

Article

Linking Leadership and Retention: Emotional Exhaustion and Creativity as Mechanisms in the Information Technology Sector

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Abstract

Employee turnover remains a critical challenge for organizations, prompting an examination of how leadership approaches influence employees' intentions to leave. This study investigates the impact of transformational leadership on turnover intention, focusing on emotional exhaustion and creativity as potential mediators. The study employs a quantitative design grounded in leadership and organizational psychology theory and surveys 182 professionals working in the information technology sector across Bosnia and Herzegovina, Croatia, Serbia, and Montenegro. Structural equation modeling reveals that transformational leadership reduces turnover intention by alleviating emotional exhaustion, highlighting the importance of psychological well-being in employee retention. While transformational leadership enhances employee creativity, creativity did not significantly mediate turnover intention in this context. These findings suggest that strategies that foster engagement and reduce burnout in knowledge-intensive industries can strengthen organizational commitment and improve retention. This study contributes to the understanding of behavioral mechanisms linking leadership to employee outcomes and offers actionable insights for modern organizations aiming to address turnover through supportive, empowering leadership practices. Additional mediators and contextual variables should be explored in further research.

Keywords: transformational leadership; turnover intention; emotional exhaustion; employee creativity; IT sector



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1. Introduction

The success and sustainability of any organization are largely determined by its ability to retain skilled, motivated, and productive employees (Cheung & Wong, 2011). High turnover disrupts business continuity, increases costs, and reduces performance. As global competition intensifies, retaining talent has become a strategic imperative (Bass & Avolio, 1993). This paper analyzes the impact of transformational leadership style on employee turnover intention, the mediation role of employee creativity, and emotional exhaustion between transformational leadership and turnover.

Employee turnover remains a major problem for businesses worldwide because it interferes with business continuity and results in high hiring, onboarding, and productivity loss expenses.

Retaining skilled personnel has become a strategic priority for firms looking to maintain their competitive advantage due to the increasingly competitive nature of global industries. Considering this difficulty, recent studies have focused on how leadership shapes workers' experiences and influences their decisions to stay or go. Transformational leadership is essential for creating a positive work atmosphere and lowering the employee's desire to leave. Emotional exhaustion, burnout, is a strong predictor of the decision to leave (Bass, 1999). High levels of emotional exhaustion increase the likelihood that workers will leave their positions and look for other employment options. Transformational leaders can lessen emotional exhaustion through transformational leadership and enhance psychological safety, which in turn reduces turnover intention, by cultivating a happy and encouraging work environment. Employee creativity has also been found to be a crucial component of innovation and organizational success (Guchait et al., 2023). Transformational leaders can foster employees' creativity by emphasizing autonomy and empowerment, which may increase their sense of belonging and decrease the risk of leaving the company. This study examines how transformational leadership influences turnover intention through the mediating effects of emotional exhaustion and employee creativity. The research addresses three main questions: (1) Does the intention to leave a company significantly decrease under transformational leadership? (2) How much does emotional exhaustion mediate the relationship between turnover intention and transformational leadership? (3) Does this relationship depend significantly on employee creativity as a mediator? By tackling these issues, the study adds to the corpus of knowledge on retention, leadership, and employee well-being while providing useful advice for companies looking to hold onto top business talent. Employee turnover is a growing challenge in the global IT sector, with particularly high rates reported in transitional economies such as Bosnia and Herzegovina (B&H). The IT sector in B&H is among the fastest growing industries, employing over 6000 professionals and contributing significantly to the country's gross domestic product (GDP) (IGES, 2023). However, the sector faces persistent challenges in retaining skilled employees due to a combination of factors, including high emigration rates, increased global demand for IT expertise, and attractive remote work opportunities abroad (StartBiH, 2024). A recent report highlighted that nearly 60% of IT professionals in B&H consider leaving their current employer within a year, mainly due to dissatisfaction with career development prospects, low salaries compared to international standards, and burnout (StartBiH, 2024). Furthermore, the dynamic and competitive nature of the IT industry amplifies work-related stress and emotional exhaustion, which can further decrease creativity and increase turnover intentions. While previous studies have established links between leadership styles and employee turnover, little is known about the mediating mechanisms of emotional exhaustion and creativity, particularly in the specific socio-economic and cultural context of B&H. Therefore, this study aims to address this gap by examining how transformational and authentic leadership affect turnover intentions among B&H IT employees through the mediating roles of emotional exhaustion and creativity. The remainder of this article is structured as follows. First, we present the theoretical background and development of the hypotheses. Next, we present the research methodology, followed by the analysis results. Section 5 then interprets the findings and highlights their implications. Finally, the study concludes with limitations and suggestions for future research (Inova Posao, 2024; StartBiH, 2024).

2. Theoretical Framework

2.1. Transformational Leadership and Turnover

Research on transformational leadership has become a popular theory of organization since Burns's (1978) publication of his groundbreaking paper establishing the idea (Judge

& Bono, 2000; Bass & Riggio, 2006). According to Masood et al. (2006), a “transforming leader engages the full person of the follower, looks for potential motives in followers, and seeks to satisfy higher needs.” Bass (1999), who proposed that transformational leadership includes intellectual stimulation, personalized attention, idealized influence, and inspirational motivation, was further expanded upon by Bass and his associates. Transformational leadership is a series of actions that enable followers to perform better and translate their values, beliefs, and attitudes beyond demands and beyond simple enforcement. Leaders can effectively enable individuals within groups to collectively transcend their self-interests for the good of the group through a variety of transformational leadership subdimensions, including charisma (later renamed idealized influence), intellectual stimulation, individualized consideration, and inspirational motivation. They can also inspire followers to become disciples and push themselves to higher need levels (Tse et al., 2013). Transformational leaders articulate a clear vision, communicate it effectively—often using metaphors—model the desired behaviors (“walk the talk”), and consistently demonstrate commitment to that vision. By providing insight and meaning, transformational leaders inspire followers to achieve amazing results (Diko & Saxena, 2023).

By focusing on the requirements of each individual, transformational leadership encourages followers to put the needs of their organizations ahead of their own. It also “helps followers reach their fullest potential” (Oh & Chhinzer, 2021).

Various behaviors (extra-roles) or leader conduct, including ideal influence, intellectual stimulation, and individual considerations, may indicate transformational processes.

When transformational leadership is present in organizations or businesses, followers are inspired to go above and beyond what is initially expected of them because they perceive that their leaders are respected, trusted, and admired (Situmorang & Wardhani, 2022). According to Saira et al. (2020), transformational leadership style is a determining factor that influences employee attitudes, perceptions, and behavior. Moreover, increased motivation, job satisfaction, and trust in leaders can also reduce the frequency of conflicts that frequently arise within an organization (Saira et al., 2020; Hadziahmetovic et al., 2023).

