The Appropriate Work Environment for Older Employees: The Case of Slovenia

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Abstract

Background: The increase in population life expectancy in developed economies is also reflected in the aging of the workforce; therefore, enterprises should create an appropriate work environment for all employees, emphasizing the older ones.

Objectives: The major objectives of this paper are to establish the impact of appropriate working conditions and training programs for older employees on their work motivation, as well as to establish the latter’s impact on the older employees’ work engagement in Slovenian medium-sized and large enterprises.

Methods/Approach: Structural equation modeling explored the links between four constructs – appropriate working conditions, training programs, work motivation, and work engagement. Results: In Slovenian enterprises, appropriate working conditions and training programs for older employees positively impact their work motivation. Moreover, the work motivation of older employees positively impacts their work engagement. Conclusions: These findings can be useful for employers or managers for developing targeted employee motivation and employee engagement programs to leverage the talents and dedication of older employees.

Keywords: appropriate work environment; older employees; enterprises; structural equation modeling

JEL classification: J24; I19; C38

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Introduction

European countries are characterized by declining mortality and low birth rates, resulting in an aging population (Soja et al., 2020). According to Bal et al. (2016), demographic changes influence the workplaces; enterprises are therefore looking for ways to develop an appropriate work environment for age diverse employees, especially older ones.

Finding ways in which people can stay motivated and involved in their work at different stages of life is an ever-increasing challenge (Zaniboni et al., 2014). According to Rožman et al. (2017b), Bal et al. (2016), an appropriate work environment for older employees is the key to competitive business performance because an appropriate work environment with appropriate work conditions positively impacts work motivation leads to higher work engagement of older employees. A basic condition for successful leadership is to support a high level of motivation regardless of age. Also, according to Vasconcelos (2018), work engagement is key to achieving the companies’ goals, and this also applies to older employees. Therefore, we created a structural model of an appropriate work environment for older employees with which employers contribute to the increase in work engagement of older employees.

According to Korsakienė et al. (2017), employers should create an appropriate work environment for the elderly because motivated employees achieve higher levels of work engagement (Korsakienė et al., 2017). To have age-diverse employees motivated and engaged in the workplace, employers need to determine which work conditions are appropriate for their employees because all employees of different ages do not experience job characteristics in the same way (Zaniboni et al., 2014; Rožman et al., 2017b). This can be illustrated by the conclusions of Zacher et al. (2017) and Truxillo et al. (2012) that younger employees will find a high diversity of task more useful than older ones, because they do not yet have experience with the various tasks. In contrast, older employees have already acquired them. Thus, older employees “might see task variety as a burden” (Zacher et al., 2017). They must complete tasks that do not focus on their specialized expertise and existing experience, which leads to lower work motivation. This should also make the variety of tasks more interesting for younger employees compared to older ones. The authors analyzed what form of training programs is interesting from the point of view of older employees. Still, they did not analyze if training programs have a significant positive impact on work motivation. Therefore, in our research, we analyzed if training programs have a significant positive impact on the work motivation of older employees.

