

Work Environment Design and Key Indicators of Organizational Effectiveness

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ABSTRACT: This study aims to examine how the design of the work environment and its key dimensions—job design, employee involvement in goal setting and decision-making, as well as teamwork practices and open communication—affect productivity, organizational identification, and workforce stability in organizations in Bosnia and Herzegovina. Using a quantitative research approach and linear regression analysis on a sample of employees from the industrial sector, the results indicate that the work environment exerts a statistically significant and consistent effect on all observed outcomes. Among the analyzed components, employee involvement in decision-making proved to be the most significant factor, indicating that a sense of appreciation and the ability to influence one's own work have a strong effect on employees' motivation, loyalty, and willingness to stay in the organization. The results show that the impact of work environment design on employee performance is largely realized through strengthening employees' connection to the organization. When the work environment is designed to ensure pleasant working conditions in which employees are actively involved in work processes, it becomes a powerful source of employee motivation and engagement. Therefore, a policy of adequately designing the work environment does not represent merely a short-term solution, but rather a realistic and sustainable approach to strengthening organizational stability and long-term success.

KEYWORDS: employee participation, job design, organizational identification, teamwork, productivity, work environment,, workforce stability

1. INTRODUCTION

In contemporary organizations, where competitive advantage increasingly stems from employees' knowledge and skills, the work environment is defined as a factor that shapes their behaviour and effectiveness (Shaari et al., 2022; Agbozo et al., 2017; Rorong, 2016). The way the workplace is organized and how employees perceive it can substantially influence their job satisfaction, level of motivation, and willingness to actively contribute to the achievement of organizational goals (Riyanto et al., 2021; Massoudi & Hamdi, 2017). When the environment is pleasant, fatigue, monotony, and boredom are minimized, and work performance can be maximized. The concept of the work environment is comprehensive, as it encompasses physical, psychological, and social working conditions (Osibanjo, Abiodun, & Adeniji, 2014).

The relevance of this topic is further reinforced in the context of Bosnia and Herzegovina, where the labour market has become increasingly unstable due to the continuous outflow of the workforce. Under such conditions, organizations are increasingly confronted with the need to manage not only employee performance but also employee retention, with the work environment emerging as one of the key mechanisms for preserving workforce stability and reducing staff outflow. Consequently, there is a clear need in Bosnia and Herzegovina for better-designed jobs, greater employee involvement in work processes, and the creation of realistic opportunities for professional growth and development, which implicitly leads to the improvement of the work environment.

According to the study by Massoudi and Hamdi (2017), behavioural components of the work environment—such as relationships with supervisors, communication, and fair treatment—contribute more to employee productivity than the physical components of the work environment. However, Al-Omari and Okasheh (2017) argue that physical aspects of the work environment, including adequate lighting, noise levels, air quality, and well-designed workspaces, also contribute to higher productivity and improved employee concentration. Beyond their effects on individual job performance, the quality of the work environment influences employees' attachment to the organization, which is reflected in stronger identification with organizational goals and values (Agbozo et al., 2017). Such attachment plays an important role in reducing employee turnover and absenteeism, which are often regarded as indicators of organizational instability and employee dissatisfaction.

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Based on the above, this paper investigates the impact of the work environment on three interrelated dimensions of employee organizational performance: productivity, employee identification with the organization, and workforce stability expressed through turnover and absenteeism. Although individual links between the work environment and the aforementioned outcomes have often been considered separately, there is a need for a more integrated approach that simultaneously encompasses the performance, identification, and stabilization dimensions of employees, especially in the context of a labor market such as Bosnia and Herzegovina, where retention and engagement of personnel are increasingly important for organizational sustainability. In methodological terms, the paper relies on a quantitative approach and uses correlation and regression analysis to empirically assess the intensity and direction of the impact of the work environment on the aforementioned outcomes, with the aim of offering relevant theoretical implications and practical guidelines for managers of Bosnian and Herzegovinian organizations.

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2. LITERATURE REVIEW

The work environment represents one of the fundamental elements influencing both employees' job satisfaction and their motivation. When the workplace is designed in a way that enables employees to feel safe, to participate in decision-making processes, and to have their opinions and ideas respected, employees tend to be more efficient, while absenteeism and turnover are reduced. Mutual trust between management and employees, a rational distribution of tasks, and clearly defined goals contribute to employees' perception of the work environment as desirable and directly influence organizational success. For this reason, investment in a high-quality work environment represents not only concern for employees, but also a strategic decision that contributes to improved work outcomes and overall organizational efficiency (Agbozo et al., 2017).

The work environment is also recognized as one of the key determinants of job satisfaction and employee motivation. A supportive and appropriately structured workplace contributes to higher work efficiency, a stronger sense of organizational belonging, and greater workforce stability through reduced tendencies toward turnover and absenteeism. Elements such as fairness in relationships, trust between employees and management, reasonable workload, and clearly defined yet attainable goals shape a positive perception of the work environment and influence key organizational outcomes. From the perspective of organizational efficiency, investment in the quality of the work environment represents a strategically important factor for enhancing employees' overall work performance (Agbozo et al., 2017).

According to the findings of Massoudi and Hamdi (2017), a high-quality work environment not only contributes to higher productivity and improved job performance but is also associated with lower levels of stress and anxiety among employees. When employees feel safe and work in a pleasant working atmosphere, they are better able to focus on their tasks, demonstrate higher levels of motivation, and perform their duties more efficiently. Such an environment simultaneously creates conditions for higher-quality decision-making and healthier, more constructive interpersonal relationships within work teams (Hamed et al., 2023), thereby further strengthening overall organizational efficiency and stability.

Pitaloka and Sofia (2014) state in their study that working in a positive work environment leads to lower turnover rates and increased job satisfaction and motivation. Accordingly, a well-designed work environment can enhance satisfaction, which in turn leads to improved employee performance, whereas a poorly designed work environment can reduce productivity and increase dissatisfaction. Changes in the workplace environment present organizations with both opportunities and challenges; therefore, the work environment represents an integrated set of working conditions, opportunities for growth, management style, organizational culture, and related factors (Saxena & Kaur, 2017).

The significance and role of the work environment are further confirmed by the study of Jernigan, Beggs, and Kohut (2016), who indicate that perceptions of the work environment are strongly and positively related to employee behaviours and attitudes. The authors emphasize that human resource management practices and policies should be oriented toward creating a positive work environment, as such an environment contributes to higher employee satisfaction and engagement, which indirectly strengthens organizational competitiveness and long-term profitability.

