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Inclusiveness as a key determinant of work engagement: evidence from V4 countries

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Keywords: empowerment; workplace autonomy; organizational learning environment; structural equation modeling

Abstract

Research background: There is currently a need for empirical research regarding the validity of specific work environment model elements supported by strong statistical evidence. The amount of research conducted in this field has been particularly limited in Central-Eastern Europe. The desire to fill in these gaps was at least in part responsible for the uniqueness of the research approach and its differences from previous similar studies.

Purpose of the article: The purpose of this study was to examine factors affecting employee engagement and to examine their relationship with each other using Visegrad countries as an example.

Methods: The initial data is taken from the fourth European Company Survey (2019) for management respondents. After data cleaning, the sample sizes for Czechia, Hungary Poland, and Slovakia are N(CZ)=904, N(HU)=682, N(PL)=511, and N(SK)=361, respectively. As a result of the exploratory factor analysis (EFA), the following five dimensions were identified for this research: (1) inclusiveness, (2) empowerment, (3) work autonomy, (4) organizational learning environment, and (5) work engagement. An analysis of structural equation modeling (SEM) was

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conducted to determine the links that exist among these dimensions of a constructive work environment.

Findings & value added: The structural model indicates that inclusiveness and empowerment have a significant positive impact on work engagement in all the countries examined. Inclusiveness was the strongest predictor of work engagement, followed by empowerment. Both of the two other predictors in the model (workplace autonomy and organizational learning environment) generally had less or no effect on employee engagement. The present study extends recent literature on work engagement by empirically validating the influence of workplace environment-related factors, as well as providing useful organizational policy recommendations for managers.

Introduction

Currently, there is no consensus among researchers regarding the key predictors of a constructive work environment. There is also a lack of empirical research regarding the validity of specific models in terms of their key constituent elements. This problem is related to the difficulty of measuring the work environment with quantitative techniques due to its complexity. Ultimately, the following problem develops. Despite the availability of sufficient data, solid theoretical understanding, and adoption of novel concepts in the management of organizational environments, researchers and practitioners in business administration may lack empirically proven tools for the assessment of the current state of affairs (e.g. Markowska-Przybyla, 2012; Engbers *et al.*, 2017). As such, one of the accompanying tasks of this study was not only the development of actual research assumptions supported by the literature but also their statistical testing. We hope, therefore, that as a result of our contribution, future studies in this area will be able to partly remove more of these restrictions.

Workplaces are organized differently in different countries, and organizational cultures follow this difference, which suggests that cross-national comparisons of workplace-related, meso-level variables can also provide insight into what actually shapes work environments in practice. At the same time, research on key predictors of a constructive work environment has mostly focused on the US, Japan, and Western Europe, whereas little research has been conducted in Central-Eastern Europe. In this regard, we also intend to bring some depth to the analysis of the predictors by examining and analyzing the influence of factors not just in the workplace in general but cross-nationally (in our case, at the V4) level. The desire to fill in these gaps was at least in part responsible for the uniqueness of our research approach and its differences from previous similar studies.

The following last argument is also worth mentioning. Initially, the European Company Survey (the source we used here) was conceived as a Eurofound source of comparative information on social dialogue at the

workplace. If you turn to academic search engines, you will find mostly reporting or program documents following this direction. Its datasets are mentioned rather modestly in research articles. The topic of predictors of work engagement based on the European Company Survey is not displayed in such a search combination at all. At the same time, the dataset incorporates a lot of high-quality statistical information with a large sample, which may well act as a source not only for direct purposes but also for a broader analysis of working relations in European countries. Our research contributes in some way to redressing this injustice.

The investigation proceeds as follows. To justify our theoretical framework, we start with a brief literature review and conceptualization of the research. We then identify five key dimensions of workplace environments based on research in the psychology of work. In subsequent steps, we attempt to draw a picture of the relationship between these five elements. Lastly, we conclude with a discussion of the findings and their implications, an explanation of some limitations, and suggestions for future research opportunities.

Literature review

There are many significant terms in the studies of work environment that are still contested. Discontent with oversimplifications, and interpretations have prompted some to coin their own definitions for arguably highly related research practices. Based on these considerations, we'd first do some relevant literature review in order to describe our conceptual vision based on the secondary data that we had available more clearly later.

Work engagement

Engagement in work, enthusiasm, and involvement tend to result in better work performed by employees. When people are engaged at work, they are not only happier but also contribute to higher productivity and profitability (Lee, 2012). A work culture that is engaging fosters employee commitment and increases employee energy, which improves production and business performance (Kumar, & Swetha, 2011; Goswami, & Goswami, 2018). This is why the working atmosphere of a company improves when its workers are engaged at work and have good relationships with their coworkers.

It has been proven that organizations with more engaged employees have elevated levels of satisfaction and loyalty, are more productive, and more profitable than those with less engaged employees (Harter *et al.*, 2002; Shanker *et al.*, 2017). Enhancing work engagement is a key factor in creating an innovative organizational environment that contributes to the sustainability of organizations (Mulligan *et al.*, 2021).

The generally accepted view is that the term work engagement was first used by Kahn (1990). to refer to employee engagement as the extent to which employees are involved and committed towards their organization and its values. More recently, Colbert et al. (2004) defined engagement in terms of a 'high internal motivational state'. The interest of employees in new information and experiences makes them more engaged at work (Suzuki et al., 2015). A clear picture of the organization's mission and vision may also be added to the list of antecedents of effective work engagement (van Tuin et al., 2020; Eguchi et al., 2021). According to the findings of the research series, a positive and significant relationship was found between mechanisms for individual and collective employee input and work engagement (Cheng et al., 2013; Holland et al., 2017; Weiss, & Zacher, 2022; Alshaabani & Rudnák, 2022). Taken together, all definitions involve some form of motivation and affect that motivation. Workers are not only ready to allocate effort and time toward their work but do so in part because they are interested in doing so. Within our research, we define work engagement as someone's intention to articulate ideas and improve work processes at work. Moreover, we argue that quite often people who are highly engaged in their work feel personally connected to its mission and are motivated by the work itself.

Inclusiveness

The next important dimension of the work environment is linked to inclusiveness, which refers to the extent to which work-life policies are perceived as readily accessible to people at all levels and in all jobs rather than as a privilege of certain groups (managers versus clerical or blue-collar employees).

A qualitative study conducted by Roberson (2006) found that inclusion focuses on employee involvement and integration. A truly inclusive workplace values differences among its workers and makes full use of their potential (Carmeli *et al.*, 2010). A more inclusive work environment has been shown to encourage employees to speak up and participate more actively (Detert & Burris, 2007; Carmeli *et al.*, 2010), as well as to demonstrate managers' accessibility and availability in their interactions with employees. A study by Nair and Vohra (2015) examined that an inclusive environment is characterized by open communication and managerial openness.