Also, Zacher et al. (2009) found out that workplace autonomy has a positive and stronger effect on work motivation among older than younger employees. Previous research has shown that “poor physical work environments or badly designed and demanding work conditions” (Nilsson, 2017) lead to lower work motivation and engagement (Nilsson, 2016, 2017; Forma et al., 2005; Siegrist et al., 2007). Also, previous studies have found that maintenance of good health of older employees is conditional on moderate work, more time to rest, and limited working hours (Nilsson, 2016; Forma et al., 2005; Siegrist et al., 2007). Decreased cognitive ability of older employees often does not depend on aging, but on lifestyle factors, lack of motivation, and negative expectations (Nilsson, 2016; Mather, 2010; Salthouse, 2000). The authors mentioned above analyzed some aspects of working conditions on the motivation of older employees. In our research, however, we added several different aspects of working conditions and analyzed how they affect the work motivation of older employees.
Previous research has also shown that the employees who feel that the enterprise pays attention to them see their work as satisfactory, which leads to higher work motivation (Nilsson, 2016, 2017; Siegrist et al., 2007). The attitude of employers or managers to older employees has a positive impact on work motivation and work engagement (Nilsson, 2016, 2012, 2011). The above-refereed authors analyzed some factors that lead to increased work motivation. In our research, however, we took a step further: we analyzed if work motivation has a significant positive impact on older employees in enterprises in Slovenia. There are many definitions of work engagement and older employees, but researchers have not delved into designing an appropriate work environment for older employees and their work engagement. This paper, therefore, seeks to examine the effects of the work environment on the work engagement of older employees. Slovenian enterprises have not yet developed such a model to increase the work engagement of older employees. The major objectives of this paper are to establish the impact of appropriate working conditions and training programs for older employees on their work motivation and the impact of work motivation on the work engagement of older employees in medium-sized and large enterprises in Slovenia. While previous authors analyzed the data with descriptive statistics (Zacher et al., 2017; Truxillo et al., 2012; Nilsson, 2016) and linear regression (Frese, 2009), we used structural equation modeling to explore the links between these four constructs.

The contribution of our study is reflected in the created model of appropriate work environment for older employees with four constructs, appropriate working conditions for older employees, training programs for older employees, work motivation of older employees, and work engagement of older employees. Ilmarinen (2006) describe which training programs are appropriate for older employees, Bal et al. (2016) describe appropriate working conditions, Claes et al. (2008) describe which factors lead to higher work motivation of older employees, and Korsakienė et al. (2017) describe the importance of work engagement of older employees. Our research combined the constructs mentioned above in a structural equation model. The second contribution of this research is in testing the validity of the created structural equation model. In addition, by examining the impacts of the influential factors on the appropriate work environment for older employees, we gave recommendations for individual development plans, including career planning, training and development programs, and public policy related to age management.

The paper consists of six sections. The introduction is followed by the literature review, which also justifies the setting of the hypotheses. Then the methodology used is described. The next part of the paper contains the results of the empirical survey, followed by the discussion on the results of hypotheses verification. The paper concludes with a summary of research and conclusion, comparison with previous research, description of practical implications, paper limitations, and further research possibilities.
Literature Review

Appropriate Work Environment for Older Employees

Vasconcelos (2018) summarizes that employers should focus on creating workplaces that fit into the personality profile and preferences of older employees. In addition, employers can enhance the well-being and health of older employees by redesigning jobs toward reducing the workload (Vasconcelos, 2018). Moreover, Nahrgang et al. (2011) and Magnavita (2017) emphasize that older employees have more serious but less frequent workplace injuries than younger employees. Programs with the following dimensions: (1) the work environment, (2) work arrangements and work-life balance, (3) health promotion and disease prevention, and (4) social support (Uhunoma et al., 2020; Lichtenthaler et al., 2016; Silverstein, 2008) should be implemented. Creating friendly workplaces for age-diverse employees and promoting the working ability of older employees increase the enterprise’s competitiveness and performance. Employers who do not provide appropriate programs and policies to create a suitable workplace for older employees will face adverse effects on quality and productivity (Ilmarinen, 2006). Thus, employers who support the workability of employees increase productivity, sustainable business practices and competitiveness (Rožman et al., 2019, 2017a).

Appropriate working conditions and training programs for older employees

Appropriate working conditions, which should be available in all enterprises, improve the management of older employees and their motivation to work (Bal et al., 2016). Enterprises need to provide appropriate working conditions to enable older employees to perform their work tasks successfully and remain efficient and productive in achieving the organization’s goals. Therefore, attention should be paid to measures and the progress of good practices in managing older employees in the workplace and thus achieving a favorable working environment for them (Ilmarinen, 2012; Claes et al., 2008). Lichtenthaler et al. (2016) summarize a positive relationship between appropriate working conditions for older employees and their work motivation. Rožman et al. (2017a) found that the motivation of older employees is reflected in the possibility of flexibility in the workplace, the possibility of autonomy at work, the possibility of working at their own pace, good relationships between employees, and respect between employees. Therefore, the following hypothesis is proposed:

H1: Appropriate working conditions have a significant positive impact on the work motivation of older employees in large and medium-sized enterprises in Slovenia.

