Manuscript received: 19.11.2025
Accepted: 30.11.2025

International Journal of Economics, Management and Tourism
Vol 5, No. 2, pp. 66 - 76
Online: ISSN **2671-3810**
UDC: 338.48-057.16:159.944.4]:004:303.62(497.7)
338.48-057.16:331.101.32]:004:303.62(497.7)
Original research paper

THE IMPACT OF DIGITALIZATION ON STRESS AND WELL-BEING AMONG TOURISM EMPLOYEES

Martin Dzambaski
University "Goce Delčev" – Faculty of Tourism and Business Logistics, Štip, North Macedonia
mail: martin.217175@student.ugd.edu.mk

Abstract

In the contemporary tourism industry, digitalization has become an inevitable part of everyday processes — from online reservations to automated shift management. Although digital tools have the potential to facilitate work processes, they simultaneously bring new challenges, such as constant exposure to online reviews and the feeling of 24/7 availability. The aim of this paper is to examine how digitalization affects the level of stress and well-being of employees in tourism. The research is conducted through a quantitative method — a survey designed to measure sources of stress, perceptions of digitalization, and the level of job satisfaction. The results will provide insight into which digital solutions reduce and which increase stress among personnel. Based on the findings, recommendations will be proposed to improve work organization and strengthen the mental well-being of employees. The paper aims to contribute to the creation of more sustainable and human-centered working conditions in tourism in the digital era.

Key words: Employee well-being, occupational stress, digital transformation, hospitality workforce, mental health, technological adaptation, organizational change

INTRODUCTION

The contemporary tourism industry is facing dynamic changes resulting from globalization, increasing competition, and especially the rapid development of digital technologies. Digitalization, through online reservation systems, process automation, mobile applications, and review platforms, has significantly transformed the working environment in tourism companies (UNWTO, 2018). Although these technologies have the potential to enhance efficiency and simplify daily operations, they simultaneously bring new challenges for employees.

One of the key challenges is the growing level of work-related stress and the disruption of the balance between professional and private life. In burnout theory, Maslach and colleagues define burnout as a chronic reaction to emotional and interpersonal stress at work, manifested through three dimensions: emotional exhaustion, cynicism, and a sense of reduced personal accomplishment (Maslach, Schaufeli & Leiter, 2001). Tourism employees are often exposed to long shifts, high workload, and direct contact with guests, which can result in irritability, anxiety, and reduced job satisfaction.

Additionally, constant connectivity through digital channels and public exposure on online review platforms can create additional psychological pressure and a feeling that employees must respond 24/7. UNWTO (2021) emphasizes that digital transformation affects organizational structure and the demand for new skills among the tourism workforce, which can influence the well-being of personnel.

Within this framework, the aim of the paper is to examine the impact of digitalization on the level of stress and well-being of employees in the tourism industry, as well as to identify measures for improving work organization and supporting the mental health of staff.

Manuscript received: 19.11.2025
Accepted: 30.11.2025
International Journal of Economics, Management and Tourism
Vol 5, No. 2, pp. 66 - 76
Online: ISSN **2671-3810**
UDC: 338.48-057.16:159.944.4]:004:303.62(497.7)
338.48-057.16:331.101.32]:004:303.62(497.7)
Original research paper

LITERATURE REVIEW

Stress in the Tourism Industry

Work-related stress occurs when the demands of the work environment exceed the employee's abilities, resources, or available time (Lazarus & Folkman, 1984). In the tourism industry, which is dynamic and dependent on seasonal demand, stress is a frequent phenomenon. Employees face long working hours, direct contact with guests with different expectations, frequent unpredictable situations (canceled reservations, complaints, technical problems), as well as high standards of service quality (Karatepe & Uludag, 2008).

Research indicates that chronic stress leads to an increased turnover rate, reduced productivity, more frequent conflicts among staff, and a lower perception of service quality by guests (Kim et al., 2015). The burnout theory of Maslach, Schaufeli & Leiter (2001) defines this condition as a long-term response to emotional and interpersonal stress, characterized by emotional exhaustion, depersonalization (cold attitude toward guests), and a reduced sense of personal accomplishment.