In spite of Nord and Tucker's finding that if communication channels are open, employee dissatisfaction and resistance to innovations are much lower (1987), inclusiveness is still a concept that most organizations advocate but find hard to put into practice. Even if policies and practices to support inclusiveness are formally adopted at the organizational level, they can be implemented differently across workgroups, business units, and locations (Blair-Loy & Wharton, 2002).

If policy use is merely nominally supported, it can detract from the feeling of overall inclusion. Employees will experience exclusion if they do not know whether any policy exists or are not aware of how the policy can meet their needs. Using poorly communicated or impersonally written policies as the primary focus limits understanding of their availability and applicability to individuals (Lee, 2012). Groups of employees who do not regularly access the organization's website or emails may be unaware that policies are available. These kinds of practices can raise barriers to inclusion within an organization, particularly when access is not readily available to those with lower wages and when it is unfair to minorities and women (Lambert & Waxman, 2005). As a result, a high number of employees perceives that they are not considered an integral part of their organization (Mor Barak, 2000).

When organizations and their leaders actively explore options and are open to alternative solutions, they will find themselves more likely to cultivate an inclusive environment, as well as become better positioned to meet the expectations of their employees and multicultural society. These perspectives provide a potentially powerful tool for both problem-solving and enhancing competitive advantage. For this reason, some authors, like Tang *et al.* (2017), suggest creating an inclusive climate so that the workplace can become a location where 'a hundred rivers run into the sea'.

Within our research, we define inclusiveness as an organizational intention to strengthen the individual contribution of the employee to the improvement of work processes by eliminating information and communication harriers.

Empowerment

Researchers have noted the wide internal variance in the level of employee access to policies (Lambert & Waxman, 2005; Fotiadis *et al.*, 2019). The reality is that employees desire to feel appreciated and empowered at work and desire a sense of ownership of their work (Lee *et al.*, 2015). Providing empowerment and recognition to employees is a persuasive factor (Baldoni, 2015). The organization that encourages employees to take

important decisions and to demonstrate their competence and lead others will likely be more attractive to job seekers (Kausel & Slaughter, 2011).

In the words of Randolph (1995), empowerment is the 'transfer of power' from management to employees. It may also be defined as the transfer of power or authority (Burke, 1986). Similar definitions have been provided by other authors, such as Thomas and Velthouse (1990), and Spreitzer (1992). The degree of empowerment can likewise be determined by the way a person perceives his or her role and the degree to which he or she is capable of influencing outcomes (Spreitzer, 1995). In previous research, empowerment was also described as giving people the opportunity to make workplace decisions by increasing their degree of autonomy in decisionmaking (Vogt, 1997). According to Leach et al. (2003, p. 28), empowerment refers to 'a practice, or set of practices involving the delegation of responsibility down the hierarchy so as to give employees increased decision-making authority with respect to the execution of their primary work tasks. This would be possible by quantifying the degrees of freedom (or options) with which one can reliably and perceptibly influence the world (Salge et al., 2014).

In our view, empowerment is not about losing the resources of power. Specifically, we deal primarily with giving employees authority and allowing them to perform their duties efficiently. This dimension of the workplace environment that emerges from the above-referenced literature talks about the constructive ability to influence management decisions and cuts across both professional and organizational boundaries. An organization whose managers exercise their power in such a supportive manner will undoubtedly inspire its employees.

Workplace autonomy

An insightful aspect of the current study compared the relationship between working relationships and work autonomy with various work-related correlates. There has been an increasing amount of research on the factors that influence employees' discretion and latitude at work. In the early literature, Hackman and Oldham (1975) conceptualized work autonomy as the freedom to do the task as one sees fit; discretion in scheduling, decision making, and means of accomplishing a task; and how much freedom and autonomy the worker has in determining how the task will be done. Later on, this term has been defined in a variety of ways, for instance as a person's right to choose and to be free to perform the work (Brey, 1999). A similar term is 'business autonomy', which describes the degree of freedom that an employee has when planning and working in his/her job (Mor-

geson et al., 2005). The main conclusion from this observation is that various definitions of work autonomy emphasize the principle of giving employees some control over certain aspects of their work. In this study, we define work autonomy as the degree of ability to perform work tasks without accessing any side (non-personal) resources.

As usual, low-wage employees are less likely to have flextime than managers and professionals (Holcomb, 2001). Nevertheless, employees with autonomy in their work often perform better (Saragih, 2015; Liu *et al.*, 2016). Accordingly, workplace autonomy is regarded as a core source of intrinsic motivation, mainly because, when an employee experiences the freedom of working for themselves, their intrinsic motivation towards the job is stimulated (Liu *et al.*, 2016). In light of these findings, we propose that job autonomy can provide some explanations for some principal elements of the working environment.

Organizational learning environment

Over the past decade, we have seen an increasing emphasis on learning at work in an effort to enhance productivity, innovation, and competitiveness (Lundvall, 2010; Hislop *et al.*, 2018; Andreoni *et al.*, 2021; Leydesdorff, 2021). Today's employees should be able to analyze information, enhance their problem-solving abilities and communication skills, and reflect on their role in the learning process. Learning occurs most often through social interactions and interactions with others, both inside and outside the organizations where they work (Spreitzer *et al.*, 2005). Wang *et al.* (2007) is convinced that a creational organizational learning culture is essential to nurture employee satisfaction, organizational commitment, and sustainable personnel.

It has become increasingly apparent that the acquisition of knowledge and skills must extend beyond the traditional stage of education; rather, it must be a lifelong process that continues throughout the entirety of an individual's working life, and the need for continuing education is growing (Wang *et al.*, 2007). In addition, E-learning is also getting recognized as being an essential component of workplace learning in the modern era (Cheng *et al.*, 2012; Kimiloglu *et al.*, 2017). We make the point, therefore, that training in work organizations results in clear benefits for all the elements of the working environment in general.

The organizational learning environment is a multifaceted concept that has been defined in a variety of ways. Senge (1990) defines it as 'an organization where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nur-

tured, where collective aspiration is set free, and where people are continually learning to see the whole together'. Organizational learning also focuses on issues of inter-organizational environmental processes and behavior, and thus, an organizational learning environment is perceived as a supportive entity (Hanaysha, 2016; Ahmed *et al*, 2020).

Following the comprehensive approach of Cheng et al. (2012), we fully agree with the relevant vision that the workplace learning environment consists of means, processes, and activities that allow employees to acquire skills and knowledge that relate to their jobs, duties, and roles, from basic skills to high technology and management practices.

Visegrad countries: differences and commonalities

We introduced a cross-cultural dimension to our research. Our focus is on the Visegrad countries, otherwise known as the V4 countries, which are Czechia Republic, Hungary, Poland, and Slovakia.

All four members of the V4 are connected by their history, since they all lived east of the Iron Curtain, meaning they were influenced by the Soviet Union. Each of these countries suffered through a transformation in the 1990s, and all joined the European Union in 2004 (Kowalska *et al*, 2018). These countries have similar or identical business development conditions in terms of size of the market, geography, and development of regions. The Visegrad Group countries and the companies that operate in them have almost identical HR approaches and cultures (Mura *et al.*, 2017).