Previous research consistently indicates that the quality of the work environment has multiple implications for organizational outcomes, including employee productivity, organizational identification, and phenomena such as turnover and absenteeism. According to Danish et al. (2013), a work environment that is both physically and psychologically supportive fosters higher levels of employee motivation and job satisfaction. These conditions enable employees to perform their tasks more efficiently and to contribute positively to overall organizational performance (Danish, Ramzan, & Ahmad, 2013). When employees perceive their work environment as stable and supportive, they are more likely to invest sustained effort in their work and to remain with the organization for a longer period of time.

2.1. Characteristics of Job Design

Job design is based on the assumption that high work performance and genuine job satisfaction largely stem from the intrinsic content of work tasks, with employees being more strongly motivated when they are able to achieve personal goals through their

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work (Armstrong & Taylor, 2014). In this regard, the thoughtful structuring and organization of work represent an effective means of strengthening employee motivation and enhancing performance in contemporary organizations (Jovanović & Božilović, 2017; Siengthai & Pila-Ngarm, 2016).

The physical work environment is one of the basic components of workplace design and has a significant impact on employee productivity. Organizations that pay attention to workplace design have more satisfied employees who achieve better work performance (Mokaya et al., 2013; Muduli, 2015). However, physical working conditions are only one dimension of the overall work environment. Psychological and social aspects—such as a sense of trust, the presence of social support, recognition of individual contributions, and effective teamwork—contribute to higher levels of motivation and more stable work behaviour, which ultimately translates into the achievement of organizational goals. (Brough & O'Driscoll, 2010; Boxall & Macky, 2009; Agbozo et al., 2017). In this way, the physical and social aspects of the work environment act as factors that not only encourage productivity, but also contribute to greater workforce stability through lower rates of absenteeism and turnover.

2.2. Participation in Goal Setting and Decision-Making

One of the key mechanisms through which the quality of job design is operationalized in practice is employee participation in decision-making related to work processes and work organization, most commonly through two-way communication with management and involvement in work groups (White et al., 2006). Research indicates that such forms of participation strengthen employees' sense of personal influence over workplace changes, encourage more active problem-solving, and contribute to more stable work behavior, which is directly reflected in higher levels of productivity and a lower propensity for employee turnover (McGovern et al., 2007; White & Bryson, 2013; Strauss, 2006).

Employee involvement in goal setting and decision-making—where responsibility, as well as success, is shared with employees—encourages their active participation in work processes and strengthens their understanding of what the organization aims to achieve. This approach fosters more open communication between management and employees and strengthens mutual trust within the organization. However, only clearly defined goals that are attainable, aligned, and transparent can be realistically achieved and accepted by employees. Their implementation is typically monitored through regular evaluation cycles, enabling timely adjustments and a more accurate assessment of results achieved. Through management by objectives, employees' individual work is directly linked to the organization's broader strategic direction, thereby reinforcing a sense of purpose and contribution to shared achievements (Vidaković, 2017). In this sense, this approach represents a management policy in which organizational goals are not imposed unilaterally, but are developed through dialogue and shared responsibility between managers and employees (Rupčić, 2018).

2.3. Open Workplace Policy and Teamwork

Modern people management practices increasingly emphasize the importance of direct employee involvement in work processes, teamwork, and flexible task allocation. Such an approach not only increases motivation, but also creates space for employee autonomy, creativity, and innovative behavior (Ichniowski, Shaw & Prennushi, 1997; Batt, 2002; Zhou, Hong & Liu, 2013). In this sense, open workplace and teamwork policies can facilitate communication, encourage the exchange of different views, and strengthen a sense of shared responsibility in solving tasks. In contrast, a work environment that ignores cultural differences and does not invest in the development of teamwork leads to a weakening of interpersonal relationships and cooperation (Ford, Piccolo & Ford, 2017).

An essential prerequisite for high-quality teamwork is effective communication and trust within the organization. Hakanen and Soudunsaari (2012) emphasize that trust facilitates cooperation among team members and enables the functional integration of professionals from diverse backgrounds, whereby individuals' knowledge and skills are recognized as a reliable foundation for joint action. Such an environment helps teams operate more consistently and efficiently, while simultaneously supporting higher levels of day-to-day productivity. When cooperation and the flow of information between employees and management are at a high level, employees are able to direct their energy toward their work rather than toward overcoming organizational barriers. In such an environment, employees freely express their ideas, propose solutions, and take initiative, thereby fostering innovative behaviour and enhancing the organization's long-term efficiency. Further support for this is provided by the statistically significant positive relationship identified between trust and the quality of teamwork (Işık, Timuroğlu, & Aliyev, 2015), which further underscores the role of teamwork as an important factor in improving key organizational outcomes.

2.4. Work Environment and Employee Organizational Outcomes

At the organizational level, the design of jobs and work structures has strategic implications for long-term effectiveness. Umihanić and Delić (2013) emphasize that an adequately designed work structure enables organizations to simultaneously improve employee satisfaction, service quality, and overall business performance. Accordingly, the work environment is increasingly viewed as a strategic resource that, beyond its direct impact on productivity, plays an important role in strengthening employees' organizational identification and reducing negative human resource trends such as turnover and absenteeism. The way employees perceive the organizational climate plays a key role in shaping their engagement at work and sense of identification with the

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organization (Brown & Leigh, 1996). When the work environment is perceived as safe, fair and supportive, employees are more likely to identify with the organization's values and put more effort into achieving shared goals, which will have an effect on organizational performance (Chandrasekar, 2011; Morrow, McElroy, & Scheibe, 2012; Pitaloka & Sofia, 2014; Soelton et al., 2020).

Contemporary organizations are increasingly paying attention to workplace design, as it has been recognized as a factor of long-term workforce stability. According to the study by Soenant, Akbar, and Sariwulan (2021), jobs that are clearly structured, challenging, and offer opportunities for advancement contribute to employee retention. These findings are consistent with the research of Bangwala, Tiwari, and Chamola (2017), who emphasize that safe and comfortable working conditions are not only a fundamental right of employees but also an important mechanism for reducing negative organizational phenomena, such as turnover and absenteeism, while simultaneously fostering more stable and productive work.

