



FROM VISION TO INNOVATION: HOW TRANSFORMATIONAL LEADERSHIP EMPOWERS EMPLOYEE INNOVATIVENESS

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Abstract

The changing economic environment, influenced by globalization, technology, and population trends, is reshaping both companies and their employees. Companies must innovate and be resilient to stay competitive, while employees should drive sustainability and progress within firms. The strategic investment in employees is now recognized as a driver of sustainable growth and market differentiation. This paper aims to examine how transformational leadership leads to innovative employee behavior in companies operating in Bosnia and Herzegovina. In a dynamic and competitive market, transformational leadership is a key factor in fostering creativity and innovation in the workplace. The research included a sample of 116 companies from different industries operating in the Federation of Bosnia and Herzegovina. The research findings indicate that transformational leadership style has positive effects on innovative employee behavior.

Keywords: Leadership, transformational leadership, innovation, innovative employee behavior



INTRODUCTION

Innovation is considered a key factor for an organization's long-term sustainability and competitive advantage. According to relevant academic literature, establishing and continuously developing an organizational culture that affirms and promotes innovativeness is a necessary condition for the successful generation and implementation of innovations (Bendak, Shikhli, & Abdel-Razek, 2020).

In the contemporary business landscape, there is a discernible trend among nations prioritizing strategies and policies designed to foster innovation. This recognition stems from the understanding that achieving global competitiveness necessitates robust and systematic support for the development of innovative practices. Without such foundational support, countries risk falling behind in the rapidly evolving global marketplace, where innovation serves as a critical driver of economic growth and sustainable development (Ćosić et al., 2023). The Global Innovation Index (GII) was established to measure the level of innovation in various countries and to allow comparisons across the globe. According to the latest report published in 2023, Bosnia and Herzegovina is ranked 77th out of 132 countries in terms of innovation.

The concept of innovative work behavior is increasingly gaining traction among practitioners due to its significant role in bolstering competitive advantage and fostering organizational performance. This phenomenon underscores the necessity for organizations to cultivate organizational environments which promote creativity and innovation among employees, thereby enhancing overall effectiveness and adaptability in a dynamic business environment. To achieve this behavior, organizations should create a work environment where employees can address challenges, generate and share ideas, and transform them into real-world solutions. This is especially the case in knowledge-based organizations with lower levels of bureaucratization and formalization and in which employees can directly impact organizational performance through business process, product, and service innovations (Scott & Bruce, 1994; Shalley & Gilson, 2004; Janssen, 2000).

Most of the innovative behavior in employees relies on their attitude towards managerial support and intrinsic motivation. Although numerous factors may influence such behavior, leadership style stands out as the most significant situational factor that directly shapes attitudes and organizational conditions conducive to the emergence and development of innovativeness among employees (Al-Adwan et al., 2021; Lin, 2023; Zhang et al., 2021). In this context, transformational leadership brings a fundamental shift in organizational management, as it is based on the leader's ability to inspire, motivate, and guide individuals toward achieving exceptional results, thereby further encouraging innovative behavior within the organization (Duerod & Mousavi Tayebi, 2024).

This paper analyzes the relationship between transformational leadership style and employees' innovative behavior through the following dimensions: idea exploration, idea generation, idea promotion, and idea implementation.

LITERATURE REVIEW

The theoretical response to the challenges facing today's organizations has given rise to leadership models as a way to overcome increasingly complex business conditions. Given the numerous factors that influence organizational behavior and the continuous changes in the environment, various leadership models have been developed that differ from each other in their structure, approach, and applicability depending on the needs of the organization (Northouse, 2018).

Transformational leadership implies the ability of a leader to motivate employees with his vision and charisma, creating working conditions in which employees will achieve above-average results (Afsar & Umrani, 2020). The foundation upon which transformational leadership is based is precisely the vision that the leader has cultivated in a way such that employees are willing to seek it and through which one can ensure the organization's strategic goals, with emphasis on fostering innovation and creating new knowledge (Bass & Riggio, 2006; Eisenbeiss & Boerner, 2013). Leaders who employ this style typically create an open-to-change workplace that encourages ongoing professional growth and enables employees to have the confidence to take action in their work. This type of leadership often produces concrete progress at the team and individual levels, which translates into greater teamwork, improved performance outcomes, and eventual advancement of the organization at large (Duerod & Mousavi Tayebi, 2024; Northouse, 2018).

Based on the widely used theoretical model presented by Bass (1985) and Avolio & Bass (2004), transformational leadership encompasses four essential dimensions: individualized consideration, intellectual stimulation, inspirational motivation, and idealized influence. Due to its scope, Shrestha (2020) argues that transformational leadership offers the most optimally effective problem-solving approach among other leadership models, supports organizational change, and results in high performance and job satisfaction. Research by Kim, Yang, and Lee (2023) indicates that all four dimensions of transformational leadership differently influence the development of organizational identification and employees' creative potential.

The idea of how to deal with the problems that today's groups face has led to leader styles as a way to get past more and more tricky work situations. With the many things that affect how groups act and the constant changes in their surroundings, different leader styles

have come up that are not the same in their form, method, and use based on what the group needs (Northouse 2018).

Transformational leadership is known for its ability to involve and excite workers by pushing them to go beyond what is expected and take part in their job growth (Afsar & Umrani, 2020). What makes this type of leadership different is its focus on making a shared vision that shows the plan of the organization. This vision-building aligns personal goals with company objectives and encourages employees to generate new ideas by thinking creatively and approaching challenges with a problem-solving mindset. (Bass & Riggio, 2006; Eisenbeiss & Boerner, 2013). Leaders who use this style usually create a workplace that welcomes change, supports ongoing job growth, and gives workers the trust to lead in their jobs. This type of leadership tends to bring real development at the team as well as individual level, leading to enhanced cooperation, higher performance outputs, and overall long-run growth of the organization (Duerod & Mousavi Tayebi, 2024; Northouse, 2018).