Tourism, as a service-oriented industry, carries a particular risk of burnout due to the high amount of emotional labor required — maintaining a positive and hospitable attitude even in stressful situations. This is especially relevant in small and remote tourist destinations, such as Berovo, where the lack of workforce increases the workload of employees and intensifies stress levels among personnel.

Well-being in the Workplace

Well-being is not merely the absence of stress or illness; it encompasses overall physical, mental, and social health (Dodge et al., 2012). Seligman (2011), through the PERMA model, identifies five pillars of well-being:

- Positive emotions (joy, gratitude),
- Engagement (involvement in work),
- Relationships (good interpersonal connections),
- Meaning (a sense that work has purpose),
- Achievement (success and recognition).

In the context of tourism, employee well-being is directly linked to guest satisfaction — an employee who is content and motivated provides higher service quality (Chiang, 2010). Research shows that mental health support programs, stress management training, and team-building activities have a positive effect on employee engagement and productivity (Grawitch et al., 2006).

Digitalization in Tourism

Digital transformation is among the key drivers of competitiveness in the tourism sector (UNWTO, 2018). Hotels and travel agencies are increasingly adopting online reservation systems, mobile applications, chatbots, self-check-in and self-check-out solutions, CRM systems, and digital platforms for guest communication (OECD, 2021).

These tools enable faster service, reduced administrative workload, and better shift organization (Sigala, 2018). However, digitalization also introduces new challenges: the need for continuous staff training, dependence on online reputation and KPI metrics, as well as the persistent "always-on" pressure to respond to messages and reviews in real time (Gretzel et al., 2020).

Manuscript received: 19.11.2025
Accepted: 30.11.2025
International Journal of Economics, Management and Tourism
Vol 5, No. 2, pp. 66 - 76
Online: ISSN **2671-3810**
UDC: 338.48-057.16:159.944.4]:004:303.62(497.7)
338.48-057.16:331.101.32]:004:303.62(497.7)
Original research paper

The concept of digital stress has also emerged — a psychological strain caused by excessive or forced use of digital technologies (Tarafdar et al., 2015). This may result in fatigue, reduced concentration, and a disrupted work-life balance.
In the Macedonian context, many small hospitality businesses lack sufficient resources for digital support, which places additional workload on a limited number of employees who must respond to bookings and messages outside regular working hours.

Critical note: In Macedonian hotels, investment in employee well-being is often viewed as a cost rather than as a long-term strategy for reducing staff turnover and lowering reputation and training expenses.

The Relationship Between Digitalization, Stress, and Well-being

Contemporary research indicates that digitalization has a dual effect — it can reduce physical and cognitive workload through automation, but at the same time, it may create a sense of constant connectivity and psychological pressure (Derks et al., 2014). Therefore, managers in the tourism industry should develop strategies that allow technology to serve as an ally rather than as a source of additional stress.

This includes:

- establishing clear rules for digital communication (e.g., responding to messages within a reasonable timeframe, but not 24/7),
- conducting digital literacy and stress management training, and
- balancing automation with human contact to maintain personalized service.

In the future, successful tourism companies will be those that not only implement the latest technologies but also foster a culture of support that protects employees' mental health and ensures a sustainable working environment.

MATERIAL AND METHODS

Type of Research

The research is **quantitative and descriptive**, aiming to determine the relationship between digitalization, stress levels, and the well-being of employees in the tourism industry.

Sample

The sample consists of **20–40 respondents**, employed in hotels, restaurants, and travel agencies in North Macedonia.

Participants were selected using a **convenience sampling method**, with the objective of covering a diverse range of professional profiles, including receptionists, service staff, housekeeping personnel, kitchen staff, and managers.

