Research Article

Enhancing Remote Work Performance through Effective Leadership

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ARTICLE INFO	ABSTRACT
	The COVID-19 pandemic has significantly reshaped work dynamics, pushing remote work to the forefront. This study explores the impact of transformational leadership on employee performance in remote working environments. Conducted among 231 respondents from various sectors in Bosnia and Herzegovina, the research investigates how leadership styles affect employee performance in a post-pandemic period. The findings highlight that transformational leadership significantly enhances employee performance across all dimensions. Remote working benefits, however, show negligible impact on performance, while remote working disadvantages and job autonomy have medium to large effects. These results underline the importance of effective leadership and autonomy in optimizing employee performance in remote work settings. These insights highlight the need for organizations to adapt their leadership strategies to the evolving digital work environment, ensuring that remote work remains a viable and productive option for the future. Research provides valuable guidance for businesses aiming to navigate the new normal successfully, emphasizing the crucial role of transformational leadership in the digital age. **Keywords:** Transformational leadership, remote work, employee performance, Bosnia and Herzegovina

INTRODUCTION

The onset of the COVID-19 pandemic in late 2019 introduced a worldwide crisis that not only changed day-to-day lifestyles but also reshaped workplace dynamics. Bosnia and Herzegovina, a country known for its traditional reliance on in-person collaboration, faced a significant turning point. The pandemic, necessitating social distancing and remote measures, demanded an immediate shift in the nation's work culture and technology adoption.

This transition was initially challenging for both employees and employers, but as they adapted, remote work became more than an alternative—it was a revelation.

Employees have recognized the benefits of flexibility and balance between work and private life (Raj et al., 2023) while employers have realized that accepting remote work is key to retaining quality workers, which is crucial for organizational success. Consequently, leadership faced a new normal: leading teams in a digital world.

This research explores into the impact of transformational leadership within the framework of post-pandemic remote work, focusing on organizations that have seamlessly embraced the digital age. The research examines how leadership styles influence employee performance in this evolving work landscape, guiding organizations toward a future where remote work is an indispensable cornerstone of modern work culture.

Transformational leadership, which includes idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, has been shown to significantly enhance employee performance (Bass & Riggio, 2006; Yücel, 2021). Leaders who adopt this style inspire and motivate their teams, fostering a supportive and productive work environment (Meiryani et al., 2022). In remote work settings, effective leadership becomes even more critical as it helps mitigate the challenges posed by physical distance and fosters a sense of connection and commitment among employees.

LITERATURE REVIEW

1. Transformational leadership

Transformational leadership refers to several elements, including charisma, intellectual stimulation, individualized consideration, and inspirational motivation. Yücel (2021) states that it describes a leader's ability to inspire followers to develop themselves to higher need levels and to collectively transcend individual self-interests for the good of the group. As per Meiryani et al. (2022) transformational leadership style can bring changes that will impact the emergence of employee motivation to make extra efforts in achieving the expected performance. So having a transformational leader will improve the performance of company employees.

Transformational leadership is a style that prioritizes the needs and aspirations of followers, focusing on the organization's vision and mission, as noted by Raffo & Williams (2018). Leaders with high expectations believe in their followers' abilities, inspiring and motivating them to perform above their normal levels, according to Bass & Riggio (2006). This leadership style enhances morality and motivation, making goals more than just personal interests, as Yukl (2013) explains.

This leadership style is characterized by four dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, as Judge & Piccolo (2004) outline. These dimensions were developed by Avolio & Bass (1995) and are frequently used in research to measure transformational leadership behaviors.

Idealized influence involves a leader's admirable behavior that causes followers to identify with them, as described by G. Yukl (1999). Bono & Judge (2004) state that inspirational motivation entails having a strong vision for the future based on values and ideals, challenging followers with high standards, stimulating enthusiasm, and communicating optimism. Intellectual stimulation, as described by Bono & Judge (2004) includes challenging organizational norms and assumptions, encouraging divergent thinking, and taking risks to stimulate creativity in followers. Individualized consideration, according to (Bono & Judge (2004), involves recognizing the unique growth and development needs of followers, acting as a mentor or coach, and listening to their concerns and needs.