Based on the widely accepted theoretical framework developed by Bass (1985) and Avolio & Bass (2004), transformational leadership consists of four key elements: individualized consideration, intellectual stimulation, inspirational motivation, and idealized influence. Due to its range, Shrestha (2020) posits that transformational leadership offers a more effective problem-solving approach than other leadership models, fosters organizational change, and results in high performance and worker satisfaction. Research by Kim, Yang, and Lee (2023) supports that the four transformational leadership dimensions differently influence organizational identification development and employees' creative potential.

Individualized Consideration, as suggested by Shrestha (2020), is one of the essential dimensions of transformational leadership because it enables leaders to establish each employee's individual needs, strengths, and abilities. The dimension involves ongoing guidance and support, setting up a warm working environment, and motivating workers to enhance their individual and professional capacities. This type of leadership supports the positive organizational change process and improves the overall organizational performance. Individualized consideration, as Bass and Riggio (2006) emphasize, allows leaders to tailor their style to suit each person, and Shrestha (2020) emphasizes its importance in schools, where it supports learning culture and continuous development.

Intellectual Stimulation is all about challenging rational thought, intellectual growth, and reflective problem-solving approaches (Bass & Riggio, 2006; Chebon et al., 2019; Northouse, 2007). This approach stimulates employees to pursue new ideas and innovative means of performing tasks that can influence organizational change positively. Research by Eisenbeiss and Boerner (2013) substantiates the fact that intellectual stimulation positively

affects the creativity of employees, especially if individuals are receptive to questioning the status quo. Shrestha (2020) defines this dimension as one of the key drivers of change as it builds employees' intellectual stimulation, creativity, and critical thinking.

Inspirational motivation is one of the critical dimensions of transformational leadership, which helps to express a clear vision and higher expectations with enthusiasm, symbolism, and optimism. This helps to enable participation, collaboration, and commitment to organizational goals (Northouse, 2007; Shrestha, 2020). There is evidence to prove that inspirational motivation drives innovation, flexibility, and performance, especially in sectors such as education, healthcare, and services, whose performance is influenced directly by emotional identification with the leader (Chebon et al., 2019; Jun & Lee, 2023; Kim et al., 2023).

Idealized Influence is where the leaders set examples of the desired behavior and urge the subordinates to transcend self-interest to achieve goals in common. The charisma and moral example of the leader catalyze this influence, and it results in trust, loyalty, and respect for the leader by the followers (Avolio & Bass, 2004; Northouse, 2007). Such leaders do not rely on formal power only, but also express their vision and values through ethical conduct and personal example, inspiring others to commit themselves to shared objectives (Luthans, 2007). The followers look up to such leaders high in idealized influence as role models and automatically internalize their beliefs, attitudes, and values (Shrestha, 2020). This leadership quality is extremely significant in organizational change processes since it builds emotional connection and value orientation between leaders and organizational members. Eisenbeiß and Boerner (2013) highlight that this connection enables leaders to inspire collective motivation and establish a foundation of trust, collaboration, and long-term organizational development.

Modern business trends require employees to create and implement solutions within the organization, and therefore, their behavior plays a key role in defining it (Purc & Laguna, 2019). Innovation, in a scientific context, is defined through concepts such as creativity, innovation, innovative behavior, employee innovativeness, and innovative work behavior (Nguyen, 2021). Shalley's (1991) study suggests that innovative behavior can be driven by the implementation of creative goals and the exercise of autonomy in the workplace by employees. This behavior involves the generation and implementation of new and useful ideas that contribute to organizational goals. Berkun (2007) assumes that innovation is less about coming up with new ideas and more about the ability to implement them to achieve concrete benefits for the organization. He explains that innovative behavior is a skill that can be learned through creativity, knowledge, and determination, and that one can be an innovator if the right support and resources are provided.

De Jong and Den Hartog (2007) define innovative employee behavior as "the deliberate generation, introduction, and enactment of new ideas in a job, team, or organization to enhance performance at the individual, team, or organizational level." Three years later, they further specifically defined Innovative Work Behavior (IWB) as individual action to create and deliberately introduce (in a role, group, or organisation) new and useful ideas, processes, products, or procedures (De Jong & Den Hartog, 2010). In their model, they break innovative behavior into four fundamental dimensions, which include idea exploration, idea generation, idea promotion, and idea implementation. The four stages together encompass the entire process, ranging from the identification of an opportunity to the very application of innovation in business practices.

Idea Exploration, being the initial stage of innovative behavior, involves seeking out novel means of knowledge and technology that can reform existing organizational procedures (De Jong & Den Hartog, 2010). In this stage, employees challenge traditional work practices and seek opportunities for improvement. According to Janssen (2000), such behavior is that of committed employees who scour information even outside of formal channels. Mom et al. (2007) link such action with exploratory learning processes, in which newly gained knowledge and understanding form the foundation of potential innovations.

Idea Generation, according to De Jong and Den Hartog (2010), is the process of creating new and possibly valuable ideas that can potentially lead to better business outcomes. This calls for proposing new products, improving services, simplifying processes, or revisiting market strategies. With a special emphasis on divergent thinking and consolidation of knowledge, Yuan & Woodman (2010) and Scott & Bruce (1994) emphasize idea generation as a stepping stone in the process of innovation.

Idea Promotion, according to De Jong and Den Hartog (2010), is promoting one's ideas in the company to gain support from fellow employees and authorities. Those who excel at this are more likely to exhibit persistence even when faced with opposition from within and attempt to build networks that will aid in putting ideas into practice. As defined by Scott & Bruce (1994) and De Jong & Den Hartog (2010), such people are distinct in their clear communication of proposals and persistent championing of their implementation.

Idea Implementation is the final and crucial phase of innovative behavior when ideas are translated into viable and lasting organizational practice. De Jong and Den Hartog (2010) define this stage as a series of activities to translate ideas into valuable and lasting changes. Such a process involves developing innovative solutions, testing and refining them, and in a systematic manner implementing them to improve performance. As observed by Damanpour & Schneider (2006), successful innovation relies on management's openness to change and the

alignment of new ideas with the organization's structure and capabilities. Birkinshaw, Hamel, and Mol (2008) state that modifying decision-making habits, leadership, and interaction with employees can enhance organizational efficiency and competitiveness significantly.