Employers usually see older employees as an obligation instead of being used as a valuable resource. Employees who have 10-20 years to retirement are not included in the plans for training which hurts their work motivation (Davies et al., 2017). Due to negative stereotypes, older employees often have fewer opportunities for development, which is reflected in fewer training opportunities and development opportunities (Zwick, 2015). Older employees can learn new things. Learning does not depend on age, but the learning process changes with age. Therefore, for older employees is crucial to have access to training and equal opportunities to learn new skills and abilities (Ilmarinen, 2012) that increase their work motivation (Zwick, 2015). Hence, it is proposed:

H2: Training programs have a significant positive impact on the work motivation of older employees in large and medium-sized enterprises in Slovenia.
Work Motivation and Work Engagement of Older Employees

Job design influences older employees' motivation. Lichtenthaler et al. (2016) highlight that low levels of work resources (e.g., social support, job autonomy) and demanding work needs (e.g., opportunities for work and development) on the one hand, and high levels of hindering job demands on the other, mean lower motivation for older employees, and this leads to lower work engagement. As job creation contributes to employee motivation and health, organizations need to adapt jobs to an aging workforce (Parker, 2014). Jobs with low job resources and hindering job demands deplete the mental and physical resources of employees, and consequently the energy and health of employees (Truxillo et al., 2012). This negatively impacts older employees’ work motivation and reduces their work engagement (Bakker et al., 2014). Uhunoma et al. (2020) point out that work engagement is expected not only to improve employee and organizational performance and customer engagement, but also the financial health of an enterprise. Rich et al. (2010) emphasize that engaged employees do their job better and are more innovative than non-engaged employees.

Furthermore, engaged employees have better health, experience positive emotions, are more satisfied, more energetic, and more creative in their work. Eldor et al. (2016) found a significantly positive correlation between employee work motivation and employee work engagement. Thus, the following hypothesis is proposed:

H3: Work motivation has a significant positive impact on the work engagement of older employees in large and medium-sized enterprises in Slovenia.

Methodology

Research instrument

Questionnaires for employers and older employees contained closed questions in statements on a Likert-type scale, where 1 = I completely disagree, 2 = I do not agree, 3 = I partially agree, 4 = I agree, and 5 = I completely agree. In the questionnaire, employers answered the questions about appropriate working conditions for older employees and training programs, and older employees answered the questions about work motivation and work engagement.

Items for the 'appropriate working conditions for older employees' construct were formed by Ilmarinen (2006). This construct was described with eleven items, as shown in Table 1. Four items for the 'training programs for older employees' construct were formed by Davies et al. (2017). The 'work motivation of older employees' construct was explained with eleven items, formed by Kooij et al. (2008). The 'work engagement of older employees' construct included twelve items, formed by Robinson et al. (2004). The items included in the research instrument are presented in more detail in Table 1.
Table 1
The items included in the research instrument

