

# Analysis of workplace well-being of Slovakian employees during a crisis

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**Abstract.** *The economic crisis of recent years has had a significant impact on the well-being of employees at work. The coronavirus that appeared in 2019 and the economic crisis have become one of the most powerful influencing factors in terms of workplace well-being. The actuality of the topic is given by the fact that the effects caused by the coronavirus crisis have still left a noticeable impact in many areas of working life. The primary goal of the study was to analyse the workplace well-being in Slovakian small and medium-sized enterprises. The methodology of the research was a questionnaire survey, interviewing a total of 772 employees in 2023. According to the research hypothesis, a significant correlation can be shown between workplace anxiety, nervousness, and sadness (negative emotions) and the achievement of workplace well-being. The obtained results support the correctness of the hypothesis that there is a significant correlation between the prevalence of negative emotions and the achievement of well-being at work. The results also showed how the order of the elements of the negative emotional factor affects the achievement of well-being at work: first of all, sadness at work, then anxiety at work, and finally nervousness at work, had an impact on the development of job satisfaction.*

**Keywords:** workplace, well-being, economic crisis, employee, Slovakia.

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## Introduction

After the year 2019, the world was hit by unexpected crises, as a result of which the situation of the world economy seemed to collapse. The appearance of the coronavirus greatly contributed to the economic recession (Borio, 2020; Svabova et al., 2021; Privara, 2022;

Kramarova et al., 2022; Dima et al., 2022; Zsigmond et al., 2024). The full extent of the economic shock was further exacerbated by political tensions and the Russian-Ukrainian conflict (Fiszeder & Małecka, 2022). The decline in the economic situation resulted in a deterioration of work life within a short period of time (Chaaya et al., 2022; Bakker & Wingerden, 2021). Nowadays, well-being at work is a primary concern for employees and employers (Đuriš et al., 2018; Hutmanová et al., 2024), the achievement of which has been strongly hindered by the lack of an expected series of events (Kranc, 2023; Samašonok, 2024). Well-being at work also affects employee retention at work, employees prefer a workplace where they are satisfied (Garai-Fodor et al., 2023; Szostek et al., 2022a; 2022b; Veszprémi Sirotková & Nekolová, 2017; Piwowar-Sulej et al., 2024; Hitka et al., 2023; Daňo et al., 2024). Depending on the events mentioned, several research studies have recently been conducted on the topic of well-being at work. The results of international research showed that the appearance of the coronavirus left an impact on workplace well-being and mental health, and also had an impact on burnout (Tusi et al., 2021; Samridhi & Lavina, 2021). Restrictions, closures, and closures after the outbreak of the epidemic not only had a negative impact on economic areas but also endangered mental health and well-being (Makovicz et al., 2022; Dima et al., 2023; Mihalca et al., 2021; Gáll & Micháľková, 2023; Delcea et al., 2024). More and more studies have also confirmed the fact that the prevailing stress and negative emotions arising due to the emergence of the Covid-19 epidemic are responsible for low job satisfaction (Al-Jubari et al., 2022). At the same time, even before the outbreak of the epidemic, many studies have shown that workplace anxiety, nervousness, and sadness (negative emotions) are present as strong stress factors in working life and have an impact on the achievement of job satisfaction (Duxbury et al., 2018; Faragher et al., 2013). Considering the importance and actuality of the topic, we aimed to assess the workplace well-being situation of Hungarian employees in Slovakia. Using the PERMA-Profil model, the study aims to demonstrate the strength or weakness of the relationship between workplace well-being and individual factors.

## Literature review

We can now use many terms to define "well-being". In the Oxford dictionary, the English collocation "well-being" can also be interpreted as health, happiness, and comfort. "Well-being" is a multifactorial concept that is difficult to generalise or define precisely. According to some researchers, well-being is much more than the absence of disease (Schramme, 2023), while according to other authors, subjective well-being is not the same as, nor is it a condition for, psychological well-being (Tov & Diener, 2013). A perfect example of this definition is when an individual is able to live a happy life despite their physical disability or illness.

It is important to note that the definition of well-being at work cannot even be mentioned under a certain definition. Almost every author explains it differently and captures the essence of the concept from different angles. According to the eudaimonic approach, workplace well-being is nothing more than the employee's subjective assessment of his workplace development opportunities and the company's operation (Bartels et al., 2019). In their study, Ismail et al. (2019) defined the concept of workplace well-being as the same as a good feeling from work, which is closely related to the general feelings of employees and the external and internal values of work.

Measurement procedures and methods largely determine who understands the concept of "well-being at work" today (Houdmont et al., 2012; Waqar et al., 2024). One of the basic works of the workplace well-being literature is "The Oxford Handbook of Organizational Well-being", published in 2009 by S. Cartwright and C.L. Cooper. Based on measurement procedures and methods, the book shows which models are suitable for workplace well-being surveys. The study includes the following models:

- Martin Seligman – PERMA model (Positive psychology model, 2011): The method measures the level of well-being along the five factors defined by Seligman. Measuring employee well-being/happiness is a key task for every organisation and company, as its lack can negatively affect the workplace climate, the performance of employees, and consequently the company's performance (Seligman, 2011).
- Cartwright and Cooper – ASSET model (2009): The ASSET model is also closely related to stress theories, in which the level of stress serves as the primary measurement tool. The model determines the level of workplace well-being through several basic factors, which are: control, workplace relations, job insecurity, the company's commitment to the employee, the employee's commitment to the company, communication, and income (Cooper & Cartwright, 2009).

The well-being models listed above can be used in many ways in many areas of life. We can use them for workplace, personal, and psychological purposes. In our case, the workplace aspect is important. During workplace well-being research, the following aspects need to be measured and analysed: physical factors, psychological factors, psychosocial factors, community factors, and the work environment. A satisfied employee is able to perform productive work and is willing to make efforts to increase the organization's performance (Parmar et al., 2022; Bazo et al., 2019; Naďová Krošlákova et al., 2021). That is why it is advisable for a company that wants to operate efficiently to invest energy and time at certain intervals in carrying out and evaluating workplace well-being surveys (Borisov & Vinogradov, 2022).