METHODOLOGY

This study employs a quantitative research design to examine how transformational leadership impacts innovative employee behavior among employees in companies operating in Bosnia and Herzegovina. In accordance with the preceding discourse, the following hypothesis has been articulated: *"The transformational leadership style has a positive impact on innovative employee behavior in companies in Federation of Bosnia and Herzegovina."*

The research strategy is survey-based using a structured questionnaire. A random sampling technique was used in order to ensure representation of different industries and organizational sizes. The empirical research involved a sample of 116 respondents, specifically focusing on employees from various industries throughout the Federation of Bosnia and Herzegovina.

Within the scope of the primary research (field research), data were collected using the survey method, specifically through the technique of written questionnaires. A customized survey questionnaire was used as the primary data collection instrument, designed according to the thematic components of the research. The questionnaire was structured into the following sections: (1) Basic demographic information about the respondent, (2) Employee innovative behavior, and (3) Leadership style. The survey included both nominal scale questions and questions measured using a 5-point interval-based Likert scale ranging from strongly disagree (1) to strongly agree(5).

In order to analyze the data and test the proposed hypothesis the study employed a structured analytical approach which was comprised of descriptive statistics, correlation analysis and regression analysis. Descriptive statistics was used to summarize the demographic characteristics of the sample as well as mean and standard deviation for key variables: transformational leadership and innovative employee behavior. Correlation analysis was conducted to examine the strength and direction of the relationship between transformational leadership and innovative employee behavior. In order to test our main hypothesis regression analysis was performed in order to assess the predictive power and statistical significance of transformational leadership in explaining variations in employee innovative behavior. The analysis was conducted using Microsoft Excel and IBM SPSS Statistics.

The dependent variable in this research refers to employee innovative behavior, which was measured using an adapted version of the methodology developed by De Jong and Den

Hartog (2010). Employee innovative work behavior was assessed using indicators that reflect the following dimensions: Idea Exploration (IE), Idea Generation (IG), Idea Promotion (IP), Idea Implementation (II). In addition to these, the questionnaire also included indicators related to the effectiveness of innovation-related activities (EIA). A summary of these variable indicators is provided in Table 1.

Table 1. Indicators of the Variables “Innovative Behavior” and “Effectiveness of Innovation Activities”

Variable	Dimension	Code	Statement / Indicator
Innovative Work Behavior	Idea Exploration (IE)	IE ₁	I often pay attention to things that are not part of my formal job duties.
		IE ₂	I often look for opportunities to improve things.
		IE ₃	I often consider opportunities for innovation.
		IE ₄	I often think about how things can be improved.
		IE ₅	I often reflect on new products and services.
	Idea Generation (IG)	IG ₁	I often search for new working methods, techniques, and tools.
		IG ₂	I often suggest original solutions to problems in the organization.
		IG ₃	I frequently create and present new ideas.
		IG ₄	I often explore new ways of performing tasks.
	Idea Promotion (IP)	IP ₁	I often seek support for new ideas.
		IP ₂	I often seek approval and recognition for innovative ideas.
		IP ₃	I make other members of the organization enthusiastic about innovative ideas.
		IP ₄	I try to convince others in the organization to support innovative ideas.
	Idea Implementation (II)	II ₁	I often transform innovative ideas into usable applications.
		II ₂	I systematically integrate innovative ideas into work practices.
		II ₃	I strive to contribute to the implementation of new ideas.
II ₄		I make efforts to develop new things.	
Effectiveness of Innovation Activities		EIA ₁	At my workplace, we often propose ways to improve current products and services.
		EIA ₂	At my workplace, we frequently develop ideas to improve work practices.
		EIA ₃	At my workplace, we actively adopt new knowledge.
		EIA ₄	At my workplace, we actively contribute to the development of new products and services.
		EIA ₅	At my workplace, we regularly make suggestions for improving organizational processes.

The independent variable in this research is transformational leadership, and the indicators used to measure it were derived from the Multifactor Leadership Questionnaire (MLQ) measurement instrument. The indicators used in the study are presented in Table 2.

Table 2. Indicators of the MLQ Measurement Instrument

Variable	Dimension	Code	Statement / Indicator
Transformational Leadership	Idealized Influence (II)	II ₁	Your supervisor makes you feel comfortable in their presence.
		II ₂	Others have complete faith in your supervisor.
		II ₃	You are proud to be associated with your supervisor.
	Inspirational Motivation (IM)	IM ₁	Your supervisor expresses what can and should be done in just a few simple words.
		IM ₂	The superior explains vividly what can be done.
		IM ₃	Your supervisor helps you find meaning in your work.
	Intellectual Stimulation (IS)	IS ₁	Your supervisor encourages others to think about old problems in new ways.
		IS ₂	Your supervisor suggests new ways of looking at how to solve things.
		IS ₃	Your supervisor encourages you to consider ideas you have not examined before.
	Individualized Consideration (IC)	IC ₁	Your supervisor helps others develop themselves.
		IC ₂	Your supervisor provides feedback on how they think you are progressing.
		IC ₃	Your supervisor pays attention to those who seem neglected.

The data collected through the questionnaire were subjected to a reliability analysis. The reliability of the measurement scales used in the questionnaire was tested by calculating the Cronbach's Alpha coefficient.

RESULTS

Reliability Estimation

As part of the results analysis, the reliability of the measurement scales was assessed using Cronbach's Alpha coefficient. The obtained values for all applied scales exceed the threshold of 0.70, indicating a satisfactory level of internal consistency of the instruments. These results confirm that the measurement instruments are reliable and suitable for further statistical analysis, as coefficients above 0.70 suggest that the items within each scale are internally consistent and measure the same latent variable.

Table 3. Reliability Statistics for the Measurement Scales Used in the Study

Measurement Scale	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Item
Transformational Leadership	0,953	0,952	12
Idea Exploration	0,823	0,835	5
Idea Generation	0,849	0,849	4
Idea Promotion	0,862	0,862	4
Idea Implementation	0,889	0,892	4
Effectiveness of Innovation Activities	0,912	0,912	5

Descriptive Statistical Indicators for Transformational Leadership Style Indicators

Considering that the measurement instrument used in this study operationalized variables through indicators measured on a closed-ended interval scale—specifically, a five-point Likert scale—descriptive statistical analysis was performed (Table 4).