Variables and Indexes

The responses were grouped into **four main indexes**:

- **Stress Index:** average of items related to time pressure, workload, and availability outside regular shifts.
- **Digital Facilitation Index:** average of items assessing the usefulness of digital tools and self-check-in solutions.
- **Digital Pressure Index:** average of items referring to online reviews and the feeling of 24/7 connectivity.

Manuscript received: 19.11.2025
Accepted: 30.11.2025
International Journal of Economics, Management and Tourism
Vol 5, No. 2, pp. 66 - 76
Online: ISSN **2671-3810**
UDC: 338.48-057.16:159.944.4]:004:303.62(497.7)
338.48-057.16:331.101.32]:004:303.62(497.7)
Original research paper

- **Well-being Index:** average of items related to job satisfaction, support, and work–life balance.

Limitations

The research is limited by the relatively small sample size and the use of **self-reported data**, which may reflect subjective perceptions of the respondents.

ANALYSIS OF RESULTS

Table 1 presents the descriptive statistical indicators for the four analyzed indexes: **Stress_Index, Digital_Index, Pressure_Index, and Wellbeing_Index**. Displayed are the number of respondents (N), mean values, standard deviations, as well as minimum and maximum scores for each index. These indicators provide an overview of the respondents' general condition and serve as a basis for further analysis.

Table 1. Descriptive Statistics (Mean Values) for the Analyzed Indexes

Index	N	Mean (M)	SD	Min	Max
Stress Index	20	4.45	0.75	3.00	5.00
Digital Index	20	4.33	0.96	1.67	5.00
Pressure Index	20	2.67	1.10	1.00	4.00
Wellbeing Index	20	2.71	0.88	1.00	4.00

Source: Author's calculation based on survey data, PSPP (2025)

The results indicate a relatively high average stress level among respondents (M = 4.45), which points to a pronounced sense of work-related pressure.

The mean score for digitalization is also high (M = 4.33), suggesting that employees generally perceive digital tools as useful and supportive in their daily work.

On the other hand, the Pressure Index shows a moderate value (M = 2.67), implying that digital tools are not perceived as a major source of additional stress.

The Well-being Index is lower (M = 2.71), indicating a moderately low level of job satisfaction and overall well-being among employees.

Correlation Analysis

To examine the relationships among the key variables, a Pearson correlation analysis was conducted between the indexes of stress, digitalization, pressure, and well-being. **Table 2** presents the correlation matrix, showing the correlation coefficients (r) and their statistical significance (p-values).

This analysis enables the identification of the direction and strength of the relationships between the analyzed variables, serving as the basis for further interpretation and discussion.

Table 2. Pearson Correlation Matrix between Stress, Digitalization, Pressure, and Well-being Indexes

Indexes	**Stress_Index**	**Digital_Index**	**Pressure_Index**	**Wellbeing_Index**
Stress_Index	1.000	**0.536 (p = 0.015)**	**–0.669 (p = 0.001)**	**–0.809 (p = 0.000)**
Digital_Index		1.000	**–0.499 (p = 0.025)**	**–0.591 (p = 0.006)**
Pressure_Index			1.000	**0.861 (p = 0.000)**
Wellbeing_Index				1.000

Manuscript received: 19.11.2025
Accepted: 30.11.2025
International Journal of Economics, Management and Tourism
Vol 5, No. 2, pp. 66 - 76
Online: ISSN **2671-3810**
UDC: 338.48-057.16:159.944.4]:004:303.62(497.7)
338.48-057.16:331.101.32]:004:303.62(497.7)
Original research paper

Source: *Author's calculation, PSPP analysis (2025)*

A moderate positive correlation was observed **(r = 0.536, p < 0.05),** indicating that higher usage of digital tools corresponds with increased stress levels. This may be explained by the fact that new technologies require constant adaptation and learning, which adds additional cognitive demands on employees. In practice, this suggests that introducing digital innovations should be accompanied by adequate training and support.