2. Remote work environment

Remote work stands for work arrangement in which employees perform certain job tasks outside of the traditional office, most of the time from their homes, sometimes in other remote settings. Since the remote work comes with digitalization technology plays an important role in terms of setting remote work and making it possible. Technology and digitalization (internet connectivity, meeting platforms) allow employees to be in touch with everything that is happening in their workplace and also to communicate effectively with each other (Wang et al., 2021).

Usually, remote work is associated with flexibility, time management and work-life balance (Smite et al., 2023). People who are working remotely tend to manage their work time effectively to spend more time with their family or for other activities that they can't manage while working in traditional office working environment.

According to Pianese et al. (2023) in order to minimize work interruption, a significant number of employees was called upon in the first few months of 2020 to quickly transition from traditional office-based work to remote work assignments (RWAs) and to depend more and more on digital tools like videoconferencing and collaboration.

2.1.   Remote Working Benefits

Remote working offers numerous benefits that can positively impact employee performance and satisfaction. According to Boateng et al. (2018) these benefits include increased flexibility, improved work-life balance, and reduced commuting time. Ingusci et al. (2023) further validated these findings, highlighting that remote working can lead to higher productivity levels and better job satisfaction due to the autonomy and flexibility it provides.

Bentley et al. (2016) also discuss the benefits of remote working, noting that effective communication and social support in remote work settings positively impact employee well-being. These elements help mitigate strain and reduce perceived stressors, thereby enhancing motivation and productivity.

2.2.   Remote Working Disadvantages

Despite its benefits, remote working also presents several challenges. Boateng et al. (2018) identified key disadvantages such as social isolation, difficulties in communication, and the blurring of work-life boundaries. Ingusci et al. (2023) stated that remote work can lead to feelings of loneliness and decreased collaboration among team members.

Furthermore, Toscano & Zappalà (2020) highlight the negative impact of work isolation on remote worker satisfaction, especially in the absence of adequate social support and face-to-face interactions. The challenges of managing work-life boundaries and the tendency to work longer hours also pose risks of burnout. According to various studies, remote working can lead to increased work intensity, longer working hours, and difficulties in disconnecting from work, which can negatively impact health and well-being.

2.3.   Job Autonomy

Job autonomy in the remote working environment is crucial for employee motivation and performance. Autonomy refers to the degree to which employees have control over their work and decision-making processes. This dimension includes several subdimensions, such as decision-making autonomy, work scheduling autonomy, and work methods autonomy.

Ryan & Deci (2000) highlight that job autonomy is an innate psychological need that leads to enhanced motivation and well-being. Research has shown that greater perceptions of job autonomy are correlated with higher levels of well-being and productivity, particularly for those who spend a significant portion of their week working remotely. Bentley et al. (2016) also note that autonomy is positively associated with remote work frequency, with higher levels of autonomy reported by employees who work remotely more often.

3. Employee performance

Employee performance is a broad term that includes both an employee's willingness and capacity to carry out their duties in an effective way. It involves providing excellent work products, consistently meeting work-related goals, and making valuable contributions to the development of the company. A multitude of elements, including leadership, motivation, job happiness, and external difficulties, can impact an employee's performance. Employee success may also be impacted by the nature of the interactions between leaders and employees. (Carter et al., 2013)

According to Meiryani et al. (2022) transformational leadership style can bring changes that will impact the emergence of employee motivation to make extra efforts in achieving the expected performance. So having a transformational leader will improve the performance of company employees better.

Dimensions used for this research are individual performance, unit-level performance, and organization-level performance. These dimensions provide a comprehensive view of performance from different perspectives within an organization.

3.1.   Individual Performance

Individual performance refers to the personal contributions and achievements of an employee. According to Robinson (1996) this dimension focuses on the satisfaction and effectiveness of an employee's work. Vanhala & Dietz (2015) expanded on this by emphasizing the reliability and consistency of measuring individual performance through validated scales. Individual performance is critical as it reflects an employee's ability to meet personal and organizational goals, contributing directly to overall productivity and success.

3.2. Unit-Level Performance

Unit-level performance evaluates the collective performance of a team or department within the organization. Vanhala & Dietz (2015) also utilized these metrics to provide a thorough evaluation of team dynamics and outcomes, ensuring a comprehensive assessment of unit-level performance. This dimension is crucial for understanding the effectiveness of teamwork and the synergy within departments, which can significantly impact the organization's capacity to innovate and respond to market changes.

