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# The Impact of Empowering and Transformational Leadership on Employee Creativity in Vietnam's Telecommunications Sector

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### Abstract

This study aims to investigate how transformational leadership and empowering leadership influence employee creativity, with a focus on the roles of creative process involvement, intrinsic motivation, and psychological empowerment as mediators. Data were collected from 420 employees working in 21 telecommunication companies in Vietnam through a direct survey using questionnaires. Structural equation modeling (SEM) and confirmatory factor analysis (CFA) were used to analyze the data. The results show that both empowering and transformational leadership styles influence employee creativity indirectly through mediating factors. Specifically, these leadership styles positively correlate with psychological empowerment, which in turn affects intrinsic motivation and involvement in the creative process. Both intrinsic motivation and engagement in the creative process have a significant positive effect on creativity. The findings suggest that leaders in Vietnam's telecommunications sector should carefully consider their leadership approach, as fostering employee creativity is strongly associated with enhancing intrinsic motivation, psychological empowerment, and creative process engagement.

**Keywords:** Vietnam, Empowering Leadership, Employee Creativity, Transformational Leadership, Telecommunication.

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### Introduction

In today's highly competitive business environment, many managers are realizing the necessity of fostering innovation within their teams [1]. Creativity plays an essential role in helping organizations achieve long-term success and a competitive edge [2], with employee creativity driving innovation, efficiency, and overall survival [3, 4]. Studies of employee creativity suggest that it emerges from a dynamic interaction between environmental influences and individual employee characteristics [5]. According to Amabile *et al.* [6], leadership style stands out as a critical factor in shaping the work environment and significantly impacting employee creativity. As such, research has increasingly focused on how specific leadership styles can enhance creativity in the workplace [7-9].

Vietnam, being an Asian country, has leadership practices that are influenced by distinct cultural values. Leadership styles in the West and East differ significantly due to their unique cultural contexts [10]. In particular, Zhou [11] points out that



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leadership in many Asian nations, including Vietnam, is often characterized by aspects such as authoritarianism, benevolence, and morality. By examining leadership styles in Vietnam and other Eastern countries, researchers can uncover unique leadership traits and their impacts on organizational operations that differ from Western practices.

Empowering and transformational leadership are two significant theories in the field of leadership research [12]. While these are separate concepts, both have been shown to influence employee creativity positively. Empowering leadership is considered to have a crucial role in fostering creativity within organizations, enabling employees to better recognize opportunities and navigate challenges in ever-changing business environments [13]. It is seen as a motivator that energizes, directs, and sustains behaviors linked to higher employee performance [14]. This leadership style involves distributing power and authority, allowing employees to take more responsibility and operate with increased autonomy, and enhancing their sense of competence, meaning, agency, and impact [14, 15]. Empowered employees tend to be more motivated to innovate and engage in creative endeavors [16]. However, while the relationship between empowering leadership and creativity has been recognized, its exact impact remains underexplored and calls for further research [17].

On the other hand, transformational leadership involves leaders who are proactive, knowledgeable, and capable of guiding their teams effectively [18]. These leaders can inspire their subordinates by creating and communicating a clear vision and motivating them to pursue organizational goals [19]. Transformational leadership is strongly associated with fostering employee creativity and driving organizational success [20-23]. Transformational leaders prioritize the personal development of employees, articulate future goals clearly, and address their subordinates' needs through four key behaviors: individualized consideration, intellectual stimulation, inspirational motivation, and idealized influence [24]. However, unlike empowering leaders, transformational leaders do not typically share power with their subordinates, and employees are often excluded from the process of realizing the vision [25, 26]. This contrast offers a unique opportunity to explore how both empowering and transformational leadership influence employee creativity, specifically through the mediating roles of creative process engagement, intrinsic motivation, and psychological empowerment within the context of Vietnam's telecommunication sector.

## Theoretical Framework and Hypotheses

### *Transformational and Empowering Leadership*

Empowering leadership can be viewed through two interconnected lenses [14, 27]. The first perspective emphasizes empowering leadership as a collection of actions by a leader that allows subordinates to take greater control over their work. This view involves a shift in power from the leader to the subordinate [28]. However, some researchers contend that this definition does not fully encompass the concept of empowerment. From a self-efficacy perspective, empowering leadership is defined as a set of behaviors by a leader aimed at increasing the intrinsic motivation of subordinates concerning their tasks while diminishing their feelings of powerlessness [29, 30]. While researches on empowering leadership are more common in Western contexts across various sectors, such as telecommunications, healthcare, manufacturing, and education [15, 17, 31-34], there is a lack of research in Eastern countries, including Vietnam.

Transformational leadership, which emerged from behavioral theory, was initially proposed by Burns [35] and further developed by Bass and Bass Bernard [36]. It is defined as a collection of leader behaviors that include (a) idealized influence, (b) inspirational motivation, (c) intellectual stimulation, and (d) individualized consideration, all of which elevate individuals by aligning their needs, aspirations, and values with the organization's goals [37]. Transformational leadership is seen as applicable across different situations and is not bound to specific contexts, focusing instead on actions that inspire and drive changes within organizations [38].

