maintaining and updating their knowledge and skills. Corporate education is an effective way for employers to update the skills of their employees, as well as motivate and retain them, thereby improving their competitiveness. The results of research conducted by Bernsteiner et al. (2013) show that in recent years, the importance of further education has grown for the majority of employees and that the management of competences is one of the ways in which companies can motivate employees to participate in further education initiatives. Goldstein (1992), in dealing with education among employees, emphasises the importance of motivation: "Before trainees can benefit from any form of training, they must be ready to learn. That is, they must have the particular background and experience necessary for being successful in the training programme and they must be motivated." In current research, the topic of further vocational education has primarily been explored from the point of view of intrinsic motivation (Pasaribu et al., 2022; Bartlett, 2001; Tharenou, 2001) in relation to the personality characteristics of an employee and their commitment to work (Bertolino, et al., 2011; Gavurova et al., 2022a).

One of the prerequisites for a business to succeed in a rapidly evolving world is the ability to respond to change. This was confirmed during the Covid-19 pandemic, with companies having to react to situations and problems they had never encountered before (Gavurova et al., 2022b). This also had a major impact on the field of human resources management, with the pandemic revealing how difficult it is to motivate people from afar, without personal, face-to-face contact, and not only in terms of their further education.

This notwithstanding, it is recognised that extrinsic motivation, in the form of company incentives, is also an important factor in motivating employees to undertake further education. We therefore set out to examine this issue in a sample set of Czech companies. The main focus being developments in various forms of motivation in the field of corporate education and how these have been affected by the Covid-19 pandemic.

The aim was to determine how the importance of motivational factors for employees to participate in further education have changed, and how this differs according to company size. For this purpose, the years 2016 and 2021 were selected, i.e. before and during the Covid-19 pandemic.

## 2. Theoretical background

The human capital of an organisation consists of the knowledge, skills and abilities the organisation can utilise to achieve its goals (Ahmad, et al., 2019). The people with the knowledge, skills and abilities that an organisation needs at a particular moment are not always available on the labour market. According to Balkova et al. (2022), the increasing degree of automation, and the interconnection of the digital and real worlds, creates an environment in which human creativity plays an essential role. Within this context, employee education is important. This can be understood to be a continuous process, which leads to the adaptation of and changes in the work behaviour, knowledge, skills levels and motivation of employees by means of various strategies, styles and methods (Depesova, et al., 2015; Stefko et al., 2017). Numerous studies deal with research that has been conducted into the influence of employee education on company performance (Birdi et al., 2008; Collier, et al., 2011; Garavan,

2012; Ključnikov et al., 2020). Rauch & Hatak (2016), in their meta-analysis of 56 studies focused on small and medium-sized enterprises (SMEs), showed that procedures for strengthening the human resource within companies correlated with improved company performance in all instances. Longitudinal analysis performed by Roca-Puig, et al. (2019) confirmed a two-way relationship between investment in human resources and profitability over time. It has been proven that employee education has an influence on company performance even in the case of managers (Aragon & Valle, 2013; Caha, 2017). The importance of education for the development of businesses was also confirmed by Moideenkutty, et al. (2011). Employees are holders of knowledge and experience, with the success of an organisation depending wholly on this and their creativity, attitude and performance (Belas et al., 2022, 2023). Hansen et al. (1999) argues that competitiveness is not only influenced by the achieved knowledge of employees, but also by the fact whether and how this knowledge is applied. Such knowledge also has to be shared within a company. Israilidis, et al. (2020) offer insight into what can happen if a company fails to share knowledge internally or has inefficient mechanisms for doing so.

Rowden & Conine (2005) studied employee education and concluded that it is an efficient means of improving employees' satisfaction with their work. According to their findings, employees that successfully complete training are also better able to satisfy the needs of their customers. In today's business environment, the success of a company depends to a significant extent on the competences and motivation of its employees. Maintaining the motivation and involvement of employees in order to achieve the required business results is a difficult task. According to Milic, et al. (2020), employee education is an important factor in the solution of this challenge.

Mahmoud et al. (2021) point out the differences between three generations of workers and the necessity to offer employees motivators that each generation appreciates in order to create and support a multigenerational workplace environment.