Compared with other leadership theories, such as transactional or laissez-faire styles, transformational leadership is often viewed as the most effective. Leaders who adopt this approach tend to inspire employees, encourage positive behaviors, and support personal growth (Bass & Avolio, 1990).

They promote a learning culture by coaching their teams, offering guidance, and creating space for continuous development. In doing so, they help individuals feel more connected to the organization. Such leaders also motivate their teams to prioritize shared goals, embrace change, and strive for high performance beyond standard expectations.

Transformational leadership is defined by the following four core dimensions:

1. Idealized Influence: Establishes a vision and mission, instills pride, and earns respect and trust.
2. Inspirational Motivation: Sets high expectations, uses symbols to unify efforts, and clearly and effectively conveys key goals.
3. Individualized Consideration: Provides personal attention, addresses unique needs of employees, and offers coaching and guidance.
4. Intellectual Stimulation: Encourages critical thinking, creativity, and promotes thoughtful problem-solving.

Turnover intention (TI) refers to an employee’s plan to leave their organization, encompassing the time from contemplating resignation to officially leaving their position (Bothma & Roodt, 2013).

Turnover intention represents the final stage in an employee’s thought process about leaving an organization—a conscious and deliberate decision shaped by their perceptions

and experiences (Tett & Meyer, 1993; Esthi & Panjaitan, 2023). Job satisfaction and turnover intention are strong predictors of voluntary employee departure. The loss of skilled employees disrupts operations and incurs significant costs related to rehiring, retraining, and reduced performance (C.-C. Lee et al., 2023). The departure of highly skilled employees often leads to increased costs associated with rehiring and retraining. These challenges emphasize the importance of understanding what drives turnover intention. According to Yassine and Jacobs (2024), employees' perceptions of organizational culture significantly influence their intention to stay or leave the company.

Employee turnover is generally classified into two categories: voluntary and involuntary. Voluntary turnover occurs when employees leave the organization on their own, often due to personal reasons, job dissatisfaction, or better opportunities elsewhere. Involuntary turnover is initiated by the employer and includes terminations related to performance issues, organizational restructuring, or mandatory retirement. According to Yassine and Jacobs (2024), an employee's decision to voluntarily resign is strongly influenced by their perception of organizational culture, leadership style, and overall workplace experience.

Among the leadership styles, transformational and transactional leadership are particularly relevant in understanding employee turnover. Transformational leaders focus on addressing higher-order psychological needs and fostering intrinsic motivation and engagement. Transactional leaders rely on contingent rewards to achieve their goals. While both styles influence turnover, transformational leadership has shown greater potential in promoting employee retention (Bass & Avolio, 1990).

Recent studies have highlighted that psychological empowerment under transformational leadership reduces the intention of employees to leave (Saleh et al., 2023). This leadership approach supports self-actualization, encourages proactive behavior, and fosters personal development. It also moderates the link between emotional exhaustion and turnover intention. C.-C. Lee et al. (2023) suggesting that emotionally supported employees are less likely to consider leaving. Additionally, regression analyses confirm that transformational leadership mediates withdrawal cognition and increases trust in leader–follower relationships, which in turn enhances well-being and moral identity.

2.2. Hypothesis Development

These findings reinforce the importance of the core dimensions of transformational leadership—idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration—in shaping employees' commitment and reducing turnover risk. Emerging research further suggests that transformational leadership may buffer the impact of workplace stressors, including burnout and lack of recognition, among the leading causes of voluntary turnover in knowledge-based sectors. Considering the above arguments, we propose the following hypothesis:

Hypothesis 1: *Transformational leadership has a negative direct impact on turnover intention.*

2.3. Mediating Role of Emotional Exhaustion

Emotional exhaustion is defined as a state of physical, emotional, and psychological fatigue that arises from continuous exposure to demanding work conditions (Demerouti, 2010). It reflects a depletion of emotional and cognitive resources and is often considered one of the most severe forms of occupational strain. As a central component of burnout, emotional exhaustion can result in a noticeable decline in energy, motivation, and engagement, often manifesting in feelings of detachment, irritability, and reduced personal accomplishment (Maslach, 1982; Maslach & Jackson, 1986). These symptoms not only affect individual well-being but can lead to broader organizational issues, such as reduced productivity and increased turnover.

In leadership research, the concept of emotional exhaustion has gained attention, particularly regarding its mediating role in the relationship between transformational leadership and turnover intention. Transformational leadership, which is characterized by support, inspiration, and individualized consideration, is generally associated with enhanced job satisfaction and organizational commitment. However, its influence also extends to reducing emotional strain among employees, thereby indirectly lowering the likelihood of turnover (Green et al., 2013). Numerous studies support this mediating effect. For instance, Green et al. (2013) found that emotional exhaustion moderated the link between leadership style and turnover intention—employees under democratic and transformational leaders experienced less emotional fatigue, leading to decreased intent to leave. Similarly, Avey et al. (2008) emphasized that transformational leaders could reduce employees' desire to quit by alleviating emotional exhaustion. Tse and Lam (2008), through regression analysis, demonstrated that the relationship between transformational leadership and turnover intention was fully mediated by emotional exhaustion, highlighting its central role in shaping employee decisions. Zhu et al. (2012) further confirmed that trust in transformational leaders enhances overall employee well-being and buffers against the emotional burden caused by workplace stress, which in turn reduces the probability of turnover (Martins et al., 2023).

Considering the above arguments, we propose the following hypothesis:

Hypothesis 2: *Emotional exhaustion mediates the negative relationship between transformational leadership and turnover intention.*

2.4. Mediating Role of Employee Creativity

Employee creativity refers to the generation of novel and useful ideas aimed at improving work performance, efficiency, and organizational effectiveness. It stems from an individual's creative thinking, expertise, and skill set, all of which are influenced by prior experiences and qualifications. As creativity demands considerable intellectual effort, organizations must cultivate environments in which employees are encouraged to engage deeply with their work and strive for innovative breakthroughs. Creative employees can significantly contribute to the development of new and valuable ideas that lead to transformative changes in products, services, and processes (Cheung & Wong, 2011).

Khalili (2016) highlighted the importance of leadership in fostering creativity, emphasizing that leaders should recognize, support, and nurture innovative efforts within their teams. In this regard, transformational leadership is particularly effective because it inspires employees to think beyond conventional approaches and to engage in creative problem-solving. By setting high expectations, providing encouragement, and expressing confidence in their employees' abilities, transformational leaders create a motivational climate where creativity can thrive (Bass, 1985).