### *Employee Creativity*

Employee creativity refers to the ability of individuals to generate new, valuable ideas that contribute to the improvement of individual or group performance within the workplace [39, 40]. It is viewed as a human process that blends knowledge of the world with the creation of new ideas and solutions to address societal needs [41, 42].

Creativity is typically characterized by two key elements: novelty and usefulness. Novelty is the introduction of new concepts or the rearrangement of existing elements in a unique way to produce something innovative [40]. Novelty can take 3 forms: (1) creating something entirely new and distinct from previous ideas within the organization, (2) combining existing elements in new ways to produce previously unseen outcomes, and (3) improving or modifying existing concepts [43]. However, creativity that is impractical or disconnected from reality cannot be deemed truly creative [44].

The second key component, usefulness, refers to the value that creative ideas bring to the organization, both immediately and in the long term [4]. This aspect is seen in the ability to implement ideas that are practical, feasible, and bring tangible benefits. The value of a creative idea is reflected in its capacity to address organizational challenges, enhance task performance, and achieve desired outcomes. Successfully applied creative ideas can have a lasting impact by improving productivity, optimizing

processes, increasing quality, reducing costs, and creating a competitive advantage, thus contributing to long-term organizational success [45].

### *Effects of Transformational and Empowering Leadership on Employee Creativity*

The connection between leadership styles and employee creativity has been a subject of extensive research, with leaders identified as critical factors influencing creativity in the workplace [1, 4, 46, 47]. Both transformational and empowering leadership styles have been linked to positive impacts on employee creativity [13, 22].

Empowering leadership enables employees to take greater responsibility for their work [48] and enhances intrinsic motivation, encouraging them to experiment and take creative risks [13]. By empowering individuals, they are more inclined to invest effort into problem-solving and are more likely to generate innovative and valuable ideas than their peers [13, 49]. Li and Zhang [50] emphasize that empowering leadership has a direct influence on individual creativity. First, leaders who foster a sense of purpose and significance in their employees' work inspire them to improve performance. Second, offering autonomy and involving employees in decision-making is essential for creativity [6]. Lastly, empowerment reduces constraints, creating an environment conducive to problem-solving and innovative thinking.

The impact of empowering leadership on creativity is mediated by various factors. Zhang and Bartol [13] argue that empowering leadership boosts psychological empowerment, which, in turn, fosters engagement in the creative process and strengthens intrinsic motivation—both of which positively influence creativity. Slåtten *et al.* [51] also indicate that a humorous work environment combined with empowering leadership enhances creativity. Amundsen and Martinsen [52] show that empowering leadership has both direct and indirect effects on creativity, mediated by self-leadership, where psychological empowerment influences job satisfaction and work effort, but self-leadership is the key factor driving creativity. Additionally, Li and Zhang [50] suggest that both individual and team learning mediate the relationship between empowering leadership and creativity. Chow [33] further highlights the indirect role of learning motivation, particularly for employees with less experience, while trust in leadership strengthens the connection for employees with greater experience.

Transformational leadership encourages employees to think critically and take initiative, often promoting creative risk-taking [53]. These leaders challenge the status quo and push for greater accomplishments, nurturing creativity through motivation and intellectual stimulation [54-56]. Sosik [57] found that transformational leadership is especially effective in motivating employees to think differently and generate innovative solutions, more so than other leadership styles.

The relationship between transformational leadership and creativity is also mediated by various factors. Jyoti and Dev [58] identified a positive relationship between transformational leadership and creativity, mediated by a learning orientation. Jaiswal and Dhar [59] extended this finding by showing how an innovative climate and creative self-efficacy mediate the relationship between transformational leadership and creativity. Henker *et al.* [60] confirmed that transformational leadership positively impacts creativity, with mediation through motivational focus and active participation in the creative process. This study examines the indirect effects of both transformational and empowering leadership on creativity, particularly through mediators such as intrinsic motivation, creative process engagement, and psychological empowerment.

### *Mediating Factors: Psychological Empowerment, Creative Process Engagement, and Intrinsic Motivation*

Psychological empowerment refers to a cognitive state characterized by four dimensions: impact, self-determination, competence, and meaning [14]. It describes the sense of power employees feel concerning their work [14, 61]. It is tied to employees' confidence in their ability to manage tasks and handle challenges effectively [30], and can be measured as a continuous variable representing the degree of empowerment perceived by employees [14].

Empowering leadership is a key driver of psychological empowerment, with leaders enhancing employees' understanding of the importance of their roles and the goals of the organization [29]. By delegating responsibilities and granting more autonomy, empowering leaders allows employees to exert greater influence over their work [25]. These leaders also provide emotional support, offer encouragement, and act as role models, helping employees feel more competent in their tasks [62]. Furthermore, empowering leadership promotes active participation in decision-making and values employees' input, leading to a greater sense of ownership and empowerment [25].

### *Hypothesis Development*

We hypothesize the following:

H1: Empowering leadership positively influences psychological empowerment.