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appropriate working conditions for older employees</strong> (Ilmarinen, 2006)</td>
<td>In the company, we take care of the workload reduction of an older employee in the workplace by work transformation.</td>
</tr>
<tr>
<td></td>
<td>Obligation for management of older employees on all company levels prevails in the company.</td>
</tr>
<tr>
<td></td>
<td>In the company, we encourage changes in connection with older employees.</td>
</tr>
<tr>
<td></td>
<td>We take care of the improvement of working conditions for older employees.</td>
</tr>
<tr>
<td></td>
<td>Older employees are offered the flexibility of working space (working from home or a remote location).</td>
</tr>
<tr>
<td></td>
<td>We offer older employees a flexible workday (we leave it to the employees to choose for themselves within the given frames of the time for start and end of work).</td>
</tr>
<tr>
<td></td>
<td>We enable older employees to job share (two or more employees share the tasks and responsibilities of one full-time post).</td>
</tr>
<tr>
<td></td>
<td>We allow older employees to work part-time.</td>
</tr>
<tr>
<td></td>
<td>We enable older employees to work variable working hours (similar to a flexible workday, only that in this case, there is no main workday or a defined number of hours that need to be performed in a reporting period).</td>
</tr>
<tr>
<td></td>
<td>In the company, we integrate older employees in strategy planning and initiatives to manage older employees.</td>
</tr>
<tr>
<td></td>
<td>Age diversity has to be connected with the company strategy for equality and diversity in the company.</td>
</tr>
<tr>
<td><strong>Training programs for older employees’</strong> (Davies et al., 2017)</td>
<td>The company carries out training and education programs tailored specifically for older employees.</td>
</tr>
<tr>
<td></td>
<td>In the company, we provide older employees with technology training.</td>
</tr>
<tr>
<td></td>
<td>In the company, we provide older employees with training in foreign languages.</td>
</tr>
<tr>
<td></td>
<td>In the company, we offer career development opportunities.</td>
</tr>
<tr>
<td><strong>Work motivation of older employees</strong> (Kooij et al., 2008)</td>
<td>The employer gives us compliments for the well-done work.</td>
</tr>
<tr>
<td></td>
<td>The employer gives me the possibility of flexibility in the workplace.</td>
</tr>
<tr>
<td></td>
<td>The employer gives me the possibility of autonomy at work.</td>
</tr>
<tr>
<td></td>
<td>The employer allows me to provide diverse tasks.</td>
</tr>
<tr>
<td></td>
<td>The employer allows me to do my work at my own pace.</td>
</tr>
<tr>
<td></td>
<td>The employer gives me the possibility of advancement.</td>
</tr>
<tr>
<td></td>
<td>The employer gives me the possibility for training and education.</td>
</tr>
<tr>
<td></td>
<td>In the company prevails the possibility of equal treatment of employees by age.</td>
</tr>
<tr>
<td></td>
<td>The company prevails the possibility of cooperation with other employees and the allocation of work.</td>
</tr>
<tr>
<td></td>
<td>In the company prevail good relationships in the workplace.</td>
</tr>
<tr>
<td></td>
<td>In the company, intergenerational cooperation is established, thereby reducing the burden on the workplace.</td>
</tr>
<tr>
<td><strong>Work engagement of older employees’</strong> (Robinson et al., 2004)</td>
<td>I do my work with passion.</td>
</tr>
<tr>
<td></td>
<td>I am engaged in the quality of my work.</td>
</tr>
<tr>
<td></td>
<td>I am engaged in achieving successful business results.</td>
</tr>
<tr>
<td></td>
<td>I feel a connection with the company in which I worked.</td>
</tr>
<tr>
<td></td>
<td>I am aware of the importance of innovation for our company, and I am helping to develop the company.</td>
</tr>
<tr>
<td></td>
<td>I trust in my colleagues and the manager.</td>
</tr>
<tr>
<td></td>
<td>I feel that my work and job are important.</td>
</tr>
<tr>
<td></td>
<td>I am proud to be employed in this company.</td>
</tr>
<tr>
<td></td>
<td>I believe in the successful development and operation of our company.</td>
</tr>
<tr>
<td></td>
<td>I would not leave the company, even if I could get another job opportunity.</td>
</tr>
<tr>
<td></td>
<td>I feel very good at my workplace.</td>
</tr>
<tr>
<td></td>
<td>I feel like a “part of the family” in the company.</td>
</tr>
</tbody>
</table>

Source: Ilmarinen, 2006; Davies et al., 2017; Kooij et al., 2008; Robinson et al., 2004

