WORK ENGAGEMENT AND BURNOUT SYNDROME OF CIVIL SERVANTS DURING AND AFTER THE COVID-19 PANDEMIC

Mokrá K., Poláková G., Horváthová P., Štverková H.

Abstract: There have been a number of changes in organizations in the context of anti-epidemic measures, so the authors aim to examine the level of engagement of civil servants before the pandemic and now and to examine the correlation between engagement and burnout syndrome. Based on a review and analysis of the available Czech and foreign literature, a questionnaire survey was prepared, and a survey was conducted on a sample of 984 respondents (civil servants) in the Czech Republic. The Utrecht Work Engagement Scale and a questionnaire assessing burnout syndrome were used. The data were processed using statistical methods. In addition, parametric paired t-test and one-way ANOVA were used. This study provides insight into the current state of the issue and possible changes caused by the covid-19 pandemic. For the observed sample of respondents, it was found that burnout syndrome had no impact on the engagement of civil servants; age had no impact on the burnout syndrome of civil servants, and the level of engagement of civil servants was higher in 2022 than before the pandemic. The novelty of the study is the focus on the measurements mentioned above, as similar research has not been conducted in the Czech Republic yet. The findings from this research may be useful for practitioners and the management of public institutions if a similar situation arises in the future.

Key words: burnout syndrome, civil servants, employee engagement, pandemic
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Introduction

The success of any organisation is fundamentally influenced by the performance of its employees. Therefore, many companies are continuously improving the performance of their employees and exploring the impact of work engagement on employee performance (Bieńkowska et al., 2021; Hutama and Sagala, 2019, Satata, 2021). Employees are the most important resource for the successful functioning of any organisation, not excluding public organisations, as they play a key role in achieving performance and maintaining the stability of any organisation (Horváthová et al., 2021; Ntshangase and Msosa, 2022).

In relation to employees, many organisations today are also dealing with burnout syndrome, as its consequences can be severe and can lead not only to personal problems but also to problems in the workplace. Burnout syndrome can apply to any occupation that requires a strong personal commitment to work and where there is an imbalance between demands and opportunities to recover resources (Albrecht, 2014).

Burnout syndrome and employee engagement are influenced by a number of factors (Esen and Esen, 2021; Szabo and Karacsony, 2021). One of the factors - the covid-19 pandemic has dramatically affected the lives of the people in both private and work-related areas (Manpowergroup, 2021; Halmai, 2022; Basuki et al., 2022). Due to the pandemic, organisations from different industries and sectors had to cope with many changes and face new challenges, not only in the workplace (Arruda, 2022; Stojanovic et al., 2020).

Therefore, in this article, the authors decided to focus on how the pandemic has changed the level of engagement of civil servants, what was the level of burnout syndrome of these employees and assess the correlation between these phenomena.

Employee Engagement

Work engagement is the subject of a large and growing body of literature and has various definitions. It is most often defined as a positive state of mind in which the individual perceives fulfillment in relation to the work being done. This state leads to investing effort in continuing to perform work (Schaufeli et al., 2002).

Employee engagement has been extensively studied in recent years. Research has been encouraged mainly because engagement has been shown to be an important element in gaining competitive advantage as it leads to higher job performance (Albrecht et al., 2015; Schaufeli, 2013; Szostek et al., 2020; Paulikas and Paulikiene, 2022; Valinurova et al., 2022). Engagement encourages people to feel passionate and driven about their work (Rich et al., 2010). This of course has an impact not only on the aforementioned individual and company performance (Harter et al., 2002) but also on the level of innovation, flexibility, competitiveness and organisational success (Bilan et al., 2020; Eldor and Vigoda-Gadot, 2017; Čižo et al., 2022). Employee engagement is also important because of the long-term retention of good employees (Knezović and Dilovic, 2020).
Engaged employees may be highly involved in their work, expend a great deal of energy, and may be willing to use their knowledge and skills to contribute to the achievement of the goals of the organization (Ünal and Turgut, 2015). Work engagement represents an incentive for people to feel passionate and driven to perform their work (Rich et al., 2010). This naturally has an impact on the final performance of the individual, and consequently of the whole organisation (Janeš and Faganel, 2013).