Organizational climate, understood through the shared experiences and perceptions of employees about how the organization functions in everyday practice, plays a meaningful role in shaping both work-related attitudes and behavior (Schneider & Reichers, 1983; Choi, 2007). When employees feel that their contributions are acknowledged and that their needs are genuinely respected, they tend to develop a stronger sense of belonging and commitment to the organization. Over time, these positive perceptions support workforce continuity and are associated with lower levels of absenteeism (Hennekam & Herrbach, 2013; Riad, Labib, & Nawar, 2016).

Organizational culture represents the broader context within which these processes occur and exerts both direct and indirect effects on employee performance. Empirical findings indicate that a culture that promotes cooperation, respect, and openness contributes to higher employee satisfaction and superior performance outcomes (Nikpour, 2017; Kawiana et al., 2018). At the same time, organizations that successfully cultivate an innovative work climate create conditions in which employees are more actively involved in work improvement processes, which is particularly important in competitive and unstable market environments (Jadhav et al., 2017). Conversely, perceptions of injustice and opportunistic behavior may negatively affect employee motivation and performance (Nguyen et al., 2020).

Employee involvement in work processes and decision-making represents a powerful mechanism for improving both individual and organizational performance. According to Bhatti, Nawab, and Akbar (2011), participation in management and goal setting contributes to the development of knowledge, skills, and positive work attitudes, which is reflected in higher job satisfaction and increased productivity. Employees' involvement in decisions that directly affect their work strengthens their sense of control and belonging, thereby ensuring workforce stability and reducing employee turnover within the organization (Khalid & Nawab, 2018). In the context of organizational change, employee participation is of particular importance. Lines (2004) notes that involving employees in the planning and implementation of change leads to higher-quality decision-making and more positive reactions to change, especially when changes are aligned with organizational culture and employees' personal goals. Such an approach not only facilitates change acceptance but also fosters long-term organizational commitment and reduces resistance that often negatively affects productivity and the work climate (Lines, 2004).

Teamwork is recognized in contemporary organizations as an important channel for knowledge sharing, autonomy enhancement, and overall performance improvement. Hanaysha (2016) argues that a team-based environment promotes mutual learning and cooperation, leading to greater team effectiveness as well as increased job satisfaction, which in turn translates into higher levels of organizational commitment. Such relationships also foster innovative behavior, as employees in psychologically safe team environments are more likely to share ideas and propose improvements (Hanaysha, 2016).

From the perspective of workforce sustainability, organizations strive to simultaneously achieve high performance and low rates of turnover and absenteeism (Herrera & De Las Heras-Rosas, 2021), although even successful organizations are not immune to challenges related to job satisfaction and employee retention (Lesabe & Nkosi, 2007). Employee turnover represents a significant organizational cost, particularly when considering investments in training and competency development that organizations expect to yield long-term performance benefits (Murali, Poddar, & Seema, 2017). In this context, employees' organizational identification plays an important role in stabilizing the workforce. Research indicates that a stronger sense of belonging increases employees' willingness to support organizational goals and demonstrate additional work engagement (Dai & Qin, 2016). However, high levels of engagement cannot be expected without adequate organizational support. Employees must be provided with clear job tasks, appropriate working conditions, and recognition for their contributions in order to foster perceptions of fairness and care, which constitute the foundation for long-term job satisfaction and reduced intentions to leave the organization (Dai & Qin, 2016; Amri et al., 2021).

Organizational identification represents an important process through which individuals shape their professional identity and align their beliefs with organizational values, with these beliefs guiding their behavior and life decisions (Ashforth et al., 2008). According to Valackiene (2009), organizational identification is a dynamic and multidimensional process that develops through employees' active involvement in work activities, as well as through the interaction between the organizational environment and employees' adaptive behavioral patterns. The study by Yue, Men, and Ferguson (2021) demonstrates that symmetrical internal communication and leader-driven motivation contribute to the creation of a positive work environment that significantly

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strengthens employees' organizational identification. Chi and Gursoy (2009) note that although the direct relationship between employee satisfaction and financial performance is not always easily observable, organizational survival in the long term depends on satisfied employees. Accordingly, the quality of work life is higher when employees perceive their workplace as meaningful, valuable, engaging, and development-oriented (Ashton, 2018).

Organizations that successfully align the work environment with employees' needs and expectations through appropriate organizational policies and a supportive culture can enhance employee satisfaction, thereby reducing the likelihood of employee turnover (Ahmad & Rainyee, 2014). The design of the work environment plays a crucial role in shaping employees' attitudes, which are subsequently reflected in turnover, absenteeism, and productivity. High turnover rates represent a serious challenge for organizations due to the financial costs associated with talent loss, recruitment, and training of new employees, as well as temporary declines in performance and the loss of organizational knowledge (Stamolampros et al., 2019; Yang et al., 2012; Davidson et al., 2010; Guzeller & Celiker, 2020).

Empirical evidence confirms that job satisfaction is one of the key mechanisms through which the work environment affects turnover. Yücel (2012) emphasizes that higher levels of job satisfaction significantly reduce intentions to leave the organization, while Tarigan and Ariani (2015) indicate that job dissatisfaction indirectly increases turnover propensity. Similar conclusions are drawn by Ekhsan (2019), who confirms a negative relationship between job satisfaction and turnover intention, suggesting that a well-designed work environment that fosters positive work experiences can play a preventive role in employee retention.

In addition to turnover, the design of the work environment also influences absenteeism through social and psychological aspects of work. Bouville, Dello Russo, and Truxillo (2018) highlight that coworker support, as an important component of the work environment, significantly reduces absenteeism, particularly among older employees, indicating the need for human resource management policies tailored to different employee groups. Woods, Poole, and Zibarras (2012) further note that a positive and supportive work environment that strengthens employees' organizational identification has long-term effects on reducing absenteeism. Furthermore, the implementation of appropriate human resource management practices that foster team spirit, a sense of meaning, and mutual support contributes to higher job satisfaction and a more favorable organizational climate, which in turn leads to reductions in both turnover and absenteeism (Kinjerski & Skrypnik, 2008; Davey et al., 2009).

Finally, the design of the work environment also affects productivity through alignment between job demands and employee competencies, as well as through the quality of the physical and psychosocial environment. Soelton et al. (2020) note that employees achieve higher performance when they work in roles that match their abilities, while a supportive work environment and a positive organizational culture further strengthen commitment and motivation. Management concern for working conditions, interpersonal relationships, and organizational support creates perceptions of a fair and stimulating environment, which is directly reflected in employee performance and overall organizational productivity.