On the other hand, there are also significant differences. According to Csath (2021), for example, there is a vast amount of variation among the Visegrad 4 countries as far as economic, knowledge, and social indicators are concerned.

In our research, we extend the analysis of the causes of work relationships by exploring the cross-national implications of variance in national employment relations, more specifically across the V4. The combination of cross-cultural evidence may provide substantial validation for our proposed model.

Hypotheses development and research questions

We hope the preceding overview has demonstrated the need for further exploration, modification, and the evaluation of existing categorizations of influences on work engagement. Below we develop an analysis related to the multidimensionality of the workplace by using a battery of questions taken from the European Company Survey (Eurofound & Cedefop, 2020a).

Aims and research questions

The main objective of this study was to examine factors affecting employee engagement and analyze their relationship with each other and their influence on work engagement using Visegrad countries as an example.

The following research questions have been formulated.

- 1. What are the main determinants of employee engagement?
- 2. What are the mutual influences among the elements of the working environment considered in this study?

Additionally, the authors like to draw attention to what is outside the scope of the study. Current research focuses on generalizations that can be applied across all four countries; therefore, it focuses more on the model of working relationships than on comparing countries based on the values of the examined dimensions. Although the authors do not exclude the possibility that this will be addressed in future research.

Hypotheses and research model

In the following subsections, research hypotheses are presented that later lead to the construction of a research model.

$Inclusiveness \rightarrow work engagement$

There is evidence of the connection between inclusiveness and work engagement, and how it might be promoted within organizations. Research on inclusiveness reported that employee perception of inclusion predicts engagement strongly (Cho & Mor Barak, 2008). When employees feel excluded, they experience a lower intention to engage (Findler *et al.*, 2007). Employees are more likely to be engaged if they are provided with organizational information that promotes their sense of belonging to the organization, so that they feel included, thus increasing their level of interest, as well as their contribution to the achievement of organizational goals (Goswami & Goswami, 2018; Zhu *et al.*, 2009; Xu & Cooper-Thomas, 2011). Specifically, we hypothesize that:

H1a. Inclusiveness has a positive influence on work engagement.

 $Inclusiveness \rightarrow empowerment$

Numerous researchers have discussed the positive relationship between inclusiveness and empowerment. Pelled *et al.* (1999) drew the conclusion that a component of inclusion was equality in the distribution of influence on decision-making. In some instances, workplace inclusiveness refers to how employees feel part of the organization through their access to decision-making processes and meaningful networks (Cho & Mor Barak, 2008; Adamonienė *et al.*, 2021). In terms of job support structures, empowerment is described as the process of sharing information and resources, for example, Hardy and Leiba-O'Sullivan (1998). Drawing from the above perspectives, the next hypothesis is proposed:

H1b. *Inclusiveness has a positive impact on empowerment.*

 $Inclusiveness \rightarrow workplace autonomy$

Considering that workplace autonomy is an example of independent functioning, we assume that it is of particular interest to inclusive working societies. A key component of inclusiveness is to create an atmosphere where employees feel that they are part of the organization while maintaining their sense of individuality, as demonstrated by Randel *et al.* (2018). In addition, Shakil *et al.* (2021) illustrate that inclusive leadership style plays a major role in predicting work autonomy. This leads to:

H1c. *Inclusiveness positively affects workplace autonomy.*

 $Inclusiveness \rightarrow organizational\ learning\ environment$

Fourth, the character of inclusiveness affects the learning environment, because information availability and transparency are some of the factors that contribute to enhancing employees (Yazdani *et al.*, 2011). Thus, we can form the following hypothesis:

H1d. *Inclusiveness has a significantly positive influence on creating learning environment.*

 $Empowerment \rightarrow work \ engagement$

In his book, Marquardt (2002) argues that empowering people, as an interesting subsystem of the organizations, would enable them to learn and share learning with one another, the act that represents the core of the process of developing organizational learning. According to Korsakienė *et*

al. (2003), the opportunity for employees to make decisions is one of the most effective methods of increasing employee engagement. It can therefore be hypothesized that:

H2a. Empowerment has a significant positive influence on work engagement.

 $Empowerment \rightarrow workplace autonomy$

According to Blumberg (1969), people's desire for greater participation at work is a manifestation of their generalized need for control. For quite some time now, researchers have pointed out the importance of control for the very reason that it ensures that effort and result are connected (Rodin *et al.*, 1980; Bandura, 1986). Both laboratory and field experiments have demonstrated that people cope far better when they believe they have control over adverse events than they do when they believe they are out of their control (Bandura, 1986; Lee, 2012). The following definition is offered by Tannenbaum (1986, p. 323): 'To control means to 'determine outcomes,' 'act as a causal agent,' 'have an impact'. In other words, control can be considered as having the ability to influence and act independently.

Employees feeling that their job denies them work autonomy may perceive their job as taking away a chance to participate in decision-making and the flexibility to work as they see fit (Hackman & Oldham, 1975). On the other hand, empowerment allows employees to be involved in decision-making and to remove certain institutional restrictions, which gives them relatively high autonomy and enables them to reach timely operational decisions (Li *et al*, 2016). Therefore, the following hypothesis was formulated:

H2b. Empowerment positively affects workplace autonomy.

Workplace autonomy \rightarrow work engagement

Aspects such as flexibility or autonomy promote engagement (Markwich & Robertson-Smith, 2009). Menguc *et al.* (2013) found that employee engagement levels might vary depending on their autonomy. Some researchers (Schaufeli *et al.*, 2002) considered work autonomy as a component of work engagement. Psychological engagement of employees can be affected by the employee's autonomy orientation (Gagné, 2003; Fürstenberg *et al.*, 2021). The following hypothesis is derived from the above discussion:

H3a. Workplace autonomy positively affects work engagement.

Workplace autonomy → Organizational learning environment

There has been previous research examining that organizational learning environments are largely influenced by workplace autonomy. It has been found that employees with high autonomy orientations are more likely to be inclined towards initiative learning, which makes them more effective learners (Liu *et al.*, 2011). With more autonomy, employees manage their inter-organizational relationships to fulfill the needs of their job, requiring updated knowledge and skills (Menguc *et al.*, 2013), and 'encouraging a habit of continuous learning and development' (Watkins & Marsick, 1993). Frayne and Geringer (2000) indicate that an organizational learning environment may also benefit from increasing trainees' self-efficacy and self-management capabilities. Therefore, the following was hypothesized:

H3b. Workplace autonomy has a significant positive influence on creating learning environment.

Work engagement → *Organizational learning environment*

Lockwood (2006) points out that employee engagement requires a continuous process and a work environment that is characterized by stimulation, development, learning, support, contribution, and recognition. Hanaysha (2016) concluded that organizational learning enhances organizational engagement significantly. Thus, we hypothesize:

H4. Organizational learning environment has a positive effect on employee engagement.

The hypotheses proposed in the current study are summarized in Table 1.