Research carried out by Deloitte (2018) showed that 48% of representatives of generation Z and 44% of representatives of generation Y consider education and development a very important factor. In contrast, a study by MetLife (2013), which dealt with generation X, makes no mention of education and development as being a motivational factor for this generation. The findings suggested that only a third of the representatives of generation X see insufficient development as a reason for dissatisfaction. Zientara (2009) states that older employees are motivated by the desire to improve their financial situation and to remain active. Employee education plays a positive role in the removal of work stereotypes among older employees and also increases their productivity (Appelbaum, et al., 2016; Kuba & Milichovský, 2019, Xu et al., 2020). Hitka, et al. (2018), through their research into motivational factors in the Czech Republic, Slovakia and Lithuania, found that there are differences linked to nationality, but not age. In Lithuania, unlike Slovakia and the Czech Republic, motivational factors linked to personal development and career were considered the most important. Ližbětínová, et al. (2017) identify differences in employee motivation related to gender.

Competence management positively affects the relationship with the employer and can therefore improve the motivation and the willingness of employees to perform. Training and other competence measures have an influence not only on personal development, but also on motivation (Mirsky, et al., 2013). Employee education is also linked to employability (Houben et al., 2019; Domaracká et al., 2020). By extension, the relationship with the employer influences staff turnover. The conditions created for knowledge sharing, and the inner motivation and confidence of employees are some of the factors that determine the level of staff turnover (Linhartová & Urbancová, 2011).

Zhang & Chen (2017) illustrate the positive effects of motivation for learning on the efficacy of the learning itself and the ability to innovate. Vanthournout, et al. (2014) examine the relationships between workplace environment/atmosphere, motivation and attitudes to learning. The research showed that both workplace environment/atmosphere and motivation directly influence the attitude to learning among employees. Tarábková

(2014) emphasises the importance of the approach of managers to corporate education and their ability to motivate their subordinates. The better employees are informed about the educational goals, the more they are involved and willing to transfer their knowledge in practice. Verswijvel, et al. (2016) deal with the relationship between employee motivation to participate in formal educational activities, the character of their goals and their learning.

The workplace environment is an important factor affecting the results of employee education. The term workplace environment can include factors such as managerial support, opportunities to apply learnt skills, support from colleagues, technical support, etc. (Colquitt, et al., 2000; Burke & Hutchins, 2008; Kontoghiorghes, 2001; Lim & Morris, 2006; Martin, 2010; Krajčik, 2022). According to Puhakka, et al. (2021), the greater the attention paid to the learning environment within the workplace, the greater the satisfaction of an employee's basic psychological needs. An employee's motivation or desire to change their behaviour is closely related to their ability to gain and successfully transfer a target ability. Employees with a high self-efficacy level are usually more motivated and achieve greater study success (Chiaburu & Marinova, 2005).

Diamantidis & Chatzoglou (2019) prove that workplace environment and management support have the strongest impacts (direct and indirect) on work performance, with adaptability and inner motivation directly influencing work performance. McLoughlin & Jennings (2018) remind us that when talking about employee motivation for education, it is important not to forget that the quality of educational services is also an important motivating factor.

At present, corporate education is going through a process of huge change in relation to the Covid-19 pandemic, with the rapid introduction of new trends and digitalization (Ejdys & Kozłowska, 2021; Skare & Riberio Soriano, 2022; Chen et al., 2022; Wang et al., 2022). For example, numerous companies are embracing the advantages of online education. Gregorc (2015) points out that new forms of education and training are making it possible to rationalise educational processes and motivate employees to get involved in self-study and pass on their knowledge to others.

Increasing labour mobility requires the time- and place-independent transfer of knowledge. The quality of corporate education reflects the implementation and use of new technologies in the education of adults. These technologies make the learning process more intensive and active, and contribute to the quick achievement of positive results (Decker et al., 2016; Vaganova, et al., 2020; Szostek et al., 2020). The approach to relevant educational content in situations when employees need it leads to greater flexibility and motivation in employees. Companies are aware of the necessity to introduce adequate learning methods to strengthen the motivation of employees. Methods like learning through practice, computer simulation and virtual reality support the acquisition of knowledge by employees and also improves their awareness of the opportunities to improve themselves (Stadnicka et al., 2019). Companies can also apply distance education, which can deliver both time and cost savings for employees and the employer (Ananchenkova & Ponomareva, 2016).