In accordance with the foregoing discussion, the following hypotheses are proposed:

H1: *The design of the work environment has a significant effect on increasing productivity per employee.*

H2: *The design of the work environment has a significant effect on employees' organizational identification.*

H3: *The design of the work environment has a significant effect on workforce stability.*

3. METHODOLOGY

The empirical study was conducted in the industrial sector within the territory of Bosnia and Herzegovina. The companies included in the sample were selected based on the criterion of territorial dispersion, in order to ensure that the empirical research encompassed companies across the entire country. A structured questionnaire was used for the purposes of data collection, and the data were analyzed using descriptive and inferential statistical methods. Regression analysis was applied to test the proposed hypotheses. Data processing was carried out using the statistical software package SPSS 21 (Statistical Package for the Social Sciences).

The questionnaire was organized into two sections. The first section covered the components of work environment design, namely: job design characteristics, participation in goal setting and decision-making, and open workplace policy and teamwork. The second section of the questionnaire examined key dimensions of organizational outcomes, including productivity, employees' organizational identification, and workforce stability. All variables used in the study were measured using a five-point Likert scale, ranging from "strongly disagree" to "strongly agree."

The study sample consisted of 128 companies from Bosnia and Herzegovina. The objective of the research was to examine the impact of the work environment on employee work-related and organizational outcomes, operationalized through productivity, organizational identification, turnover, and absenteeism. The data collected through the questionnaire were subjected to reliability analysis. The reliability of the measurement scales was assessed using Cronbach's alpha coefficient. The questionnaires were completed by company managers. Out of a total of 140 distributed questionnaires, 128 were returned completed, resulting in a response rate of 91.43%.

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4. RESULTS

The first step in the analysis involved assessing the reliability of the measurement scales used in the questionnaire. Reliability was examined using Cronbach's alpha coefficient, which indicates the degree of internal consistency among the items, with values ranging from 0 to 1. The closer the value is to 1, the higher the precision and stability of the measurement instrument. Based on the obtained results and their analysis, it can be concluded that the measurement instruments employed in this study exhibit a high level of reliability, thereby ensuring the credibility of the collected data.

Table 1. Cronbach's Alpha coefficients of questionnaire reliability

Variables	Cronbach's Alpha
Work Environment Design	0,940
Job Design Characteristics	0,945
Participation in Goal Setting and Decision-Making	0,938
Open Workplace Policy and Teamwork	0,937
Productivity	0,937
Employees' Organizational Identification	0,933
Workforce Stability	0,934

Source: Authors' research

In **Table 2**, with the aim of testing the first hypothesis—“*The design of the work environment has a significant effect on increasing productivity per employee*”—the results of simple linear regression models are presented. These models examine the impact of work environment design and its individual components on productivity per employee. In the proposed hypothesis, work environment design represents the independent variable, while productivity per employee represents the dependent variable. The results indicate that all components of work environment design have a statistically significant effect on increasing productivity per employee ($p < 0.000$). Accordingly, the first research hypothesis is accepted.

Table 2. Impact of Work Environment Design on Productivity per Employee

Component (factor)	Representativeness of the regression model				Parameters of the linear regression equation		
	r	r ²	F	p	a	b	Beta
Job Design Characteristics	0,590	0,348	67,387	0,000	3,813	0,533	0,590
Participation in Goal Setting and Decision-Making	0,531	0,282	49,407	0,000	3,813	0,479	0,531
Open Workplace Policy and Teamwork	0,435	0,189	29,357	0,000	3,813	0,392	0,435
Work Environment Design – TOTAL	0,594	0,353	68,685	0,000	3,813	0,536	0,594

Source: Authors' research

In **Table 3**, with the aim of testing the second hypothesis—“*The design of the work environment has a significant effect on employees' organizational identification*”—the results of simple linear regression models are presented. These models examine the impact of work environment design and its individual components on employees' organizational identification. In the proposed hypothesis, work environment design represents the independent variable, while employees' organizational identification represents the dependent variable. The results indicate that all components of work environment design have a statistically significant effect on employees' organizational identification ($p < 0.000$). Accordingly, the second research hypothesis is accepted.

Table 3. Impact of Work Environment Design on Employee Organizational Identification

Component (factor)	Representativeness of the regression model				Parameters of the linear regression equation		
	r	r ²	F	p	a	b	Beta
Job Design Characteristics	0,587	0,344	66,113	0,000	15,695	1,600	0,587
Participation in Goal Setting and Decision-Making	0,667	0,444	100,78	0,000	15,695	1,819	0,667
Open Workplace Policy and Teamwork	0,597	0,356	69,726	0,000	15,695	1,628	0,597
Work Environment Design – TOTAL	0,682	0,465	109,59	0,000	15,695	1,861	0,682

Source: Authors' research

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In **Table 4**, with the aim of testing the third hypothesis—“*The design of the work environment has a significant effect on workforce stability*”—the results of simple linear regression models are presented. These models examine the impact of work environment design and its individual components on workforce stability. In the proposed hypothesis, work environment design represents the independent variable, while workforce stability represents the dependent variable.

The results indicate that all components of work environment design have a statistically significant effect on workforce stability ($p < 0.000$). Accordingly, the third research hypothesis is accepted.

Table 4. Impact of Work Environment Design on Workforce Stability

Component (factor)	Representativeness of the regression model				Parameters of the linear regression equation		
	r	r ²	F	p	a	b	Beta
Job Design Characteristics	0,585	0,342	65,409	0,000	23,688	2,552	0,585
Participation in Goal Setting and Decision-Making	0,644	0,414	89,181	0,000	23,688	2,810	0,644
Open Workplace Policy and Teamwork	0,504	0,254	42,955	0,000	23,688	2,201	0,504
Work Environment Design – TOTAL	0,651	0,423	92,466	0,000	23,688	2,840	0,651

Source: Authors' research

5. DISCUSSION

The results of this study clearly confirm that work environment design has a statistically significant and positive effect on all analyzed organizational outcomes, including employee productivity, organizational identification, and workforce stability. Across all regression models, a high level of statistical significance was observed ($p < 0.000$), indicating that the work environment should not be viewed merely as an operational element of the organization, but rather as a factor with long-term strategic implications. These findings support perspectives that conceptualize the work environment as a strategic resource rather than solely a technical framework for work (Umihanić & DeliĆ, 2013).