Employee well-being surveys are an integral part of the efficient operation of companies and institutions. Interpreting employee satisfaction is by no means as simple a task as it seems. Many researchers approach the definition of the concept from a different perspective. According to Wnuk's interpretation, we can talk about employee satisfaction when the employee likes his job (Wnuk, 2017). Based on a sociological interpretation, employee satisfaction is nothing more than a positive evaluation of work (Sypniewska, 2014). In a narrower sense, the level of employee well-being is determined by the fulfilment of the individual at work and the level of enjoyment of work (Ekmekcioglu & Nabawanuka, 2023). However, it can also be interpreted in a broader spectrum, according to which employee well-being is closely related to workplace well-being, subjective well-being, and psychological well-being (Rothausen et al., 2012; Aliyev, 2021). According to the definition of the ILO, employee well-being can be primarily influenced by the workplace environment, organisational factors, and operational factors (Sinclair et al., 2010).

Surveys related to employee well-being highlight three points of view: social well-being, mental and physical health, and the employee's commitment and satisfaction with work (Pagán et al., 2019; Mura et al., 2021). Many researchers agree that the stress factor has one of the greatest influences on achieving well-being (Nimmi & Donald, 2022) and this relationship was especially obvious during the pandemic and appropriate employment risks related to work duties (Mishchuk et al., 2023); however, Seligman's theory of positive

psychology refutes this. He does not deny that stress is of great importance in the development of employee satisfaction, but he believes that the path to well-being cannot be achieved only by eliminating negative effects. According to Seligman's 5-factor model of positive psychology, the achievement of employee satisfaction, which can lead to well-being at work, is based on the following factors: predominance of positive emotions, good relationships with colleagues, meaning, and interest in work and success (Seligman, 2011).

Well-being at work is not only important for employees, but also a primary factor for employers. Among the basic expectations of employers is the qualitative work of their employees. Quality work can be significantly influenced by the existence or degree of well-being at work (Ďuriš et al., 2018).

Overall, it can be stated that satisfaction is a complex phenomenon that has a close interaction between the organisation and the employee. The level of employee satisfaction affects the efficiency of the organisation, and, at the same time, the operation of the company can significantly influence the level of employee satisfaction (Aslan et al., 2022; Sageer et al., 2012). Employees with a higher level of well-being are typically more committed to their work, produce better performance, and contribute more effectively to the achievement of organizational goals (Albalawi et al., 2019; Shuck & Reio Jr, 2014).

### Research objective, methodology, and data

The purpose of the research was to assess and analyse the workplace well-being of workers in Slovakia in the period following the outbreak of the coronavirus epidemic. The probability sampling method was implemented in the form of a questionnaire, the time interval of which lasted from February 2023 to August 2023. The questionnaire can be accessed via the following link: <https://www.peggykern.org/questionnaires.html>. A total of 772 responses were received to the questionnaire. The evaluation of the questionnaire results was helped by the values of the Cronbach-alpha reliability index and the results of the applied regression equation. During the analyses, we worked with a 95% confidence level and a 0.5% error probability. Regarding the demographic data, 58.5% of the respondents in the examined sample are men and 41.4% are women. In terms of age, the highest percentage of participants in the survey is between 46-50 years old (24.1%), the lowest percentage is under 18 years old (0.1%) (Table 1).

*Table 1. Distribution of respondents by gender and age group*

Characteristic		% of the Sample
Gender	Female	41.50%
	Male	58.50%
Age	under 18	0.10%
	19-25	8.00%
	26-30	10.40%
	31-35	12.60%
	36-40	12.70%
	41-45	16.80%
	46-50	24.10%
	over 51	15.30%

Source: own editing.

The questionnaire is used to assess workplace well-being using the Workplace PERMA-Profiler questionnaire. The basis of the questionnaire is Martin Seligman's "Positive

Psychology Model", which, however, is not yet suitable for assessing workplace well-being. Later on, the research couple L.M. Kern and J. Butler expanded and improved the model, thanks to which it became suitable for carrying out research on well-being at work. The revised model was named Workplace PERMA-Profiler. The questionnaire contains a total of 23 closed-ended questions, which are grouped along 10 different factors. The first 5 factors (positive emotions, commitment, relationship, meaning, performance) are based on M. Seligman's model, and the following 5 factors (negative emotions, health, loneliness, happiness, PERMA average) are based on L.M. It is associated with Kern and Butler. The questionnaire can be used in 2 versions, for which the authors have developed a 0-10 scale system. The order of the questions cannot be changed or modified. Among the elements in the sample, seven factors contain three sub-questions, while the remaining three factors contain only one. The sample of the Workplace PERMA-Profiler questionnaire used in the research and the order of its application are illustrated in Table 2.

*Table 2. The PERMA-Profiler Questionnaire*

<b>Factors</b>	<b>Question</b>	<b>Response Anchors</b>
Accomplishment.:	How often do you feel you are making progress towards accomplishing your work-related goals?	0=never, 10=always
Engagement:	At work, how often do you become absorbed in what you are doing?	
Positive em.:	At work, how often do you feel joyful?	
Negative em.:	At work, how often do you feel anxious?	
Accomplishment:	How often do you achieve the important work goals you have set for yourself?	
Health:	In general, how would you say your health is?	0=terrible, 10=excellent
Meaning:	To what extent is your work purposeful and meaningful?	0=not at all, 10=completely
Relationships:	To what extent do you receive help and support from coworkers when you need it?	
Meaning:	In general, to what extent do you feel that what you do at work is valuable and worthwhile?	
Engagement:	To what extent do you feel excited and interested in your work?	
Loneliness:	How lonely do you feel at work?	
Health:	How satisfied are you with your current physical health?	0=not at all, 10=completely
Positive em.:	At work, how often do you feel positive?	0=never, 10=always
Negative em.:	At work, how often do you feel angry?	
Accomplishment:	How often are you able to handle your work-related responsibilities?	
Negative em.:	At work, how often do you feel sad?	
Engagement:	At work, how often do you lose track of time while doing something you enjoy?	
Health:	Compared to others of your same age and sex, how is your health?	0=terrible, 10=excellent
Relationships:	To what extent do you feel appreciated by your coworkers?	
Meaning:	To what extent do you generally feel that you have a sense of direction in your work?	
Relationships:	How satisfied are you with your professional relationships?	
Positive em.:	At work, to what extent do you feel contented?	0=not at all, 10=completely
Happiness:	Taking all things together, how happy would you say you are with	0=not at all,

your work?	10=completely
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Source: own editing.