The application of new trends in education, like gamification, improves the motivation of employees. Gamification can be utilised to support motivation and engagement in the workplace (Miri & Macke, 2021).

The education of employees traditionally focused on the provision of a huge quantity of information in a short period of time. The use of modern methods, like microlearning, enables employees to learn in short time intervals with just-in-time information, which is always accessible and within arms reach (Siminovich & Provost, 2020). It has been proven that the utilisation of new methods contributes to increasing employee motivation for education. However, even if this is true, it is necessary that the motivation and first impulse comes from company management. The choice of suitable managers and human resources management also play an important role in the motivation and drive for knowledge sharing (Caha & Urban, 2020; Matoskova, et al., 2013). Randall et al.

(2021) emphasise the key role that organisations play in supporting the permanent education of their employees, particularly in times of crisis. Companies can utilise numerous tools to motivate their employees to acquire and extend their knowledge.

**Research objectives, methodology and data**

The aim was to determine how the importance of motivational factors for employees to participate in education have changed in a particular time period, and how this differs according to company size (on the basis of the number of employees). The analysis utilises the results of a repeated questionnaire survey conducted among companies in the years 2016 and 2021. The questionnaire was sent to HR officers of companies based in the Czech Republic (stratified random sampling).

The following research questions were formulated:

RQ1: What is the frequency of the selected extrinsic motives for employees to participate in further education in Czech companies and how do these differ according to company size?

RQ2: To what extent has employee motivation for education changed in the Czech Republic between 2016 and 2021?

The sample set (N=1114) consisted of 607 companies in 2016 and 507 in 2021. The companies were divided into four groups: micro companies (1-9 employees); small companies (10-49 employees); medium-sized companies (50-249 employees); large companies (250 or more employees). The 2016 sample set consisted of 142 (23.4%) micro companies, 180 (29.7%) small companies, 163 (26.9%) medium-sized companies and 122 (20.1%) large companies. The 2021 sample set consisted of 130 (25.6%) micro companies, 139 (27.4%) small companies, 109 (21.5%) medium-sized companies and 129 (25.4%) large companies. The structure of the sample sets for both years are presented in Table 1.

The statistical analysis was carried out using IBM SPSS 24 software. The following aspects of employee motivation for education were used as the dependent variables: career growth, financial remuneration and inclusion of education in regular evaluations. These factors were chosen on the basis of research carried out into employee motivation (Bercu, 2015; Ferguson & Reio, 2010; Hitka & Balážová, 2015; Kakhovska et al., 2018; Ng & Dastmalchian, 2011). The statistical processing was carried out by means of an independence analysis in contingency tables. This was done according to company size and the difference between the data for 2016 and 2021 by means of a Chi-square test and Cramer's test for nominal dependent variables.

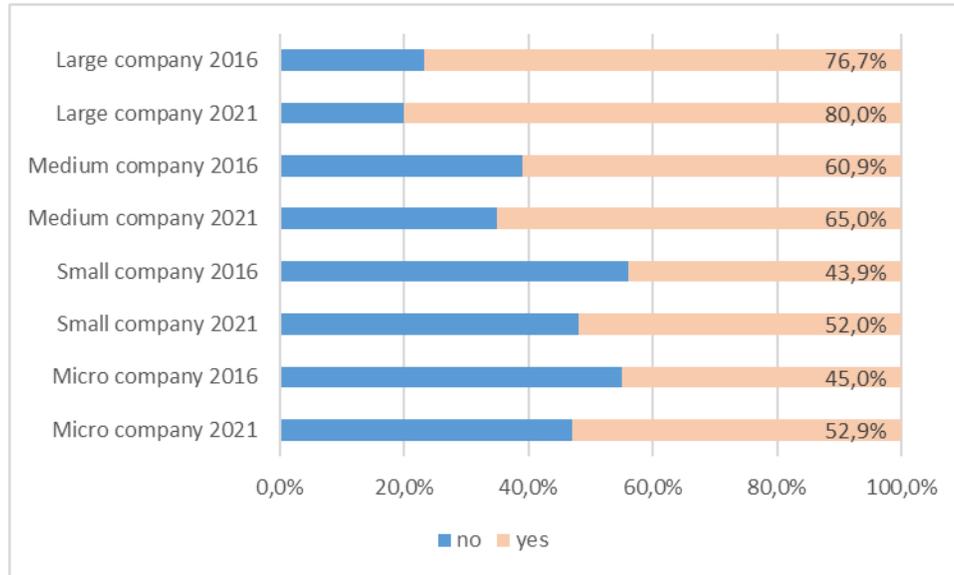
Company type	No. of companies 2016	No. of companies 2021
Micro company (1-9 employees)	142	130
Small company (10-49 employees)	180	139
Medium-sized company (50-249 employees)	163	109
Large company (250 or more employees)	122	129
Total	607	507