A strong negative correlation **(r = –0.669, p < 0.001)** indicates that the higher the experienced stress, the more employees perceive work pressure as a significant factor. This highlights the need for organizational stress management programs in tourism enterprises.

A very strong negative correlation **(r = –0.809, p < 0.001)** shows that higher stress levels significantly reduce employee well-being. This result is consistent with the literature and emphasizes the importance of psychosocial support at the workplace.

A moderate negative correlation (**r = –0.591, p < 0.01**) suggests that although digital tools improve efficiency, they may create a sense of constant connectivity and digital overload.

A very strong negative correlation **(r = –0.861, p < 0.001)** indicates that employees who experience constant work pressure report the lowest well-being levels, which may have direct implications for productivity and staff retention.

Gender Differences in Stress and Well-being

To determine whether differences exist in the levels of stress and well-being between male and female employees, an **independent samples t-test** was conducted. **Table 3** presents the results of the analysis, including mean values (M), standard deviations (SD), t-values, degrees of freedom (df), and significance levels (p-values) for both genders. This analysis allows for the assessment of whether gender represents a significant factor in the perception of stress and well-being among employees.

Table 3. Results of t-test for Gender Differences in Stress and Well-being Indexes

Index	Gender	N	M	SD	t (df)	p (Sig. 2-tailed)
Stress_Index	Male (1)	7	4.34	0.84	–0.46 (18)	0.653
	Female (2)	13	4.51	0.73		
Wellbeing_Index	Male (1)	7	2.63	1.04	–0.28 (18)	0.770
	Female (2)	13	2.75	0.82		

Source: *Author's calculation, PSPP analysis (2025)*

Absence of Statistically Significant Differences: The results show no statistically significant gender differences for either the **Stress_Index** ($t(18) = –0.46$, $p = 0.653$) or the **Wellbeing_Index** ($t(18) = –0.28$, $p = 0.770$).

Stress: Male participants reported slightly lower average stress levels (**M = 4.34**) compared to female participants (**M = 4.51**), but this difference is too small to be considered significant. This suggests that perceived stress levels are approximately equal regardless of gender.

Well-being: For the well-being index, women reported a marginally higher mean score (**M = 2.75**) compared to men (**M = 2.63**), yet this difference was also not statistically significant.

Practical Implications: These results imply that **gender is not a determinant** of stress and well-being levels among the surveyed employees. Consequently, interventions aimed at

Manuscript received: 19.11.2025
Accepted: 30.11.2025

International Journal of Economics, Management and Tourism
Vol 5, No. 2, pp. 66 - 76
Online: ISSN **2671-3810**
UDC: 338.48-057.16:159.944.4]:004:303.62(497.7)
338.48-057.16:331.101.32]:004:303.62(497.7)
Original research paper

reducing stress and improving well-being should target **all employees equally**, regardless of gender.

Analysis of Variance (ANOVA) by Age Groups

To examine whether significant differences exist in the levels of stress and the perception of digitalization among different age groups, a **one-way ANOVA** was conducted. **Table 4** presents the results of the analysis, including values for **Sum of Squares**, **df**, **Mean Square**, **F**, and the level of statistical significance (**Sig.**).

This analysis allows for an assessment of whether age represents a significant factor in the variation of the analyzed indexes.

Table 4. ANOVA Results by Age Groups

Index	Sum of Squares	df	Mean Square	F	Sig.
Stress_Index	1.37	3	0.46	0.78	0.523
Digital_Index	9.75	3	3.25	6.86	0.003

Source: *Author's calculation, PSPP analysis (2025)*

Stress_Index: The ANOVA results show **no statistically significant differences** in stress levels among different age groups ($F = 0.78$, $p = 0.523$). This indicates that age, in this sample, is not a significant factor in determining employees' stress levels. This finding suggests that stress is universally present across all age categories, implying that stress management interventions should be designed at the **organizational level**, rather than selectively for specific age groups.