## Results and discussion

### Results

The unexpected appearance of the coronavirus epidemic dealt a severe blow to the world economy. At the same time, it left its mark not only in the areas of the economy but also had an impact on everyday life. The importance of well-being at work is receiving more and more attention around the world. The main goal of this research was to assess the level of well-being at work among Slovakian employees after this crisis. The results of the Workplace PERMA-Profiler survey provided easy-to-interpret, and detailed information about the respondents' current workplace well-being situation, which is illustrated in Table 3 using various statistical indicators (average, standard deviation, minimum, maximum, Cronbach alpha).

*Table 3. Workplace PERMA-Profiler-based analysis of the examined sample*

		Mean	Std. Deviation	Min	Max	Cronbach alfa
<b>POSITIVE EMOTIONS</b>		5.49	1.80	0	10	
P1	At work, how often do you feel joyful?	5.36	1.90	0	10	0.91
P2	At work, how often do you feel positive?	5.42	1.92	0	10	
P3	At work, to what extent do you feel contented?	5.69	2.03	0	10	
<b>ENGAGEMENT</b>		5.51	2.07	0	10	
E1	At work, how often do you become absorbed in what you are doing?	5.81	2.14	0	10	0.86
E2	To what extent do you feel excited and interested in your work?	5.60	2.32	0	10	
E3	At work, how often do you lose track of time while doing something you enjoy?	5.11	2.52	0	10	
<b>RELATIONSHIPS</b>		5.87	1.74	0	10	
R1	To what extent do you receive help and support from coworkers when you need it?	5.87	1.96	0	10	0.90
R2	To what extent do you feel appreciated by your coworkers?	5.77	1.94	0	10	
R3	How satisfied are you with your professional relation-ships?	5.95	1.83	0	10	
<b>MEANING</b>		6.55	1.78	0	10	
M1	To what extent is your work purposeful and meaningful?	6.41	1.88	0	10	0.91
M2	In general, to what extent do you feel that what you do at work is valuable and worthwhile?	6.58	1.85	0	10	
M3	To what extent do you generally feel that you have a sense of direction in your work?	6.66	2.05	0	10	
<b>ACCOMPLISHMENT</b>		6.15	1.68	0	10	
A1	How often do you feel you are making progress towards accomplishing your work-related goals?	6.15	1.94	0	10	0.84
A2	How often do you achieve the important work goals you have set for yourself?	5.70	2.10	0	10	
A3	How often are you able to handle your work-related responsibilities?	6.60	1.74	0	10	

		Mean	Std. Deviation	Min	Max	Cronbach alfa
<b>NEGATIVE EMOTIONS</b>		5.97	2.19	0	10	
N1	At work, how often do you feel anxious?	6.10	2.45	0	10	0.90
N2	At work, how often do you feel angry?	6.24	2.28	0	10	
N3	At work, how often do you feel sad?	5.55	2.44	0	10	
<b>HEALTH</b>		6.34	1.70	0	10	
H1	In general, how would you say your health is?	6.49	1.69	0	10	0.94
H2	How satisfied are you with your current physical health?	6.36	1.73	0	10	
H3	Compared to others of your same age and sex, how is your health?	6.18	1.96	0	10	
<b>LONELINESS</b>	How lonely do you feel at work?	5.38	2.68	0	10	
<b>HAPPINESS</b>	Taking all things together, how happy would you say you are with your work?	5.83	1.95	0	10	
<b>PERMA</b>	PERMA mean= (P1,P2,P3,E1,E2,E3,R1,R2,R3,M1,M2,M3,A1,A2,A3,hap)	5.91	1.66	0	10	0.97

Source: own research.

Answering the questions in the questionnaire was made possible by a 0-10 scale system. The results of the indicators representing the average and standard deviation are shown in relation to this scale system. The average represents the arithmetic mean of the data in the sample, while the standard deviation shows the deviation of the quantitative values from the average. Based on the results, the "meaning" factor ( $m=6.55$ ) reached the highest value on the scale system, which means that our respondents are satisfied with the quality of their work and its effectiveness. The factors "health" ( $m=6.34$ ) and "performance" ( $m=6.15$ ) produced additional positive results. Against all this, the result of the "negatively emotional" factor ( $m=5.97$ ) is less encouraging, according to which the respondents' work life is strongly characterised by anxiety, nervousness, and sadness. The results of the "positive emotional" factor ( $m=5.49$ ) further confirm the fact that the level of workplace well-being follows a stagnant or decreasing trend, despite the fact that feelings of joy, positivity, and satisfaction are an essential part of effective work. Anxiety, nervousness, and sadness are more present than joy, positivity, and satisfaction. A key factor in the model is the "PERMA average" (general well-being). The creators of the Workplace PERMA-Profiler defined a formula that can be used to calculate the level of general well-being (P1, P2, P3, E1, E2, E3, K1, K2, K3, J1, J2, J3, T1, T2, T3, B1) (Kern & Butler, 2016). In the case of the examined sample, the result of "the PERMA average" represents an average of 5.91 with a standard deviation of 1.66. In this case, the level of general workplace well-being among Slovakian employees is stronger than average. Based on the results, the deviation from the average is the highest in the case of "commitment", "negative emotions", and "loneliness". According to the obtained Cronbach's alpha coefficient, the measurement reliability of the research was adequate.

According to a hypothesis established during research, the elements of the "negative emotional" factor included in the Workplace PERMA-Profiler questionnaire exert a strong influence on the achievement of workplace satisfaction. The components of the mentioned factors are workplace anxiety, workplace nervousness, and workplace sadness. The regression statistical procedure was used to analyse the hypothesis. During the regression process, an survey seeks the answer to the extent to which the elements

of the "negative emotional" factor move proportionally with the indicator of job satisfaction, as well as to what extent the combined effect of the mentioned components can explain the evolution of job satisfaction. During the analysis, the elements of the "negative emotional" factor included in the PERMA-Profil represent the independent variables, while job satisfaction appears as a dependent variable.