With regard to productivity, the research results indicate that work environment design plays a significant role in explaining employee job performance. The analysis shows that the overall model explains 35.3% of the variance in productivity per employee ($r = 0.594$; $r^2 = 0.353$; $\beta = 0.594$), confirming that the way the work environment is designed represents an important factor in work efficiency. When examining the components of the work environment, the greatest contribution to productivity was recorded for the job design characteristics component ($\beta = 0.590$; $r^2 = 0.348$). These results indicate that clearly defined work tasks, favorable physical working conditions, and effective work organization provide employees with an adequate work environment that enables greater focus and efficiency in the performance of their duties, which is consistent with the findings of Chandrasekara (2011) and Soelton et al. (2020). The research findings also showed that the employee participation component makes a significant contribution to the work process ($\beta = 0.531$; $r^2 = 0.282$), further indicating that productivity does not depend exclusively on the technical and organizational characteristics of the job, but also on the degree of employee involvement in decision-making. This is in line with the results of Bhatti, Nawab, and Akbar (2011), who emphasize that participatory practices foster employee engagement and responsibility, thereby leading to higher job performance.

With regard to productivity, the results indicate that work environment design represents a significant predictor of job performance, with the overall model explaining 35.3% of the variance in employee productivity ($r = 0.594$; $r^2 = 0.353$; $\beta = 0.594$). Among the individual components, job design characteristics make the greatest contribution ($\beta = 0.590$; $r^2 = 0.348$), suggesting that clearly structured work tasks, adequate physical conditions, and a functional organization of work create a stable foundation for efficient performance, which is consistent with the findings of Chandrasekara (2011) and Soelton et al. (2020). At the same time, the significant effect of employee participation ($\beta = 0.531$; $r^2 = 0.282$) confirms that productivity does not depend solely on the technical organization of work, but also on the level of employee involvement in decision-making. This aligns with the results of Bhatti, Nawab, and Akbar (2011), who emphasize that participatory practices foster employee engagement and responsibility, thereby leading to higher job performance.

The results indicate that work environment design has an exceptionally strong influence on employees' organizational identification, with the overall model explaining 46.5% of the variance in this dependent variable ($r = 0.682$; $r^2 = 0.465$; $\beta = 0.682$). Employee participation in goal setting and decision-making stands out as the component making the greatest contribution to organizational identification ($\beta = 0.667$; $r^2 = 0.444$). The findings further indicate that employee participation in decision-making plays an important role in strengthening organizational identification. When employees are involved in setting goals and making decisions, they are more likely to feel valued and connected to the organization, which fosters a stronger sense of belonging. This interpretation is consistent with earlier studies by Valackiene (2009) and Yue, Men, and Ferguson (2021). Job design characteristics ($\beta = 0.587$; $r^2 = 0.344$) and open workplace policy and teamwork ($\beta = 0.597$; $r^2 = 0.356$) also demonstrate

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significant effects, indicating that both physical and social aspects of the work environment contribute to strengthening organizational identification, in line with the theoretical framework proposed by Ashforth et al. (2008).

The findings indicate that work environment design significantly contributes to workforce stability, with the overall model explaining 42.3% of the variance in employee retention ($r = 0.651$; $r^2 = 0.423$; $\beta = 0.651$). Employee participation in decision-making again demonstrates the most pronounced effect ($\beta = 0.644$; $r^2 = 0.414$), confirming that a sense of involvement and influence over work processes substantially reduces employees' propensity to leave the organization, in line with the findings of Khalid and Nawab (2018) as well as Soenanta, Akbar, and Sariwulan (2021). Job design characteristics also make a strong contribution to employee stability ($\beta = 0.585$; $r^2 = 0.342$), while open workspace policies and teamwork practices show a moderate but statistically significant effect ($\beta = 0.504$; $r^2 = 0.254$). This suggests that formal structures supporting teamwork contribute to employee retention, although the quality of the relationship between employees and the organization plays a decisive role.

It is important to emphasize that work environment design exerts a more pronounced influence on psychological work outcomes, such as employees' organizational identification and workforce stability, than on productivity itself. This pattern suggests that changes in the way work is organized primarily shape employees' attitudes, their sense of belonging, and their perceived security within the organization, while effects on job performance often occur indirectly and with a certain time lag. These findings are consistent with the studies of Dai and Qin (2016) as well as Amri et al. (2021). In this sense, work environment design can be viewed as a structural mechanism that shapes employees' work experiences and, through them, long-term organizational outcomes.

Overall, the results of this study not only confirm previous theoretical and empirical findings, but also extend them by indicating that employee participation represents the central mechanism through which work environment design influences productivity, organizational identification, and workforce stability. In this context, the findings have important practical implications, as they suggest that organizations striving for long-term sustainable competitive advantage cannot base their development solely on technical improvements of working conditions, but must also systematically develop participatory practices and actively involve employees in decision-making processes.

6. CONCLUSIONS

The findings of this study indicate that work environment design plays an important role in shaping employee productivity, organizational identification, and workforce stability. However, the results also suggest that its strongest effects are not observed directly at the level of performance, but rather through employees' psychological connection with the organization. This implies that the way work is organized primarily influences how employees perceive their role within the organization before these effects translate into observable performance outcomes.

Improving the work environment by increasing employee participation in goal setting and decision-making represents a sustainable approach to strengthening organizational stability and employee engagement. The results suggest that valuing employees' opinions and involving them in decision-making processes can lead to stronger organizational identification and greater workforce stability over time.

Although the design of the work environment exhibits a somewhat weaker direct effect on productivity compared to psychological outcomes, the results suggest that long-term effects on work performance are realized indirectly, through increased motivation, stronger organizational attachment, and more stable employment relationships. This is especially important for organizations in Bosnia and Herzegovina, which often operate under conditions of economic uncertainty and competition in the regional labor market, where the retention of trained employees represents a critical factor for business sustainability.

Overall, the study indicates that improving work environment design in Bosnian and Herzegovinian organizations should not be viewed as a secondary issue of work organization, but rather as a strategic direction for human resource development. A focus on participatory practices, high-quality job design, and the creation of a supportive work climate may represent an important step toward strengthening organizational competitiveness and labor market stability in Bosnia and Herzegovina.