On the basis of the above, the following research model was developed (Fig. 1). Inclusiveness is a predictor of all other study dimensions (empowerment, workplace autonomy, learning environment, and employee engagement). The key predicted dimension in the model is work engagement. As part of this model, empowerment is examined in relation to workplace autonomy or workplace autonomy in relation to an organization's learning environment, as well as the effects of these dimensions on work engagement.

Methods: empirical material and analytical tools

In this part, the methods of validating and assessing latent constructions (study dimensions) are discussed, as well as research instrument development, sample description, and data analysis. Additionally, this section describes the fit indices of the structural model used to investigate the relationship between inclusive working environment and work engagement.

Sample

This study applies the quantitative research approach, measuring data on constructs (inclusiveness, work engagement, empowerment, work autonomy, and organizational learning environment), using quantitative scales and quantitative data analysis. The data was taken from a dataset of the European Company Survey (ECS)¹ (Eurofound & Cedefop, 2020a) for management respondents, published in October 2020. ECS is an annual, crossnational European survey that is administered to a representative sample of about 30 countries. The questionnaires were provided to executives and managers across different management levels within European organizations in a way that preserved the proportions within the organization. Our article presents data on four European countries: Our article presents data on four European countries: Czechia, Hungary, Poland, and Slovakia. It was decided to exclude 300 incomplete responses from further analysis. This resulted in 2458 responses, allowing them to be analyzed: 904, 682, 511, and 361, respectively. As the minimum sample size suggested in the literature is not less than 300 (Tabachnick & Fidell, 2007), a sample size from 361 to 904 for SEM is considered acceptable. In the initial stage of analysis, Cronbach's coefficient alpha (Cho, 2016) was calculated to test the reliability of each scale. The questionnaire items had an 'acceptable' or 'very good' internal consistency (Cronbach, 1951; Cho, 2016).

The percentage distribution of the number of enterprises represented in the sample shows differences in the studied countries based on the main characteristics of the company sample (Table 2). As an example, the Slovakian sample underrepresents the production sector and overrepresents the service sector. Small companies are overrepresented in the samples for Hungary and Slovakia. These differences in proportions have no effect on the study results, as weights were applied by sector and size group according to the weighting approach implemented in ECS 2019 (Eurofound & Cedefop, 2020b, p. 126).

¹ Links to the databases are provided in the Acknowledgements.

Data analysis

Measures preliminary tests and procedures

Regrettably, the items were not all categorized according to attitude scaling theory, as they displayed a variety of response categories: 1–3 (4 items); 1–4 (11 items); 1–7 (6 items); 1–2 (1 item).

To resolve this issue, all items were rescaled into a 0-1 scale in order to construct the subscales. MIN-MAX scaling was used to normalize the values: the minimum value (minimum level on the Likert scale) was set to 0 and the maxi-mum value to 1. In addition, in order to achieve accordance between the ordering of the response categories, the scores of negatively worded items were reversed before the analysis (Table 3). Renewed scales were constructed by averaging the re-scaled defining items according to the factor loadings. As a result, a low or high score indicates a low or high construct value, respectively.

In order to examine the construct validity of the constructs in the theoretical model evaluating inclusiveness, work engagement, empowerment, work autonomy, and organizational learning environment, exploratory factor analysis (EFA) was conducted. Harman's single factor test (Afthanorhan, et al., 2021; Podsakoff et al., 2003) was used to examine potential common method variance (bias due to using a single data collection method). The EFA results indicated that the single factor explained 21.86% of the variance in the items for Czechia, 22.6% for Hungary, 21.40% for Poland, and 22.31% for Slovakia, indicating that common method bias was unlikely to be a problem in the model.

The structure suggested by EFA was subsequently validated by conducting a confirmatory factor analysis (CFA) with IBM Statistics SPSS Version 25 and AMOS Graphics Version 23.0. It was found that all dimensions were sufficiently loaded, above 0.5, on each construct. According to the confirmatory factor analysis results, the measurement model produces satisfactory goodness-of-fit (GFI) measures and, therefore, it can be deemed to display acceptable discriminant and convergent validity. Results presenting missing data were removed using list-wise deletion.

To compute the average variance extracted, the item reliability for each measure, the composite reliability for each construct, and the item reliability for each measure were computed according to the recommendations in the literature. According to recommendation (Malhotra & Birks, 2018), the Cronbach coefficient for all constructs of the multi-item measures exceeded 0.6, indicating that the scales are reliable. For the cases of two-item measures, we have also used the Spearman-Brown formula to estimate the

reliability of the total scale, since the inter-item correlation equals the split-half reliability estimate (Hulin *et al.*, 2001; Eisinga *et al.*, 2013). As a measure of the overall amount of variance attributable to the construct and the amount attributable to measurement error, the average variance extracted was computed (AVE). Convergent validity was considered to be adequate because AVE is below the threshold of 0,5, but the value of the composition confidence indicator exceeds the value of 0,7, for example, the relaxed variant of Fornell and Larcker (1981) or see also Henseler *et al.* (2009); Lam (2012); Hair *et al.* (2014). In Appendices, Tables 4, 5, 6, 7 present descriptive statistics, convergent validity, composite reliability, discriminant validity, and internal consistency based on representative samples for each country.

So, all values meet the criteria for validity and reliability.

Structural model & hypotheses testing

In the next step, in order to test the hypothesized causal effects, maximum likelihood was used to estimate the path coefficients in the structural model. Confirmatory factor analysis (CFA) and structural equation modeling (SEM) were used to analyze the samples from all four countries. The model fit was deemed acceptable if χ 2/df \leq 5 (Podsakoff *et al.*, 2003), since comparative fit index (CFI), and Tucker-Lewis index (TLI) values were > 0.90 and Root-mean-square error approximation (RMSEA) < 0.08 (Hu & Bentler, 1999; Steinmetz *et al.*, 2009; Cieciuch *et al.*, 2014; Schwartz & Butenko, 2014). Table 8 presents the goodness of fit indices for structural models.

In order to calculate the scores for composite reliability and average variance extracted from the composite reliability, the acceptable values were first determined for both individual measures and composite measures. The values for discriminant validity and convergent validity were also measured, and subsequently, the structural model was empirically evaluated using a number of fitness indices.

It was assumed that the incidence of the variables and examined perspectives in the expected final result could be corroborated or rejected. The use of confirmatory factor analysis and path analysis demonstrates the possibility of corroborating the existence of the perspectives found in the exploratory factorial analysis, and the overall model fit of this study was acceptable.

Thus, four potential key drivers of work engagement emerged: (1) inclusiveness, (2) empowerment, (3) work autonomy and (4) organizational learning environment.

Results

The results related to the research questions are provided in this section. Table 9 summarizes the results for all four countries to illustrate the points.