*Table 4. Results of regression analysis explaining the relationship between workplace anxiety, nervousness and sadness and workplace well-being*

Model summary			
Model	R	R Square	Adjusted R Square
1	.563a	0.317	0.314
a. Predictors: (Constant), At work, how often do you feel anxious?, At work, how often do you feel angry?, At work, how often do you feel sad?			

Source: own research.

Table 4 contains the summary table of the regression analysis. In the case of the examined variables, a relevant relationship can be found, as the value of the correlation coefficient exceeded  $\pm 0.2$ . The value of the overall correlation coefficient (R) in the table is 0.563, which means a stronger relationship than the average value between the examined variables. This value means that the higher the level of anxiety, nervousness, and sadness, the lower the level of job satisfaction. The second indicator shown in the summary table produced a remarkable result. The value of the coefficient of determination (R square) is 0.317, which means that the influence of the factors examined in the regression process can explain up to 31% of the variance of the job satisfaction value. This is followed by a presentation of the detailed examination of the obtained results.

*Table 5. Analysis of variance of the examined variables (ANOVA)*

ANOVA					
Sum of Squares		df	Mean Square	F	
1	Regression	1010.787	3	336.929	118.619
	Residual	2181.456	768	2.840	
	Total	3192.242	771		
a. Dependent Variable: At work, to what extent do you feel contented?					
b. Predictors: (Constant), At work, how often do you feel anxious?, At work, how often do you feel angry?, At work, how often do you feel sad?					

Source: own research; Note: \*  $p < 0.05$ .

The results of the conducted ANOVA test (Table 5) support the results of the aggregated correlation coefficient (R) value obtained in Table 4, according to which there is a relationship between the examined variables. There is a significant relationship in cases where  $p < 0.05$ . The significance value of the F-test is  $p = 0.000$ , which confirms the existence of a relationship between the variables.

*Table 6. Coefficient table of the examined variables*

Coefficients $\alpha$					
Model		Unstandardized Coefficients		Standardized Coefficients	t.
		B	Std. Error	Beta	
1	(Constant)	8.590	0.181		47.578
	At work, how often do you feel anxious?	-0.203	0.043	-0.244	-4.768
	At work, how often do you feel angry?	0.002	0.047	0.003	0.051



	At work, how often do you feel sad?	-0.301	0.041	-0.361	-7.437
a. Dependent Variable: At work, to what extent do you feel contented?					

Source: own research; Note: \*  $p < 0.05$ .

The last part of the study separately analyses the effects of workplace anxiety, nervousness, and sadness on the development of workplace satisfaction. Table 6 illustrates to what extent the studied variables have an impact on the achievement of job satisfaction. The significance level of workplace anxiety and workplace sadness is below the 0.05 threshold, but workplace nervousness is outside the mentioned threshold. Based on the results, it can be concluded that, among the examined variables, workplace anxiety and workplace sadness significantly influence the development of workplace satisfaction. Afterwards, the beta coefficient can be used to analyse the strength of the relationships, in order to find out which variable has the strongest effect on achieving job satisfaction. In the case of the relationship between workplace anxiety and workplace satisfaction, the sign of the coefficient beta index reversed and became negative. The beta value of the coefficient on the relationship between workplace sadness and workplace satisfaction developed similarly. The negative result means that the higher the value of anxiety and sadness, the lower the level of job satisfaction. Based on the results, the factor most influencing the achievement of job satisfaction was primarily sadness at work ( $\beta = -0.361$ ), then anxiety at work ( $\beta = -0.244$ ), and finally, nervousness at work ( $\beta = 0.003$ ).

The results of the hypothesis analysis in the case of the examined sample produced similar results to the research of Duxbury et al. (2018), where the mentioned stress factors also appear as a strong influencing factor. In the analysis of the hypothesis, the significance level of the regression is  $p = 0.000$  and the coefficient of determination (R square) is 0.317. Based on these results, we can accept the hypothesis.

After the analysis of the hypothesis, the results of the regression procedure showed that among the elements of the "negative emotional" factor, workplace sadness has the strongest effect on achieving "well-being" of workplace satisfaction. The next step is to examine the relationship between workplace sadness and workplace satisfaction. Table 7 illustrates the results of the correlation calculation.

Table 7. Correlation table of the examined variables

		At work, to what extent do you feel contented?	At work, how often do you feel sad?
At work, to what extent do you feel contented?	Pearson Correlation	1.000	-0.538a
	Sig. (2-tailed)		.000
	N	772	772
At work, how often do you feel sad?	Pearson Correlation	-0.538a	1.000
	Sig. (2-tailed)	.000	
	N	772	772

Source: own research; Note: \*  $p < 0.05$ .

The results in the table show a relatively strong (-0.538a) negative correlation and significance between workplace sadness and workplace satisfaction. The negative sign means the opposite relationship, i.e. the stronger the sadness at work, the lower the satisfaction at work. In addition to the regression procedure, the results of the correlation calculation also support the correctness of the hypothesis. The correlation is illustrated by a scatterplot diagram (Figure 1). The scatter plot illustrates the results obtained by performing

the correlation. The scatterplot diagram helps to explore the relationships between the examined variables. The location and shape of the point cloud allow us to infer the relationships between the variables. Figure 1 illustrates the results of the correlation that high job sadness results in low job satisfaction.

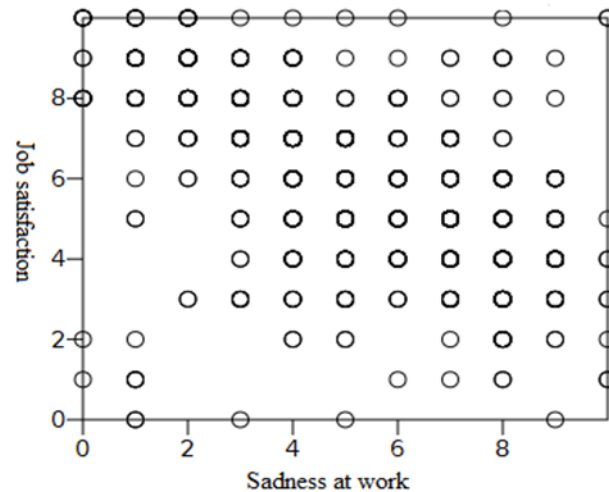


Figure 1. Scatterplot to represent correlation.