One of the most well-known tools for assessing work engagement is UWES (Bekerom et al., 2017). This quantitative approach was introduced by Schaufeli et al. and has been used globally since 2006. Respondents rate individual statements on a Likert scale that reflects how they feel at work - a number from 0 to 6 that best describes how often they feel this way. The questionnaire includes ratings on three dimensions: vigor, dedication, and absorption. Vigor shows the level of energy and resilience, willingness to invest effort, not being easily tired and perseverance in the face of difficulties. Dedication refers to a sense of importance of one's work, a sense of enthusiasm and proud of one's work, and a sense of the inspiration and challenge that work brings. Absorption indicates that a person is completely and happily immersed in his or her work and finds it difficult to detach from it, so that time passes quickly and he or she forgets everything else that is around. (Schaufeli et al., 2002).

Researchers also pointed out that employee engagement can change over time (Mitchel, 2017). A highly motivated and competent employee can be very sensitive and the absence of the necessary support from the external environment can easily disengage the employee (Geethalakshmi and Lewlyn, 2017).

A number of studies have been conducted on how to increase employee engagement (Jerónimo et al., 2022, Marques et al., 2022). Kundu and Nag (2021) list possible approaches that some companies have used to increase employee morale and engagement during the covid-19 pandemic. These include activities such as meditation sessions, various online group challenges, mentors to motivate the employees, the opportunity to participate in e-learning courses or exercise classes etc. According to research by Kot-Radojewska and Wodz (2021), who assessed engagement in organisations during the pandemic, the overall level of engagement in organisations was rated as moderate by respondents.

**Burnout Syndrome**

Burnout can also be considered as a serious career crisis (Leiter et al., 2014). Maslach defines burnout as a psychological syndrome that arises as a long-term response to chronic interpersonal stressors at work. In response, it produces overwhelming exhaustion, feelings of cynicism and detachment from work, and a sense of ineffectiveness and lack of accomplishment (Maslach and Leiter, 2016). Burnout particularly affects individuals who entered their working lives with high hopes, ideals, and ego commitment and subsequently experience physical, emotional, and mental exhaustion (Pines, 2005).

Burnout in the workplace is becoming increasingly important as the global workforce ages. Therefore, it is important to find ways for individuals to remain
satisfied and engaged at work throughout their entire lives. Burnout of older workers can be characterized by high workloads with a lack of challenges at work and fewer opportunities for growth (Rožman et al., 2018). According to Ahola et al. (2006), the likelihood of burnout syndrome is higher among older individuals. Henkens and Leenders (2010) justify burnout syndrome of older employees by the inability to meet the physical demands of the job (due to older age), high workload or lack of support in the organisation.

However, there are also opposing views on the relationship between burnout and age. For example, Sak and Kolesárová (2012) state that how a person can manage stress and resist burnout does not depend on age. The prominent Czech psychiatrist Honzák then states that older employees themselves attribute their higher resistance to burnout syndrome to the "lessons" they have learned through experience (Honzák, 2022).

There are a number of approaches to measuring burnout syndrome. The globally used Maslach Burnout Inventory General Survey (MBI-GS) measures burnout in general, regardless of profession (Chirkowska-Smolak and Kleka, 2011). MBI-GS rates three scales – exhaustion, cynicism and professional efficacy (Maslach et al., 2022). Some authors consider exhaustion and cynicism as the core of burnout syndrome and see reduced professional effectiveness as its consequence (Eldridge et al., 2020).

The measurement of burnout syndrome was also long studied by Pines and Aronson (Křivohlavý, 1998), and their approach inspired the authors to create a questionnaire used among civil servants. They described possible subjective symptoms of burnout syndrome (e.g., extreme exhaustion, decreased self-esteem, poor concentration, easily irritability etc.) as well as objective symptoms (e.g., reduced performance over a prolonged period of time noted by colleagues, clients, students and other recipients). This approach measures burnout syndrome by assessing 21 statements.

**Relationship Between Employee Engagement and Burnout Syndrome**

The relationship between employee engagement and burnout syndrome has been addressed by a number of authors and there is no unified view on this issue. While engagement is a positive state of mind and involves positive energy and effectiveness, burnout syndrome, on the contrary, represents ineffectiveness, unhappiness and low energy (Drummond, 2016, Mone and London, 2018). Based on this, multiple authors summarize that there is a negative relationship between burnout syndrome and work engagement (Chen et al., 2013, Upadyaya et al., 2016, Rožman et al., 2018). Maslach and Leiter (2016) confirm that engagement is considered by some researchers to be the opposite of burnout. Schaufeli's study showed that all scales of burnout and engagement are significantly and negatively related (Schaufeli, 2002), which supports the opinion that engagement and burnout are opposing frames and therefore cannot occur simultaneously.