Data
In the medium-sized and large enterprises involved in the research, we surveyed employers and older employees over 50 years of age. In most cases, the lower age
limits that define an older employee are 45 (Brooke, 2003) or 50 (Ilmarinen, 2001). The enterprises were included in the sample based on their size, determined by the Slovenian companies act CA-1 (2017). According to Slovenian companies act CA-1 (2017), medium-sized enterprises fulfill two of the following criteria: (1) there are no more than 250 employees on average in a business year, (2) NET revenues from sales do not surpass 40,000,000 EUR and (3) the value of assets does not surpass 20,000,000 EUR. Large enterprises have more than 250 employees on average in a business year, their NET revenues from sales surpass 40,000,000 EUR, and the value of assets surpass 20,000,000 EUR. Simple random sampling was used to design a final sample of enterprises. Based on the random selection, 1,000 enterprises were included in the sample, of which 472 enterprises (i.e., employers) responded (the response rate was 47.2%). The number of participating older employees was limited to 4 per enterprise. Thus, 1,086 older employees participated in this survey. The sample of employers regarding the enterprise size is as follows: 51.9% were from large enterprises, and 48.1% were from medium-sized enterprises. According to the same control variable, the structure of the sample of older employees is as follows: 54.3% of older employees were employed in large enterprises, and 45.7% of them were in medium-sized enterprises. Data collection was implemented by the method of electronic and written questioning.

**Statistical methods**

We established the justification to use the factor analysis based on the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO ≥ 0.5) (Kaiser, 1974) and Bartlett’s test of sphericity (BTS). Then we analyzed factor loadings (η ≥ 0.5), commonalities of variables (h > 0.4), and eigenvalues of factors (λ ≥ 1.0) (Tabachnick, Fidell, 2013). We checked the reliability of measurements with Cronbach’s alpha coefficient (Chronbach, 1951). We examined average variance extracted (AVE) and composite reliability coefficients (CR) as part of the convergent validity. Also, we followed the criteria according to Kock (2019): AVE > 0.5, CR > 0.7 and CR > AVE. We used variance inflation factors (VIF), considering the criterion VIF < 5.0, to check the multicollinearity in the model (Hair et al., 2010). The quality of the structural model was measured by the R-squared, adjusted R-squared coefficients, and the Stone-Geisser Q-squared coefficient. We examined the predictability value of the structural model. Acceptable predictive validity in connection with an endogenous latent variable is suggested by Q² > 0 (Kock, 2019). To test the structural model, we used the following quality indicators and criteria according to Kock (2019) and Tabachnick et al. (2013): average path coefficient (APC, p < 0.05), average R-squared (ARS, p < 0.05), average adjusted R-squared (AARS, p < 0.05), average block variance inflation factor (AVIF < 5.0), average full collinearity VIF (AFVIF < 5.0), goodness-of-fit (GoF ≥ 0.36), Simpson’s paradox ratio (SPR ≥ 0.7), the R-squared contribution ratio (RSCR ≥ 0.9), statistical suppression ratio (SSR ≥ 0.7), and nonlinear bivariate causality direction ratio (NLBCD ≥ 0.7).

Path coefficients of causal links (γ) and indicators of Cohen’s effect (f²) indicating the small (0.02), medium (0.15), and large (0.35) effect sizes (Kock, 2019; Tabachnick et al., 2013) were used to test the hypotheses stated in this research. We used the Statistical Package for the Social Sciences (SPSS) and WarpPLS software to analyze the data. According to Kock (2019), SEM models linear or nonlinear connections between constructs. The outputs of the processing of our model by WarpPLS indicate the nonlinearity of connections.
Validity
The values of convergent, discriminant, and nomological validity indicators are presented in Table 2.

Table 2
Indicators of validity

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Cronbach’s α</th>
<th>CR</th>
<th>AVE</th>
<th>R²</th>
<th>Adj. R²</th>
<th>Q²</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriate working conditions for older employees</td>
<td>0.958</td>
<td>0.964</td>
<td>0.694</td>
<td>(-)</td>
<td>(-)</td>
<td>(-)</td>
<td>1.573</td>
</tr>
<tr>
<td>Training programs for older employees</td>
<td>0.901</td>
<td>0.931</td>
<td>0.772</td>
<td>(-)</td>
<td>(-)</td>
<td>(-)</td>
<td>1.679</td>
</tr>
<tr>
<td>Work motivation of older employees</td>
<td>0.964</td>
<td>0.969</td>
<td>0.739</td>
<td>0.472</td>
<td>0.436</td>
<td>0.484</td>
<td>2.553</td>
</tr>
<tr>
<td>Work engagement of older employees</td>
<td>0.984</td>
<td>0.985</td>
<td>0.848</td>
<td>0.451</td>
<td>0.443</td>
<td>0.462</td>
<td>2.364</td>
</tr>
</tbody>
</table>