H1 (**A**, **B**, **C**, **D**) — *Inclusiveness as a predictor*

- (A) The primary objective of this study was to examine the effects of inclusiveness on work engagement. Models indicate dependencies that were consistently greater than 0.40 for three out of four countries. An exception to this pattern is Hungary ($\beta = 0.245$, S.E. = 0.106, p = 0.015). Thus, finally, our main hypothesis (H1a) is confirmed. It is important to note that the strength of the relationship between these orientations in all countries indicates that inclusiveness is central to the development of work engagement.
- (B) Hypothesis H1b confirmed that empowerment increases with an increase in the use inclusiveness activities. The effects can be classified from weak to moderate (ranging from $\beta=0.338$ in Hungary to $\beta=0.540$ in Czech Republic). It was shown that the impact of inclusiveness on empowerment in the V4 countries can be considered as a stable effect. Hence, H1B was supported.
- (C) An examination conducted in H1c examined whether workplace autonomy will increase with increased inclusiveness. It could only partially be accepted for Czechia (β = 0.224, S.E. = 0.140, p = 0.012). Obviously, this highlights the national specificity of Czechia and suggests a need for further investigation in future studies. On the basis of the data from four data sets and the model, it is not possible to claim that inclusiveness has a statistically sustained significant direct effect on workplace autonomy.
- (**D**) In spite of Slovakia's negligible results ($\beta = 0.118$, S.E. = 0.148, p = 0.349), the relationship between inclusiveness and organizational learning environment can be partially accepted. In the other countries, the conclusion seems to be: the better people feel about inclusiveness the more elements of organizational learning environment they will accept in their working process. So, it seems expanded research is needed to definitely answer the question of whether inclusiveness is useful for the organizational learning environment. In general, however, hypothesis H1d was partially confirmed.

H2 (**A**, **B**) — Empowerment as a predictor

- (A) In support of Hypothesis H2a, it was confirmed that empowerment contributes significantly to work engagement. Indicators showed weakly, but sustained effects from $\beta = 0.204$ (the Czech Republic) to $\beta = 0.431$ (Hungary). Hence, the hypothesis is confirmed.
- (B) The findings of this study do support this proposition as empowerment has a direct and strong effect on workplace autonomy. The effects can be classified as weak but sustainable (ranging from 0.224 in Poland to 0.304 in Czechia and Slovakia). The hypothesis (H2b) is accepted here on the basis of the results.

H3 (**A**, **B**) — Workplace autonomy as a predictor

- (A) Studying the role of workplace autonomy in influencing work engagement produced mixed results. Workplace autonomy predicted negligible loadings for the 'work engagement' factor across all countries, demonstrating invalidity. Except for Czechia and Poland, our study failed to reject the null hypothesis of the workplace autonomy effect (ranging from 0.145 in Hungary to 0.308 in Poland). Hence, the results show that no support for H3a was found.
- (B) Hypothesis H3b assumes that workplace autonomy impacts the organizational learning environment, which was also the case during our analysis. The results suggest that the impact exists, and the effect is especially strong in the case of Hungary ($\beta = 0.758$, p<0.001) and Slovakia ($\beta = 0.856$, p<0.001). Overall, we can state that workplace autonomy impacts organizational learning positively. Thus, these results indicate that businesses that are able to gain more flexibility in their working relationships adapt to the new business environment faster and to a certain degree more effectively.

H4 — Organizational learning environment as a predictor

Since many organizations around the world invest heavily in training, it was anticipated that these efforts would result in significant benefits and have a positive impact on the work engagement of employees. However, the organizational learning environment was found to have a negligible or weak impact on work engagement. In general, the findings indicate that the organizational learning environment has no direct impact on work engagement (H4). The significant negative associations in Poland and Slovakia ($\beta_{PL} = -0.069$, $\beta_{SK} = -0.047$) do not support the H4 hypothesis. No direct

relationship was noted between the organizational learning environment and work engagement. A similar effect has been observed by Stankiewicz and Moczulski (2015) in certain work environments, as a consequence of informal limitations on the use of innovative knowledge. For further research, we may suggest that the impacts of organizational learning are indirect.

Discussion

At the V4 level, the strongest predictor of work engagement was inclusiveness ($\beta_{CZ} = 0.456$; $\beta_{HU} = 0.245$; $\beta_{PL} = 0.414$; $\beta_{SK} = 0.439$) followed by empowerment ($\beta_{CZ} = 0.204$; $\beta_{HU} = 0.431$; $\beta_{PL} = 0.345$; $\beta_{SK} = 0.310$). This is quite consistent with previous findings (Kowalska *et al.*, 2018; Ahmed *et al.*, 2020; Eurofound & Cedefop, 2020a). Interestingly, even though inclusiveness was confirmed as having a strong role in predicting work engagement across all of the mentioned countries, in Hungary it was the second most reliable predictor of work engagement. Both of the other predictors (employee autonomy and organizational learning environment) generally had less or no effect.

Based on the results above, the items of the model have similar relationships with each other in each country and are therefore interpreted similarly (Buss & Royce, 1975; Hui & Triandis, 1985). Along these lines, using measures that are universally applicable across countries makes it possible to conduct multinational comparisons of the effects of organizational changes and reproduce valid managerial approaches across cultures.

Thus, these analyses can be viewed as contributing to an expanding understanding of the factor structure of cross-cultural working relationships. The slight differences in the patterns of causal relations are likely due to external factors, which concern the relationship between HR practices and the cross-national environment in which a firm operates.

Conclusions

Theoretical contributions

The present study extends recent literature on work engagement acceptance by validating the influence of workplace environment-related factors. In particular, according to the majority of existing research, the comprehensive organizational learning environment should positively impact work engagement. This paper challenges this assumption and raises new questions about the role of learning efforts.

Furthermore, from a theoretical perspective, we develop the concept of the EU's 'open method of coordination in this article, which is based on the premise that institutional best practices can serve as benchmarks, and that policies can be put in place at European, V4 and national level to facilitate their dissemination. Consequently, to increase the advancement and sophistication of research on working relationships practices, researchers and managers should move beyond simply promoting the mere existence of such policies. Only then can a truly advanced workplace be achieved. To enhance the usefulness of work engagement policies as a more collaborative managerial environment vehicle, e.g. Borisov and Vinogradov (2019), a comprehensive understanding of inter-organizational linkages is certainly needed.

It is also worth noting that the role of inclusiveness in the work environment has not been extensively researched in Visegrad Group countries so far. Moreover, at the time of preparing this article, the authors were unable to find English-language studies that utilized data from the European Company Survey for the study of this topic in relation to this European Quartet. Generally, it seems that the possibility of using the datasets of the European Company Survey to study groups of countries or even individual countries is unfairly overlooked by modern researchers. The desire to fill in these gaps is at least in part responsible for the uniqueness of our research approach and its differences from previous similar studies.

Practical implications

Considering the structural model, we can conclude that there are two factors: firstly, inclusiveness and secondly, empowerment, both of which positively affect work engagement. These findings suggest that for managers who are responsible for employee engagement it would be a wise idea to first check and redesign these elements of the work environment. On the basis of additional assessments of particular job needs, working and managing assets, practitioners might propose intervention strategies to enhance work engagement. This effect might be used intentionally to build a work engagement policy in certain ways. More counseling programs developed on a larger scale might very well improve employees` inclusion and therefore enhance their work engagement. In this sense, the most relevant practical implication is the recommendation to incorporate workshops and interventions to promote inclusive intentions to further strengthen work engagement.