On the other hand, Kahn fundamentally disagreed with the premise that a worker cannot be simultaneously burned out and engaged (Anthony-McMann et al., 2016). Results from other research (Taris et al., 2017) show that the distinction between
burnout and engagement is elusive; burnout and engagement are seen as largely overlapping concepts and their conceptual and empirical differences should not be overstated. According to Villavicencio-Ayub, work engagement casually reduces the likelihood of job burnout, which can be used to design effective interventions to prevent burnout syndrome and promote work engagement (Villavicencio-Ayub et al., 2014). According to Hakanen and Schaufeli (2012), burnout and work engagement are not direct opposites. On the contrary, both have a unique, gradual effect on life satisfaction and equally on individuals' depressive symptoms.

Research Methodology

Initially, it was considered which respondents would be targeted for the research. The authors decided to analyse employees funded by public budgets (Vavrek and Bečica, 2020). Selected respondents, i.e., civil servants, belong according to the classification of economic activities (CZ NACE) to section O. About 464,000 of employees were paid from the state budget in 2020 and are classified as civil servants (Bartušek et al., 2022).

The UWES questionnaire was used in this research to investigate the work engagement before the pandemic and now (May 2022). In the development of the second part of the questionnaire concerning burnout syndrome, the authors relied on theoretical assumptions concerning burnout syndrome, its symptoms and also took into account the approach of measuring burnout syndrome by Pines and Aronson (Křivohlavý, 1998). Furthermore, the authors relied on the conclusions of meetings with 16 representatives of the state administration in the Moravian-Silesian region of the Czech Republic to better understand their views on the examined issue.

When assessing burnout syndrome, the respondents were asked to indicate in the questionnaire how often they felt according to the statement (a five-point scale was used; 1 - never, 2 - almost never, 3 - sometimes, 4 – often, 5 – always). The respondents should evaluate statements such as: “I felt exhausted physically or emotionally.”; “I had negative thoughts about my job.”; “I was easily annoyed by minor problems or by my co-workers and team.”; “I felt under uncomfortable pressure to succeed.”; “I felt that I was in the wrong organisation or profession.”; “I felt that organisational politics or bureaucracy was hindering my ability to do a good job.”; “I felt that I did not have time to do many of the things that are important for doing good work.”; “I find that I do not have time to plan as much as I would like to.” The questionnaire also included open-ended questions about burnout syndrome and demographic questions. The full questionnaire can be sent by the authors upon request.

Validation of the questionnaire through a pilot study was done to check the comprehensibility of the questions by the respondents. The pilot study was conducted on a relevant sample of the population, but not on those who formed part of the final sample; 20 respondents from the university staff, doctoral students and faculty management participated. The pilot survey was conducted in the same way
as the expected main survey, i.e., by sending e-mails with a link to an online questionnaire with the possibility to add comments at the end of the questionnaire. Based on the evaluation, minor changes were made to the wording and the survey could be launched.

The data were processed using statistical methods (Microsoft Excel). The results were then processed in the form of frequency tables, graphs, and verbal descriptions. The analysis concludes descriptive statistics of analysed variables. The authors have considered the selection of appropriate methods (Vavrek and Bečica, 2022). The one-way analysis of variance (ANOVA) was used to determine whether there are any statistically significant differences between the means of analysed independent groups. The Pearson correlation coefficient was used for measuring a linear correlation. It is a number between −1 and 1 that measures the strength and direction of the relationship between two analysed variables. The paired t-test compares the means of two measurements taken from same individuals at two different times to determine if there is statistical evidence that the mean difference between paired observations is significantly different from zero. This is a parametric test. Cronbach’s alpha was used to measure the internal consistency of all questionnaires, i.e., how closely the set of items are related to each other as a group. It is a measure of scale reliability.

In order to meet the objective of the study, research questions (Q1-Q3) and hypotheses (H1-H3) were formulated based on the previously mentioned findings. The evaluation of the conducted survey allowed answering them.