Digital_Index: The analysis revealed **statistically significant differences** between age groups ($F = 6.86$, $p = 0.003$). This result suggests that age influences how employees perceive and use digital technologies. For instance, younger employees may be more inclined to use digital tools and perceive them as facilitating, while older employees might experience higher cognitive load or resistance toward digital innovations.

This has practical implications for managers — when introducing new digital solutions, it is essential to provide adequate **training, support, and gradual adaptation** for all age groups, with particular attention to those who experience more difficulties.

Relationship between Stress Index and Digitalization Index

Figure 1 illustrates the relationship between the **Stress_Index** and the **Digital_Index** for all respondents.The graph shows the direction and strength of the relationship between the two variables, where the regression line indicates a **slight positive trend** — that is, as digitalization increases, a **slight increase in perceived stress** can be observed.

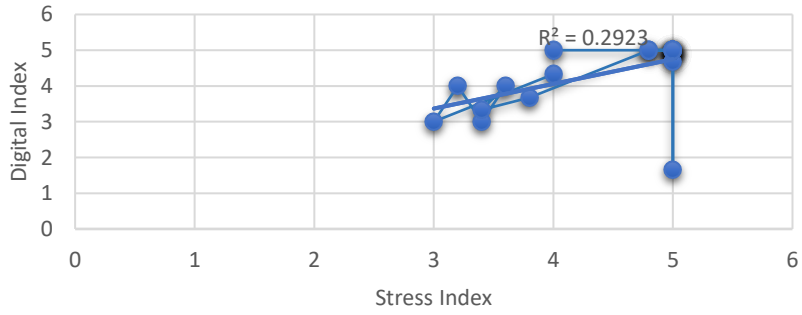


Figure 1. Relationship Between Stress Index and Digitalization Index

Manuscript received: 19.11.2025
Accepted: 30.11.2025
International Journal of Economics, Management and Tourism
Vol 5, No. 2, pp. 66 - 76
Online: ISSN **2671-3810**
UDC: 338.48-057.16:159.944.4]:004:303.62(497.7)
338.48-057.16:331.101.32]:004:303.62(497.7)
Original research paper

The graph illustrates the relationship between the **Stress_Index** and the **Digital_Index** for all respondents. A slight positive trend can be observed **(R^2 = 0.29),** indicating that as digitalization increases, a moderate rise in perceived stress levels is noted among employees.
This result is consistent with the **Pearson correlation (r = 0.53, p < 0.05)** and confirms the findings from the previous statistical analysis.

Practically, this can be explained by the fact that although digitalization enhances efficiency and resource accessibility, it may also create **additional cognitive load,** a sense of constant availability, and the need for quick adaptation to new systems. These factors, particularly in the tourism industry where guest interaction is intense, can contribute to **moderately higher stress levels** among employees.

Correlation Between Weekly Working Hours and Psychosocial Indexes

To examine the relationship between weekly working hours and psychosocial indexes, a **Pearson correlation analysis** was conducted.
Table 5 presents the correlation coefficients (*r*) and their statistical significance (*p*-values) for the relationships between working hours, stress levels, well-being, and perceived pressure among respondents.

This analysis enables the identification of key factors linking workload to the psychological condition of employees.

Table 5. Pearson Correlations between Weekly Working Hours, Stress, Well-being, and Pressure

Indexes	Hours_Per_Week	Stress_Index	Wellbeing_Index	Pressure_Index
Hours_Per_Week	1.000	**0.855 (p = 0.000)**	**–0.762 (p = 0.000)**	**–0.572 (p = 0.008)**
Stress_Index		1.000	**–0.809 (p = 0.000)**	**–0.669 (p = 0.001)**
Wellbeing_Index			1.000	**0.861 (p = 0.000)**
Pressure_Index				1.000

Source: *Author's calculation, PSPP analysis (2025)*

The results of the correlation analysis reveal a **very strong positive relationship** between the number of weekly working hours and stress levels **(r = 0.855, p < 0.001).** This finding is consistent with Hong et al. (2022), who confirmed that extended working hours increase employees' psychological strain and stress levels.