3.3. Organization-Level Performance

Organization-level performance focuses on the overall effectiveness and success of the organization. Delaney & Huselid (1996) note that the effectiveness of skilled employees will be limited if they are not motivated to perform their jobs. The form and structure of an organization's HRM system can affect employee motivation levels in several ways.

For instance, organizations can implement merit pay or incentive compensation systems that provide rewards to employees for meeting specific goals. Vanhala & Dietz (2015) further elaborate on these aspects to capture a holistic view of organizational performance, addressing both internal and external success factors.

CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

The impact of transformational leadership, the advantages and disadvantages of remote work, and job autonomy on employee performance at the individual, unit, and organizational levels are all examined in the suggested research model (Fig. 1). This framework combines the various components covered in the literature to provide a thorough understanding of how they affect employee performance.
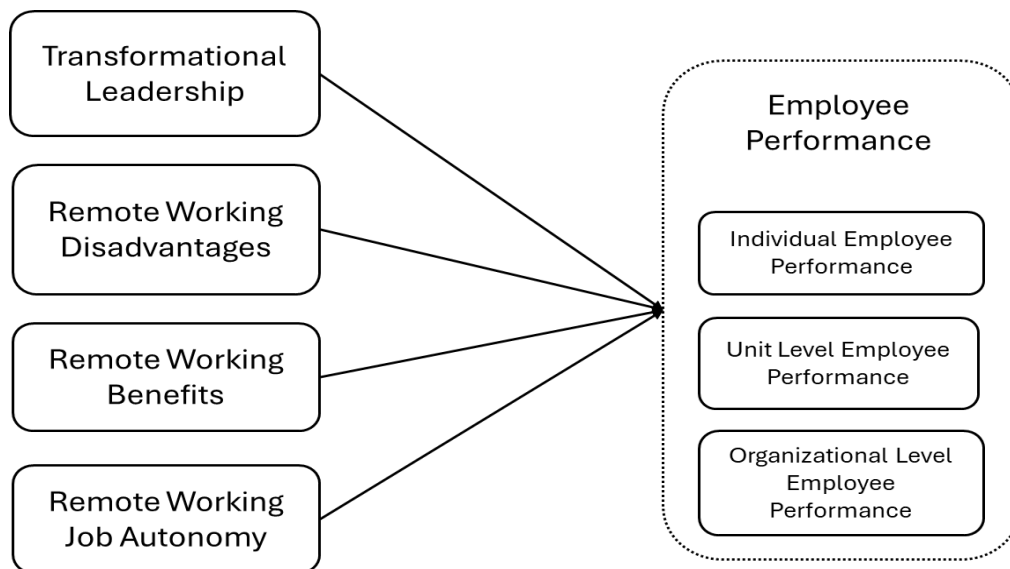

Figure 1 - Research model

Transformational Leadership and Employee Performance

Idealized influence, inspiring motivation, intellectual stimulation, and individualized consideration are the four main components of transformational leadership style that improve employee performance based on G. Yukl (1999) and Bass (1985) transformational leaders build an environment that encourages innovation and creativity, set high performance expectations, and offer constructive feedback. According to Rafferty & Griffin (2004) and Ariyabuddhiphongs & Kahn (2017) leaders improve job satisfaction and performance by focusing on the growth and development of their followers and responding to their specific needs and ambitions.Yücel (2021) and Meiryani et al. (2022) indicate that transformational leadership inspires employees to exceed their usual performance levels by fostering motivation and a commitment to the organization's vision and mission. Based on these insights, the following hypotheses are proposed:

Hypothesis 1 (H1): *Transformational leadership has an impact on employee performance.*

Hypothesis 1a (H1a): *Transformational leadership has an impact on individual employee performance.*

Hypothesis 1b (H1b): *Transformational leadership has an impact on unit-level employee performance.*

Hypothesis 1c (H1c): *Transformational leadership has an impact on organizational-level employee performance.*

Remote Working Benefits and Employee Performance

Remote working benefits, such as increased flexibility, improved work-life balance, and reduced commuting time, enhance employee satisfaction and productivity (Boateng et al., 2018; Ingusci et al., 2023). As per Bentley et al (2016) effective communication and social support in remote settings further mitigate stress and enhance performance.

Based on these insights, the following hypotheses are proposed:

Hypothesis 2 (H2): Remote working benefits have an impact on employee performance.

Hypothesis 2a (H2a): Remote working benefits have an impact on individual employee performance.