Table 4. Distribution of Respondents' Answers for Transformational Leadership Indicators

Statement / Indicator	Code	Never		Occasionally		Sometimes		Relatively Often		Often, if not Always	
		[1]	%	[1]	%	[1]	%	[1]	%	[1]	%
Your supervisor makes you feel comfortable in their presence.	II ₁	7	6,03	9	7,76	17	14,66	28	24,14	55	47,41
Others have complete faith in your supervisor.	II ₂	10	8,62	13	11,21	30	25,86	30	25,86	33	28,45
You are proud to be associated with your supervisor.	II ₃	22	18,97	24	20,69	30	25,86	22	18,97	18	15,52
Your supervisor expresses what can and should be done in just a few simple words..	IM ₁	4	3,45	9	7,76	15	12,93	42	36,21	46	39,66
The superior explains vividly what can be done	IM ₂	8	6,90	15	12,93	27	23,28	40	34,48	26	22,41
Your supervisor helps you find meaning in your work.	IM ₃	19	16,38	16	13,79	21	18,10	31	26,72	29	25,00
Your supervisor encourages others to think about old problems in new ways.	IS ₁	11	9,48	14	12,07	30	25,86	25	21,55	36	31,03
Your supervisor suggests new ways of looking at how to solve things.	IS ₂	9	7,76	13	11,21	29	25,00	21	18,10	44	37,93
Your supervisor encourages you to consider ideas you have not examined before.	IS ₃	14	12,07	24	20,69	17	14,66	31	26,72	30	25,86

Your supervisor helps others develop themselves.	IC ₁	6	5,17	17	14,66	23	19,83	28	24,14	42	36,21
Your supervisor provides feedback on how they think you are progressing.	IC ₂	9	7,76	20	17,24	20	17,24	28	24,14	39	33,62
Your supervisor pays attention to those who seem neglected.	IC ₃	22	18,97	14	12,07	27	23,28	29	25,00	24	20,69

Table 4...

After analyzing the frequency distribution, descriptive statistical indicators were calculated for each variable. The results are presented in Table 5, which includes data on leadership indicators in terms of the mean, mode, median, and standard deviation for each item.

Table 5. Descriptive Statistics for Leadership Indicators

Indicator	Code	Mean	Median	Mode	Standard Deviation
Your supervisor makes you feel comfortable in their presence.	II ₁	2,99	3,00	4	1,219
Others have complete faith in your supervisor.	II ₂	2,54	3,00	4	1,254
You are proud to be associated with your supervisor.	II ₃	1,91	2,00	2	1,336
Your supervisor expresses what can and should be done in just a few simple words.	IM ₁	3,01	3,00	4	1,075
The superior explains vividly what can be done.	IM ₂	2,53	3,00	3	1,176
Your supervisor helps you find meaning in your work.	IM ₃	2,30	3,00	3	1,409
Your supervisor encourages others to think about old problems in new ways.	IS ₁	2,53	3,00	4	1,302
Your supervisor suggests new ways of looking at how to solve things.	IS ₂	2,67	3,00	4	1,297
Your supervisor encourages you to consider ideas you have not examined before.	IS ₃	2,34	3,00	3	1,376
Your supervisor helps others develop themselves.	IC ₁	2,72	3,00	4	1,243
Your supervisor provides feedback on how they think you are progressing.	IC ₂	2,59	3,00	4	1,319
Your supervisor pays attention to those who seem neglected.	IC ₃	2,16	2,00	3	1,395

The results of our analysis, as shown in Table 5, indicate that the arithmetic means of the strategic competence indicators range from 1.91 to 3.01. This generally suggests a low level of transformational leadership for several of the indicators used in the assessment. To generalize the analysis of transformational leadership indicators, descriptive statistical measures were also calculated at the variable level. The value of each variable was operationalized through the average score of the respondents' answers to the respective indicators. More specifically, the value of transformational leadership was calculated as the

simple arithmetic mean of the scores for the indicators measuring idealized influence (II), inspirational motivation (IM), intellectual stimulation (IS), and individualized consideration (IC).

Table 6. Descriptive Statistics for the Transformational Leadership Style

Varijable	Mean	Median	Mode	Standard Deviation
Transformational Leadership	2,52	2,71	2,67	1,044

Descriptive Statistical Indicators of Leadership and Employees' Innovative Behavior and Innovation Outcomes

Employee innovative behavior was observed through twenty-two indicators, each measured using a five-point Likert scale. Based on the collected data, a distribution of respondents' answers was compiled and is presented in Table 7.

Table 7. Distribution of Respondents' Answers for Indicators of Employee Innovative Behavior and Innovation Outcomes

Indicator	Code	Strongly Disagree		Disagree		Neither Agree nor Disagree		Agree		Strongly Agree	
		[1]	%	[1]	%	[1]	%	[1]	%	[1]	%
I often pay attention to things that are not part of my formal job duties.	IE ₁	4	3,45	8	6,90	27	23,28	41	35,34	36	31,03
I often look for opportunities to improve things.	IE ₂	1	0,86	6	5,17	20	17,24	42	36,21	47	40,52
I often consider opportunities for innovation.	IE ₃	2	1,72	9	7,76	30	25,86	34	29,31	41	35,34
I often reflect on how things could be improved.	IE ₄	0	0,00	5	4,31	14	12,07	48	41,38	49	42,24
I often consider new products and services.	IE ₅	5	4,31	13	11,21	28	24,14	36	31,03	34	29,31
I often search for new working methods, techniques, and tools.	IG ₁	3	2,59	9	7,76	24	20,69	38	32,76	42	36,21
I often propose original solutions to problems within the organization.	IG ₂	3	2,59	10	8,62	29	25,00	41	35,34	33	28,45
I frequently create and present new ideas.	IG ₃	4	3,45	13	11,21	34	29,31	29	25,00	36	31,03
I often explore new ways to perform tasks.	IG ₄	2	1,72	9	7,76	25	21,55	47	40,52	33	28,45
I often seek support for new ideas.	IP ₁	3	2,59	26	22,41	27	23,28	33	28,45	27	23,28
I often seek approval and recognition for innovative ideas.	IP ₂	6	5,17	25	21,55	32	27,59	32	27,59	21	18,10