Creativity is considered one of the most valuable assets for organizational growth and long-term success (Oldham & Cummings, 1996). It lays the foundation for meaningful change and the implementation of new ideas (OECD, 2010). Transformational leaders play a key role in promoting continuous learning, knowledge-sharing, and exploration of new methods for task execution. Organizations that actively support employee creativity in transforming ideas into innovative products and services are more likely to gain a sustainable competitive advantage in the marketplace (Kremer et al., 2019). In this sense, creativity is not only central to organizational achievement but also to its resilience and adaptability. As Mumford et al. (2002) note, transformational leaders enhance creative performance by articulating a compelling vision that mobilizes employees toward innovation, ultimately reinforcing the organization's capacity for innovation and progress.

Based on the preceding arguments, the following hypothesis is suggested:

Hypothesis 3: *Employee creativity mediates the negative relationship between transformational leadership and turnover intention.*

2.5. Emotional Exhaustion and Turnover

A substantial body of research has established emotional exhaustion as one of the most robust predictors of turnover intention. As the core dimension of burnout (Maslach & Jackson, 1986), emotional exhaustion reflects a chronic state of emotional and physical depletion resulting from prolonged exposure to work-related stressors. Employees experiencing high levels of emotional exhaustion often feel detached, overextended, and incapable of meeting work demands, which fosters a psychological withdrawal from their job roles (Taris et al., 1999). This withdrawal frequently translates into a conscious intention to leave the organization (Džambić & Hadziahmetovic, 2025; Romão et al., 2022).

Through a comprehensive meta-analysis, R. T. Lee and Ashforth (1996) confirmed that emotional exhaustion had the strongest and most consistent relationship with turnover intention among all burnout components. Similarly, Avey et al. (2008) emphasized that emotionally drained employees tend to disengage and exhibit reduced organizational commitment, thereby increasing their propensity to quit. Furthermore, Green et al. (2013) found that emotional fatigue affects not only job satisfaction and well-being but also serves as a primary psychological mechanism underlying voluntary turnover.

Collectively, these findings suggest that when employees lack emotional and psychological resources to cope with work demands, they are more likely to consider leaving their jobs. Therefore, understanding and addressing emotional exhaustion are crucial for organizations aiming to retain talent and prevent burnout-driven attrition. This theoretical and empirical foundation provides strong support for the following hypothesis:

Hypothesis 4: *Emotional exhaustion has a positive direct impact on turnover intention.*

2.6. Employee Creativity and Turnover

Employee creativity, defined as the ability to generate novel and useful ideas (Amabile, 1983), plays a critical role in enhancing innovation and organizational performance. Beyond its contribution to productivity, creativity is also closely linked to an employee's sense of purpose, engagement, and job satisfaction (Shalley et al., 2004). Employees who perceive that their creative ideas are encouraged, implemented, and rewarded are more likely to feel psychologically empowered and committed to the organization (Zhou & George, 2001).

Creative environments often promote autonomy and trust, which can foster a sense of belonging and meaning at work—two key factors known to reduce turnover intentions. According to Amabile and Pratt (2016), creativity-supportive climates contribute to a positive work identity, which further lowers the desire to leave an organization. Conversely, employees whose creative efforts are overlooked or stifled may experience frustration and disengagement, leading to increased turnover intentions (Hon, 2012; Madžak et al., 2025).

Studies have shown that employees with high creative self-efficacy and opportunities to innovate are significantly less likely to express intentions to quit, especially in knowledge-intensive and dynamic sectors such as IT. This suggests that creativity is not just a functional skill but also a psychological anchor that enhances organizational attachment and reduces the likelihood of voluntary turnover. Based on the preceding arguments, the following hypothesis is suggested:

Hypothesis 5: *Employee creativity has a negative direct impact on turnover intention.*

3. Research and Methodology

We used a questionnaire designed to collect data from a group of professionals from some of the main companies in the information technology sector in Bosnia and Herzegovina (B&H), Croatia, Serbia, and Montenegro; the data were analyzed using SPSS 25 and Amos 23 to determine the validity of our working hypotheses. This study employed a deductive, quantitative research design, in which data were collected using standardized questionnaires. The sample was selected using convenience sampling (Alshebami, 2025). Although the sample size in this study is relatively modest, it is within acceptable limits for structural equation modeling (SEM) in exploratory research contexts. Previous studies indicate that SEM techniques such as AMOS can still yield reliable results with sample sizes above 100, especially when the model complexity is moderate and the data meet normality assumptions. As Wolf et al. (2013) note, model complexity and indicator reliability play a more important role than arbitrary sample size cutoffs. Nonetheless, it is acknowledged that AMOS generally performs better with larger samples (200+). On the other hand, partial least squares structural equation modeling (PLS-SEM) is often recommended in situations where sample sizes are smaller, as it is a variance-based approach that requires fewer distributional assumptions and handles small samples more robustly. Future studies could therefore consider applying PLS-SEM to further validate the findings with improved statistical power. The expository aims of this research adopt a quantitative approach to establish whether there are relationships between transformational leadership, employee creativity, emotional exhaustion, and employee turnover intention. A survey method served as the primary data collection technique, using the data collection tool to gather information from respondents located in Bosnia, Croatia, Serbia, and Montenegro on the grounds that these countries possess similar linguistic and cultural characteristics and help in standardizing the data collection process. The proposed research model is shown in Figure 1.

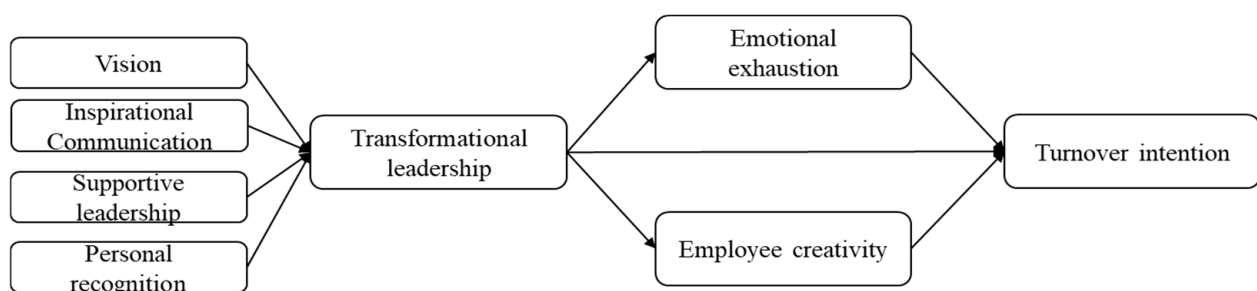


Figure 1. The research model.