Hypothesis 2b (H2b): Remote working benefits have an impact on unit-level employee performance.

Hypothesis 2c (H2c): Remote working benefits have an impact on organizational-level employee performance.

Remote Working Disadvantages and Employee Performance

Despite its benefits, remote working presents challenges such as social isolation, communication difficulties, and blurred work-life boundaries (Boateng et al., 2018; Ingusci et al., 2023). These challenges can lead to decreased collaboration, increased stress, and reduced employee well-being stated (Toscano & Zappalà, 2020).

Based on these insights, the following hypotheses are proposed:

Hypothesis 3 (H3): Remote working disadvantages have an impact on employee performance.

Hypothesis 3a (H3a): Remote working disadvantages have an impact on individual employee performance.

Hypothesis 3b (H3b): Remote working disadvantages have an impact on unit-level employee performance.

Hypothesis 3c (H3c): Remote working disadvantages have an impact on organizational-level employee performance.

Job Autonomy and Employee Performance

Job autonomy, including decision-making autonomy, work scheduling autonomy, and work methods autonomy, is crucial for employee motivation and performance. Ryan & Deci (2000) and (Bentley et al., 2016) emphasize that higher job autonomy is associated with enhanced well-being and productivity, particularly in remote work settings.

Based on these insights, the following hypotheses are proposed:

Hypothesis 4 (H4): Remote working job autonomy has an impact on employee performance.

Hypothesis 4a (H4a): Remote working job autonomy has an impact on individual employee performance.

Hypothesis 4b (H4b): Remote working job autonomy has an impact on unit-level employee performance.

Hypothesis 4c (H4c): Remote working job autonomy has an impact on organizational-level employee performance.

METHODOLOGY

Sample and data collection

The research was conducted in 2024 among employees in Bosnia and Herzegovina, involving a total of 231 participants. The sample consisted of 62.3% male and 38.7% female participants. The study focused exclusively on individuals that works in remote or hybrid environments, with 121 participants (52.4%) working entirely remotely and 110 participants (47.6%) working in a hybrid setup.

Data were collected using Google Surveys to ensure convenience and efficiency. Each questionnaire included an explanation of the research study purpose to encourage participation. All responses collected were anonym but valid and used for analysis.

Variable	Demographics	Number	Percentage
Gender	M	144	62,3%
	F	87	37,7%
Age	18-24	81	35,1%
	25-34	109	47,2%
	35-44	31	13,4%
	45-54	8	3,5%
	55-64	1	0,4%
	65 and older	1	0,4%
Education diploma	High School Diploma	49	21,3%
	Bachelor's degree	104	45,2%
	Master's degree	71	30,9%
	Doctorate degree	6	2,6%
Employee status	Full-time	173	74,9%
	Part-time	23	10,0%
	Contract/Temporary	9	3,9%
	Self-employed	8	3,5%
	Freelance	18	7,8%
Work environment	Hybrid	150	64,9%
	Fully remote	81	35,1%
Industry	BPO	2	0,9%
	Clinical research and monitoring	2	0,9%
	Consulting	12	5,3%
	Education	26	11,4%
	Engineering	21	9,2%
	Finance/Banking	29	12,7%
	Graphic design	5	2,2%
	Health	3	1,3%
	IT	63	27,6%
	Marketing/Advertising	30	13,2%

	Media	2	0,9%
	NGO	3	1,3%
	Pharmaceutical industry	3	1,3%
	Project Management	2	0,9%
	Sales	11	4,8%
	Other	17	6.1%

Table 1 - Sample characteristics

Research design and instrumentation

The survey was designed in two parts. The first part included demographic questions covering age group, gender, education, work environment, employee status, and industry. Beyond demographics, the survey featured three additional categories: transformational leadership, remote working, and employee performance.

The transformational Leadership category included 3-7 items per dimension, covering idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, based on scales developed by Avolio & Bass (1995).

The Remote Working category included 3-7 items per dimension, covering Remote Working Disadvantages, Remote Working Benefits, and Job Autonomy. Job Autonomy was further divided into Work Scheduling Autonomy, Decision-Making Autonomy, and Work Methods Autonomy. Scales were developed by Boateng et al. (2018) for benefits and disadvantages, and Morgeson & Humphrey (2006) for job autonomy.