Source: based on the author's editing.

The analysis of workplace satisfaction was an important part of the workplace well-being questionnaire. One of the sub-questions of the "positive emotional" factor included in the Workplace PERMA-Profiler sample reads: "How satisfied do you feel at your workplace?".

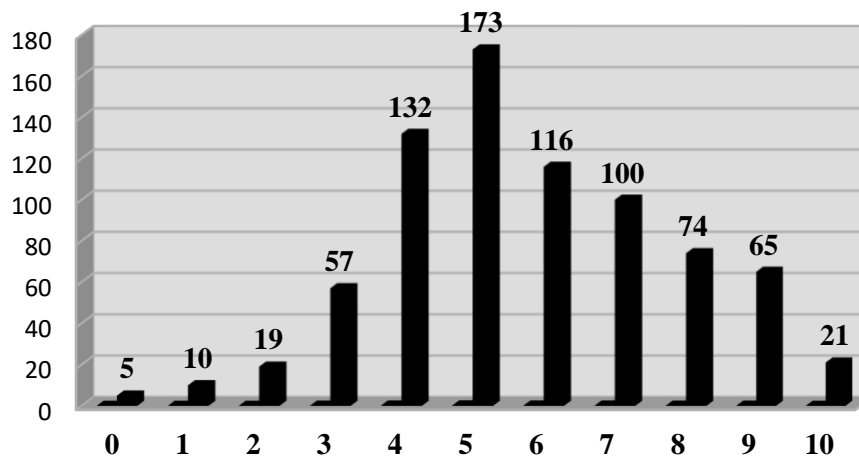


Figure 2. Level of job satisfaction.

Source: based on the author's editing.

Figure 2 illustrates the degree of job satisfaction among the research participants. There were mixed responses regarding the results. The largest proportion of those surveyed marked point 5 (22.4%) of the scale system, thus expressing that they consider their level of job satisfaction to be medium. This is followed by the group of respondents who rated their

level of satisfaction at 4 (17.1%). The group of respondents indicating the two most common values is currently relatively far from achieving the state of well-being at work. Despite this, a high number of completions were also received for the values for which we can rather talk about the existence of well-being at work. 15% of the participants in the research rated their job satisfaction at 6, 13% at 7 and 9.6% at 8. Overall, in the case of the examined sample, the level of job satisfaction is not very high depending on the results, which also proves that the crises of recent years have also significantly influenced the employees' workplace satisfaction.

The research examines the workplace well-being of Slovakian employees based on the Workplace PERMA-Profiler model. The results of the research further expand the specialised literature on workplace well-being surveys, so they can provide useful and innovative information to those interested in the topic. To the best of our knowledge, research similar to the present research has not been carried out in such detail in the case of Slovakia in the recent period.

### ***Discussion***

During the analysis, it was revealed which of the examined factors were the factors that facilitated, and which were the ones that most hindered, the achievement of well-being at work. Based on the results, the preponderance of elements belonging to the "negative emotional" factor had the most intensive effect on the achievement of well-being, supplemented by the "loneliness" factor. Anxiety, sadness, and nervousness at work appear as a strong stress factor that inhibits and complicates the development of well-being at work. Similar to several studies (Duxbury et al., 2018; Faragher et al., 2013), the present research drew a similar conclusion regarding the severity of these stress factors. The "meaning" and "performance" factors showed slightly more positive results during the analysis. The results of the research also revealed that the elements of the "negative emotional" factor are present to a greater extent than the factors of the "positive emotional" factor. This means that workplace anxiety, nervousness, and sadness are more strongly present in the lives of employees than workplace joy, positivity, and satisfaction. The summarising and most important factor included in the Workplace PERMA-Profiler model is the "PERMA average", which determines the level of general well-being in the workplace according to a certain formula. Based on the results, the general workplace well-being level of the individuals participating in the research reached an average of  $m=5.91$ . Based on the data, the workplace well-being level of Slovakian employees is slightly above the average value, but at the same time, the detailed results of the factors highlight the seriousness of the situation.

Summarising the conclusions of the research, the positive results of the survey are the factors that most helped to achieve the well-being of Slovak employees at work, i.e. the factors of "meaning", "performance", and "health". The previous factors contribute to the development of workplace well-being within the framework of self-reflection, responsibility for work, commitment, and physical and mental health. The "loneliness" and "negative emotional" factors were found to be the most hindering or inhibiting components of the development of well-being. Overall, there is consensus on many points between the results of our research and several international surveys (Basit & Nauman, 2023).

According to the hypothesis of the study: "Anxiety, nervousness, and sadness at work have a negative effect on the achievement of job satisfaction". To test the hypothesis, we used the regression procedure, which showed that there is a significant correlation between the

"negative emotional" factor included in the PERMA-Profiler model and the achievement of job satisfaction ( $p=0.000$ ). The results of the beta coefficient revealed the order of influence, i.e., ranking, between the elements of the "negative emotional" factor in terms of achieving well-being at work. Based on the results, the achievement of well-being at work is primarily hindered by workplace sadness ( $\beta=-0.361$ ), then by workplace anxiety ( $\beta=-0.244$ ), and finally by workplace nervousness ( $\beta=0.003$ ). Regarding the literature background, Mark and Smith's 2012 survey revealed similar results regarding the negative effects of workplace anxiety, nervousness, and sadness on job satisfaction (Mark & Smith, 2012).

Based on the results obtained, it can be stated that the lives of the respondents participating in this research were significantly affected by the economic difficulties of recent years. The results of our study, in line with the literature, confirmed the fact that the coronavirus epidemic and the subsequent economic crisis had a strong impact on the achievement of workplace well-being (Chaaya et al., 2022; Juhniewicz & Kinowska, 2021; Fodranová & Veszprémi Sirotková, 2023; Mihalca et al., 2021; Bakker & Wingerden, 2021; Srovnalíková, 2024).