**Table 1.** The number of companies by size in the sample sets for 2016 and 2021

Source: authors

**Results and discussion**

Figure 1 shows the change (between 2016 and 2021) in the number of companies (by size) that utilise a motivational system to encourage employees to undertake education. The connection between employee education and the presence of a motivation system is the strongest in large companies (in 80% of large companies in 2016 and in 76.7% of the companies in 2021), followed by medium-sized companies (65% in 2016 and 60.9% in 2021, respectively). In contrast, this is lower, but stable, in small and micro companies.



**Fig. 1.** The numbers of companies utilising a motivation system to encourage employee education  
*Source:* authors

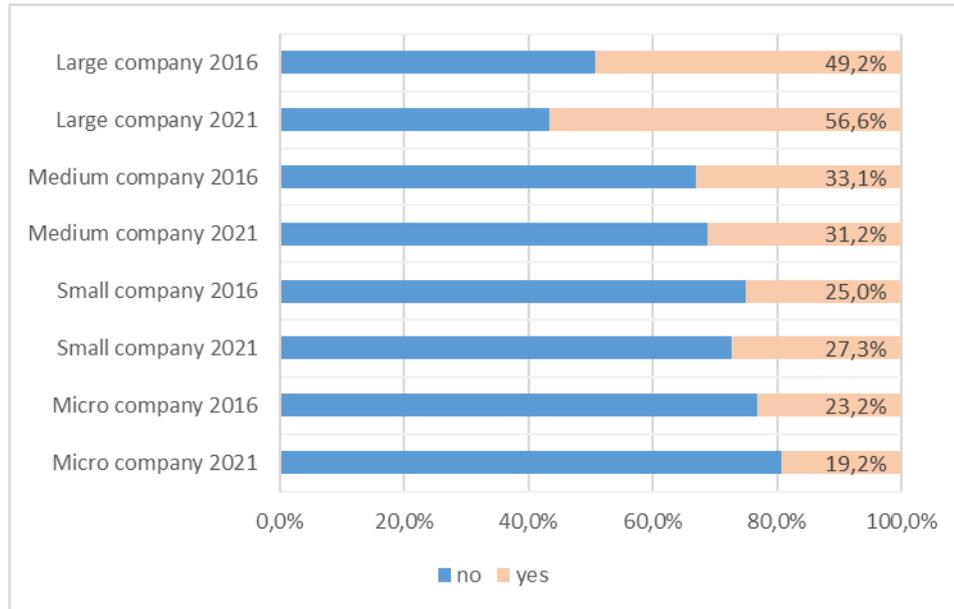
The selected motivational factors that encourage employees to undertake education, namely career growth, financial remuneration, and the inclusion of education in regular evaluations, were used as partial variables.

***Career growth as motivational factor***

The results for 2016 show that there is a difference in the utilisation of the motive of career growth to encourage employees to participate in further education according to company size ( $\chi^2 = 25.827$ ;  $p < 0.001$ ). Micro companies reported that this applied to 23.2% of cases, small companies to 25.0% of cases, medium-sized companies to 33.1% of cases, and large companies to 49.2% of cases. Cramer’s coefficient of association reached the value of  $V=0.250$ .