In this context, the findings further support existing theoretical perspectives by demonstrating that work environment design affects organizational outcomes primarily through employees' attitudes and perceptions rather than through immediate performance effects. From a practical standpoint, the results also indicate that strengthening employee participation and improving job design can represent an effective and realistic strategy for enhancing workforce stability and employee engagement, particularly in environments with limited financial resources.

Although this study offers meaningful insight into how the work environment influences organizational outcomes, its findings should be interpreted with certain considerations in mind. First, the research was carried out exclusively within the industrial sector in Bosnia and Herzegovina. Because this sector has its own specific production processes, patterns of work organization, and physical working conditions, the results may not fully reflect the realities of other sectors where work is structured differently, autonomy levels vary, and organizational practices follow alternative models.

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Future research should therefore incorporate broader and more heterogeneous samples and integrate quantitative and qualitative approaches in order to enable a deeper understanding of the mechanisms through which the work environment influences productivity, employees' organizational identification, and the occurrence of turnover and absenteeism.

REFERENCES

- 1) Agbozo, G. K., Owusu, I. S., Hoedoafia, M. A., Atakorah, Y. B. (2017). The effect of work environment on job satisfaction: Evidence from the banking sector in Ghana. *Journal of human resource management*, 5(1), 12-18. doi: 10.11648/j.jhrm.20170501.12.
- 2) Ahmad, A., & Rainyee, R. A. (2014). Which is the better predictor of employee turnover intentions: Job satisfaction or organizational commitment? A literature review. *Business and Management*, 6(1), 74-81.
- 3) Al-Omari, K., & Okasheh, H. (2017). The influence of work environment on job performance: A case study of engineering company in Jordan. *International journal of applied engineering research*, 12(24), 15544-15550.
- 4) Amri, A., Ramadhi, R., & Ramdani, Z. (2021). Effect Of Organization Commitment, Work Motivation And Work Discipline On Employee Performance (Study at. PT. PLN (Persero) P3b Sumatera UPT Padang). *International Journal of Educational Management and Innovation*, 2(1), 88-99. DOI:10.12928/ijemi.v2i1.3183
- 5) Armstrong M., Taylor S. (2014). *Handbook of Human Resource Management Practice*, 13th Edition. Kogan Page. London.
- 6) Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in organizations: An examination of four fundamental questions. *Journal of management*, 34(3), 325-374. DOI: 10.1177/0149206308316059
- 7) Ashton, A. S. (2018). How human resources management best practice influence employee satisfaction and job retention in the Thai hotel industry. *Journal of human resources in hospitality & tourism*, 17(2), 175-199. <https://doi.org/10.1080/15332845.2017.1340759>
- 8) Bangwal, D., Tiwari, P., & Chamola, P. (2017). Workplace design features, job satisfaction, and organization commitment. *Sage Open*, 7(3), 1-12. <https://doi.org/10.1177/2158244017716708>
- 9) Batt, R. (2002). Managing customer services: Human resource practices, quit rates, and sales growth. *Academy of management Journal*, 45(3), 587-597. <https://doi.org/10.5465/3069383>
- 10) Bhatti, K. K., Nawab, S., & Akbar, A. (2011). Effect of direct participation on organizational commitment. *International journal of business and social science*, 2(9), 15-23.
- 11) Bouville, G., Dello Russo, S., & Truxillo, D. (2018). The moderating role of age in the job characteristics-absenteeism relationship: A matter of occupational context?. *Journal of Occupational and Organizational Psychology*, 91(1), 57-83. <https://doi.org/10.1111/joop.12188>
- 12) Boxall, P., & Macky, K. (2009). Research and theory on high-performance work systems: progressing the high-involvement stream. *Human resource management journal*, 19(1), 3-23. <https://doi.org/10.1111/j.1748-8583.2008.00082.x>
- 13) Brough, P., & O'Driscoll, M. P. (2010). Organizational interventions for balancing work and home demands: An overview. *Work & Stress*, 24(3), 280-297. <https://doi.org/10.1080/02678373.2010.506808>
- 14) Brown, S. P., & Leigh, T. W. (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of applied psychology*, 81(4), 358-368.
- 15) Chandrasekar, K. (2011). Workplace environment and its impact on organisational performance in public sector organisations. *International journal of enterprise computing and business systems*, 1(1), 1-19.
- 16) Chi, C. G., & Gursoy, D. (2009). Employee satisfaction, customer satisfaction, and financial performance: An empirical examination. *International journal of hospitality management*, 28(2), 245-253. <http://dx.doi.org/10.1016/j.ijhm.2008.08.003>
- 17) Choi, J. N. (2007). Change-oriented organizational citizenship behavior: effects of work environment characteristics and intervening psychological processes. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 28(4), 467-484. <https://doi.org/10.1002/job.433>
- 18) Dai, K., & Qin, X. (2016). Perceived organizational support and employee engagement: Based on the research of organizational identification and organizational justice. *Open Journal of Social Sciences*, 4(12), 46. <http://dx.doi.org/10.4236/jss.2016.412005>
- 19) Danish, R. Q., Ramzan, S., & Ahmad, F. (2013). Effect of perceived organizational support and work environment on organizational commitment; mediating role of self-monitoring. *Advances in Economics and Business*, 1(4), 312-317. DOI: 10.13189/aeb.2013.010402
- 20) Davey, M. M., Cummings, G., Newburn-Cook, C. V., & Lo, E. A. (2009). Predictors of nurse absenteeism in hospitals: a systematic review. *Journal of nursing management*, 17(3), 312-330. <https://doi.org/10.1111/j.1365-2834.2008.00958.x>