## Conclusion

### *Research conclusion*

The survey made it possible to verify the research hypothesis, which is about the connection between workplace well-being and the elements of the "negative emotional" factor. The results showed a significant correlation between a low degree of well-being at work and the predominance of elements of the "negative emotional" factor. The research results are in many respects the same as those read in the literature. In the case of the examined sample, the highest average job satisfaction achieved represents a medium value. The results also reveal the elements of the factors that promote and hinder the achievement of well-being at work. The study analyses the current situation of workplace well-being in detail along 10 factors and identifies the group of factors influencing it. The study draws attention to the necessity and importance of workplace well-being surveys to be carried out at certain intervals.

### *Limitations and future research*

The present study showed the assessment and analysis of workplace well-being in light of the series of unexpected events that have plagued the past years. It is important to mention that the factors investigated in the study are time-dependent (a state that changes over time), according to which the results of the research can be understood for the given period. After the coronavirus period, it would be necessary to carry out further research, since these surveys could provide the most important information, i.e., whether the level of workplace well-being can show an improving trend after the epidemic subsides.

In the case of workplace well-being research, in addition to employee perspectives, employer perspectives are equally important. This study examined the level of workplace well-being exclusively from the employee's point of view, but it would be advisable to conduct the research from the employer's point of view as well.

Regarding future research opportunities, it would be worthwhile to expand the survey on a national and international level as well. At the national level, the expansion of the research would be the large Slovak companies, which would allow the level of well-being at work to

be mapped among the large companies as well. Furthermore, an international comparison regarding well-being at work could be an important milestone. A way to do this would be to include several Central European countries in the research, which would allow comparisons to be made.

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## References

- Albalawi, A. S., Naughton, S., Elayan, M. B., & Sleimi, M. T. (2019). Perceived Organizational Support, Alternative Job Opportunity, Organizational Commitment, Job Satisfaction and Turnover Intention: A Moderated-mediated Model. *Organizacija*, 52(4), 310-324. <https://doi.org/10.2478/orga-2019-0019>.
- Aliyev, K. (2021). Unemployment and (un)happiness: Life satisfaction approach to enhance policy efficiency for developing countries. *Journal of International Studies*, 14(4), 220-235. <https://doi.org/10.14254/2071-8330.2021/14-4/15>.
- Al-Jubari, I., Mosbah, A., & Salem, F. S. (2022). Employee Well-Being During COVID-19 Pandemic: The Role of Adaptability, Work-Family Conflict, and Organizational Response. *Sage Open*, 12(3), 1-13. <https://doi.org/10.1177/21582440221096142>.
- Aslan, M., Yaman, F., Aksu, A., & Güngör, H. (2022). Task performance and job satisfaction under the effect of remote working: Call center evidence. *Economics and Sociology*, 15(1), 284-296. <https://doi.org/10.14254/2071-789X.2022/15-1/18>.
- Bakker, A.B., & Wingerden, J. (2021). Rumination about COVID-19 and employee well-being: The role of playful work design. *Canadian Psychology / Psychologie canadienne*, 62(1), 73-79. <https://doi.org/10.1037/cap0000262>.
- Bartels, A. L., Peterson, J. S. & Reina, (2019). C. S. Understanding well-being at work: Development and validation of the eudaimonic workplace well-being scale. *Plos One*, 14(4), 1-21. <https://doi.org/10.1371/journal.pone.0215957>.
- Basit, A. A., & Nauman, S. (2023). How workplace loneliness harms employee well-being: A moderated mediational model. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1086346>.
- Bazo, L., Cukanova, M., Markovicova, L., & Steinhauser, D. (2019). The impact of institutional environment on Slovak enterprises and the institutional hysteresis effect. *Journal of Competitiveness* 11(3), pp. 35-52.
- Borio, C. (2020). The Covid-19 economic crisis: dangerously unique. *Business Economics*, 55(4), 181-190 <https://doi.org/10.1057/s11369-020-00184-2>.
- Borisov, I., & Vinogradov, S. (2022). Inclusiveness as a key determinant of work engagement: evidence from V4 countries. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 17(4), 1015-1050. <https://doi.org/10.24136/eq.2022.034>.

- Chaaya, C., Thambi, D. V., Sabuncu, Ö., Abedi, R., Osman, A. A. O., Uwishema, O. & Onyeaka, H. (2022). Ukraine – Russia crisis and its impacts on the mental health of Ukrainian young people during the COVID-19 pandemic. *Annals of Medicine Surgery*, 79, 1-4. <https://doi.org/10.1016/j.amsu.2022.104033>.
- Cooper, C. L., & Cartwright, S. (2009). *The Oxford Handbook of Organizational Well-being*. Oxford University Press.
- Daňo, F., Drábik, P., Rehák, R., Vernerová, D., & Čvirik, M. (2024). Models for Perceived Importance and Satisfaction of Outsourcing Factors: Evidence from Slovakia. *Acta Polytechnica Hungarica* 21(11), pp. 99-114. <https://doi.org/10.12700/APH.21.11.2024.11.6>
- Delcea, C., Oprea, S.-V., Dima, A. M., Domenteanu, A., Bara, A., & Cotfas, L.-A. (2024). Energy communities: Insights from scientific publications. *Oeconomia Copernicana*, 15(3), 1101–1155. <https://doi.org/10.24136/oc.3137>.
- Dima, A. M., Busu, M., & Vargas, V. M. (2022). The mediating role of students' ability to adapt to online activities on the relationship between perceived university culture and academic performance. *Oeconomia Copernicana*, 13(4), 1253–1281. <https://doi.org/10.24136/oc.2022.036>.
- Dima, A. M., Tantau, A., & Maassen, M.A. (2022). Models for analysing the dependencies between indicators for bioeconomy in the European Union. *Economic research Ekonomska istraživanja*, 35(1), 3533-3550
- Đuriš, M., Olvecká, V., Strážovská, L., & Sulíková, R. (2018). Influence of the globalization on doing business in Slovakia. *Proceedings of the 32nd International Business Information Management Association Conference, IBIMA 2018 - Vision 2020: Sustainable Economic Development and Application of Innovation Management from Regional expansion to Global Growth*, pp. 7310-7318.
- Duxbury, L., Stevenson, M., & Higgins, C. (2018). Too much to do, too little time: Role overload and stress in a multi-role environment. *International Journal of Stress Management*, 25(3), 250-266. <https://doi.org/10.1037/str0000062>.
- Ekmekcioglu, E. B., & Nabawanuka, H. (2023). How discretionary HR practices influence employee job satisfaction: the mediating role of job crafting. *Employee Relations: The International Journal*, 45(3), 776–793. <https://doi.org/10.1108/er-07-2022-0326>.
- Faragher, E. B., Cass, M., & Cooper, C. L. (2013). The Relationship between Job Satisfaction and Health: A Meta-Analysis. *From Stress to Wellbeing*. (pp. 254-271). Palgrave Macmillan.
- Fiszeder, P., & Małecka, M. (2022). Forecasting volatility during the outbreak of Russian invasion of Ukraine: application to commodities, stock indices, currencies, and cryptocurrencies. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 17(4), 939-967. <https://doi.org/10.24136/eq.2022.032>.
- Fodranová, I., & Veszprémi Sirotková, A. (2023). *Tréning sociálnych a manažérskych zručností*. 1. vydanie. Bratislava: Vydavateľstvo Ekonóm, 153 p. ISBN 978-80-225-5052-9
- Gáll, J., & Micháľková, A. (2023). Assessment of cluster potential in Slovakia: case study in the upper Považie region. *Journal of the Geographical Institute Jovan Cvijic SASA*, 73(3), pp. 311-324.