Source: Authors’ work

Table 2 shows that the values of the latent variables’ R², adjusted R², and Q² coefficients were greater than zero and thus indicates that the model has nomological validity. The authors also confirmed the convergent validity for all the constructs studied: composite reliabilities (CR) for the studied constructs exceeded the required lower bound 0.7, AVE values were greater than 0.5, and all CR values exceeded AVE values. Multicollinearity is not problematic in this model because the VIF values are lower than 5.0, ranging from 1.573 to 2.553.

Results
The obtained KMO values and the results of Bartlett’s test of sphericity indicate that it is justified to use a factor analysis for each of the constructs considered: appropriate working conditions for older employees (KMO = 0.945, BTS: Approximate Chi-Square = 12712.4, df = 55, p < 0.001), training programs for older employees (KMO = 0.838, BTS: Approximate Chi-Square = 2771.177, df = 6, p < 0.001), work motivation of older employees (KMO = 0.947, BTS: Approximate Chi-Square = 12799.392, df =55, p < 0.001), work engagement of older employees (KMO = 0.961, BTS: Approximate Chi-Square = 21971.451, df = 66, p < 0.001). All commonalities of the variables we used to measure individual constructs were higher than 0.40. All factor loadings were higher than 0.50 and significant at the 0.001 level; therefore, we have not eliminated any variable. The one-dimensional factor solution was obtained; their eigenvalues were greater than 1. All measurement scales proved high reliability. The values of Cronbach’s alpha were, namely, 0.949 for appropriate working conditions for older employees, 0.900 for training programs for older employees, 0.963 for work motivation of older employees, and 0.982 for work engagement of older employees. Further, 77.6% of the total variance was explained by the ‘appropriate working conditions for older employees’ factor, 77.2 % by the ‘training programs for older employees’ factor, 73.9% by the ‘work motivation of older employees’ factor, and ‘work engagement of older employees’ explained 84.9% of the total variance.

We verified the data consistency within the research model with several model fit indices. Average path coefficient (APC = 0.610), Average R-squared (ARS = 0.792) and average adjusted R-squared (AARS = 0.791) were all statistically significant (p < 0.001). With values lower than 5.0, the average block variance inflation factor (AVIF = 1.962) and average full collinearity VIF (AFVIF = 3.260) are suitable. The value of the goodness-of-fit indicator (GoF = 0.777) indicates that the model fit is highly
appropriate. The values of nonlinear causality direction ratio (NLBCD = 1), statistical suppression ratio (SSR = 1), R-squared contribution ratio (RSCR = 1) and Simpson’s paradox ratio (SPR = 1) are equal to the ideal value. The authors can therefore confirm that the data will fit the research model.

The verification of hypotheses is facilitated by Figure 1, which is the conceptual model, complete with the values of path coefficients, and Table 3, which presents the results of SEM in more detail.

The results in Table 3 show that in large and medium-sized enterprises in Slovenia, appropriate working conditions for older employees impact their work motivation positively (AWC→WM = 0.682, p < 0.001); the value of Cohen's coefficient ($f^2 = 0.573$) is greater than 0.35 and thus indicates a high impact. In addition, training programs for older employees have a positive effect on their work motivation (TP→WM = 0.326, p < 0.001); the value of Cohen’s coefficient ($f^2 = 0.259$) is between 0.15 and 0.35, indicating a medium effect size. Moreover, the work motivation of older employees has a positive effect on their work engagement (WM→WE = 0.694, p < 0.001), and the effect of latent predictive variables is of high strength ($f^2 = 0.582$). The results show that there is a nonlinear connection between the individual constructs.