The difference to the previous sample set was confirmed in 2021 ( $\chi^2 = 45.360$ ;  $p < 0.001$ ). Micro companies reported that the motive of career growth to encourage employees to participate in further education applied in 19.2% of cases, with small companies reporting the same in 27.3% of cases, medium-sized companies in 31.2% of cases, and large companies in 56.6% of cases. This upward trend was confirmed by Cramer’s coefficient of association ( $V = 0.299$ ;  $p < 0.001$ ), which signals a partial growth in the relationship between company size and career growth as a motivational factor for participating in further education in the examined years.

A partial analysis of the survey results was undertaken of whether career growth, as a motivational factor for participating in further education, changed between 2016 and 2021. Despite the fact that partial differences were recorded in relation to company size, in particular the recorded growth thereof in large companies (from 49.2% in 2016 to 56.6% in 2021 – see Figure 2), the analysis, on the basis of the calculated Chi-square value, revealed no statistically significant difference for any of the company categories (by size).



**Fig. 2.** The numbers of companies utilising the motive of career growth to support employee education.  
 Source: authors

***Financial remuneration as motivational factor***

Figure 3 shows the numbers of companies utilising the motive of financial remuneration to encourage employees to participate in further education. The 2016 results revealed no significant difference according to company size ( $\chi^2 = 1.726$ ;  $p = 0.631$ ). Micro companies reported that the motive of financial remuneration to encourage employees to participate in further education applied in 23.9% of cases, with small companies reporting that this applied in 27.8% of the cases, medium-sized companies in 22.7% of cases, and large companies in 22.1% of cases. The 2021 results revealed a difference according to company size ( $\chi^2 = 12.57$ ;  $p < 0.01$ ). While micro companies reported that the motive of financial remuneration to encourage employees to participate in further education applied in 20.0% of cases, small companies reported that this applied in 12.2% of cases, medium-sized companies in 23.9% of cases, and large companies in 29.5% of cases. The change between the examined years was statistically significant (Chi-square = 11.427;  $p < 0.001$ ) for small companies, where a drop from 27.8% to 12.2% was reported.

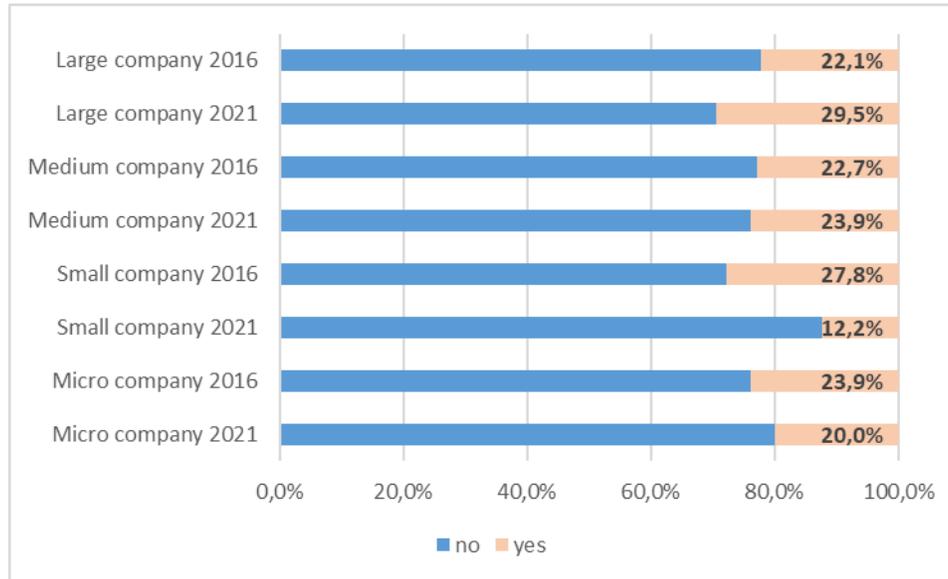


Fig. 3. The numbers of companies utilising the motive of financial remuneration to support employee education.