Work Environment Design and Key Indicators of Organizational Effectiveness

- 21) Davidson, M. C., Timo, N., & Wang, Y. (2010). How much does labour turnover cost? A case study of Australian four-and five-star hotels. *International journal of contemporary hospitality management*, 22(4), 451-466. <https://doi.org/10.1108/09596111011042686>
- 22) Ekhsan, M. (2019). The influence job satisfaction and organizational commitment on employee turnover intention. *Journal of Business, Management, & Accounting*, 1(1), 48-55.
- 23) Ford, R. C., Piccolo, R. F., & Ford, L. R. (2017). Strategies for building effective virtual teams: Trust is key. *Business horizons*, 60(1), 25-34. <https://doi.org/10.1016/j.bushor.2016.08.009>
- 24) Guzeller, C. O., & Celiker, N. (2020). Examining the relationship between organizational commitment and turnover intention via a meta-analysis. *International Journal of Culture, Tourism and Hospitality Research*, 14(1), 102-120. <https://doi.org/10.1108/IJCTHR-05-2019-0094>
- 25) Hakanen, M., & Soudunsaari, A. (2012). *Building trust in high-performing teams. Technology Innovation Management Review*, 2 (6), 38-41.
- 26) Hamed, S. A., Hussain, M. R. M., Jani, H. H. M., Sabri, S. S. S., & Rusli, N. (2023). The impacts of physical workplace environment (PWE) on employees productivity. *International Journal of Business and Technology Management*, 5(4), 369-376. <https://doi.org/10.55057/ijbtm.2023.5.4.33>
- 27) Hanaysha, J. (2016). Examining the effects of employee empowerment, teamwork, and employee training on organizational commitment. *Procedia-Social and Behavioral Sciences*, 229, 298-306. <https://doi.org/10.1016/j.sbspro.2016.07.140>
- 28) Hanna Massoudi, A., & Salah Aldin Hamdi, S. (2017). The Consequence of work environment on Employees Productivity. *IOSR Journal of Business and Management*, 19(1), 35-42. DOI: 10.9790/487X-1901033542
- 29) Hennekam, S., & Herrbach, O. (2013). HRM practices and low occupational status older workers. *Employee Relations*, 35(3), 339-355. <https://doi.org/10.1108/01425451311320512>
- 30) Herrera, J., & De Las Heras-Rosas, C. (2021). The organizational commitment in the company and its relationship with the psychological contract. *Frontiers in psychology*, 11, 609211. <https://doi.org/10.3389/fpsyg.2020.609211>
- 31) Ichniowski, C., Shaw, K., Prennushi, G. (1997). The Effects of Human Resource Management Practices on Productivity: A Study of Steel Finishing Lines. *The American Economic Review*, 87(3), 291-313. <http://www.jstor.org/stable/2951347?origin=JSTOR-pdf>
- 32) Işık, M., Timuroğlu, M., & Aliyev, Y. (2015). The Relationship between Teamwork and Organizational Trust. *International Journal of Research in Business and Social Science IJRBS*, 4(1), 133-149. ISSN: 2147-4478.
- 33) Jadhav, V., Seetharaman, A., & Rai, S. (2017). Employee expectation to demonstrate innovative work behaviour in Asia. *The Journal of Asian Finance, Economics and Business*, 4(1), 67-78. doi: 10.13106/jafeb.2017.vol4.no1.67
- 34) Jernigan, E., Beggs, J. M., & Kohut, G. F. (2016). An Examination Of Nurses'work Environment And Organizational Commitment. *Academy of Educational Leadership Journal*, 20(1), 112.
- 35) Jovanović, G., & Božilović, S. (2017). Motivacija i politika upravljanja ljudskim resursima u organizaciji. *Tehnika menadžment*, 67, 117-125.
- 36) Kawiana, I. G. P., Dewi, L. K. C., Martini, L. K. B., & Suardana, I. B. R. (2018). The influence of organizational culture, employee satisfaction, personality, and organizational commitment towards employee performance. *International research journal of management, IT and social sciences*, 5(3), 35-45.
- 37) Khalid, K., & Nawab, S. (2018). Employee participation and employee retention in view of compensation. *Sage Open*, 8(4), 1-17.. <https://doi.org/10.1177/2158244018810067>
- 38) Kinjerski, V., & Skrypnik, B. J. (2008). The promise of spirit at work: increasing job satisfaction and organizational commitment and reducing turnover and absenteeism in long-term care. *Journal of gerontological nursing*, 34(10), 17-25. <https://doi.org/10.3928/00989134-20081001-03>
- 39) Lesabe, R. A. F., & Nkosi, J. (2007). A qualitative exploration of employees' views on organisational commitment. *SA journal of human resource management*, 5(1), 35-44. <https://hdl.handle.net/10520/EJC95850>
- 40) Lines*, R. (2004). Influence of participation in strategic change: resistance, organizational commitment and change goal achievement. *Journal of change management*, 4(3), 193-215.
- 41) McGovern, P., Hill, S., Mills, C., White, M. (2007). *Market, Class, and Employment*. Oxford University Press. Oxford.
- 42) Mokaya, S. O., Musau, J. L., Wagoki, J., & Karanja, K. (2013). Effects of organizational work conditions on employee job satisfaction in the hotel industry in Kenya. *International Journal of Arts and Commerce*, 2(2), 79-90. ISSN 1929-7106.
- 43) Morrow, P. C., McElroy, J. C., & Scheibe, K. P. (2012). Influencing organizational commitment through office redesign. *Journal of vocational behavior*, 81(1), 99-111. Doi: 10.1016/j.jvb.2012.05.004.
- 44) Muduli, A. (2015). High performance work system, HRD climate and organisational performance: an empirical study. *European journal of Training and development*, 39(3), 239-257. <https://doi.org/10.1108/EJTD-02-2014-0022>