Figure 1
Structural model of appropriate work environment for older employees

![Figure 1](image_url)

Table 3
SEM results

<table>
<thead>
<tr>
<th>Hypothesized path</th>
<th>Link direction</th>
<th>Shape of link</th>
<th>Path coefficient (γ)</th>
<th>Effect size ($f^2$)</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>AWC→WM</td>
<td>Positive</td>
<td>Nonlinear</td>
<td>0.682*</td>
<td>0.573</td>
<td>0.029</td>
</tr>
<tr>
<td>TP→WM</td>
<td>Positive</td>
<td>Nonlinear</td>
<td>0.326*</td>
<td>0.259</td>
<td>0.030</td>
</tr>
<tr>
<td>WM→WE</td>
<td>Positive</td>
<td>Nonlinear</td>
<td>0.694*</td>
<td>0.582</td>
<td>0.028</td>
</tr>
</tbody>
</table>

Note: *p < 0.001; AWC – appropriate working conditions for older employees; TP – training programs for older employees; WM – work motivation of older employees; WE – work engagement of older employees

Source: Authors' work
Discussion

The presented results confirmed all three hypotheses, H1, H2, and H3. We found that appropriate working conditions for older employees and training programs for older employees positively impact their work motivation in large and medium-sized enterprises in Slovenia. This matches the conclusions of Lichtenthaler et al. (2016), Bal et al. (2016), Parker (2014), Ilmarinen (2012), Silverstein (2008) and Kooij et al. (2008). The authors found a positive relationship between appropriate working conditions and work motivation of older employees, as well as between training programs for older employees and their work motivation. Nahrgang et al. (2011) and Magnavita (2017) found out that work motivation positively impacts the work engagement of older employees, which we also confirmed for large and medium-sized enterprises in Slovenia. Our previous research (Rožman et al., 2017a) also showed that autonomy at work, respect among employees, the possibility of working at their own pace, flexibility in the workplace, equal treatment of employees by age, and good interpersonal relationships in the workplace contribute to the motivation of older employees. Therefore, employers should create appropriate work conditions for older employees, which leads to higher work motivation, and consider that work motivation differs among age-diverse employees. Also, our previous research (Rožman et al., 2019) showed that employers do not implement many training programs for older employees. On the other hand, this research found that training programs for older employees positively impact their work motivation. According to Ilmarinen (2001), skills and competencies differ between generations. Also, transferring tacit (silent) knowledge of older employees to younger generations is important. The strongest combination of competencies in the workplace is based on different generations' different strengths (see, e.g., Ilmarinen, 2001). From this point of view, enterprises should pay more attention to appropriate approaches for older employees. This way, employees are working motivated, leading to increased work engagement, which is in line with our findings.

The contributions to the theory

The contributions to theory are reflected in the effects of work environment on older employees work engagement and in the created model of appropriate work environment for older employees with four constructs which are appropriate working conditions for older employees, training programs for older employees, work motivation of older employees and work engagement of older employees. A healthy and friendly work environment gives older employees opportunities to share ideas for the enterprise's success that can help the enterprise to grow. A positive work environment makes older employees feel good about coming to work, motivating them to sustain themselves throughout the day. Therefore, they are fully motivated and engaged in their workplace. It is therefore necessary to deal with the employee engagement as the part of the business strategy that focuses on keeping employees engaged throughout the employment relationship.

Implications for practice

Implications for practice are reflected in developing employee engagement to leverage the talents and dedication of older employees by employers or managers. Employers can use the findings to develop or create an appropriate work environment with appropriate working conditions and training programs for older employees to help older adults make smooth career and life transitions. This leads to higher work motivation and works engagement. Appropriate working conditions should include, for example, the flexibility of working space (working from home or a remote location),
flexible workday (employer leave it to the employees to choose for themselves within the given frames the time for start and end of work), job share (two or more employees share the tasks and responsibilities of one full-time post), allow older employees to work part-time, variable working hours (similar to a flexible workday, only that in this case there is no main workday or a defined number of hours that need to be performed in a reporting period).