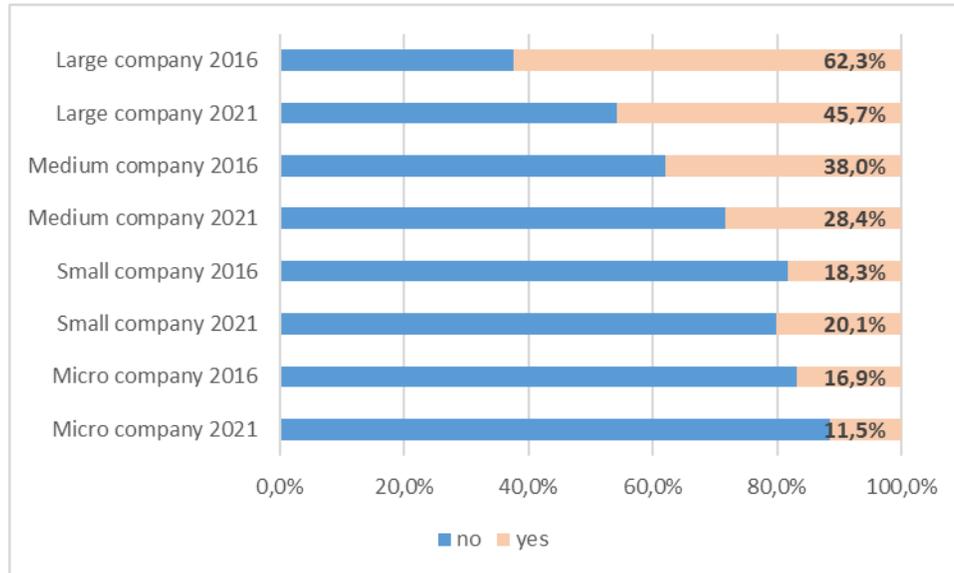
Source: authors

***Inclusion of education in regular evaluations as motivational factor***

The 2016 results show significant differences in the utilisation of the motive of inclusion of education in regular evaluations to encourage employees to participate in further education according to company size ( $\chi^2 = 84.36$ ;  $p < 0.001$ ). While micro companies reported that this applied in 16.9% of cases, small companies reported that this applied in 18.3% of cases, medium-sized companies in 38.0% of cases, and large companies in 62.3% of cases. Cramer’s coefficient of association reached the value of  $V=0.329$  ( $p < 0.001$ ).

Likewise, the 2021 results show a significant difference according to company size ( $\chi^2 = 42.80$ ;  $p < 0.001$ ). Figure 4 shows the frequencies with which companies utilise the aforementioned motive to support employee education. While micro companies reported that this applied in 11.5% of cases, small companies reported that this applied in 20.1% of cases, medium-sized companies in 28.4% of cases, and large companies in 45.7% of cases. Cramer’s coefficient of association slightly decreased in comparison to that for the previous data set ( $V = 0.291$ ;  $p < 0.001$ ).

A statistically significant change ( $\chi^2=6.916$ ;  $p<0.001$ ) was registered between the two examined years for large companies, with the value growing by 16.6%.



**Fig. 4.** The numbers of companies utilising the motive of inclusion of education in regular evaluations to support employee education.  
*Source:* authors

This article focuses on the development of trends in employee motivation in Czech companies in 2016 and 2021, in particular with regards to the roles of career growth, financial remuneration, and the inclusion of education in regular evaluations. The research includes a relatively large sample set of companies operating in the Czech Republic (N=1114), which provides a balanced sample for partial comparisons on the basis of company characteristics, in this case, company size. Kang (2007) found a close relationship between the perceivable benefits resulting from education and motivation and actual participation in such activities. However, his primary focus was on intrinsic motivation. In contrast, this study focuses on extrinsic motivation, i.e. the external incentives of companies. The companies reported that the main motivational factors for employees to participate in further education were career growth and the inclusion of education in regular evaluations. Of the three motivational factors analysed, financial remuneration was referred to the least, with the frequency thereof significantly differing according to company size, and significantly changing over time. The latter is evidenced by the significant drop in interest in financial remuneration as a motivational factor reported by small companies and the growth thereof noted by large companies.