**Research question Q1: Are civil servants burnt out and engaged at the same time?**
Since the opinion of researchers on this issue is not uniform, the authors were interested in the results of a survey among civil servants, who make up a large part of the Czech workforce.

**Research question Q2: Does burnout syndrome mainly affect older employees?**
Since the older population may be more susceptible to burnout syndrome, the authors wanted to see what the situation is among civil servants in the Czech Republic.

**Research question Q3: Has there been a significant change in the level of engagement of civil servants before the pandemic and now?**
The authors were interested in exploring whether the level of engagement changed during the examined period (before the pandemic and now). According to the authors and the available evidence, no research has been conducted in the Czech Republic measuring the level of engagement during the pandemic and now and addressing its correlation with burnout syndrome.

The primary quantitative research was conducted in May 2022 in two rounds to increase the return rate. The questionnaire was anonymous and was completed by a total of 984 respondents.

**Research Results**
As mentioned above, the authors decided to analyse employees funded by public budgets i.e., civil servants. The anonymous questionnaire was sent to 43 public
Institutions such as: Cadastral Offices, Labour Offices of selected cities, Ministry of Justice, Ministry of Foreign Affairs, Municipal authorities of selected cities, Police Departments, Czech National Bank and others.

As the first step, the authors focused on answering research question Q1.

**Research question Q1: Are civil servants burnt out and engaged at the same time?**

Table 1 illustrates some of the main characteristics of the descriptive statistics of the sample. The mean burnout score of the population was low (2.14). The low burnout syndrome is classified in the range of 1.13 – 2.36. The median is 2.13 and the modus (2.38) is on the edge of the threat of burnout. The standard deviation is relatively small (0.70) which means that the elements of the statistical population are mostly similar. The variance is 0.5 for the burnout syndrome. The right half of Table 1 shows the results obtained from the analysis of employee engagement. The mean of employee engagement was average (3.83). According to Schaufeli et al. (2002), the standardized UWES-9 scores define the average engagement in the range of 2.89 - 4.66. The median and the modus were the same (4) and the standard deviation of the employee engagement was higher (1.18) as well as the variance (1.40) than the burnout syndrome.

**Table 1. Descriptive statistics for the comparison of burnout and engagement**

<table>
<thead>
<tr>
<th></th>
<th>Burnout</th>
<th>Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.14</td>
<td>3.83</td>
</tr>
<tr>
<td>Median</td>
<td>2.13</td>
<td>4.00</td>
</tr>
<tr>
<td>Modus</td>
<td>2.38</td>
<td>4.00</td>
</tr>
<tr>
<td>SD</td>
<td>0.70</td>
<td>1.18</td>
</tr>
<tr>
<td>Variance</td>
<td>0.50</td>
<td>1.40</td>
</tr>
<tr>
<td>df max-min</td>
<td>4.13</td>
<td>6.00</td>
</tr>
<tr>
<td>Min</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Max</td>
<td>4.13</td>
<td>6.00</td>
</tr>
<tr>
<td>Range</td>
<td>1 to 5</td>
<td>0 to 6</td>
</tr>
<tr>
<td>Cronbach’s α</td>
<td>0.86</td>
<td>0.89</td>
</tr>
<tr>
<td>Internal consistency</td>
<td>Good</td>
<td>Good</td>
</tr>
</tbody>
</table>

In the following analysis, the respondents were divided into groups according to their level of burnout and the mean level of engagement was calculated for each group to determine whether they were both burned out and engaged at the same time. The aim is to find out if there are significant differences between the engagement scores of groups of respondents with different levels of burnout.
Table 2. Groups of respondents according to their level of burnout syndrome and their engagement score

<table>
<thead>
<tr>
<th>Groups of respondents according to their burnout level</th>
<th>N</th>
<th>%</th>
<th>Engagement score</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>No burnout (&lt;1.11)</td>
<td>56</td>
<td>6%</td>
<td>3.75</td>
<td>4.12</td>
</tr>
<tr>
<td>Low burnout (1.12-2.36)</td>
<td>524</td>
<td>53%</td>
<td>3.93</td>
<td>1.16</td>
</tr>
<tr>
<td>Threat of burnout (2.37-3.24)</td>
<td>332</td>
<td>34%</td>
<td>3.75</td>
<td>1.43</td>
</tr>
<tr>
<td>Serious threat of burnout (3.25-3.88)</td>
<td>64</td>
<td>7%</td>
<td>3.62</td>
<td>1.01</td>
</tr>
<tr>
<td>Very serious threat of burnout (&gt;3.89)</td>
<td>8</td>
<td>1%</td>
<td>3.61</td>
<td>2.23</td>
</tr>
</tbody>
</table>