Work Environment Design and Key Indicators of Organizational Effectiveness

- 45) Murali, S., Poddar, A., & Seema, A. (2017). Employee loyalty, organizational performance & performance evaluation—a critical survey. *IOSR Journal of Business and Management*, 19(8), 62-74. DOI: 10.9790/487X-1908036274
- 46) Nguyen, H. N., Le, Q. H., Tran, Q. B., Tran, T. H. M., Nguyen, T. H. Y., & Nguyen, T. T. Q. (2020). The impact of organizational commitment on employee motivation: A study in Vietnamese enterprises. *The Journal of Asian Finance, Economics and Business*, 7(6), 439-447. doi:10.13106/jafeb.2020.vol7.no6.439
- 47) Nikpour, A. (2017). The Impact of Organizational Culture on Organizational Performance: The Mediating Role of Employee's Organizational Commitment. *International Journal of Organizational Leadership*, 6, 65-72. Available at SSRN: <https://ssrn.com/abstract=3333078>
- 48) Osibanjo, A. O., Abiodun, A. J., & Adeniji, A. A. (2014). Impact of job environment on job satisfaction & commitment among Nigerian nurses. *Journal of South Africa Business Research*, 2(6), 1-11. DOI: 10.5171/2014.726260.
- 49) Pitaloka, E., Sofia, I. P. (2014). The affect of work environment, job satisfaction, organization commitment on OCB of internal auditors. *International Journal of Business, Economics and Law*. 5(2), 10-18. ISSN 2289-1552.
- 50) Riad, L., Labib, A., & Nawar, Y. S. (2016). Assessing the impact of organisational climate on employees commitment. *The Business & Management Review*, 7(5), 357-364.
- 51) Riyanto, S., Endri, E., & Herlisha, N. (2021). Effect of work motivation and job satisfaction on employee performance: Mediating role of employee engagement. *Problems and Perspectives in Management*, 19(3), 162. [http://dx.doi.org/10.21511/ppm.19\(3\).2021.14](http://dx.doi.org/10.21511/ppm.19(3).2021.14)
- 52) Rorong, S. V. (2016). The impact of physical work environment toward employee performance at PT. Bank Negara Indonesia Manado Regional Office. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 4(1), 441-450.
- 53) Rupčić, N. (2018). *Suvremeni menadžment. Teorija i praksa*. Ekonomski fakultet sveučilišta u Rijeci. Rijeka.
- 54) Saxena, H., Kaur, G. (2017). *Impact of Work Environment on Job Satisfaction*. Global Advancements In Hrm: Innovations And Practices. Prestige Institute of Management, Gwalior, MP And Bharti Publications. New Delhi, India
- 55) Schneider, B. & Reichers, A.E. (1983). On the Etiology of Climates. *Personnel Psychology*, 36(1), 19-39. <https://doi.org/10.1111/j.1744-6570.1983.tb00500.x>
- 56) Shaari, R., Sarip, A., & Ramadhinda, S. (2022). A study of the influence of physical work environments on employee performance. *International Journal of Academic Research in Business and Social Sciences*, 12(12), 1734-1742. <http://dx.doi.org/10.6007/IJARBS/v12-i12/15975>
- 57) Siengthai, S., & Pila-Ngarm, P. (2016). The interaction effect of job redesign and job satisfaction on employee performance. In *Evidence-based HRM: a Global Forum for Empirical Scholarship*, 4(2), 162-180. <https://doi.org/10.1108/EBHRM-01-2015-0001>
- 58) Soelton, M., Suatoni, M., Syah, T. Y. R., Ramli, Y., Santoso, P., Amanda, B., & Octaviani, R. (2020). Conceptualizing The Role of Organizational Commitment. *American International Journal of Business Management (AIJBM)*, 3(8), 178-188. DOI: 10.14738/abr.85.8139
- 59) Soelton, M., Suatoni, M., Syah, T. Y. R., Ramli, Y., Santoso, P., Amanda, B., & Octaviani, R. (2020). Conceptualizing The Role of Organizational Commitment. *American International Journal of Business Management (AIJBM)*, 3(8), 178-188.
- 60) Soenanta, A., Akbar, M., & Sariwulan, R. T. (2021). Effect of job design and organizational commitment to employee retention in a lighting company. *Linguistics and Culture Review*, 5(S3), 1161-1171. <https://doi.org/10.21744/lingcure.v5nS3.1834>
- 61) Stamolampros, P., Korfiatis, N., Chalvatzis, K., & Buhalis, D. (2019). Job satisfaction and employee turnover determinants in high contact services: Insights from Employees' Online reviews. *Tourism Management*, 75, 130-147. <https://doi.org/10.1016/j.tourman.2019.04.030>
- 62) Strauss, G. (2006). Worker participation—some under-considered issues. *Industrial Relations: A Journal of Economy and Society*, 45(4), 778-803. <https://doi.org/10.1111/j.1468-232X.2006.00451.x>
- 63) Tarigan, V., & Ariani, D. W. (2015). Empirical study relations job satisfaction, organizational commitment, and turnover intention. *Advances in management and applied economics*, 5(2), 21-42.
- 64) Umihanic, B., & Delic, A. (2013, September). Organizational assumptions for development of intrapreneurship in companies across Bosnia and Herzegovina. In *DIEM: Dubrovnik International Economic Meeting*, 1(1). Sveučilište u Dubrovniku. <https://hrcak.srce.hr/161533>
- 65) Valackiene, A. (2009). Theoretical model of employee social identification in organization managing crisis situations. *Engineering Economics*, 64(4), 95-102.
- 66) Vidaković, I. (2017). Upravljanje pomicu ciljeva. *Kontroling, financije i menadžment*, 1(01), 60-62.
- 67) White, M., & Bryson, A. (2013). Positive employee attitudes: how much human resource management do you need?. *Human relations*, 66(3), 385-406. <https://doi.org/10.1177/0018726712465096>

Work Environment Design and Key Indicators of Organizational Effectiveness

- 68) White, M., Hill, S., Mills, C., & Smeaton, D. (2006). Managing to change? British workplaces and the future of work. *British Journal of Industrial Relations*, 44(2), 374-376. <https://doi.org/10.1111/j.1467-8543.2006.00501.2.x>
- 69) Woods, S. A., Poole, R., & Zibarras, L. D. (2012). Employee absence and organizational commitment: moderation effects of age. *Journal of Personnel Psychology*, 11(4), 199-203. <https://doi.org/10.1027/1866-5888/a000073>
- 70) Yang, J. T., Wan, C. S., & Fu, Y. J. (2012). Qualitative examination of employee turnover and retention strategies in international tourist hotels in Taiwan. *International journal of hospitality management*, 31(3), 837-848. <https://doi.org/10.1016/j.ijhm.2011.10.001>
- 71) Yücel, İ. (2012). Examining the Relationships among Job Satisfaction, Organizational Commitment, and Turnover Intention: An Empirical Study. *International Journal of Business and Management*, 7(20), 44-58. <http://dx.doi.org/10.5539/ijbm.v7n20p44>
- 72) Yue, C. A., Men, L. R., & Ferguson, M. A. (2021). Examining the effects of internal communication and emotional culture on employees' organizational identification. *International Journal of Business Communication*, 58(2), 169-195. <https://doi.org/10.1177/2329488420914066>
- 73) Zhou, Y., Hong, Y., & Liu, J. (2013). Internal commitment or external collaboration? The impact of human resource management systems on firm innovation and performance. *Human Resource Management*, 52(2), 263-288. <https://doi.org/10.1002/hrm.21527>