3.1. Measures

Validated scales that included numerous dimensions to fully capture the concepts' complexity were used to measure the constructs in the suggested model. In the Table 1 it is represented the all measurement item.

Table 1. Constructs, measurement items, scales, and sources for all study variables.

Construct	Items	Scale	Source
Transformational leadership	Vision:	15 items; 5-point Likert	Rafferty and Griffin (2004)
	1. Has a clear understanding of where we are going;		
	2. Has a clear sense of where he/she wants our unit to be in 5 years;		
	3. Has no idea where the organization is going (R).		
	Inspirational communication:		
	1. Says things that make employees proud to be a part of this organization;		
	2. Says positive things about the work unit;		
	3. Encourages people to see changing environments as situations full of opportunities.		
	Intellectual stimulation:		
	1. Challenges me to think about old problems in new ways;		
	2. Has ideas that have forced me to rethink some things that I have never questioned before;		
	3. Has challenged me to rethink some of my basic assumptions about my work.		
	Supportive leadership:		
	1. Considers my personal feelings before acting;		
	2. Behaves in a manner which is thoughtful of my personal needs;		
	3. Sees that the interests of employees are given due consideration.		
	Personal recognition:		
	1. Commends me when I do a better than average job;		
	2. Acknowledges improvement in my quality of work;		
	3. Personally compliments me when I do outstanding work.		
Emotional exhaustion	1. I feel emotionally drained from my work;	9 items; 5-point Likert	Maslach and Jackson (1981)
	2. I feel used up at the end of the workday;		
	3. I feel fatigued when I get up in the morning and have to face another day on the job;		
	4. Working with people all day is really a strain for me;		
	5. I feel burned out from my work;		
	6. I feel frustrated by my job;		
	7. I feel I'm working too hard on my job;		
	8. Working with people directly puts too much stress on me;		
	9. I feel like I'm at the end of my rope.		
Employee creativity	1. Suggests new ways to achieve goals or objectives;	13 items; 5-point Likert	Zhou and George (2001)
	2. Comes up with new and practical ideas to improve performance;		
	3. Searches out new technologies, processes, techniques, and/or product ideas;		
	4. Suggests new ways to increase quality;		
	5. Is a good source of creative ideas;		
	6. Is not afraid to take risks;		
	7. Promotes and champions ideas to others;		
	8. Exhibits creativity on the job when given the opportunity to;		
	9. Develops adequate plans and schedules for the implementation of new ideas;		
	10. Often has new and innovative ideas;		
	11. Comes up with creative solutions to problems;		
	12. Often has a fresh approach to problems;		
	13. Suggests new ways of performing work tasks.		
Turnover intention	1. I am seriously considering leaving my current job to work at another company;	5 items; 5-point Likert	Memon et al. (2016)
	2. I sometimes feel compelled to quit my job in my current workplace;		
	3. I will probably look for a new job in the next year;		
	4. Within the next 6 months, I would rate the likelihood of leaving my present job as high;		
	5. I will quit this company if the given condition gets even a little worse than now.		

Each of these scales has been extensively validated in prior research, demonstrating robust psychometric properties. As indicated by Cronbach's alpha, reliability consistently exceeds 0.80 across studies, ensuring the dimensions' internal consistency. Construct validity, including convergent and discriminant validity, has been confirmed using techniques such as confirmatory factor analysis, making these scales well-suited for studying leadership styles and their influence on employee behaviors.

3.2. Data Collection

The data were collected through an online questionnaire deployed via Google Forms. The survey link was forwarded through email to the respondents of the noted countries.

This approach was ideal and provided diffusion and coverage while ensuring that the data collection methods were uniform.

3.3. Sampling and Respondents

A total of 182 valid responses were obtained in this study. Participants in the study included working people who were from different organizations in the countries of interest. The sampling technique applied was non-probabilistic sampling since it was performed at the discretion of the individuals through an email sent requesting their participation.

Employees in the information technology (IT) sector in Bosnia, Croatia, Serbia, and Montenegro provided the study's data. These nations were chosen because of their similar linguistic and cultural traits, which made it easier to comprehend and interpret the survey questions consistently. Professionals working for different IT companies in these areas provided a total of 182 valid responses.

There were difficulties in gathering information from IT specialists. The IT industry is frequently distinguished by a strong desire for privacy and confidentiality, which results in a more taciturn attitude toward outside inquiry. Professionals may be reluctant to contribute information because they are worried about data security and misuse, which can lead to reduced response rates and possible sampling biases.

3.4. Demographic Profile of Respondents

This section displays the participants' demographic information, which was examined using SPSS. According to the results, 49.2% of the respondents were women and 50.8% of the respondents were men. The workforce's age breakdown showed that 43% of workers were between the ages of 25 and 34, followed by 32.3% who were between the ages of 35 and 44. High school diplomas (14.1%), master's degrees (31.2%), and bachelor's degrees (54.7%) were the most common educational backgrounds among the participants. Additionally, the research showed that "Working in an Office" (54.4%) was the most popular work type, followed by "Combined/Hybrid Work" (37.8%) and "Working from Home" (8.3%). Geographically, Bosnia and Herzegovina accounted for 54% of the participants, with Croatia (19.3%), Serbia (17.6%), and Montenegro (8.8%) following closely behind. In terms of job roles, the most common positions were "Administrative" (20.6%) and "Designer" (17.3%), followed by "Developer" (16.2%) and "IT Manager" (14.6%). Additional demographic details are presented in Table 2. The operational definitions and corresponding measurement approaches for each construct are presented in Table 3.

Table 2. Demographic profile of the participants.

Category	Subcategory	Frequency (n)	Percentage (%)
Gender	Male	89	50.8
	Female	92	49.2
Age Distribution	18–24	21	11.9
	25–34	75	43.0
	35–44	56	32.3
	45–54	18	10.3
	55–64	5	2.9
Education Level	High School	25	14.1
	Bachelor's Degree	97	54.7
	Master's Degree	55	31.2

Table 2. Cont.

Category	Subcategory	Frequency (n)	Percentage (%)
Work Model	Working in an Office	98	54.4
	Combined/Hybrid Work	68	37.8
	Working from Home	15	8.3
Geographic Location	Bosnia and Herzegovina	98	54.0
	Croatia	35	19.3
	Serbia	32	17.6
	Montenegro	16	8.8
Job Positions	Administrative	37	20.6
	Designer	31	17.3
	Developer	29	16.2
	IT Manager	26	14.6
	Marketing Manager	20	11.1
	Other	22	12.3
	Product Owner	16	8.9

Table 3. Operational definitions and measurement of study constructs.