The motivational factor career growth also significantly differed according to company size, and in both the examined years, with the associated trend even growing in 2021 ( $V=0.30$ ) compared to 2016 ( $V=0.25$ ). Despite the fact that the data show that the importance of career growth as a motivational factor grew in large companies between the examined years, a statistically significant change over time was not proven for any of the company size categories. Kakhovska, et al. (2018) characterise career growth as an important motivational factor, one that enables a balance to be achieved between the interests of the company and those of the employee. Major, et al. (2006) identified this trend early on, when further education was just starting to become an important part of an employee’s need for career growth. It is precisely in this motive that the highest interconnection exists between the extrinsic motivation of a company and the intrinsic motivation of an employee, whereby the company cultures of large companies enable the development of this individual motivation and the manifestation thereof, and in small companies, where career growth is limited and not wholly supported, signs of demotivation can appear.

The increase in 2021, in the identification of career growth in large companies as a motivational factor for employees to participate in further education is remarkable. Son & Kim (2019) corroborate this by confirming the

importance of the manager as a model for career development. Ellström & Ellström (2018) claim there is a strong need for training and development of first-line managers in order to improve their knowledge and skills in leadership and workplace organisation. Bhaskar, et al. (2021) state that continuous education has a positive impact on employee career growth and development.

The research at the heart of this article shows how motivational factors have changed over time. In 2021, financial remuneration as a means of supporting employee education proved to be statistically significant in small companies.

In 2021, the number of large companies that included education in regular evaluations fell. This is unfortunate and may take its toll in the future. As Depesova, et al. (2015) state, evaluation of the efficacy of employee education is an important part of the process of learning in professional practice.

We can assume that the situation around the Covid-19 global pandemic will have had an effect in companies and on employees with regards to the motivation to participate in further education (Liu et al., 2021; Al-Omouh et al., 2022). Riddell, et al. (2009), on the basis of the results of their research during crises, suggest that companies approach lifelong education with a certain degree of scepticism, and that at the end of the day they prioritise profitability over the individual development of employees, a philosophy that might reasonably be expected to apply to the time of the Covid-19 pandemic. On the contrary, Randall, et al. (2021) emphasises the key role that an organisation plays in the support of the permanent education of their employees, specifically in times of crises. Rapid organisational changes related to the pandemic and the switch to home office have brought new requirements, which have been reflected in employee education. The results of the study by Gołąb & Będzik (2018) indicate that there is a relationship between certain dimensions of well-being at work and motivation to undertake additional learning activities. Horáková & Maršíková (2021), in their probe into small and medium-sized Czech companies, identify support for knowledge management and knowledge sharing, although differences exist between the level of support for individual activities and the structure thereof. The requirement to acquire new skills as part of social-labour changes may have become more evident as a result of the transition from external motivation to the need for education as a part of changes in the workplace environment. As no suitable comparative data are available for the presented results, it is not possible to compare the results of this research. This research is designed to be the first part into this area. Further research is expected to focus on the V4 countries.

### **3. Conclusions**

The article deals with the extrinsic motivation of employees to participate in further education and trends within Czech companies between 2016 and 2021. It examines the relationships between individual motives for employees to participate in further education, namely career growth, financial remuneration, and the inclusion of education in regular evaluations, and company size. The inclusion of education in regular evaluations as a motivational factor differed according to company size, with large companies reporting the highest values, but with the association slightly decreasing between the examined years (from  $V=0.329$  in 2016 to  $V=0.291$  in 2021). The differences between the two years proved to be statistically significant in large companies, where the value decreased from 62.3% to 45.2% of companies that include education in regular evaluations.

A relationship to company size was also found for career growth as a motivational factor to participate in further education. The highest growth was recorded in large companies (from 49.4% in 2016 to 56.6% in 2021). However, only insignificant differences occurred over time.

The least important motivational factor was financial remuneration. In 2015, the frequency did not differ according to company size. The statistically significant difference found in 2021 was linked to a strong drop within small companies from 27.8% to 12.2%.

The research results suggest that large companies pay greater attention to motivating their employees to participate in further education than companies in other size categories. Furthermore, it follows from the results that regardless of size, companies prefer to utilise non-financial means to motivate their employees to participate in further education, which is in line with current trends. Based on the research results, the managements of micro, small, and medium-sized companies are recommended to focus more on motivating employees to participate in further education. This recommendation is in line with numerous studies on this issue, according to which, employees are looking for employers who support their professional as well as personal development and appreciate them. Employee motivation for education therefore generates a competitive advantage for a company in all areas of its activities.

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