The Employee Performance category included 3-7 items per dimension, covering individual performance, unit-level performance, and organization-level performance, based on scales from Robinson (1996), Dvir & Shenhar, (1992) and Delaney & Huselid (1996).

All scales used a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) to capture responses. The questions were presented in a multiple-choice grid format to facilitate consistent and accurate data collection.

Name of variable	# of item scale	References
Transformational Leadership		
Idealized Influence	7 items scale	(Avolio & Bass, 1995)
Individualized Consideration	3 items scale	
Inspirational Motivation	4 items scale	
Intellectual Stimulation	6 items scale	
Remote Working		
Disadvantages	7 items scale	(Boateng et al., 2018)
Benefits	7 items scale	
Job Autonomy (Work Scheduling Autonomy, Decision-Making Autonomy, and Work Methods Autonomy)	3 items scale each	(Morgeson & Humphrey, 2006)
Employee Performance		
Individual performance	3 items scale	(Robinson, 1996)
Unit-level performance	4 items scale	(Dvir & Shenhar, 1992)
Organization-level performance	7 items scale	(Delaney & Huselid, 1996)

Table 2- Research variables scale

Data analysis

The SPSS software was utilized for the analysis of the study's data. The Cronbach's alpha coefficient was used to determine the scales' reliability. To look at the factors' initial structure, an exploratory factor analysis was done. The demographic information of the individuals was analyzed and summarised using descriptive statistics. The relationships between the various aspects of transformational leadership, remote work settings, and employee performance were depicted using Pearson's correlations. Regression models have been applied to look into how remote work environment and transformational leadership affect employee performance. The results are precisely summarised in the section that follows.

RESULTS

Initial analysis

The validity of the scales used in this study was assessed through exploratory factor analysis. The Promax method was applied for component rotations, and the maximum likelihood method was employed for factor extraction. Separate measurements of factor loadings were conducted for both independent and dependent variables. Table 3 displays the factor loadings and Cronbach's alpha coefficients.

Name of the item:		Factor loading:	Cronbach's Alpha
Transformational Leadership – Idealized influence			0.925
TLII1	Talks about their most important values and beliefs.	0,587	
TLII2	Specifies the importance of having a strong sense of purpose.	0,742	
TLII3	Suggests new ways of looking at how to complete assignments.	0,817	
TLII4	Goes beyond self-interest for the good of the group.	0,828	
TLII5	Instills pride in me for being associated with him/her.	0,775	
TLII6	Displays a sense of power and confidence.	0,773	
TLII7	Acts in ways that build my respect.	0,923	
Transformational Leadership – Individualized Consideration			0.842
TLIC1	Re-examines critical assumptions to question whether they are appropriate.	0,706	
TLIC2	Spends time teaching and coaching.	0,807	
TLIC3	Expresses confidence that goals will be achieved.	0,815	
Transformational Leadership – Inspirational motivation			0.924
TLIM1	Emphasizes the importance of having a collective sense of mission	0,815	
TLIM2	Talks optimistically about the future.	0,702	
TLIM3	Articulates a compelling vision of the future.	0,712	
TLIM4	Talks enthusiastically about what needs to be accomplished.	0,689	
Transformational Leadership – Intellectual stimulation			0.930
TLIS1	Considers the moral and ethical consequences of decisions.	0,818	
TLIS2	Gets me to look at problems from many different angles.	0,782	
TLIS3	Seeks differing perspectives when solving problems.	0,765	
TLIS4	Helps me to develop my strengths.	0,841	
TLIS5	Treats me as an individual rather than just a group member.	0,708	
TLIS6	Considers me to have different needs, abilities, and aspirations from others.	0,635	
Remote working disadvantages			0,893
RWD1	Loss of sense of belonging to one's office, isolation and lack of socialization with colleagues	0,670	
RWD2	Reduced visibility towards superiors and/or recognition of own work	0,714	
RWD3	Difficulty in accessing tools/documents in the office/office and	0,833	