As Table 2 shows, there is no significant difference in engagement scores between groups of respondents with different levels of burnout syndrome. The engagement score is average in all groups (min 3.61, max 3.93). All is surprisingly at a good level despite the level of burnout. The results, as shown in Table 2, indicate that of 984 respondents who completed the questionnaire, only 6% of participants showed no signs of burnout. While their engagement score was average, the variance was enough high (4.12). Just over half (53%) indicated a low degree of burnout (score 1.75) and an engagement score of 3.93. The threat of burnout was detected in more than one third of respondents (34%). This level of burnout is becoming a signal for both employees and employers to be careful and do something to change it. Despite of this burnout level, the mean engagement score of this group is still good (3.75). A minority of participants (7%) reported feeling highly burned out, and their scores indicate a serious threat of burnout (3.48) with an unexpectedly slightly decreasing but still average engagement score (3.62). A positive result is that only 1% of respondents were found to be at very serious risk of burnout.
Figure 1 shows the proportions of groups of respondents with a different burnout level and their engagement scores. Although burnout scores can be higher for some groups of respondents, the engagement score remain constantly still good on average. A total of 928 respondents (94%) showed some signs of burnout. Only 56 respondents (6%) have no feeling of burnout. The feeling of low burnout predominates in the sample.

In the next step, the hypotheses (H1_0, H1_1) were tested by ANOVA.

**H1_0**: Burnout syndrome has no significant impact on engagement at civil servants.

**H1_1**: Burnout syndrome has significant impact on engagement at civil servants.

A one-way ANOVA revealed that burnout syndrome has no significant impact on engagement in the sample because $F(2.0847) < F_{crit}(2.3811)$. The engagement scores are not statistically significantly different and show average values. This result is significant at the $p = 0.05$ level. Therefore, the null hypothesis is confirmed and in summary, the above results also confirm that civil servants with burnout syndrome may be engaged at the same time.

If we now turn to dividing respondents into groups according to levels of engagement (see Table 3 and Figure 2), we can find out that only a small number of respondents (8%) reported that they felt little engagement. This corresponds to their highest mean of the burnout syndrome (2.23). A low level of engagement had 7% of respondents with their slightly falling mean of burnout (2.08). Almost two-thirds of participants (67%) were diagnosed with an average level of engagement. But their mean of burnout paradoxically increased slightly to 2.19. A high level of engagement was calculated for 13% of participants and only 4% of respondents felt very highly engaged. The mean of burnout of this group is the lowest (1.56).
Table 3. Groups of respondents according to the level of engagement

<table>
<thead>
<tr>
<th>Engagement level</th>
<th>Qty</th>
<th>%</th>
<th>Mean burnout</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low (0-1.77)</td>
<td>80</td>
<td>8%</td>
<td>2.23</td>
<td>0.61</td>
</tr>
<tr>
<td>Low (1.78-2.88)</td>
<td>64</td>
<td>7%</td>
<td>2.08</td>
<td>0.92</td>
</tr>
<tr>
<td>Average (2.89-4.66)</td>
<td>664</td>
<td>67%</td>
<td>2.19</td>
<td>0.46</td>
</tr>
<tr>
<td>High (4.67-5.53)</td>
<td>132</td>
<td>13%</td>
<td>2.10</td>
<td>0.38</td>
</tr>
<tr>
<td>Very high (&gt; 5.54)</td>
<td>44</td>
<td>4%</td>
<td>1.56</td>
<td>0.42</td>
</tr>
</tbody>
</table>

Figure 2: Groups of respondents according to the level of engagement

A one-way ANOVA revealed that either engagement did not have a significant effect on burnout in the sample because $F_{20847} < F_{crit}(2.3811)$. The burnout scores are not statistically significantly different and show low values. This result is significant at the $p = 0.05$ level. In the sample, there was a weak negative correlation between burnout syndrome and employee engagement ($-0.10$). Overall, these results show that no strong and systematic relationship between burnout and engagement was observed in this sample. The authors tend to think that the relationship between burnout and engagement is not clearly graspable, as mentioned in the theoretical background chapter. Thus, managers should be concerned with monitoring burnout syndrome as well as the level of employee engagement in organisations.
**Research question Q2: Does burnout syndrome mainly affect older employees?**