I make other members of the organization enthusiastic about innovative ideas.	IP ₃	6	5,17	24	20,69	30	25,86	37	31,90	19	16,38	Table 7...
I try to persuade other members of the organization to support innovative ideas.	IP ₄	3	2,59	21	18,10	32	27,59	27	23,28	33	28,45	
I often transform innovative ideas into usable applications.	II ₁	12	10,34	21	18,10	43	37,07	18	15,52	22	18,97	
I systematically present innovative ideas in work practices.	II ₂	4	3,45	22	18,97	41	35,34	25	21,55	24	20,69	
I strive to contribute to the implementation of new ideas.	II ₃	1	0,86	10	8,62	22	18,97	47	40,52	36	31,03	
I put effort into developing new things.	II ₄	4	3,45	12	10,34	24	20,69	43	37,07	33	28,45	
At my workplace, we often suggest ways to improve current products and services.	EIA ₁	2	1,72	16	13,79	24	20,69	40	34,48	34	29,31	
At my workplace, we frequently develop ideas to improve work practices.	EIA ₂	3	2,59	18	15,52	23	19,83	36	31,03	36	31,03	
At my workplace, we actively adopt new knowledge.	EIA ₃	3	2,59	17	14,66	18	15,52	31	26,72	47	40,52	
At my workplace, we actively contribute to the development of new products and services.	EIA ₄	9	7,76	13	11,21	26	22,41	31	26,72	37	31,90	
At my workplace, we make suggestions to improve work organization.	EIA ₅	3	2,59	13	11,21	20	17,24	36	31,03	44	37,93	

Descriptive statistical indicators were calculated for the data in the previous table, similar to those of transformational leadership. The obtained results are shown in Table 8.

Table 8. Descriptive Statistics for Indicators of Employee Innovative Behavior and Innovation Outcomes

Varijable	Mean	Median	Mode	Standard Deviation
I often pay attention to things that are not part of my formal job duties.	3,84	4,00	4	1,055
I often look for opportunities to improve things.	4,10	4,00	5	0,927
I often consider opportunities for innovation.	3,89	4,00	5	1,036
I often reflect on how things could be improved.	4,22	4,00	5	0,822
I often consider new products and services.	3,70	4,00	4	1,136
I often search for new working methods, techniques, and tools.	3,92	4,00	5	1,056

I often propose original solutions to problems within the organization.	3,78	4,00	4	1,037
I frequently create and present new ideas.	3,69	4,00	5	1,130
I often explore new ways to perform tasks.	3,86	4,00	4	0,977
I often seek support for new ideas.	3,47	4,00	4	1,153
I often seek approval and recognition for innovative ideas.	3,32	3,00	3*	1,154
I make other members of the organization enthusiastic about innovative ideas.	3,34	3,00	4	1,134
I try to persuade other members of the organization to support innovative ideas.	3,57	4,00	5	1,159
I often transform innovative ideas into usable applications.	3,15	3,00	3	1,225
I systematically present innovative ideas in work practices.	3,37	3,00	3	1,115
I strive to contribute to the implementation of new ideas.	3,92	4,00	4	0,961
I put effort into developing new things.	3,77	4,00	4	1,082
At my workplace, we often suggest ways to improve current products and services.	3,76	4,00	4	1,076
At my workplace, we frequently develop ideas to improve work practices.	3,72	4,00	4*	1,139
At my workplace, we actively adopt new knowledge.	3,88	4,00	5	1,173
At my workplace, we actively contribute to the development of new products and services.	3,64	4,00	5	1,254
At my workplace, we make suggestions to improve work organization.	3,91	4,00	5	1,111

* In cases with multiple modes, the lowest value is reported.

To take a more systematic approach to analyzing employee innovative behavior, descriptive statistical indicators were also calculated at the level of the individual elements or dimensions through which this behavior was observed. The value of each element, to allow for mutual comparison, was represented by the simple arithmetic mean of its associated indicators. The obtained results are presented in Table 9.

Table 9. Descriptive Statistics for Dimensions of Employee Innovative Behavior and Its Outcomes

Dimension / Outcome of Innovative Behavior	Mean	Median	Mode	Standard Deviation
Idea Exploration	3,95	4,20	4,20	0,766
Idea Generation	3,81	4,00	3,50*	0,872
Idea Promotion	3,42	3,50	4,00	0,967
Idea Implementation	3,55	3,50	3,50	0,952
Innovation Outcomes	3,78	4,00	5,00	0,991

By ranking the average values obtained, we can conclude that employees in Bosnian and Herzegovinian companies primarily focus on exploring and generating ideas. In contrast, activities related to promoting and implementing those ideas are carried out with somewhat lower intensity. The overall outcome of conducting these activities was rated above average.

Correlation Analysis Results

Additionally, the correlation analysis examined the relationship between leadership style, employee innovation activities, and their outcomes. In this paper, the strength and direction of linear associations between variables were tested using the Pearson correlation coefficient, the most widely used measure of linear correlation between random variables. The results of the conducted correlation analysis are presented in Table 10.

Table 10. Results of the Correlation Analysis

	Transformational Leadership	Idea Exploration	Idea Generation	Idea Promotion	Idea Implementation	Innovation Outcomes
Transformational Leadership	1	0,462**	0,520**	0,425**	0,502**	0,563**
Idea Exploration		1	0,725**	0,527**	0,695**	0,631**
Idea Generation			1	0,636**	0,715**	0,706**
Idea Promotion				1	0,665**	0,622**
Idea Implementation					1	0,718**
Innovation Outcomes						1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed)

The results of the Pearson correlation coefficients presented in the Table 10 show that there is a direct and positive relationship between leadership style, employee innovative behavior, and the outcomes of such behavior, as well as among their components. In other words, a higher intensity of one variable corresponds to a higher intensity of the others, and vice versa. Various interpretations of the strength of correlation exist in the literature. For general orientation in this study, the interpretation scale used is presented in Table 11.