	obtaining information from colleagues who work in the office		
RWD4	Difficulty in planning work and/or excessive rigidity in working time	0,832	
RWD5	Less access to professional training and/or career progression, perception of less protection and/or less access to information on work decisions	0,616	
RWD6	Perception of being subjected to stricter controls and/or negative perception by colleagues or superior	0,786	
RWD7	Difficulty in concentrating due to domestic distractions and/or technology used	0,706	
Remote working benefits			0.909
RWB1	Better possibility to coordinate work-family balance and/or to meet family needs in an appropriate way	0,671	
RWB2	Economical and/or time saving in travelling	0,710	
RWB3	Stress reduction and more time available for oneself	0,779	
RWB4	Possibility of independently working and/or better concentration, organization/planning of one's work	0,836	
RWB5	Better relationships with colleagues and/or superiors	0,831	
RWB6	Increased job satisfaction	0,775	
RWB7	Better use of available technology	0,750	
Job Autonomy			0.931
WSA1	The job allows me to make my own decisions about how to schedule my work.	0,639	
WSA2	The job allows me to decide on the order in which things are done on the job.	0,481	
WSA3	The job allows me to plan how I do my work.	0,625	
DMA1	The job gives me a chance to use my personal initiative or judgment in carrying out the work	0,754	
DMA2	The job allows me to make a lot of decisions on my own.	0,853	
DMA3	The job provides me with significant autonomy in making decisions.	0,818	
MA1	The job allows me to make decisions about what methods I use to complete my work	0,842	
MA2	The job gives me considerable opportunity for independence and freedom in how I do the work	0,885	
MA3	The job allows me to decide on my own how to go about doing my work.	0,927	
Employee performance – individual performance			0.806
EPIP1	I am satisfied with my work performance.	0,845	
EPIP2	My employer is satisfied with my work performance.	0,619	
EPIP3	I am satisfied with my work performance compared to that of other employees who do the same kind of job	0,834	
Employee performance – Unit-level performance			0.894
EPULP1	My unit has been successful in advancing and supporting new business opportunities.	0,597	
EPULP2	My unit has prepared well for future opportunities and challenges.	0,829	
EPULP3	My unit has the relevant scientific, technical, and professional knowledge to cope with future needs.	0,938	
EPULP4	My unit has adequate people and skills to convert ideas into new products and services and to produce and implement them	0,855	
Employee performance – Organization-level performance			0.910
EPOLP1	Quality of products, services, or programs?	0,522	
EPOLP2	Development of new products, services, or programs?	0,380	

EPOLP3	Ability to attract essential employees	0,725
EPOLP4	Ability to retain essential employees	0,886
EPOLP5	Satisfaction of customers or clients	0,735
EPOLP6	Relations between management and other employees	0,920
EPOLP7	Relations among employees in general	0,795

Table 3 - Factors Loadings and Coefficient Alpha for Transformational Leadership, Remote Work and Employee Performance

Table 3 shows that the factor loadings for the independent and dependent variables in this study are significant, with values of ±.50 or higher. The reliability tests yielded the following results of independent variables: Transformational Leadership – Idealized Influence (α = .925) – excellent; Individualized Consideration (α = .842) – acceptable, Inspirational motivation (α = .924) - excellent, Intellectual stimulation (α = .930) - excellent, Remote working disadvantages (α = .893) - acceptable, Remote working benefits (α = .909) – excellent, Job Autonomy (α = .931) – excellent. Dependent variables: Employee performance – individual performance (α = .806) - acceptable, Unit-level performance (α = .894) - acceptable and Organization-level performance (α = .910) – excellent. indicating excellent to good reliability for the independent variables. These findings imply the validity and reliability of the scales used to measure the research's variables.

Test of the hypothesis

Correlation analysis was done to determine the relationships and strengths between the following variables: Transformational leadership (TL), remote working disadvantages (RWD), remote working benefits (RWB), remote working job autonomy (RWJA), and employee performance dimensions (individual performance [EPI], unit-level performance [EPUL], and organizational-level performance [EPOL]). Cohen (1988) stated that the effect size for Pearson's r is: small = ±.10 – < ±.30; medium = ±.30 – < ±.50; large = ≥ ±.50. The mean, standard deviation, and correlations are shown in Table 4.

Based on the research model, the independent variables (TL, RWD, RWB, RWJA) were regressed separately against the dependent variables (EPI, EPUL, EPOL). Following the examination of the correlations between these factors, the following conclusions were reached:

Transformational leadership (TL) is positively correlated with individual performance (r = .362), unit-level performance (r = .548), and organizational-level performance (r = .695). Remote working benefits (RWB) show negligible correlation with individual performance (r = -.017), indicating no significant relationship, while demonstrating small positive correlations with unit-level performance (r = .100) and organizational-level performance (r = .138). Remote working disadvantages (RWD) are positively correlated with individual performance (r = .488), unit-level performance (r = .326), and organizational-level performance (r = .277). Remote working job autonomy (RWJA) is positively correlated with individual performance (r = .472), unit-level performance (r = .537), and organizational-level performance (r = .513).