Construct	Operational Definition	Measurement	Source
Transformational leadership	A leadership style that inspires followers to transcend self-interest and achieve extraordinary outcomes through idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation.	15 items; 5-point Likert scale	Rafferty and Griffin (2004)
Emotional exhaustion	Emotional and physical depletion due to chronic work-related stress.	9 items; 5-point Likert scale	Maslach and Jackson (1981)
Employee creativity	The extent to which employees generate ideas for novel and useful organizational improvement.	13 items; 5-point Likert scale	Zhou and George (2001)
Turnover intention	The conscious and deliberate intention of an employee to leave the organization.	5 items; 5-point Likert scale	Memon et al. (2016)

Note: All items were measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

4. Results

Descriptive statistical analysis was used to summarize the demographic profiles of the respondents, an evaluation of their assessments of the study variables was conducted, and structural model analysis was used to test the hypotheses. To accomplish the goals of this study, the main technique for data analysis was structural equation modeling (SEM). SEM was chosen because it is a commonly used method in the behavioral and social sciences and can simultaneously examine several associations between latent and observable variables at once ([Golob, 2003](#)). This approach was especially well-suited for assessing the intricate connections, such as mediation effects, in the suggested model. For preliminary analysis and descriptive statistics, SPSS 25 was used, and for SEM and path analysis, AMOS 23 was used.

Cronbach's alpha, a commonly used indicator of internal consistency, was used to evaluate the scales' reliability. According to the findings, the dependability levels of each construct and its corresponding dimensions ranged from satisfactory to exceptional.

Vision (Cronbach's $\alpha = 0.694$, 3 items), inspirational communication (Cronbach's $\alpha = 0.911$, 3 items), supportive leadership (Cronbach's $\alpha = 0.916$, 3 items), personal recognition (Cronbach's $\alpha = 0.901$, 3 items), and intellectual stimulation (Cronbach's $\alpha = 0.931$, 3 items) were the five dimensions of transformational leadership that were assessed. When considering all five aspects, the overall dependability of the transformational leadership scale was excellent (Cronbach's $\alpha = 0.963$, 15 items). With a Cronbach's alpha of 0.956 over nine items, the dependability was also excellent for emotional exhaustion, a component of burnout. With Cronbach's $\alpha = 0.965$ for all nine items, the turnover intention scale showed a high degree of dependability. With Cronbach's $\alpha = 0.982$ for all five items, the employee creativity scale, which likewise lacked specified dimensions, demonstrated outstanding dependability. Although the original transformational leadership scale included 15 items, only 8 items were retained in the final model based on EFA and CFA results. Items with weak factor loadings or cross-loadings (e.g., TR_VI2, TR_SL1, TR_IC2, etc.) Exclusions were made to enhance model fit and reliability.

These findings support the validity and suitability of the scales employed in the study for assessing the relevant constructs within the framework of the investigation. The internal consistency of the constructs was assessed using Cronbach's alpha, as presented in Table 4.

Table 4. Reliability analysis.

Construct	Dimension	Cronbach's Alpha	Number of Items
Transformational Leadership	Vision	0.694	3
	Inspirational Communication	0.911	3
	Supportive Leadership	0.916	3
	Personal Recognition	0.901	3
	Intellectual Stimulation	0.931	3
	Total	0.963	8 (reduced from original 15)
Burnout	Emotional Exhaustion	0.956	8 (reduced from original 9)
Turnover Intention	No dimensions	0.965	4 (reduced from original 5)
Employee Creativity	No dimensions	0.982	10 (reduced from original 13)

Table 5 shows the results of an exploratory factor analysis (EFA) evaluating the factor loadings of each item within the constructs of transformational leadership, emotional exhaustion, employee creativity, and turnover intention. EFA was performed using SPSS with Maximum Likelihood extraction and Promax rotation. Examining these notions' underlying dimensions was made possible in large part by this analysis. Transformational leadership items loaded mostly on one component. All measures showed high factor loadings for employee creativity, turnover intention, and emotional exhaustion, indicating their internal consistency and validity as separate constructs.

Table 5. Exploratory factor analysis.

Pattern Matrix				
Factor				
	1	2	3	4
EC_7	0.923			
EC_8	0.906			
EC_5	0.891			

Table 5. Cont.

	Pattern Matrix			
	Factor			
	1	2	3	4
EC_12	0.886			
EC_9	0.886			
EC_13	0.881			
EC_3	0.861			
EC_10	0.856			
EC_4	0.854			
EC_6	0.853			
EC_2	0.850			
EC_1	0.829			
EC_11	0.803			
TR_PR1		0.964		
TR_PR3		0.945		
TR_SL3		0.939		
TR_PR2		0.905		
TR_IS1		0.888		
TR_IC3		0.881		
TR_SL2		0.869		
TR_IS2		0.806		
TR_IS3		0.749		
TR_IC1		0.738		
TR_IC2		0.720		
TR_SL1		0.663		
TR_VI2		0.444		
EE_5			0.975	
EE_3			0.890	
EE_2			0.875	
EE_1			0.863	
EE_4			0.848	
EE_7			0.847	
EE_6			0.845	
EE_9			0.824	
EE_8			0.806	
TO_3				0.973
TO_4				0.933
TO_2				0.933
TO_1				0.926
TO_5				0.843

Several statistical tests and thresholds were taken into consideration in order to guarantee that the factor analysis was appropriate. A value classified as “meritorious” (0.80–0.89) by the Kaiser–Meyer–Olkin (KMO) test was obtained in accordance with the recommendations of Williams et al. (2010). According to Williams et al. (2010), the data were suitable for factor analysis because Bartlett’s test of sphericity was significant ($p < 0.05$). The shared variance among variables was supported by the fact that all of the items’ communality values were higher than the 0.4 cutoff point. After extraction, the total variation explained exceeded 60%, meeting Gaskin’s (2016) standard.

The majority of items had factor loadings greater than 0.4, satisfying the requirements set by Field (2011) and Hair et al. (1998). With factor correlations below 0.7, which is in accordance with the acceptable standards of Gaskin (2016), there was little multicollinearity among the components. Lastly, Cronbach’s alpha was used to assess internal consistency for all constructs. Cronbach and classified values as “good” ($0.7 \leq \alpha < 0.9$) to “excellent” ($\alpha \geq 0.9$). These findings support the validity, reliability, and dimensionality of the study’s constructs.

4.1. Measurement Model Assessment

To ensure that the model was suitable for the data, the validity, reliability, and goodness of fit of the scales were assessed before performing the structural equation modeling (SEM) analysis. The measuring model sought to evaluate how well the observed variables represented conceptions.