The results may also benefit political actors in transition economies who seek improvements in the competitiveness of their countries, as they could implement laws and regulations related to the organizational environment. Without addressing other factors in the entire system, simply changing abstract inclusiveness is not enough to increase work engagement. Therefore, changing policies should be delivered and applied in concert and from a holistic perspective. It is our opinion that this view of wholeness is more than the sum of its parts.

Limitations

Some of the research hypotheses were supported by structural equation modeling tests conducted on sample data. Although every effort was made to ensure the objectivity, reliability, and validity of the study, certain limitations could not be avoided. We proposed that inclusiveness can determine workers' engagement. Even though our data generally support this hypothesis, it is possible that similar models could reverse the causal direction.

The study is also limited by the use of 'existing' data (Cheng & Phillips, 2014). The investigated datasets have not been collected in order to test our hypotheses or to address our specific research questions. Some relevant sub-variables were therefore not available to analyze. It is certain that if we had developed a questionnaire for our conceptual model, the number of questions and range of meanings requested would be far more extensive.

Taking into account the fact that the survey was distributed just before the global COVID-19 pandemic broke out and before the sharp phase of the Ukrainian crisis, there is a possibility that management in the present might answer questions about some aspects of working relationships differently.

Future research

We identify future directions for research as well.

As we have already mentioned, Czechia, Hungary, Poland, and Slovakia are neighboring countries that have some historical and intercultural similarities. This factor turned out to be significant in our results. It is therefore pertinent to study the above-mentioned relationships in other regional contexts. Our findings should subsequently be replicated in other countries or groups of countries and in different samples, combining various occupational groups. Particularly, a variety of contextual factors from the external business environment should be considered (sociocultural, technological, legislative-political, and international), so that causality can be fully established and a broader generalization can be achieved.

Moreover, practitioners may be interested in learning concrete, empirically based strategies to promote engagement at work. In order to get more specific guidance, organizations can use linkage analysis, i.e. — combining employee research and monetary data — to quantify the economic impact of denoted chains of determination in an organizationally specific way, as well as consider the potential costs and outcomes of making various changes to improve the working environment concerning employee engagement.

The reality is that there are numerous human or organizational factors influencing certain aspects of the working environment, and the latter can act as a moderating or intermediary factor. The study needs a more extended view to include additional variables related to the working environment for its results to be more generalizable.

We also contend that the benefits of inclusiveness may have a cascading effect so that empowerment affects workplace autonomy, which in turn affects work engagement outcomes. Consequently, an in-depth study is needed to identify the factors that promote a smooth dimensional transfer of benefits. There is potential value in developing concepts for such cross-dimensional transfers. Hence, future studies should investigate the mechanisms that may underlie them.

Final remarks

In this study, the authors compared various factors affecting work engagement against each other in order to determine which is the most significant. According to one of the main findings of the study, inclusiveness has the most positive effects on employees' engagement. The results of the empirical research seem to indicate, contrary to the expectations of the authors, that the organizational learning environment plays no significant role in promoting employee engagement. Given the similarity of results across samples for the studied countries, the authors' findings are considered robust. Consequently, the developed research instrument and model can be successfully transferred and implemented in other countries. Study results contribute to understanding dimensions influencing work engagement and improving managerial approaches for enhancing employee engagement.

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Acknowledgments

Data Availability Statement: Detailed information about data collection and documentation in the participating countries can be found here: https://www.eurofound.europa.eu/surveys/2019/european-company-survey-2019. Datasets from Eurofound are stored at UK Data Services (UKDS) and are accessible online through their web-site: https://ukdataservice.ac.uk/.

Annex

Table 1. The hypotheses proposed in the current study

No.	Hypotheses
H1	Inclusiveness positively affects employee engagement and empowerment, workplace autonomy,
	and learning environment
H1a	Inclusiveness has a positive influence on work engagement.
H1b	Inclusiveness has a positive impact on empowerment.
H1c	Inclusiveness positively affects workplace autonomy.
H1d	Inclusiveness has a significant positive influence on creating learning environment.
H2	Empowerment positively affects employee engagement and workplace autonomy
H2a	Empowerment has a significant positive influence on work engagement.
H2b	Empowerment positively affects workplace autonomy.
Н3	Workplace autonomy has a positive effect on employee engagement and learning environment
H3a	Workplace autonomy positively affects work engagement.
H3b	Workplace autonomy has a significantly positive influence on creating learning environment.
H4	Organizational learning environment has a positive effect on the employee engagement

Table 2. Characteristics of the company sample

			Perce	entage	
Variable	Category	Czechia (N=904)	Hungary (N=682)	Poland (N=511)	Slovakia (N=361)
Sector	Production	44.5	31.5	45.4	24.1
	Construction Services	8.0 47.6	10.9 57.6	8.6 46.0	4.4 71.5
Size in number of employees	10 to 49 employees	58.5	71.1	49.9	74.5
	50 to 249 employees	31.4	23.6	40.7	22.2
	250 employees or more	10.1	5.3	9.4	3.3

 Table 3. Selected items and alignment

Item label in ECS	Description of items in ECS	Item label after alignment
	Inclusiveness	
REGMEE	Which of the following practices are used to involve employees of this establishment in how work is organised? A Meetings between employees and their immediate manager (1-3)	Meetings emp/mng (R)
STAFFME	Which of the following practices are used to involve employees of this establishment in how work is organised? B Meetings open to all employees at the establishment (1-3)	In_open Meetings (R)

Table 3. Continued

Item label in ECS	Description of items in ECS	Item label after alignment
	Inclusiveness	
DISSINF	Which of the following practices are used to involve employees of this establishment in how work is organised? C Dissemination of information via newsletters, website, notice boards, email etc. (1-3)	Dissmnt Inform (R)
SOMEDI	Which of the following practices are used to involve employees of this establishment in how work is organised? D Discussions with employees hosted on social media platforms or online discussion boards. (1-3)	In_online Discuss (R)
VPINPER	Variable extra pay linked to individual performance - employees received variable pay - individual performance-related pay (1-7) Empowerment	Individual perf_pay
	1	
MMEPINPAY	Please think about the period since this establishment was set up. In your opinion, to what extent have employees directly influenced management decisions in the following areas? G Payment schemes (1-4)	Infl_on payment (R)
MMERINTIME	Please think about the period since this establishment was set up. In your opinion, to what extent have employees directly influenced management decisions in the following areas? F Working time arrangements (1-4)	Infl_on worktime (R)
MMERINDISM	Please think about the period since this establishment was set up. In your opinion, to what extent have employees directly influenced management decisions in the following areas? C Dismissals (1-4)	Infl_on Dismissal (R)
MMERINORG	Please think about the period since this establishment was set up. In your opinion, to what extent have employees directly influenced management decisions in the following areas? A The organisation and efficiency of work processes (1-4)	Infl_on process (R)
MMERINTRAIN	Please think about the period since this establishment was set up. In your opinion, to what extent have employees directly influenced management decisions in the following areas? E Training and skills development (1-4) Work engagement	Infl_on trainings (R)
	How important are the following reasons for providing training to employees of this	
TRINN	establishment? C Increasing the capacity of employees to articulate ideas about improvements to the establishment	Articulat ideas (R)
DISCSUGG	To be evaluated positively, how important is it that employees at this establishment demonstrate the following behaviours? C Making suggestions for improving the way things are done?	Improving suggest (R)
MOTICHAL	How often are the following practices used to motivate and retain employees at this establishment? C Providing interesting and stimulating work	Stimulat interest (R)
MOTIMIS	How often are the following practices used to motivate and retain employees at this establishment? B Communicating a strong mission and vision, providing meaning to our work	Mission& vision (R)