Furthermore, the **strong negative correlation** between working hours and well-being **(r = –0.762, p < 0.001)** indicates that longer shifts are associated with decreased satisfaction and lower psychological well-being.

This aligns with Voglino et al. (2022), whose results showed that reducing working hours improves quality of life and decreases stress.
The correlations between stress, pressure, and well-being further support this pattern: increased stress and perceived pressure significantly reduce overall well-being **(r = –0.809** and **r = 0.861, p < 0.001).**

Manuscript received: 19.11.2025
Accepted: 30.11.2025

International Journal of Economics, Management and Tourism
Vol 5, No. 2, pp. 66 - 76
Online: ISSN **2671-3810**
UDC: 338.48-057.16:159.944.4]:004:303.62(497.7)
338.48-057.16:331.101.32]:004:303.62(497.7)
Original research paper

This observation corresponds with the literature review of Saito et al. (2025), which identifies high job demands and insufficient rest periods as among the main risks for employee well-being in the hospitality sector.

ANOVA analysis by weekly working hours

To determine whether there are significant differences in stress levels among groups of respondents with different numbers of weekly working hours, a **one-way ANOVA analysis** was conducted.The table presents the results of the ANOVA test, including the **F-value** and the level of statistical significance, as well as the **Tukey HSD post-hoc test,** which allows for the identification of specific group pairs that show statistically significant differences.

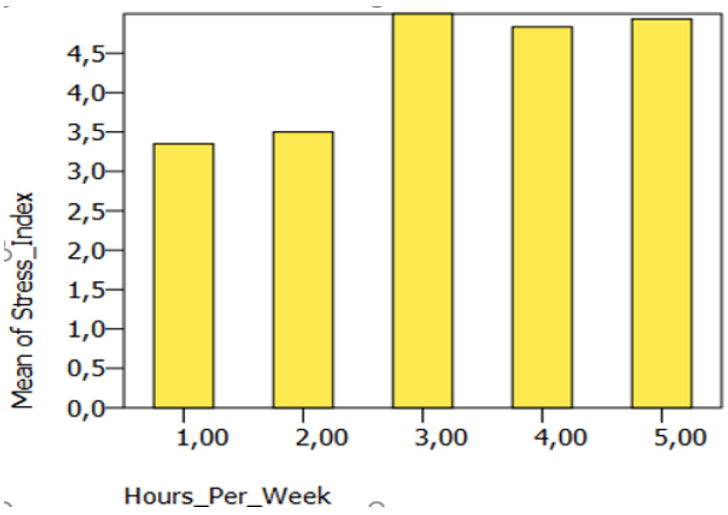
Table 6: ANOVA results and tukey HSD post-hoc test for differences in stress index by weekly working hours groups

ANOVA

		Sum of Squares-	df	Mean Square	F	Sig.
Stress_Index	Between Groups	9,53	4	2,38	28,45	,000
	Within Groups	1,26	15	,08		
	Total	10,79	19			

Multiple Comparisons (Stress_Index)

	(I) Family	(J) Family	Mean Difference (I - J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Tukey HSD	1,00	2,00	-,15	,25	,973	-,92	,62
		3,00	-1,65	,25	,000	-2,42	-,88
		4,00	-1,48	,19	,000	-2,06	-,91
		5,00	-1,58	,19	,000	-2,16	-1,01
	2,00	1,00	,15	,25	,973	-,62	,92
		3,00	-1,50	,29	,001	-2,39	-,61
		4,00	-1,33	,24	,000	-2,06	-,60
		5,00	-1,43	,24	,000	-2,16	-,70
	3,00	1,00	1,65	,25	,000	,88	2,42
		2,00	1,50	,29	,001	,61	2,39
		4,00	,17	,24	,952	-,56	,90
		5,00	,07	,24	,998	-,66	,80
	4,00	1,00	1,48	,19	,000	,91	2,06
		2,00	1,33	,24	,000	,60	2,06
		3,00	-,17	,24	,952	-,90	,56
		5,00	-,10	,17	,973	-,62	,42
	5,00	1,00	1,58	,19	,000	1,01	2,16
		2,00	1,43	,24	,000	,70	2,16
		3,00	-,07	,24	,998	-,80	,66
		4,00	,10	,17	,973	-,42	,62