The ability of a variable or group of variables to consistently measure what they are supposed to measure is known as internal consistency, or reliability (Hair et al., 2010). Cronbach's alpha was computed to evaluate reliability; a minimum value of 0.7 is advised (Hair et al., 2010). Table 6 illustrates the results, which showed that each individual Cronbach's alpha value was greater than the suggested threshold (Hair et al., 2010) and ranged from 0.866 to 0.954. In addition, the composite dependability (CR) values, which ranged from 0.947 to 0.976, were all above 0.7 (Hair et al., 2021). This suggests a satisfactory level of construct reliability.

Table 6. Convergent and discriminant validity.

Construct	CR	AVE	MSV	MaxR (H)	Employee Creativity	Transf. Leader.	Emoti. Exhaust.	Turnover
Employee Creativity	0.968	0.751	0.341	0.969	0.866			
Transformational Leadership	0.947	0.693	0.453	0.952	0.584 ***	0.832		
Emotional Exhaustion	0.959	0.746	0.254	0.965	−0.053	−0.366 ***	0.864	
Turnover	0.976	0.911	0.453	0.978	0.239	0.219	0.345	0.954

Note: *** $p < 0.001$.

The CR and Cronbach's alpha values obtained for all constructs are considered acceptable. The validity, factor structure, and measurement model were all assessed using confirmatory factor analysis (CFA). By making sure that every measured item reflected its related factor and that each construct had an average variance extracted (AVE) of 0.50 or above, convergent validity was attained (Chau et al., 2009; Fornell & Larcker, 1981). Successful convergent validity was indicated by the AVE values, which were above the suggested threshold of 0.50 and varied from 0.693 to 0.911.

By examining the correlations between the various elements under investigation, discriminant validity was evaluated to ensure that they were distinct from one another. High or extremely high correlations should be avoided, and the correlation values between latent constructs should be substantially distinct from zero (Anderson & Gerbing, 1988). To verify discriminant validity, the square root of the AVE for every construct was compared to intercorrelations with other constructs. As an illustration of sufficient discriminant validity, the square root of the AVE for employee creativity (0.866) was greater than its correlations with other variables, such as transformational leadership (0.584) and emotional exhaustion (−0.053).

Finally, the Tucker–Lewis index (TLI) and comparative fit index (CFI) values greater than 0.90 and a root-mean-squared error of approximation (RMSEA) less than 0.05 were used to assess the model's fit (Hu & Bentler, 1999). The scale's validity was confirmed by the results (CFI: 0.943, TLI: 0.938, RMSEA: 0.036), which also confirmed that the model fits the data well.

4.2. Structural Model Results

The structural model shows that employee creativity (EC) and emotional exhaustion (EE), which in turn affect turnover intention (TI), are significantly impacted by transformational leadership (TL). According to the results, transformational leadership has a major impact on employee inventiveness and emotional weariness, both of which have an effect on turnover intention. Emotional weariness is a significant mediator and a direct predictor

of turnover intention. Although transformational leadership has a favorable impact on employee creativity, its mediation effect on turnover intention is not as strong.

These results highlight the value of emotional health in lowering employee attrition and the necessity for businesses to encourage transformational leadership practices in order to create creative and encouraging work environments. It is advised that more investigations be conducted into the contextual elements that might strengthen the mediating function of creativity in particular fields or occupations.

The results for the direct effect of transformational leadership on turnover intention have been integrated into the structural model analysis. Specifically, Hypothesis 1 is confirmed by the significant negative path coefficient from transformational leadership to turnover intention, as observed in the structural model. This relationship was statistically significant and supports the assumption that transformational leadership reduces employees' intention to leave the organization.

The mediation analysis showed that emotional exhaustion plays a significant role in explaining how transformational leadership influences turnover intention. The indirect effect was -0.193 , with a 95% confidence interval between -0.278 and -0.109 , and a p -value of 0.001 , confirming strong statistical significance. Since the confidence interval does not cross zero, the mediation effect is considered both reliable and meaningful. In practical terms, this suggests that transformational leaders help reduce employees' intention to leave by relieving emotional strain. When leaders provide a supportive and motivating environment, employees are less likely to experience burnout and, consequently, less likely to consider leaving the organization. It is represented in the Figure 2.

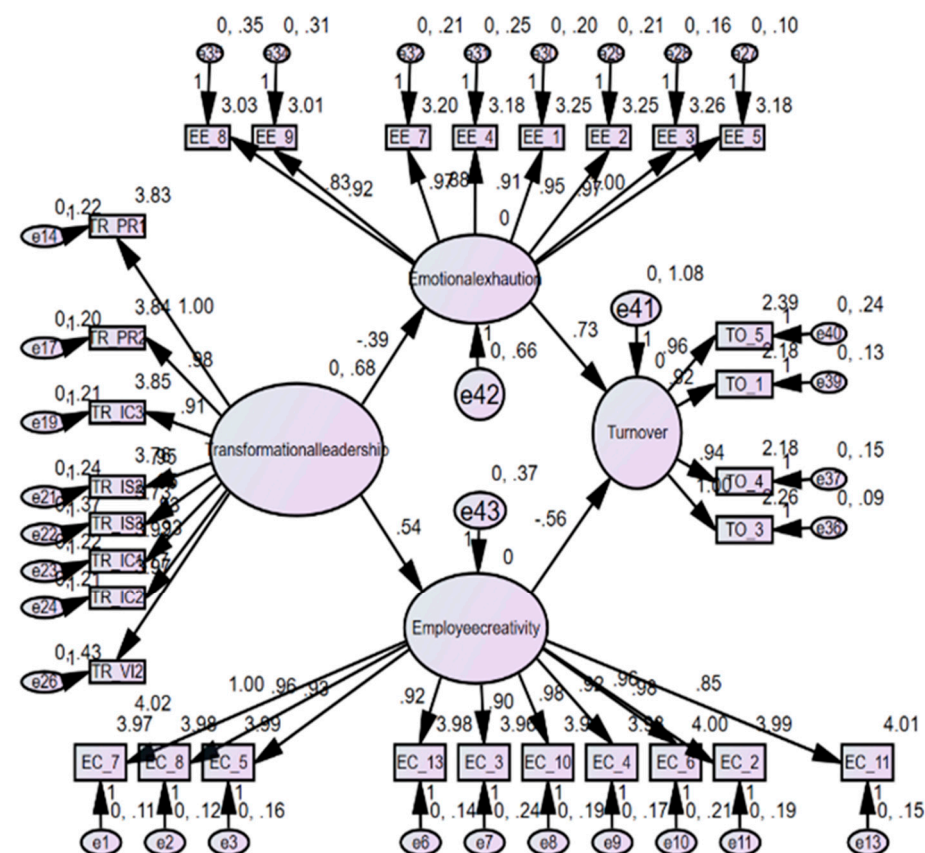


Figure 2. Research model and standard regression weights.