Transformational leadership has a significant impact on every aspect of employee performance. The benefits of remote work on employee performance are minimal to nonexistent. While job autonomy associated with remote work has a medium to large impact on employee performance, the disadvantages of remote work have a medium to small impact.

Variables	Means	StD	1	2	3	4	5	6	7	8	9
TL	3,7360	0,85041	1								
RW	3,6578	0,54648	.500**	1							
RWD	3,9102	0,87089	.259**	.568**	1						
RWB	3,0143	1,06117	.162*	.511**	-.183**	1					
RWJA	3,9622	0,79613	.489**	.742**	.335**	0,015	1				
EP	3,9049	0,70134	.680**	.586**	.379**	0,113	.589**	1			

EPI	4,1820	0,69134	.362**	.496**	.488**	-0,017	.472**	.714**	1	
EPUL	3,8668	0,80789	.548**	.523**	.326**	0,100	.537**	.851**	.568**	1
EPOL	3,8079	0,85336	.695**	.509**	.277**	.138*	.513**	.935**	.518**	.661**	1

Table 4 - The mean, standard deviation, and correlations

The results presented in Table 5 show that all hypotheses (H1, H1a, H1b, H1c, H2, H2a, H2b, H2c, H3c, H4, H4a, H4b, H4c) are statistically significant and therefore supported, except for H3, H3a and H3b.

Hypothesis number	Hypothesis	Sig. F Change measured	Sig. F Change
H1	Transformational leadership has impact on employee performance	0,000	(p ≤.05) - Supported
H1a	Transformational leadership has impact on individual employee performance	0,000	(p ≤.05) - Supported
H1b	Transformational leadership has impact on unit level employee performance	0,000	(p ≤.05) - Supported
H1c	Transformational leadership has impact on organizational level employee performance	0,000	(p ≤.05) - Supported
H2	Remote working disadvantages have impact on employee performance	0,000	(p ≤.05) - Supported
H2a	Remote working disadvantages have impact on individual employee performance	0,000	(p ≤.05) - Supported
H2b	Remote working disadvantages have impact on unit level employee performance	0,000	(p ≤.05) - Supported
H2c	Remote working disadvantages have impact on organizational level employee performance	0,000	(p ≤.05) - Supported
H3	Remote working benefits have impact on employee performance	0,087	(p ≥ .05) – Not supported
H3a	Remote working benefits have impact on individual employee performance	0,802	(p ≥ .05) - Not supported
H3b	Remote working benefits have impact on unit level employee performance	0,130	(p ≥ .05) - Not supported
H3c	Remote working benefits have impact on organizational level employee performance	0,000	(p ≤.05) - Supported
H4	Remote working job autonomy have impact on employee performance	0,000	(p ≤.05) - Supported
H4a	Remote working job autonomy has impact on individual employee performance	0,000	(p ≤.05) - Supported
H4b	Remote working job autonomy has impact on unit-level employee performance	0,000	(p ≤.05) - Supported
H4c	Remote working job autonomy has impact on organizational-level employee performance	0,000	(p ≤.05) - Supported

Table 5 - Hypotheses results

DISCUSSION

The findings of this study underscore the significant role that transformational leadership plays in enhancing employee performance within remote working environments. The positive correlations between transformational leadership and the various dimensions of employee performance—individual, unit-level, and organizational level— demonstrate that leaders who embody the qualities of idealized influence, inspirational motivation, intellectual

stimulation, and individualized consideration can effectively motivate and inspire their employees to achieve higher performance levels. This aligns with previous research suggesting that transformational leaders foster an environment of trust, creativity, and high performance (Bass & Riggio, 2006; G. A. Yukl, 2013).

The analysis also revealed that remote working benefits, such as increased flexibility, improved work-life balance, and reduced commuting time, have a negligible to small impact on employee performance. This finding is intriguing, as it suggests that while these benefits are appreciated by employees, they do not significantly influence their performance outcomes. This could be due to the fact that the advantages of remote work might be counterbalanced by the challenges it poses, such as social isolation and communication difficulties.