Manuscript received: 19.11.2025
Accepted: 30.11.2025
International Journal of Economics, Management and Tourism
Vol 5, No. 2, pp. 66 - 76
Online: ISSN **2671-3810**
UDC: 338.48-057.16:159.944.4]:004:303.62(497.7)
338.48-057.16:331.101.32]:004:303.62(497.7)
Original research paper

Figure 2. Mean Stress Index by Weekly Working Hours Groups (N=20)

The **ANOVA test** revealed statistically significant differences in the **Stress_Index** among the analyzed groups ($F = 28.45$, $p < 0.001$), indicating that not all respondent groups experience stress in the same way.

This result suggests the presence of specific factors related to group affiliation—such as length of work experience, job position, and workload—that influence employees' stress levels.

The **Tukey HSD post-hoc test** allowed the identification of specific group pairs with significant differences. The results showed that **Groups 2, 3, 4, and 5** reported significantly higher **Stress_Index** values compared to **Group 1** ($p < 0.05$).

This finding implies that **Group 1** likely represents employees with lower workload or better working conditions, whereas the other groups are exposed to greater demands, resulting in increased stress levels.

These findings are consistent with international studies demonstrating that variations in working conditions and working hours are key determinants of psychosocial stress (Hong et al., 2022; Voglino et al., 2022).

According to Saito et al. (2025), in the hospitality and tourism sector there is a strong relationship between organizational demands and employee well-being — high workload, irregular shifts, and prolonged working hours significantly increase the risk of **burnout** and reduce job satisfaction.

Practical Implications

These findings have significant practical implications for managers in the tourism and hospitality sector:

- **Optimization of Work Schedules:** A more balanced distribution of workload among employee groups is required to reduce overall stress levels.
- **Support Programs:** Implementing stress management and psychological support programs can help mitigate negative effects and improve employee resilience.
- **Monitoring Well-being:** Regular measurement of stress and well-being will enable early intervention and prevention of chronic stress and burnout.

CONCLUDING REMARKS

The research confirmed that digitalization has a dual effect on employees in the tourism sector. On the one hand, digital tools are perceived as useful and increase operational efficiency ($M = 4.33$); however, on the other hand, the results reveal a moderate positive correlation between digitalization and stress levels ($r = 0.536$, $p < 0.05$), suggesting possible cognitive overload and a sense of constant availability.

The Stress Index is relatively high ($M = 4.45$), indicating that respondents experience considerable work-related strain.

Furthermore, the correlation results demonstrate that longer working hours are strongly associated with higher stress levels ($r = 0.855$, $p < 0.001$) and lower well-being ($r = –0.762$, $p < 0.001$), while groups with the greatest number of working hours show the highest average Stress_Index values (ANOVA: $F = 28.45$, $p < 0.001$).

Although no statistically significant differences were observed in stress levels by gender or age, the findings indicate that interventions should be universal and applied to all categories of employees.

Manuscript received: 19.11.2025
Accepted: 30.11.2025
International Journal of Economics, Management and Tourism
Vol 5, No. 2, pp. 66 - 76
Online: ISSN **2671-3810**
UDC: 338.48-057.16:159.944.4]:004:303.62(497.7)
338.48-057.16:331.101.32]:004:303.62(497.7)
Original research paper

These results are consistent with international research (Hong et al., 2022; Voglino et al., 2022; Saito et al., 2025) and emphasize the need for a systematic approach to managing psychosocial risks in the tourism workplace.

Recommendations:

1. **Optimization of work schedules:**
   - Ensure an even distribution of workload among employees.
   - Introduce staff rotations and more efficient shift management to avoid the accumulation of stress within specific groups.