We suggest the following approaches to employers in creating an appropriate work environment for older employees: creating appropriate working conditions for older employees, organization of working time tailored to the elderly, reducing the workload of older employees in the workplace, additional training and education, specifically for the elderly, mentoring schemes designed as a program, with an emphasis on the exchange and transfer of knowledge and experience, which contributes to intergenerational connections between employees.

In Slovenian enterprises it is necessary to change the mindset of older employees. Work motivation can significantly increase if enterprises promote active aging and create an appropriate work environment for older employees. This leads to an increase in work engagement of older employees. The social inclusion of all employees, including the elderly, and their contribution in the enterprise are essential for its success.

When developing appropriate approaches for older employees and their work engagement in enterprises, it is necessary to take into account that the aging of employees reduces the ability to perform physically demanding tasks. This means that the complexity of work tasks must be adjusted. Some appropriate working conditions include flexible hours, job sharing, teleworking, and providing health benefits. Having flexible policies and practices will enable the enterprise to maintain an encouraging work environment for older employees.

Training and education of all employees, including older employees, are also crucial for the enterprise’s success. To improve the conditions of older employees related to education and training, appropriate learning methods are needed, such as the flexibility of learning hours due to a lower decline in concentration and thus increase the willingness to participate in such training. According to Ilmarinen (2012), older employees can learn new things, and the learning process changes with age (Ilmarinen, 2012). There is a need to introduce specific learning programs related to training and education for older employees, as they have different knowledge needs than younger employees. When educating or training older people, the enterprise must pay attention to their life and work experiences, interests, and motives. Each enterprise should help older employees acquire the skills to adapt to new work practices and changing technologies.

The research findings can help employers or managers reduce workload in the workplace by work transformation. From this perspective, the enterprise will more encourage changes in connection with older employees and integrate older employees in strategy planning and initiatives for the management of older employees, leading to higher work engagement of older employees. Furthermore, the employer should consider intergenerational methods to bring older employees training and development opportunities that they can use. Reverse mentoring, networking, and intergenerational cross-training may be of more interest to employees of all ages than traditional training classes.

Moreover, employers or managers can use the findings to consider ways of encouraging older employees to think of training and development as relevant to them. Individual development plans that include career planning may help older employees rethink what skills they need to gain or sharpen to remain at top
productivity as long as they want or need to work. This contributes to increased work motivation of older employees. Some examples of training and development programs that employers or managers can use include on-the-job training in specific technical skills used in day-to-day work, participation in project teamwork, special tasks/projects to stimulate learning, and e-learning. Also, public policy should demand stronger age management. There is a need for an active labor market and social protection policies to raise employment levels among older employees and create a healthy and friendly work environment for older employees. These implications for practice thus ensure more equal opportunities for employees of different ages, which strengthens work motivation and engagement.

**Conclusion**

In this paper, we found that appropriate working conditions for older employees and training programs for older employees positively impact their work motivation in large and medium-sized enterprises in Slovenia. In this paper, we also found that the work motivation of older employees positively impacts their work engagement.

Previous research showed statistically significant differences in work motivation of age-diverse employees and that work motivation has a positive impact on work engagement, which is in line with our research. In addition, our research highlights the effects of the work environment on older employees in the case of Slovenia, which has not yet been studied.

The workforce is aging, and the number of older employees in enterprises increases. The results of our research contribute to a new view of the proper management of older employees and to increase their work engagement. Employers or managers can use the findings to create an appropriate work environment with appropriate working conditions and training programs for older employees, which can increase the work motivation of employees as well as work engagement. Recommendations for individual development plans, including career planning, training, development programs, and public policy, can contribute to creating an appropriate work environment that positively impacts the work engagement of older employees.

Our study is limited to employees who are older than 50 years. In addition, the study carried out is limited to medium-sized and large enterprises in Slovenia. Moreover, the limitations of our research refer to the four constructs included in the structural model (Figure 1). Possibilities for further research refer to analyzing constructs among age-diverse employees in two different countries (for example, Croatia and Slovenia) and examining the differences between age-diverse employees.

**References**


33. Slovenian companies Act (CA-1) [2017]. „The Companies Act”, available at http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO4291# (12 November 2020)


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