- Garai-Fodor, M., Vasa, L., & Jäckel, K. (2023). Characteristics of segments according to the preference system for job selection, opportunities for effective incentives in each employee group. *Decision Making: Applications in Management and Engineering*, 6(2), 557–580. <https://doi.org/10.31181/dmame622023761>.
- Hitka, M., Lizbetinova, L., Javorcikova, J., Lorincova, S., & Vanderkova, K. (2023). Managing Employee Motivation in Slovak Universities from the Perspectives of Time and Age. *Education Sciences*, 13(6), 556.
- Houdmont, J., Leka, S., & Sinclair, R. R. (2012). (Eds.). Contemporary occupational health psychology: *Global perspectives on research and practice*. pp. 1–20. Wiley Blackwell. <https://doi.org/10.1002/9780470661550>.
- Hutmanová, N., Hajduová, Z., Dorčák, P., & Laskovský, V. (2024). Exploring the link between motivation and procrastination in the workplace: a case study of SMEs in Slovakia. *Entrepreneurship and Sustainability Issues* 11(3): 163-175. [https://doi.org/10.9770/jesi.2024.11.3\(11\)](https://doi.org/10.9770/jesi.2024.11.3(11)).
- Ismail, H. N., Karkoulou, S., & Kertechian, S. K. (2019). Which personal values matter most? Job performance and job satisfaction across job categories. *International Journal of Organizational Analysis*, 27(1), 109–124. <https://doi.org/10.1108/ijoa-11-2017-1275>.
- Juhniewicz, M., & Kinowska, H. (2021). Employee Well-Being and Digital Work during the COVID-19 Pandemic. *Information*, 12(8), 293. <https://doi.org/10.3390/info12080293>
- Kern, L. M., & Butler, J. (2016). The PERMA-Profiler: A brief multidimensional measure of flourishing. *International Journal of Wellbeing*, 6(3), 1-48. <https://doi.org/10.5502/ijw.v6i3.526>.
- Kramarova, K., Švábová, L., & Gabrikova, B. (2022). Impacts of the Covid-19 crisis on unemployment in Slovakia: a statistically created counterfactual approach using the time series analysis. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 17(2), 343–389. <https://doi.org/10.24136/eq.2022.012>.
- Kranc, J. (2023). *Employee wellbeing: 63% of employers say it's more important since COVID*. ÁLM Benefits Pro. <https://www.benefitspro.com/2023/03/14/employee-wellbeing-63-of-employers-say-its-more-important-since-covid/?amp=1>.
- Makovicz, D., Lisovicz, K., Bryniarski, K., Dziubaszewska, R., Makovicz, N., & Dobrowolska, B. (2022). The impact of the COVID-19 pandemic on job satisfaction among professionally active nurses in five European countries. *Frontiers in Public Health*, 10, 1-10. <https://doi.org/10.3389/fpubh.2022.1006049>.
- Mark, G., & Smith, A. P. (2012). Effects of occupational stress, job characteristics, coping, and attributional style on the mental health and job satisfaction of university employees. *Anxiety, Stress and Coping*, 25(1), 63-78. <https://doi.org/10.1080/10615806.2010.548088>.
- Mihalca, L., Lucia Ratiu, L., Brendea, G., Metz, D., Dragan, M., & Dobre, F. (2021). Exhaustion while teleworking during COVID-19: a moderated-mediation model of role clarity, self-efficacy, and task interdependence. *Oeconomia Copernicana*, 12(2), 269-306. <https://doi.org/10.24136/oc.2021.010>.
- Mishchuk, H., Bilan, Y., & Mishchuk, V. (2023). Employment risks under the conditions of the Covid-19 pandemic and their impact on changes in economic behaviour. *Entrepreneurial Business and Economics Review*, 11(2), 201-216. <https://doi.org/10.15678/EBER.2023.110211>.