On the other hand, employee creativity did not significantly mediate the relationship between transformational leadership and turnover intention. The indirect effect in this

case was -0.039 , with a 95% confidence interval from -0.084 to 0.002 , and a p -value of 0.075 . Because the confidence interval includes zero and the p -value is slightly above the standard significance threshold, this mediation was not statistically supported. These findings suggest that although transformational leadership fosters creativity, creativity alone may not have a strong enough impact on employees' decisions about whether to stay with or leave their organization. In Table 7 is represented the direct and indirect effect in the structural model.

Table 7. Summary of direct and indirect effects in the structural model.

Path	Effect Type	Effect Size	95% CI Lower	95% CI Upper	p -Value	Supports
TL $\rightarrow$ TI	Direct	-0.153	-0.269	-0.038	0.010	H1 
TL $\rightarrow$ EE $\rightarrow$ TI	Indirect	-0.193	-0.278	-0.109	0.001	H2 (partial) 
TL $\rightarrow$ EC $\rightarrow$ TI	Indirect	-0.039	-0.084	0.002	0.075	H3 
EE $\rightarrow$ TI	Direct	0.366	0.212	0.520	0.000	H4 
EC $\rightarrow$ TI	Direct	-0.092	-0.213	0.030	0.137	H5 

Hypotheses 4 and 5 were evaluated as direct paths within the structural model. Emotional exhaustion was found to significantly and positively predict turnover intention ($\beta = 0.366$, $p < 0.001$), confirming Hypothesis 4. This finding aligns with prior research indicating that employees experiencing high emotional strain are more likely to consider leaving their jobs. On the other hand, the direct effect of employee creativity on turnover intention (Hypothesis 5) was negative but not statistically significant ($\beta = -0.092$, $p = 0.137$). Although the result did not reach conventional levels of significance, it suggests a potential inverse relationship worthy of further exploration in future research.

5. Discussion

The findings of this study enrich the understanding of how leadership styles impact turnover intention, with a specific focus on the mediating roles of emotional exhaustion and creativity in the IT sector of Bosnia and Herzegovina. Consistent with our expectations, transformational leadership demonstrated a significant negative effect on turnover intention, which supports prior findings that effective leadership is crucial for retaining employees in knowledge-based industries. For example, Kidane Diko and Saxena (2023) highlighted that transformational leadership practices can foster psychological empowerment, reduce turnover intention, and promote organizational commitment in dynamic business environments. Similarly, Edonomokumor et al. (2025) emphasized that transformational leaders strengthen employee well-being by addressing emotional needs and providing meaningful work experiences, both of which reduce the desire to leave. Moreover, our results confirm the partial mediating role of emotional exhaustion in the relationship between transformational leadership and turnover intention. This is aligned with the findings of Putra et al. (2021), who showed that transformational leadership reduces burnout symptoms among employees, which in turn lowers turnover intention. Their research highlights the critical importance of supportive leadership behavior in mitigating occupational stress and emotional depletion. Likewise, the study by Edonomokumor et al. (2025) further supports that addressing employee emotions through transformational practices contributes significantly to retaining talent. On the other hand, the hypothesized mediating role of employee creativity was not supported in this study. While transformational leadership did foster higher levels of creativity, this creativity did not translate into lower

turnover intention in our sample. This is somewhat inconsistent with the findings of [Choi \(2025\)](#), who found that creativity-enhancing environments tend to promote retention by strengthening employees' sense of belonging and meaning at work. One possible explanation for this discrepancy could lie in the specific dynamics of the IT labor market in Bosnia and Herzegovina, where highly creative individuals may still seek external opportunities due to competitive offers and global demand for IT skills. As [Choi \(2025\)](#) note, organizational culture plays a moderating role in determining whether creativity contributes to lower turnover. Additionally, our results corroborate previous evidence of a strong positive relationship between emotional exhaustion and turnover intention. This aligns with the findings of [Ding and Wu \(2023\)](#), who demonstrated that burnout, particularly emotional exhaustion, remains one of the strongest predictors of employees' intent to leave. Emotional exhaustion reflects a depletion of personal resources, which diminishes employees' capacity to remain engaged and committed to the organization. Taken together, these findings contribute to both theory and practice by reinforcing the pivotal role of transformational leadership and employee well-being initiatives in minimizing turnover in knowledge-intensive industries. Organizations should focus on cultivating transformational leadership behaviors and systematically addressing emotional strain to improve retention rates. At the same time, promoting creativity remains valuable for innovation but may not, in itself, serve as a sufficient retention strategy in highly mobile labor markets.

5.1. Theoretical Implications

This study offers several theoretical contributions to the literature on leadership and employee turnover, particularly in the context of knowledge-intensive industries such as the IT sector in Bosnia and Herzegovina.

First, the findings reinforce the theoretical foundation that transformational leadership significantly reduces turnover intention by fostering employee engagement and psychological attachment. This aligns with the work of [Estherita and Vasantha \(2023\)](#), who demonstrated that by creating an empowering and motivating work environment that fulfills employees' higher-order needs, transformational leadership improves employee retention.

Second, by confirming the mediating role of emotional exhaustion, this study adds to the growing body of knowledge that emphasizes the importance of addressing employee well-being within leadership frameworks. The results are consistent with the findings of [Martin et al. \(2023\)](#), who highlighted that effective leadership practices can reduce emotional strain and burnout, thereby minimizing turnover intention. This supports theories that position leadership not only as a driver of performance but also as a safeguard of employee psychological health.

Third, this study challenges some prior assumptions about the mediating role of creativity in reducing turnover intention, suggesting that the impact of creativity may be more context-dependent. As noted by [Faeq \(2025\)](#), while transformational leadership enhances creativity, this creativity may not always lead to stronger organizational commitment, particularly in industries where creative talent is highly mobile and sought after externally. This nuance enriches theoretical discussions on creativity's boundary conditions as a retention mechanism.

Finally, the findings highlight the importance of organizational support and culture as potential moderators in the relationship between leadership, well-being, and turnover intention. This is in line with the work of [Sun and Wang \(2017\)](#), who emphasized that leadership effectiveness in retaining employees depends on the organizational context and support structures available to employees.

Taken together, these contributions advance theoretical models of employee retention by integrating emotional, cognitive, and contextual factors into the leadership–turnover

nexus, offering a more holistic understanding of how leaders can influence employees' decisions to stay or leave.