Table 3. Continued

Item label in ECS	Description of items in FC'S					
LOWMOT	Overall, how motivated do you think employees in this establishment are?	Motivation level (R)				
Work authonomy						
COMORG	For how many employees their job include organising their own time and scheduling their own tasks? (1-7)	Own schedule				
SUPCHEK	Which of these two statements best describes the general approach to management at this establishment? 1 Managers control whether employees follow the tasks assigned to them 2 Managers create an environment in which employees can autonomously carry out their tasks	Autonom /control				
TRSKI	Ensuring that employees have the skills they need to do their current job - important for providing training to employees A Ensuring that employees have the skills they need to do their current job	Signif_of need_skill (R)				
	Organizational learning environment					
PAIDTRAIN	In 2018, how many employees participated in training sessions on the premises or at other locations during paid working time? (1-7)	Paid training				
CONTR	How many employees in this establishment are in jobs that require continuous training? (1-7)					
ONJOB	In 2018, how many employees have received on-the-job training/forms of direct instruction from more experienced colleagues? (1-7)	Onjob training				
ICTCOMP	How many employees in this establishment use personal computers or laptops to carry out their daily tasks? (1-7)	PC_daily tasks				

Note: (1-3) = 1 Yes, on a regular basis, 2 Yes, on an irregular basis, 3 No; (1-4) = 1 To a great extent, 2 To a moderate extent, 3 To a small extent, 4 Not at all; (1-4 A) = 1 Very important (motivated), 2 Fairly important (motivated), 3 Not very important (motivated), 4 Not at all important (motivated); (1-7) = 0 exact number of employees, or percentage categories 1-7: 1-1 None at all, 1-1 Less than 1-1 Less than 1-1 1 and 1-1 None at all, 1-1 2 Less than 1-1 1 and 1-1 1 None at all, 1-1 2 Less than 1-1 1 and 1-1 1 None at all, 1-1 2 Less than 1-1 2 None at all, 1-1 2 Less than 1-1 2 None at all, 1-1 2 Less than 1-1 2 None at all, 1-1 2 Less than 1-1 2 None at all, 1-1 2 Less than 1-1 2 None at all, 1-1 2 None at all, 1-1 2 Less than 1-1 2 None at all, 1-1 2 Less than 1-1 2 None at all, 1-1 2 Less than 1-1 3 None at all, 1-1 4 None at all, 1-1

Table 4. Descriptive statistics of items and internal reliability and convergent validity of the latent variables for Czech Republic

Construct (Factor)/Items	Mean (SD) Loadings	'ronbach' s alpha	CR	AVE
Inclusiveness	0.58 (0.22)	0.618	0.743	0.318
Inclusive meetings	0.83 (0.25) 0.722			
Inclusive open meetings	0.62 (0.36) 0.723			
Dissemination of Information	0.63 (0.39) 0.667			
Inclusive online discussion	0.12 (0.29) 0.544			
Empowerment	0.42 (0.23)	0.752	0.823	0.375
Influence on payment schemes	0.35 (0.34) 0.724			
Influence on working time	0.42 (0.34) 0.739			
Influence on dismissals	0.22 (0.29) 0.646			
Influence on work processes	0.55 (0.30) 0.753			
Influence on training development	0.53 (0.31) 0.680			

Table 4. Continued

Construct (Factor)/Items	Mean (SD)	Loadings	Cronbach' s alpha	CR	AVE
Organizational learning environment	0.48 (0.24)		0.668	0.771	0.408
Paid training	0.55 (0.32)	0.830			
Jobs that require continuous training	0.46 (0.29)	0.755			
On-the-job training	0.43 (0.33)	0.740			
Workplace authonomy	0.53 (0.29)		0.587*	0.717	0.434
Work autonomy	0.38 (0.26)	0.787			
Managerial style: autonomy/control	0.68 (0.47)	0.787			
Work engagement	0.59 (0.17)		0.707	0.823	0.375
Capacity of employees to articulate ideas	0.60 (0.25)	0.649			
Improving work processes	0.66 (0.25)	0.681			
Stimulating interest	0.57 (0.23)	0.726			
Mission and vision	0.55 (0.26)	0.772			
Level of motivation	0.56 (0.20)	0.550			

Note: N = 904; * Spearman-Brown coefficient.

Table 5. Descriptive statistics of items and internal reliability and convergent validity of the latent variables for Hungary

Construct (Factor)/Items	Mean (SD)	Loadings	Cronbach 's alpha	CR	AVE
Inclusiveness	0.34 (0.28)		0.616*	0.711	0.427
Dissemination of Information	0.50(0.39)	0.807			
Inclusive online discussion	0.17 (0.30)	0.807			
Empowerment	0.46 (0.24)		0.758	0.832	0.387
Influence on payment schemes	0.43 (0.35)	0.743			
Influence on working time	0.47 (0.35)	0.756			
Influence on dismissals	0.30 (0.32)	0.619			
Influence on work processes	0.60 (0.31)	0.726			
Influence on training development	0.48 (0.32)	0.715			
Organizational learning environment	0.38 (0.20)		0.668	0.719	0.350
Paid training	0.31 (0.27)	0.752			
Jobs that require continuous training	0.29 (0.27)	0.745			
On-the-job training	0.45 (0.28)	0.667			
Using PC in daily tasks	0.50 (0.32)	0.628			
Workplace authonomy	0.47 (0.32)		0.610*	0.738	0.466
Work autonomy	0.37 (0.27)	0.806			
Managerial style: autonomy/control	0.88 (0.49)	0.806			
Work engagement	0.61 (0.17)		0.697	0.790	0.370
Capacity of employees to articulate ideas	0.63 (0.24)	0.767			
Improving work processes	0.70 (0.22)	0.739			
Stimulating interest	0.54 (0.24)	0.681			
Mission and vision	0.57 (0.24)	0.710			

Note: N = 682; *Spearman-Brown coefficient.