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>%</th>
<th>Mean of burnout</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Till 25</td>
<td>20</td>
<td>2%</td>
<td>1.83</td>
<td>0.48</td>
</tr>
<tr>
<td>26 to 41</td>
<td>304</td>
<td>31%</td>
<td>2.24</td>
<td>0.48</td>
</tr>
<tr>
<td>42 to 57</td>
<td>516</td>
<td>52%</td>
<td>2.16</td>
<td>0.47</td>
</tr>
<tr>
<td>58 to 76</td>
<td>140</td>
<td>14%</td>
<td>1.95</td>
<td>0.59</td>
</tr>
<tr>
<td>77+</td>
<td>4</td>
<td>0%</td>
<td>1.50</td>
<td>0.51</td>
</tr>
</tbody>
</table>

Table 4. Age groups and their burnout score

![Figure 3: Burnout and engagement according to age groups](image)

A weak negative correlation between burnout and age was found (-0.10). Table 4 and Figure 3 show that only 2% of respondents belonged to the age group under 25 years. Their level of burnout (1.83) was lower compared to other age groups. Groups of respondents with age between 26 to 41 (31%) and 42 to 57 (52%) are the most numerous and have the biggest average values of burnout syndrome (2.24; 2.16). Interestingly, the older employees are, the less burnout they feel (age group 58 to 76: the mean of burnout 1.95).

Further testing is therefore based on the following hypotheses:

- $H_{20}$: Age has no impact on burnout syndrome of civil servants.
- $H_{21}$: Age has an impact on burnout syndrome of civil servants.

A one-way ANOVA revealed that age has no significant impact on the burnout syndrome in the sample because $F (2.0847) < F_{crit} (2.3811)$. The burnout scores are not statistically significantly different between individual age groups and show low values. This is statistically proven at the chosen 5% level of significance. Overall,
these results indicate that burnout syndrome in the public administration is not predominant among older employees in this sample of respondents because the means of burnout score are very close. The results of the authors' research regarding the relationship between age and burnout syndrome demonstrate that there can be likely a high level of attention to the needs of individuals in public administration. Employees have the opportunity to tell someone competent that they have encountered some difficulties in their work and can seek advice. These conclusions were also reached by Jeklová and Reitmayerová (2006) in their research that focused on the risks of developing burnout syndrome in workplaces.

Research question Q3: Has there been a significant change in the level of engagement of civil servants before the pandemic and now?

Summary statistics of engagement before the pandemic and now are shown in Table 5 and Figure 4. What is interesting about the data in Figure 4 is that there is now an increase in engagement score by more than 10%. It is apparent that there are statistically significant differences between scores in both periods. There was found a positive correlation between engagement scores before the pandemic and now (p = 0.27). The Cronbach's alpha test confirmed a good internal consistency of factor items in both periods (now: α=0.89, before the pandemic: α=0.82). The total average scores show a good level of engagement in both periods: before the pandemic (average=3.47) and now (average=3.83).

<table>
<thead>
<tr>
<th>Period</th>
<th>Statistics</th>
<th>Vigour</th>
<th>Dedication</th>
<th>Absorption</th>
<th>Total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>Average score of all respondents</td>
<td>3.41</td>
<td>3.64</td>
<td>3.44</td>
<td>3.47</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>3.33</td>
<td>3.50</td>
<td>3.33</td>
<td>3.39</td>
</tr>
<tr>
<td></td>
<td>Standard deviation</td>
<td>1.18</td>
<td>1.27</td>
<td>1.21</td>
<td>1.03</td>
</tr>
<tr>
<td>Now</td>
<td>Average score of all respondents</td>
<td>3.71</td>
<td>4.00</td>
<td>3.79</td>
<td>3.83</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>Standard deviation</td>
<td>1.38</td>
<td>1.34</td>
<td>1.30</td>
<td>1.18</td>
</tr>
<tr>
<td>Difference</td>
<td>%</td>
<td>8.82%</td>
<td>9.67%</td>
<td>10.15%</td>
<td>10.50%</td>
</tr>
<tr>
<td>Range</td>
<td></td>
<td>0 - 6</td>
<td>0 - 6</td>
<td>0 - 6</td>
<td>0 - 6</td>
</tr>
</tbody>
</table>
**Figure 4: The comparison of engagement scores before the pandemic and now**