- Mura, L., Hajduová, Z., Smorada, M., & Jakubova, Z. (2021). Employee motivation and job satisfaction in family-owned businesses. *Problems and Perspectives in Management*, 19(4), pp. 495-507.
- Nimmi, M. P., & Donald, E. W. (2022). Modelling the interaction between serious leisure, self-perceived employability, stress, and workplace well-being: empirical insights from graduates in India. *Personnel Review*, 52(1), 272-287. <https://doi.org/10.1108/PR-04-2021-0305>.
- Nad'ová Krošláková, M., Khouri, S., Čvirik, M., Tomášková, A., Drábik, P., & Derkawi, H. (2021). The business environment of family enterprises in Slovakia - Perception of external barriers. *Polish Journal of Management Studies*, 24(2), pp. 321-335.
- Pagán, E. C., Maseda, A. M., & Santos, C. R. (2019). Wellbeing in work environments. *Journal of Business Research*, 115(4), 469-474. <https://doi.org/10.1016/j.jbusres.2019.12.007>.
- Parmar, V., Channar, Z. A., Ahmed, R. R., Streimikiene, D., Pahi, M. H., & Streimikis, J. (2022). Assessing the organizational commitment, subjective vitality and burnout effects on turnover intention in private universities. *Oeconomia Copernicana*, 13(1), 251-286. <https://doi.org/10.24136/oc.2022.008>.
- Piwowar-Sulej, K., Blštáková, J., Ližbetinová, L., & Zagorsek, B. (2024). The impact of digitalization on employees' future competencies: has human resource development a conditional role here? *Journal of Organizational Change Management*, Article in Press
- Privara, A. (2022). Economic growth and labour market in the European Union: lessons from COVID-19. *Oeconomia Copernicana*, 13(2), 355-377. <https://doi.org/10.24136/oc.2022.011>.
- Rothausen, J. T., Larson, A. M., & Christenson, S. M. (2012). Expanding Desirability of Turnover: Hedonic and Eudaimonic Job Satisfaction and Well-being. *Academy of Management Proceedings*, 2012(1), 11481. <https://doi.org/10.5465/AMBPP.2012.11481abstract>.
- Sageer, A., Rafat, S., & Agarwal, P. (2012). Identification of Variables Affecting Employee Satisfaction and Their Impact on the Organization. *Journal of Business and Management*, 5(1), 32-39. <https://doi.org/10.9790/487X-0513239>.
- Samašonok, K. (2024). Employee turnover: causes and retention strategies. *Entrepreneurship and Sustainability Issues*, 11(3), 134-148. [https://doi.org/10.9770/jesi.2024.11.3\(9\)](https://doi.org/10.9770/jesi.2024.11.3(9)).
- Samridhi, B., & Lavina, S. (2021). Impact of COVID-19 on the Mental Well-Being of Employees: A Study of Mental Wellness of Employees during COVID-19 in India. *Cardiometry*, 19, 78-89. <https://doi.org/10.1111/j.1468-0432.2009.00487.x>.
- Schramme, T. (2023). Health as Complete Well-Being: The WHO Definition and Beyond. *Public Health Ethics*, 20(20), 1-9. <https://doi.org/10.1093/phe/phad017>.
- Seligman, E. P. M. (2011). *Flourish: A Visionary New Understanding of Happiness and Well-being*. Free Press.
- Shuck, B., & Reio Jr, T. G. (2014). Employee Engagement and Well-Being: A Moderation Model and Implications for Practice. *Journal of Leadership & Organizational Studies*, 21(1), 43-58. <https://doi.org/10.1177/1548051813494240>.
- Sinclair, R. R., Sears, L. E., Probst, T., & Zajack, M. (2010). A multilevel model of economic stress and employee well-being. In J. Houdmont & S. Leka (Eds.), *Contemporary occupational health psychology: Global perspectives on research and practice*, 1, 1-20). Wiley Blackwell. <https://doi.org/10.1002/9780470661550.ch1>.



- Srovnalíková, P. (2024). Crisis Management, in Family Enterprises, from a Personnel Management Perspective. *Acta Polytechnica Hungarica* 21(6), pp. 285-301. <https://doi.org/10.12700/aph.21.6.2024.6.15>
- Svabová, L., Tesárová, E. N., Durica, M., & Straková, L. (2021). Evaluation of the impacts of the COVID-19 pandemic on the development of the unemployment rate in Slovakia: counterfactual before-after comparison. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 16(2), 261–284. <https://doi.org/10.24136/eq.2021.010>.
- Sypniewska, A.B. (2014). Evaluation of factors influencing job satisfaction. *Contemporary Economics*, 8(1), 57-72. <https://doi.org/10.5709/ce.1897-9254.131>.
- Szostek, D., Balcerzak, A. P., Rogalska, E., N., & MacGregor Pelikánová, R. (2022b). Personality traits and counterproductive work behaviors: The moderating role of demographic characteristics. *Economics and Sociology*, 15(4), 231-263. <https://doi.org/10.14254/2071-789X.2022/15-4/12>.
- Szostek, D., Balcerzak, A. P., & Rogalska, E. (2022a). The impact of personality traits on subjective categories of counterproductive work behaviors in Central European environment. *Transformations in Business & Economics*, 21(2), (56), 163-180.
- Tov, W., & Diener, E. (2013). Subjective wellbeing. In K. D. Keith (Ed.), *The encyclopedia of cross-cultural psychology*, 1239–1245. John Wiley & Sons.
- Tuši, M., Brauchli, R., Kerksieck, P., & Bauer, G. F. (2021). Impact of the COVID-19 crisis on work and private life, mental well-being and self-rated health in German and Swiss employees: a cross-sectional online survey. *BMC Public Health*, 21(1). <https://doi.org/10.1186/s12889-021-10788-8>.
- Veszprémi Sirotková, A., & Nekolová, V. (2017). Current Challenges in the Field of Education of Future Business Managers. Trends and Challenges in the European Business Environment: Trade, International Business and Tourism. *Proceedings of the 6<sup>th</sup> International Scientific Conference*, Bratislava: Ekonóm, 445-450.
- Waqar, A., Serban, A.C., Jamal, M.N. (2024). Influence of Organisational Climate and Employee Desires on Managerial Drive. *Proceedings of the 7th international conference on economics and social sciences. Exploring Global Perspectives: The Future of Economics and Social Science*. Editura ASE. DOI: 10.24818/ICESS/2024/082.
- Wnuk, M. (2017). Organizational Conditioning of Job Satisfaction. A Model of Job Satisfaction. *Contemporary Economics*, 11(1), 31–44. <https://doi.org/10.5709/ce.1897-9254.227>.
- Zsigmond, T., Mura, L., Machová, R., Bakó, F., & Kupi, M. (2024). Motivation and organisational culture from the perspective of SME employees – a case study at the time of COVID-19 pandemic. *International Journal of Services, Economics and Management*, 15(1), pp. 34-50.