5.2. Managerial Implications

The findings also have significant practical and social implications for modern organizational practice. The study underscores the critical role of the transformational leadership in reducing turnover and improving employee well-being. Organizations are encouraged to implement leadership development programs aimed at cultivating transformational behaviors such as articulating a clear vision, offering individualized support, stimulating creativity, and recognizing achievements.

The study's findings offer practical advice for HR professionals and organizational leaders looking to improve employee engagement and retention:

Encouraging Leadership Transformation: Organizations should prioritize leadership development programs that foster transformational leadership behaviors like igniting a common vision, offering tailored assistance, and fostering creative thinking. Reducing emotional exhaustion and creating a happy work environment are important tasks for transformational leaders, as these factors greatly reduce the desire to leave.

Resolving Emotional Weariness: Organizations need to put initiatives in place to improve employee well-being because emotional weariness was found to be the most significant mediator in this study. These include launching workshops on stress management and mental health initiatives, encouraging work–life balance by managing workload and offering a flexible schedule, and promoting networks of support and candid communication among teams.

Leveraging Creativity: Although the association between transformational leadership and turnover intention was not significantly mediated by employee creativity, the relevance of this trait is highlighted by the direct enhancement of it through transformational leadership.

This study contributes to both theory and practice in several important ways.

First, it expands the theoretical understanding of how transformational leadership (TL) influences turnover intention (TI) by empirically validating the mediating role of emotional exhaustion (EE). The finding that TL reduces TI, both directly and indirectly through EE, strengthens existing leadership theories that emphasize the emotional impact of leadership on employee attitudes (Zhu et al., 2012; Avey et al., 2008). While earlier models have considered TL as a general predictor of performance and satisfaction, this study clarifies its psychological mechanism in retaining employees.

Second, the study adds value by disentangling the dual pathway through which transformational leadership operates. Although employee creativity (EC) was positively related to TL, its mediating role in reducing turnover intention was not statistically significant. This nuance indicates that creativity alone may not be a strong driver of retention unless it is embedded in a system that recognizes and rewards innovation (Zhou & George, 2001; Amabile & Pratt, 2016). This finding adds to the existing literature by drawing attention to the conditional effectiveness of creativity in influencing employee withdrawal.

Third, the direct positive relationship between emotional exhaustion and turnover intention is empirically supported, in line with the literature on burnout (R. T. Lee & Ashforth, 1996). This confirms that emotional exhaustion is not only a mediator but also an independent predictor of employees' decisions to leave. This insight is especially relevant in high-pressure, knowledge-based industries like IT, where mental fatigue and burnout are common (Lopes et al., 2025).

Fourth, from a methodological standpoint, this research extends the application of structural equation modeling (SEM) in examining complex mediation models in cross-national samples from Southeastern Europe. By confirming the psychometric validity of the

measurement model across culturally similar but administratively distinct countries (Bosnia and Herzegovina, Croatia, Serbia, and Montenegro), the study contributes to cross-cultural leadership research, an area still underexplored in non-Western contexts.

Finally, the findings provide practical implications for HR managers and organizational leaders. Reducing turnover intention should begin with investing in emotionally intelligent leadership development that promotes empathy, psychological safety, and inspiration. Interventions targeting emotional exhaustion—such as stress-reduction programs, workload balancing, and open communication channels—are crucial for workforce sustainability. Meanwhile, creativity should be encouraged not only as an innovation driver but also as a retention tool—as long as organizations create environments that acknowledge and act on employees' ideas.

6. Conclusions

At the heart of every successful organization is the ability to retain its people, especially those who are creative, driven, and capable of driving change. This study set out to explore how transformational leadership influences an employee's intention to stay or leave, and it found a powerful story within the data: leadership matters, not just in shaping performance, but in shaping the emotional and creative experiences of employees.

Among the two mediators studied—emotional exhaustion and employee creativity—it was emotional exhaustion that carried the most weight. When employees feel emotionally drained, disconnected, or chronically fatigued, their motivation to remain loyal to the organization weakens. However, transformational leaders, through their ability to inspire, support, and recognize the individual needs of team members, can create work environments that buffer against this exhaustion. These leaders offer more than direction—they offer psychological safety, empathy, and energy. In doing so, they foster conditions that make employees feel valued, heard, and emotionally sustained, which directly lowers their intent to leave.

On the other hand, creativity—while positively influenced by transformational leadership—did not significantly mediate turnover intention. This does not diminish its value; rather, it invites us to reflect on how creativity is recognized and rewarded in the workplace. Employees may be generating new ideas, solving problems innovatively, or thinking outside the box. However, if these contributions are not acknowledged or tied to meaningful outcomes, they may not feel a stronger connection to the organization. This finding suggests that creativity alone is not enough to keep people; it must be embedded in a broader system of appreciation, recognition, and support.

The implications for organizational leaders and HR practitioners are clear. To build a resilient, innovative, and loyal workforce, companies must look beyond surface-level engagement strategies. They should actively invest in leadership development programs that equip managers with transformational capabilities. Leaders must learn how to connect authentically, communicate vision, challenge creatively, and coach individually. Equally important is the commitment to emotional well-being—providing tools and spaces for mental health support, stress management, work–life balance, and open communication. Finally, organizations must rethink how they encourage and reward creativity, transforming it from a soft skill into a strategic asset (Rodrigues et al., 2025).

The study also challenges earlier assumptions about the role of creativity as a retention mechanism, showing that while transformational leadership fosters creativity, this alone may not be sufficient to reduce turnover intention in competitive, knowledge-based sectors. This insight broadens the discourse on creativity by emphasizing its conditional nature, depending on organizational support and recognition (Amabile & Pratt, 2016).

Practically, the findings provide actionable recommendations for managers and HR practitioners seeking to retain talent in the IT sector, particularly in transitional economies like Bosnia and Herzegovina. By promoting transformational leadership behaviors and implementing strategies that support employee well-being and acknowledge creative contributions, organizations can improve retention, engagement, and performance.

This research contributes to a growing understanding of how psychological and relational dynamics shape workforce stability in knowledge-intensive sectors. It reminds us that retention is not just about contracts, compensation, or perks—it is about human experience. People stay where they feel inspired, emotionally supported, and intellectually stimulated.

Looking forward, future studies could expand this model by examining additional psychological mediators such as trust in leadership, organizational justice, or job autonomy. It would also be valuable to explore how industry context, company size, and cultural differences might influence the effectiveness of transformational leadership in retaining talent.

In conclusion, this study offers a roadmap for organizations seeking to become not only more competitive but also more compassionate. By fostering leadership that uplifts, environments that energizes, and cultures that celebrate innovation, organizations can build workplaces where people do not just work—they thrive and choose to stay.

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