<table>
<thead>
<tr>
<th>Engagement score</th>
<th>Before</th>
<th>Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigor</td>
<td>3.41124119</td>
<td>3.71</td>
</tr>
<tr>
<td>Dedication</td>
<td>3.64988645</td>
<td>3.54</td>
</tr>
<tr>
<td>Absorption</td>
<td>3.444444444</td>
<td>3.44</td>
</tr>
<tr>
<td>Total score</td>
<td>3.470189702</td>
<td>3.834688347</td>
</tr>
</tbody>
</table>

**H3**: The level of engagement of civil servants does not differ before the pandemic and now. $\mu_0 = \mu_1$

**H3**: The level of engagement of civil servants differs before the pandemic and now. $\mu_0 \neq \mu_1$

A paired t-test was used to test if there was a significant difference in the mean between pairs of measurements. To assess the validity of the null hypothesis, the most important statistical value achieved for the two-sided P(2) test is $6.35E-17$. It is obvious that the achieved significance value is significantly smaller than the established level 0.05. The authors are therefore justified in rejecting the null hypothesis and accept the alternative hypothesis: "The engagement level before the pandemic differs from the engagement level now." The average level increased statistically significantly from the average value of 3.43 (before the pandemic) to the average value of 3.83 (now). This is an increase of more than 10%.

As already mentioned, no research has been conducted in the Czech Republic measuring the level of engagement during the pandemic and now and the authors assumed that the level of engagement would decrease. According to the survey, the level of engagement of civil servants is now higher than before the pandemic. As the drivers of employee engagement during the covid-19 pandemic can be seen following factors: the organisation's leaders, culture of trust and technologies that enable a smooth remote working and employee connection (Ramakumar and Priyadarshini, 2021), these factors could contribute to higher engagement of civil servants. Considering that many employees worked at least partially from home during the pandemic, the following positive factors may have also influenced the increased level of engagement during the pandemic: the ability to schedule time...
according to oneself, saving time (e.g. on commuting, grooming), saving money (e.g. on commuting), positive impact on the sense of independence or the ability to have more time for family (Hájková, 2022; Očenášková, 2021). Many employees used the pandemic as a time for personal development. As mentioned in the research done by Kundu and Nag (2021) the possibility to attend on-line learning helped to increase employee engagement during the pandemic as well.

Discussion

With respect to the first research question, it was found that on average, civil servants showed a low level of burnout and an average level of engagement. As mentioned in the literature review, several reports have shown that there is a strong relationship between burnout and engagement. Contrary to expectations, the current study based on the one-way ANOVA found that levels of burnout syndrome have no significant impact on employee engagement in this sample. The engagement scores were not statistically significantly different between groups with various levels of burnout. These results provide further support for the hypothesis that civil servants can be burnt out and engaged at the same time. The low level of burnout syndrome at civil servants is undoubtedly a positive result.

Regarding the second research question, a comparison of age groups showed that the mean level of burnout was the highest in the 26-41 age group. This finding is rather surprising. Higher values would be rather expected for older groups. However, this value was the highest compared to the other groups, but still rated as a low level of burnout. This result could be explained by a bigger need for face-to-face social contacts in this age group, people of this age are mainly parents, they may have felt more burnt out during the pandemic due to isolation and online learning. Interestingly, the results show that the older employees were, the less burnt out they felt. Burnout scores between age groups were very close. The one-way ANOVA showed that burnout scores were not statistically significant between age groups. This observation may support the hypothesis that age has no significant impact on the burnout syndrome.

The third question of this study found that the level of engagement differed significantly before the pandemic and now. There was an increase in engagement of more than 10%. It might be related to new opportunities as remote work (Černohlávková and Housková, 2022) and effective motivators.

Conclusion

After a thorough study of the literature and previous surveys realized within the examined issue, the authors prepared a questionnaire survey which aimed to assess the level of employee engagement, job burnout and its relationship among civil servants in the Czech Republic. These findings can help us understand the levels of burnout and engagement among civil servants, their relationship with each other, and their evolution in the pandemic. If a similar situation arises in the future, managers
would know on what and how to focus when managing civil servants in such a period.