2. **Stress management programs:**
   - Organize training sessions on stress-coping techniques and mental health awareness.
   - Implement psychological support and counseling programs for employees.
3. **Controlled digitalization:**
   - Establish clear policies for digital communication (reasonable response times, limited availability outside working hours).
   - Provide continuous digital literacy training and support during the implementation of new tools to reduce cognitive load.
4. **Monitoring well-being:**
   - Conduct regular assessments of stress and job satisfaction through surveys or interviews.
   - Apply preventive interventions for groups with the highest stress levels.
5. **Organizational measures:**
   - Develop a culture of support and open communication within the organization.
   - Encourage a healthy balance between work and private life.

REFERENCES

1. Chiang, C. F. (2010). Exploring the relationship between job satisfaction and service quality in the hospitality industry. *Tourism and Hospitality Research, 10*(4), 362–375.

2. Derks, D., van Duin, D., Tims, M., & Bakker, A. B. (2014). Smartphone use and work–home interference: The moderating role of social norms and employee work engagement. *Journal of Occupational and Organizational Psychology, 88*(1), 155–177.

3. Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining wellbeing. *International Journal of Wellbeing, 2*(3), 222–235.

4. Grawitch, M. J., Gottschalk, M., & Munz, D. C. (2006). The path to a healthy workplace: A critical review linking healthy workplace practices, employee well-being, and organizational improvements. *Consulting Psychology Journal: Practice and Research, 58*(3), 129–147.

5. Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2020). Smart tourism: Foundations and developments. *Electronic Markets, 30*(1), 1–10.

6. Hong, J., Kim, M. J., & Lee, C. K. (2022). Digital transformation in the tourism and hospitality industry: The influence of digital technologies on job stress and well-being. *Tourism Management Perspectives, 44*,

7. Karatepe, O. M., & Uludag, O. (2008). Affectivity, conflicts in the work–family interface, and hotel employee outcomes. *International Journal of Hospitality Management, 27*(1), 30–41.

Manuscript received: 19.11.2025
Accepted: 30.11.2025
International Journal of Economics, Management and Tourism
Vol 5, No. 2, pp. 66 - 76
Online: ISSN **2671-3810**
UDC: 338.48-057.16:159.944.4]:004:303.62(497.7)
338.48-057.16:331.101.32]:004:303.62(497.7)
Original research paper

8. Kim, H. J., Shin, K. H., & Umbreit, W. T. (2015). Hotel job burnout: The role of emotional intelligence, emotional labor, and emotional dissonance. *International Journal of Hospitality Management, 44*, 38–47.

9. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping.* Springer.

10. Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*, 397–422.

11. OECD. (2021). *Digital transformation in the tourism sector.* Organisation for Economic Co-operation and Development.

12. Saito, T., Kimura, Y., & Kobayashi, M. (2025). The impact of digital technology use on work stress among hospitality employees. *Journal of Tourism Research and Hospitality, 12*(2), 45–57.

13. Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being.* Free Press.

14. Sigala, M. (2018). *Social media and customer engagement in the tourism and hospitality industry.* Routledge.

15. State Statistical Office of the Republic of North Macedonia. (2024). *Tourist traffic by months 2023.*

16. Tarafdar, M., Pullins, E. B., & Ragu-Nathan, T. S. (2015). Technostress: Negative effect on performance and possible mitigations. *Information Systems Journal, 25*(2), 103–132.

17. UNWTO. (2018). *Tourism and digital transformation.* World Tourism Organization.

18. Voglino, G., Manca, A., & Zunino, A. (2022). Wellbeing and digitalization in tourism and hospitality work environments. *International Journal of Contemporary Hospitality Management, 34*(11), 4078–4094.

19. Xiang, Z., & Fesenmaier, D. R. (2017). Big data analytics, tourism design and smart tourism. *Tourism Management, 58*, 539–548.