Table 6. Descriptive statistics of items and internal reliability and convergent validity of the latent variables for Poland

Construct (Factor)/Items	Mean (SD)	Loadings	Cronbach' s alpha	CR	AVE
Inclusiveness	0.33 (0.23)		0.637	0.704	0.335
Dissemination of Information	0.46 (0.40)	0.744			
Inclusive online discussion	0.08 (0.22)	0.625			
Variable extra pay linked to individual performance	0.43 (0.37)	0.626			
Empowerment	0.50 (0.21)		0.766	0.841	0.406
Influence on payment schemes	0.46 (0.31)	0.727			
Influence on working time	0.53 (0.29)	0.772			
Influence on dismissals	0.34 (0.31)	0.619			
Influence on work processe	0.59 (0.27)	0.791			
Influence on training development	0.55 (0.28)	0.694			
Organizational learning environment	0.43 (0.20)		0.628	0.715	0.360
Paid training	0.45 (0.29)	0.799			
Jobs that require continuous training	0.34 (0.27)	0.697			
On-the-job training	0.42 (0.29)	0.622			
Using PC in daily tasks	0.45 (0.29)	0.658			
Workplace authonomy	0.43 (0.31)		0.609*	0.704	0.419
Work autonomy	0.33 (0.25)	0.793			
Managerial style: autonomy/control	0.52 (0.50)	0.793			
Work engagement	0.60 (0.18)		0.699	0.787	0.367
Capacity of employees to articulate ideas	0.64 (0.24)	0.719			
Improving work processes	0.73 (0.23)	0.727			
Stimulating interest	0.52 (0.25)	0.723			
Mission and vision	0.53 (0.27)	0.734			

Note: N = 511; *Spearman-Brown coefficient.

Table 7. Descriptive statistics of items and internal reliability and convergent validity of the latent variables for Slovak Republic

Construct (Factor)/Items	Mean (SD)	Loadings	Cronbach's alpha	CR	AVE
Inclusiveness	0.63 (0.26)		0.657	0.713	0.350
Inclusive meetings	0.81 (0.28)	0.786			
Inclusive open meetings	0.61 (0.34)	0.798			
Dissemination of Information	0.43 (0.43)	0.646			
Empowerment	0.47 (0.21)		0.744	0.832	0.386
Influence on payment schemes	0.48 (0.31)	0.719			
Influence on working time	0.46 (0.31)	0.740			
Influence on dismissals	0.28 (0.30)	0.634			
Influence on work processe	0.57 (0.28)	0.692			
Influence on training development	0.53 (0.29)	0.728			
Organizational learning environment	0.47 (0.21)		0.675	0.718	0.297
Paid training	0.53 (0.34)	0.725			
Jobs that require continuous training	0.38 (0.28)	0.693			
On-the-job training	0.46 (0.31)	0.769			
Using PC in daily tasks	0.50 (0.32)	0.756			
Workplace authonomy	0.36 (0.30)		0.638*	0.717	0.433
Work autonomy	0.26 (0.25)	0.776			
Managerial style: autonomy/control	0.48 (0.50)	0.776			

Table 7. Continued

Construct (Factor)/Items	Mean (SD)	Loadings	Cronbach's alpha	CR	AVE
Work engagement	0.61 (0.18)		0.722	0.815	0.406
Capacity of employees to articulate ideas	0.66 (0.24)	0.691			
Improving work processes	0.75 (0.25)	0.748			
Stimulating interest	0.51 (0.25)	0.742			
Mission and vision	0.52 (0.26)	0.770			

Note: N = 361; *Spearman-Brown coefficient

Table 8. Goodness of fit indices for structural models

Country	χ2/df (≤ 5)	CFI (>0.90)	TLI (>0.90)	RMSEA (<0.08)	RMSEA 90% CI upper limit (<0.08)
Czech Republic	3.29	0.914	0.901	0.050	0.045
Hungary	4.40	0.948	0.912	0.071	0.064
Poland	2.47	0.975	0.925	0.054	0.046
Slovak Republic	2.61	0.946	0.901	0.067	0.058

Note: df = degrees of freedom; CFI = Comparative fit index: TLI = Tucker-Lewis index; RMSEA = Root-mean-square error; CI = confidence interval.

Table 9. Path analysis and hypotheses testing

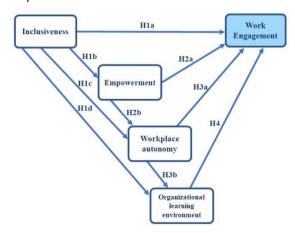
	Hypotheses		Standardized Regression Coefficient (Beta)	S.E. (Standard error)	p	Result (+/-)*	Conclusion
H1A	inclusiveness → work engagement	CZ	0.465	0.089	< 0.001	+	
		HU	0.245	0.106	0.015	+	Supported
		PL	0.414	0.230	0.002	+	
		SK	0.439	0.103	< 0.001	+	
H1B	inclusiveness → empowerment	CZ	0.540	0.139	< 0.001	+	
		HU	0.338	0.107	< 0.001	+	Supported
		PL	0.464	0.291	< 0.001	+	
		SK	0.539	0.116	< 0.001	+	
H1C	inclusiveness → workplace	CZ	0.224	0.140	0.012	+	_
		HU	0.128	0.102	0.103	-	Partly
	autonomy	PL	0.046	0.338	0.694	-	supported
		SK	0.224	0.134	0.089	-	
H1D	inclusiveness → organizational learning environment	CZ	0.264	0.115	< 0.001	+	
		HU	0.311	0.064	< 0.001	+	Partly
		PL	0.358	0.225	< 0.001	+	supported
		SK	0.118	0.148	0.349	-	

Table 9. Continued

	Hypotheses		Standardized Regression Coefficient (Beta)	S.E. (Standard error)	p	Result (+/-)*	Conclusion
H2A	empowerment → work engagement	CZ	0.204	0.033	< 0.001	+	
		HU	0.431	0.043	< 0.001	+	Supported
		PL	0.345	0.050	< 0.001	+	
		SK	0.310	0.071	0.001	+	
	empowerment → workplace autonomy	CZ	0.304	0.068	< 0.001	+	
H2B [€]		e HU	0.239	0.058	< 0.001	+	Supported
F12D		PL	0.224	0.101	0.019	+	
		SK	0.304	0.102	0.011	+	
	workplace autonomy → work engagement	CZ	0.202	0.050	0.005	+	
Н3А		HU	0.145	0.142	0.410	-	Partly
		PL	0.308	0.072	0.010	+	supported
		SK	0.151	0.360	0.719	-	
	workplace autonomy → organizational learning environment	CZ	0.280	0.084	< 0.001	+	
LIOD		HU	0.758	0.078	< 0.001	+	Supported
НЗВ		PL	0.490	0.087	< 0.001	+	
		SK	0.856	0.272	< 0.001	+	
H4	organizational learning environment → work engagement	CZ	0.112	0.033	0.028	+	
		HU	0.125	0.255	0.528	-	Partly
		PL	-0.069	0.089	0.536	-	supported
		SK	-0.047	0.310	0.909	-	

Note: * '+' = Accepted; '-' = Rejected.

Figure 1. A conceptual model of theoretical frameworks



Note: Detailed information on items in the figure see Table 3 'Selected items and alignment'.