Table 11. Interpretation of the Pearson Correlation Coefficient

Absolute Value of the Correlation Coefficient	Interpretation
0	No correlation
do 0,20	Negligible correlation – almost none
0,20-0,40	Low correlation – weak association
0,40-0,70	Moderate correlation
0,70-0,90	High correlation – strong association
0,90-1	Very high correlation
1	Perfect correlation

Source: Fazlović, S., *Primijenjena statistika*, OFF SET, Tuzla, 2013., str. 353.

Based on the obtained results of the Pearson correlation coefficient, and following the adopted interpretation criteria for assessing the strength of relationships, the following conclusions can be drawn:

- At the 0.01 significance level, there is a significant but low positive correlation between transformational leadership and the following dimensions: Idea exploration ($r = 0.315$), Idea promotion ($r = 0.360$), Idea implementation ($r = 0.338$).
- There is a moderate positive linear correlation between transformational leadership and all elements of employee innovative behavior: Idea exploration ($r = 0.462$), Idea generation ($r = 0.520$), Idea promotion ($r = 0.425$), Idea implementation ($r = 0.502$), Innovation outcomes ($r = 0.563$). Additionally, a moderate correlation was found between: Idea exploration and idea promotion ($r = 0.527$), Idea exploration and idea implementation ($r = 0.695$), Idea exploration and innovation outcomes ($r = 0.631$), Idea generation and idea promotion ($r = 0.636$), Idea promotion and idea implementation ($r = 0.665$), Idea promotion and innovation outcomes ($r = 0.622$).
- A high positive correlation (strong association) was identified between: Idea exploration and idea generation ($r = 0.725$), Idea generation and idea implementation ($r = 0.715$), Idea generation and innovation outcomes ($r = 0.706$), Idea implementation and innovation outcomes ($r = 0.718$).

Testing the Impact of Transformational Leadership Style on Employee Innovative Behavior in Companies in Federation of Bosnia and Herzegovina

The relationship between transformational leadership style and employee innovative behavior was examined through regression analysis, with the key findings outlined below. In this analysis, model 1 refers to the effect of transformational leadership on idea exploration, model 2

refers to the effect of transformational leadership on idea generation, model 3 reflects the effect of transformational leadership on idea promotion, and model 4 covers the effect of transformational leadership on idea implementation. The values of transformational leadership and the individual dimensions of employee innovative behavior were operationalized through the simple arithmetic mean of the respondents' answers to their corresponding indicators. The first set of results refers to the evaluation of the models, which is presented below.

Table 12. Evaluation of Regression Models – The Impact of Transformational Leadership on Elements of Employee Innovative Behavior

Model Summary				
Model	R	Coefficient of Determination	Adjusted Coefficient of Determination	Standard Error of the Estimate
1	0,462 ^a	0,213	0,207	0,68220
2	0,520 ^a	0,271	0,264	0,74826
3	0,425 ^a	0,181	0,173	0,87960
4	0,502 ^a	0,252	0,245	0,82743

a. Predictors: (Constant), Transformational Leadership

b. Dependent Variables: Idea Exploration, Idea Generation, Idea Promotion, and Idea Implementation

ANOVA

	Model	Sum of Squares	df	Mean Square	F	sig.
1	Regression	14,394	1	14,394	30,928	0,000
	Residual	53,056	114	0,465		
	Total	67,450	115			
2	Regression	23,687	1	23,687	42,305	0,000
	Residual	63,828	114	0,560		
	Total	87,515	115			
3	Regression	19,450	1	19,450	25,139	0,000
	Residual	88,202	114	0,774		
	Total	107,652	115			
4	Regression	26,265	1	26,265	38,362	0,000
	Residual	78,050	114	0,685		
	Total	104,315	115			

The coefficient of determination reflects the extent to which variability in the dependent variable can be accounted for by the independent variable(s) in the model. In our case, model 1 explains 21.3% of the variance, model 2 explains 27.1%, model 3 explains 18.1%, and model 4 explains 25.2% of the variance in employee innovative behavior.

The statistical significance of these results is shown in the ANOVA table (*Sig.* < 0.05), confirming that all four models are statistically significant. The next step is to assess how much the independent variable contributes to the prediction of the dependent variable, which is indicated by the beta coefficients in the standardized coefficients section of Table 13. Whether a variable makes a statistically significant contribution to the regression equation depends on the significance level (*Sig.*) in the last column of the coefficients table. Specifically, if the *p*-value is less than 0.05, the variable is considered to make a significant contribution to the prediction of the dependent variable. In our case, transformational leadership makes a statistically significant contribution to the prediction of all four elements of employee innovative behavior: Idea exploration; Idea generation; Idea promotion; Idea implementation

Table 13. Regression Coefficients – The Impact of Transformational Leadership on Elements of Employee Innovative Behavior

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. error	beta		
1	(Constant)	3,093	0,166		18,606	0,000
		0,339	0,061	0,462	5,561	0,000
2	(Constant)	2,718	0,182		14,905	0,000
		0,435	0,067	0,520	6,504	0,000
3	(Constant)	2,431	0,214		11,339	0,000
		0,394	0,079	0,425	5,014	0,000
4	(Constant)	2,397	0,202		11,886	0,000
		0,458	0,074	0,502	6,194	0,000

a. Dependent Variables: Idea Exploration, Idea Generation, Idea Promotion, Idea Implementation

Based on the above considerations, the proposed research hypothesis is accepted, confirming that the transformational leadership style positively influences employee innovative behavior in companies within the Federation of Bosnia and Herzegovina.

DISCUSSION

The results of this study confirm the existence of a statistically significant and positive correlation between the transformational leadership style and all the main dimensions of innovative employee behavior. Moderate to extremely positive correlations vary between 0.425 and 0.563. The results show that the stronger the presence of transformational leadership within the organization, the greater the impact on strengthening the innovative behavior of employees, and therefore directly supports the development and implementation of new solutions.