Remote working disadvantages were found to have a medium negative impact on employee performance, indicating that issues such as social isolation, blurred work-life boundaries, and difficulties in communication can detract from employee productivity and well-being. This is consistent with the literature, which highlights the potential downsides of remote work, including increased work intensity and challenges in disconnecting from work (Toscano & Zappalà, 2020)

Job autonomy, which encompasses decision-making autonomy, work scheduling autonomy, and work methods autonomy, was shown to have a medium to large positive impact on employee performance. This finding aligns with self-determination theory, which posits that autonomy is a critical factor in enhancing motivation and well-being (Ryan & Deci, 2000). Employees who perceive a high degree of autonomy in their work are likely to feel more empowered and engaged, leading to higher performance levels.

Limitations and Future Directions

This study has several limitations. The sample was limited to employees in Bosnia and Herzegovina, which may not be representative of other regions or industries. The cross-sectional design of the study also limits the ability to draw causal conclusions. Future research should explore these relationships in different geographical contexts and industries to validate the findings. Longitudinal studies could provide deeper insights into the causal relationships between leadership, remote work conditions, and employee performance.

These insights provide practical implications for organizations looking to optimize their remote work strategies. By prioritizing the development of transformational leaders and fostering job autonomy, organizations can effectively navigate the challenges of remote work and enhance employee performance. This study contributes to the existing literature on leadership and remote work, offering a comprehensive understanding of how these factors interplay to influence employee outcomes. From a theoretical perspective, this research adds to the body of knowledge on transformational leadership and its impact on employee performance in remote work settings. It underscores the relevance of leadership styles in adapting to new work environments and highlights the critical role of autonomy in employee engagement and productivity.

CONCLUSION

This study offers valuable insights into the factors influencing employee performance in remote working environments. The significant positive impact of transformational leadership highlights the importance of leaders who can inspire and motivate employees. While remote work offers benefits such as flexibility and improved work-life balance, these advantages alone do not significantly impact performance. Addressing the challenges of remote work, such as social isolation and communication difficulties, is essential for maintaining productivity and employee well-being. Additionally, granting employees greater job autonomy can enhance motivation, engagement, and performance. Overall, this study offers practical implications for managers and organizations striving to create effective remote work environments.

Ethic statement

03-51-1/24[Registered on 20/06/2024] taken from the Ethical Board of the Faculty of Economics and Social Sciences of International Burch University

Data availability statement

The data will be available upon request through an email from the corresponding author.

Additional information

Notes on contributors

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Amina Madžak is a marketing manager with a strong academic foundation, holding a degree in Marketing Management from International Burch University. Her professional experience spans digital marketing, banking, and finance, showcasing her adaptability and commitment to growth. Amina also has a rich background in civic engagement, having served as the youngest female councillor in her city and currently leading the Red Cross Youth as its president. Her leadership roles and collaborative nature reflect her passion for creativity, teamwork, and community impact.

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Dr Nereida Hadziahmetovic is a Professor at the Berlin School of Business and Innovation with extensive expertise in organisational behaviour, human resources management, and leadership. With over 15 years of experience in academia, consulting, and management, she brings valuable insights to her teaching of courses such as Organizational Dynamics, Project Management, and Corporate Responsibility. Dr Hadziahmetovic's research centres on the impact of leadership on team dynamics, employee engagement, and organisational performance, and her work is published in numerous international peer-reviewed journals. She has also contributed to high-impact projects, including COST's "Who Cares in Europe, enhancing understanding of social responsibility across Europe.

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Selma Turčinović is a skilled professional with a background in Financial Management and expertise in project coordination and career advising. With over three years of experience as an Event Coordinator and Career Office Advisor, she has guided students in professional development while building strong partnerships with leading companies. Beginning her career in non-governmental organizations, Selma discovered her passion for management and leadership. Known for her proactive approach and organizational skills, she focuses on creating opportunities that equip students with practical skills, reflecting her commitment to personal and community growth.

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Ajdin Karić, a graduate of International Burch University specializing in Marketing and Management, brings over four years of experience in volunteering, project coordination, and content creation. He has contributed to youth exchanges, academic publishing, and marketing campaigns while excelling in roles involving digital marketing, social media management, and project implementation. Ajdin's work focuses on improving organizational performance and employee dynamics, combining academic insights with practical expertise in communication, teamwork, and strategic planning.

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