Based on this aim, the authors set three research questions which led to the formulation of corresponding hypotheses. Afterwards, an online survey was carried out in May 2022 based on a structured questionnaire (preceded by a pilot survey). A total of 984 respondents completed the questionnaire. The results of the survey were processed and evaluated using Microsoft Excel. One-way ANOVA, Pearson correlation and parametric paired T-test were also used to evaluate the data obtained. In the chapter Results and discussion, the results of the survey were analysed and commented in detail.

Based on the questionnaire survey, statistical analysis, literature review, method of analysis, comparison and deduction, the research questions were answered as follows: Q1 - Burnout syndrome has no impact on engagement of civil servants; Q2 - Age has no impact on burnout syndrome of civil servants; Q3 - The level of engagement of civil servants is higher now than before the pandemic. No research on similar measurement has been conducted in the Czech Republic yet.

The limiting conditions of the survey can be seen in the return rate of the questionnaires. In generalising the results of this study, it should be considered that the findings are based on only a one-sectional sample (civil servants) in one country. Future research on the current topic is therefore recommended. A further study with more focus on identification of engagement drivers is therefore suggested.

Acknowledgments

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References


ZAANGAŻOWANIE W PRACĘ I SYNDROM WYPALENIA ZAWODOWEGO URZĘDNIKÓW ŚLUŻBY CYWILNEJ W TRAKCIE I PO PANDEMII COVID-19

Streszczenie: W organizacjach nastąpiło wiele zmian w kontekście przeciwdziałania epidemii, dlatego autorzy postawili sobie za cel zbadanie poziomu zaangażowania urzędników służby cywilnej przed pandemią i obecnie oraz zbadanie korelacji między zaangażowaniem a syndromem wypalenia zawodowego. Na podstawie przeglądu i analizy dostępnej literatury czeskiej i zagranicznej przygotowano ankietę kwestionariuszową i przeprowadzono badanie wśród 984 respondentów (urzędników służby cywilnej) w Czechach. Wykorzystano Utrechcką Skalę Zaangażowania w Pracę oraz kwestionariusz oceniający syndrom wypalenia zawodowego. Dane zostały przetworzone przy użyciu metod statystycznych. Ponadto zastosowano parametryczny sparowany t-test i jednokierunkową ANOVA. Niniejsze badanie zapewnia wgląd w aktualny stan zagadnienia i możliwe zmiany spowodowane pandemią COVID-19. W przypadku obserwowanej grupy respondentów stwierdzono, że syndrom wypalenia zawodowego nie miał wpływu na zaangażowanie urzędników służby cywilnej; wiek nie miał wpływu na sindrom wypalenia zawodowego urzędników służby cywilnej, a poziom zaangażowania urzędników służby cywilnej był wyższy w 2022 r. niż przed pandemią. Nowatorstwo badania polega na skupieniu się na wyżej wymienionych pomiarach, ponieważ podobne badania nie zostały jeszcze przeprowadzone w Czechach. Wyniki tego badania mogą być przydatne dla praktyków i kierownictwa instytucji publicznych, jeśli podobna sytuacja wystąpi w przyszłości.

Słowa kluczowe: syndrom wypalenia zawodowego, urzędnicy służby cywilnej, zaangażowanie pracowników, pandemia
工作投入和倦怠综合症 期间和之后的公务员 COVID-19 大流行

摘要：在抗疫措施的背景下，组织发生了一些变化，因此作者旨在考察大流行之前和现在的公务员敬业度水平，并检验敬业度与倦怠综合症之间的相关性。在查阅和分析现有的捷克和外国文献的基础上，准备了问卷调查，并以捷克共和国的984名受访者（公务员）为样本进行了调查。使用乌得勒支工作参与量表和评估倦怠综合征的问卷。使用统计方法处理数据，此外，还使用了参数配对 t 检验和单向方差分析。这项研究提供了对当前状态以及 covid-19 大流行可能引起的理解的深入了解。对于观察到的受访者样本，发现倦怠综合症对公务员的敬业度没有影响；年龄对公务员倦怠综合症没有影响；2022年公务员敬业度高于疫情前。该研究的新颖之处在于关注上述测量，因为捷克共和国尚未进行类似研究。如果将来出现类似情况，这项研究的结果可能对从业者和公共机构的管理有用。

关键词：职业倦怠综合症, 公务员, 员工敬业度, 流行病