These results confirm previous research by Afsar and Umrani (2020), who concluded that transformational leadership positively and directly affects employee innovation. The same result is given by Jun and Lee (2023), who emphasize commitment to change as a key mediator of the relationship between leadership and innovation. Organizational support for creativity is also known as a moderating variable that affects the strength of this relationship. In the same vein, Eisenbeiss, van Knippenberg, and Boerner (2008) found that transformational leadership can positively influence employee innovativeness, particularly when leaders actively stimulate employees' intellectual development and individual motivation.

The findings of the regression analysis further confirm a positive and statistically significant effect of transformational leadership on all four dimensions of innovative behavior. The coefficient of determination (R^2) values between 18.1% and 27.1% indicate that transformational leadership explains a significant portion of the variance in the dependent variables. These values are consistent with the results of Afsar and Umrani (2020). Similar findings were confirmed by Gumusluoglu and Ilsev (2009), highlighting the role of transformational leaders in creating a clear vision that triggers innovation. Although the proportion of explained variance indicates that other variables also influence innovative behavior, the high statistical significance of all models (Sig. < 0.001) supports the idea that leadership is at the heart of fostering a work environment that supports innovation. Of particular interest is the fact that the strongest effect of transformational leadership was found for the dimension of idea generation ($\beta = 0.520$), indicating that leaders play their most critical role in the initial stages of the creative process. The results obtained are in line with the results of Jun and Lee (2023), who describe the initial stages of idea formation as the stage in which leadership has the greatest impact. The results also coincide with the findings of Reuvers et al. (2008), who observed that transformational leaders significantly enable the creative potential of workers by encouraging freedom of expression and the development of new proposals. All standardized beta coefficients calculated in this study were statistically significant ($p < 0.05$), indicating that transformational leadership directly and measurably affects the creation of a work environment conducive to innovation.

CONCLUSION

The findings of the present study provide empirically testable evidence that transformational leadership style is a significant predictor of innovative behavior among employees in organizations. The findings highlight the crucial role of transformational leadership in all key stages of the innovation process, from initial idea generation and search to promotion, implementation, and realization. These findings are consistent in a conceptual sense with

existing models that emphasize leadership's role in fostering an innovative organizational climate, and lend further support in the context of transitional economies such as Bosnia and Herzegovina.

This research makes a theoretical contribution by enhancing our understanding of leadership styles and innovative behavior, supported by empirical evidence from an underrepresented geographical area in the existing literature. By doing so, it enriches the global dialogue on leadership and innovation, particularly within complex transition economies where there is such a huge need for innovation, but systemic environments are typically not supportive.

Research identifies transformational leadership as a key strategic lever for organizational innovation capacity. The results can serve as the foundation for creating targeted HR policy, management training programs, and assessment tools that enable the selection and development of managers with the potential to create a culture of innovation.

Lastly, the social impact of this research in a broader context is that if the development of transformational leadership is routinely enabled and nurtured, one can reasonably expect not only more quantity of innovation within organizations but also a wider contribution to social and economic progress. Leadership, in this case, can no longer be viewed as an internal process of an organization but as a leading force of social progress and transformative change.

STUDY LIMITATIONS

The primary limitations of this research are directly related to the sample size. Although the sample includes over 110 respondents, which is generally sufficient for an analysis of this type, a larger, more inclusive sample would generate more quality results that better reflect the larger population.

The second main limitation is related to the time constraints required to obtain research data. Research involving larger sample sizes usually requires more time to design, collect, and analyze data, and this time was limited in this study.

The third limitation relates to the method of data collection. Both electronic publication on Google Forms and face-to-face surveys were used. However, the low response rate to the electronic questionnaire required a personal approach to the respondents, which affected the number of questionnaires that could be returned within that timeframe. This caused the mixed-methods design, pragmatic as it is, to potentially bring in some inconsistencies in responses and response biases in the findings

RECOMMENDATIONS

The issue of developing the competitiveness of Bosnian and Herzegovinian companies is still very current, and innovation is one of the main drivers of increased organizational effectiveness and market position. It is therefore no surprise that national governments, as well as multilateral institutions, are still keen on investing in innovation in local companies.

This study can serve as a foundation for further and more in-depth research in the area of workplace behavior, particularly employee creativity and innovation. Future studies would be assisted by identifying the most significant variables that influence employees to be more creative and assist in bringing about greater innovative outcomes in the workplace. Though transformational leadership was only one example used in this study, it would be scientifically and pragmatically valuable to study the effects of other styles—or combinations thereof—of leadership that can result in optimal consequences in stimulating innovative employee conduct.

Furthermore, from a practical point of view, the findings of this and future studies can be used to inform the development of evidence-based programs for organizational-level innovation enhancement. The findings can also inform evidence-based recommendations to managers and organizational leaders on how to create a work environment that supports creativity and innovation and how to unleash that energy into the continuous improvement of organizational performance and strategic goals.

REFERENCES

- Afsar, B., & Umrani, W. A. (2020). Transformational leadership and innovative work behavior: The role of motivation to learn, task complexity and innovation climate. *European Journal of Innovation Management*, 23(3), 402-428. <https://doi.org/10.1108/EJIM-12-2018-0257>
- Agazu, B. G., Kero, C. A., & Debela, K. L. (2025). Transformational leadership and firm performance: a systematic literature review. *Journal of Innovation and Entrepreneurship*, 14(1), 29. <https://doi.org/10.1186/s13731-025-00476-x>
- Al-Adwan, A. S., et al. (2021). *The effect of leadership styles on employees' innovative work behavior*. *Management Science Letters* 11 (2021) 239–246. DOI: 10.5267/j.msl.2020.8.010
- Ariyani, N., & Hidayati, S. (2018). Influence of transformational leadership and work engagement on innovative behavior. *Etikonomi*, 17(2), 275-284.
- Avolio, B. J., & Bass, B. M. (2004). Multifactor leadership questionnaire. Manual and sampler set (3rd ed.). Mindgarden.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Psychology Press.
- Bass, B. M. (1985). Liderstvo i performanse iznad očekivanja. *Academy of Management Review*, 12 (4), 756. <https://doi.org/10.2307/258081>
- Bendak, S., Shikhli, A. M., & Abdel-Razek, R. H. (2020). How changing organizational culture can enhance innovation: Development of the innovative culture enhancement framework. *Cogent Business & Management*, 7(1), 1712125. <https://doi.org/10.1080/23311975.2020.1712125>
- Berkun, S. (2007). *The myths of innovation*. O'Reilly Media.
- Birkinshaw, J., Hamel, G., & Mol, M. J. (2008). Management innovation. *Academy of management Review*, 33(4), 825-845. <https://doi.org/10.5465/amr.2008.34421969>

- Chebon, S. K., Aruasa, W. K., & Chirchir, L. K. (2019). Influence of individualized consideration and intellectual stimulation on employee performance: lessons from Moi Teaching and Referral Hospital, Eldoret, Kenya. *IOSR Journal of Humanities and Social Science*, 24(7), 11-22. DOI: 10.9790/0837-2407041122
- Ćosić, M., Tomić, L., & Mesarević, A. (2023). Analiza globalnog indeksa inovativnosti srbije i bosne i hercegovine. *Trendovi u poslovanju*, 1(21), 84-90. DOI: 10.5937/trendpos2301084C
- Damanpour, F., & Schneider, M. (2006). Phases of the adoption of innovation in organizations: effects of environment, organization and top managers 1. *British journal of Management*, 17(3), 215-236. <https://doi.org/10.1111/j.1467-8551.2006.00498.x>
- De Jong, J. P., & Den Hartog, D. N. (2007). How leaders influence employees' innovative behaviour. *European Journal of innovation management*, 10(1), 41-64. <https://doi.org/10.1108/14601060710720546>
- De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity and innovation management*, 19(1), 23-36. <https://doi.org/10.1111/j.1467-8691.2010.00547.x>
- Duerod, M., & Mousavi Tayebi, S. M. (2024). Impact of leadership style on employee creativity and knowledge sharing in the IT industry in Bosnia and Herzegovina. *International Journal of Economics, Commerce and Management*, 12(5), 14–28.
- Eisenbeiss, S. A., & Boerner, S. (2013). A double-edged sword: Transformational leadership and individual creativity. *British Journal of Management*, 24(1), 54–68. <https://doi.org/10.1111/j.1467-8551.2011.00786.x>
- Eisenbeiss, S. A., van Knippenberg, D., & Boerner, S. (2008). Transformational leadership and team innovation: Integrating team climate principles. *Journal of Applied Psychology*, 93(6), 1438–1446.
- Fazlović, S. (2013). Primijenjena statistika. *Tuzla: OFF-SET*.
- Gumusluoglu, L., & Ilsev, A. (2009). Transformational leadership and organizational innovation: The roles of internal and external support for innovation. *Journal of Product Innovation Management*, 26(3), 264–277.
- Janssen, O. (2000). Job demands, perceptions of effort–reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287–302. <https://doi.org/10.1348/096317900167038>
- Jun, K., & Lee, J. (2023). Transformational leadership and followers' innovative behavior: Roles of commitment to change and organizational support for creativity. *Behavioral Sciences*, 13(4), 320. <https://doi.org/10.3390/bs13040320>
- Kim, J. K., Yang, J. J., & Lee, Y. K. (2023). The impact of transformational leadership on service employees in the hotel industry. *Behavioral Sciences*, 13(9), 731. <https://doi.org/10.3390/bs13090731>
- Lin, Q. (2023). Transformational leadership and innovative work behavior: The role of identification, voice and innovation climate. *International Journal of Hospitality Management*, 113. <https://doi.org/10.1016/j.ijhm.2023.103521>
- Luthans, F. (2007). *Organizational behavior* (11th ed.). McGraw-Hill.
- Mom, T. J., Van Den Bosch, F. A., & Volberda, H. W. (2007). Investigating managers' exploration and exploitation activities: The influence of top-down, bottom-up, and horizontal knowledge inflows. *Journal of management studies*, 44(6), 910-931. <https://doi.org/10.1111/j.1467-6486.2007.00697.x>
- Nguyen, N. P. (2021). Employee innovativeness: A conceptual framework. *Tạp chí Khoa học và Công nghệ-Đại học Đà Nẵng*, 48-53.
- Northouse, P. G. (2007). *Leadership: theory and practice*. 4th ed. SAGE Publications.
- Northouse, P. G. (2018). *Leadership: Theory and practice* (8th ed.). Sage Publications.
- Purc, E., & Laguna, M. (2019). Personal values and innovative behavior of employees. *Frontiers in Psychology*, 10, Article 865. <https://doi.org/10.3389/fpsyg.2019.00865>
- Reuvers, M., van Engen, M. L., Vinkenburg, C. J., & Wilson-Evered, E. (2008). Transformational leadership and innovative work behaviour: Exploring the relevance of gender differences. *Creativity and Innovation Management*, 17(3), 227–244. <https://doi.org/10.1111/j.1467-8691.2008.00487.x>
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580–607. <https://doi.org/10.2307/256701>
- Shalley, C. E. (1991). Effects of productivity goals, creativity goals, and personal discretion on individual creativity. *Journal of Applied Psychology*, 76(2), 179–185. <https://doi.org/10.1037/0021-9010.76.2.179>
- Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly*, 15(1), 33–53. <https://doi.org/10.1016/j.leaqua.2003.12.004>

Shrestha, M. (2020). Transformational leadership and its dimensions: Contributions in organizational change among schools. *BSSS: Journal of Management*, 11(10), 112-131. <https://doi.org/10.51767/jm1107>

Yuan, F., & Woodman, R. W. (2010). Innovative behavior in the workplace: The role of performance and image outcome expectations. *Academy of management journal*, 53(2), 323-342. <https://doi.org/10.5465/amj.2010.49388995>

Zhang, Q., Abdullah, A., Hossan, D., & Hou, Z. (2021). The effect of transformational leadership on innovative work behavior with moderating role of internal locus of control and psychological empowerment. *Management Science Letters*, 11(4), 1267-1276. DOI: 10.5267/j.msl.2020.11.012