Several studies have highlighted the strong link between transformational leadership and psychological empowerment [63-67]. Transformational leaders inspire their followers by transforming their values and behaviors, enabling them to realize their full potential. These leaders foster empowerment by promoting a sense of autonomy and organizational impact, which enhances the psychological well-being of their followers [68]. By sharing a motivating vision and offering personal guidance, transformational leaders help employees feel a sense of purpose and competence, which contributes to psychological empowerment [69].

Thus, based on these previous findings, we suggest the following:

H2: Transformational leadership has a positive effect on psychological empowerment.

Creativity studies traditionally emphasize the results of creative endeavors [70], but the processes leading to these results have often been overlooked [71]. These processes—such as problem identification, idea generation, and information analysis—precede and are crucial for creativity [71]. Engagement in the creative process refers to an employee's active participation in these stages, which includes tasks like problem-solving and idea development [7, 72]. Psychological empowerment is closely related to an employee's willingness to engage in these creative processes [13]. When employees perceive themselves as capable and empowered, they tend to focus longer on tasks and invest more effort into solving problems [14, 73]. Therefore, we propose:

H3: Psychological empowerment has a positive impact on engagement in the creative process.

Intrinsic motivation is characterized by an individual's internal drive to engage in tasks for their satisfaction [74]. Empowered employees tend to experience greater intrinsic motivation, as their sense of autonomy and competence influences their motivation levels [75-77]. Empirical studies suggest that psychological empowerment positively impacts intrinsic motivation, which in turn drives creativity [3, 14]. However, limited empirical evidence exists to confirm this direct relationship [4, 13]. As a result, we hypothesize:

H4: Psychological empowerment positively influences intrinsic motivation.

The creative process begins with problem structuring—defining goals, methods, limitations, and necessary information [78]. The next phase involves gathering and processing relevant data to improve understanding of the issue at hand [55]. This phase of searching for and organizing information is crucial in enhancing the quality of solutions and promoting creativity [7, 78]. Finally, synthesizing this information fosters new insights and creative ideas [55]. Employees who participate in these creative activities tend to generate more innovative solutions [13]. Therefore, we hypothesize:

H5: Participation in the creative process positively influences employee creativity.

Intrinsic motivation plays a significant role in fostering employee creativity [3, 79]. Psychological mechanisms, such as intrinsic motivation, are key to driving creativity [80, 81]. Scholars have demonstrated that intrinsic motivation mediates the relationship between leadership and creativity [13, 82]. The importance of intrinsic motivation has been underscored in numerous studies, as it not only promotes creativity but also enhances learning, perseverance, and overall well-being [83]. Zhang and Bartol [13] further assert that intrinsic motivation serves as a crucial link between empowering leadership, psychological empowerment, and creativity. Based on these findings, we hypothesize:

H6: Intrinsic motivation positively influences employee creativity.

## Methods

### *Procedure and Sample*

To obtain reliable data, the research team visited telecommunication companies directly, guiding employees to participate in the survey. The questionnaire was split into two sections: the first part addressed employees' perceptions of empowering leadership, intrinsic motivation, creativity, transformational leadership, engagement in creative processes, and psychological empowerment; the second part collected demographic data including gender, age, education level, and job tenure.

Data was gathered from 500 employees across 21 telecommunication companies in Vietnam, with 420 completed responses after screening. The participant pool consisted of 188 males (44.8%) and 232 females (55.2%). Age-wise, 64.5% were between twenty and thirty years old, 30.2% were aged 31 to 40 years, and the remaining age groups were marginal. The majority of participants (79.8%) held a college or university degree, with 55.6% having one to five years of job experience, and 17.9% with six to ten years.

### *Measures*

**Empowering Leadership:** Empowering leadership was measured using a 12-item scale developed by Ahearne *et al.* [15], covering four key areas: enhancing work meaningfulness, encouraging decision-making participation, expressing confidence in performance, and offering autonomy from bureaucratic constraints ( $\alpha = 0.856, 0.777, 0.867, 0.860$ ). A typical item is, "My manager helps me understand how my goals align with the company's objectives." Respondents rated each item from 1 (strongly disagree) to 5 (strongly agree). Confirmatory factor analysis (CFA) confirmed the model fit ( $\chi^2(50) = 121.146, P < 0.001$ ; CFI = 0.969, GFI = 0.955, RMR = 0.072, RMSEA = 0.058), validating the scale's construct.

**Transformational Leadership:** Transformational leadership was assessed using a 20-item scale from Avolio [63], divided into four dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration ( $\alpha = 0.812, 0.862, 0.833, 0.873$ ). An example item is, "I feel proud to work with my team leader." Each response was rated on a 1 to 5 scale. CFA results indicated a good fit ( $\chi^2(131) = 169.421, P < 0.001$ ; CFI = 0.989, GFI = 0.958, RMR = 0.040, RMSEA = 0.026), supporting the scale's construct validity.

**Psychological Empowerment:** Psychological empowerment was evaluated using Spreitzer's [14] 12-item scale, covering impact, self-determination, competence, and meaning ( $\alpha = 0.808, 0.762, 0.798, 0.829$ ). An example item is, "The work I do is important to me." Responses were rated from 1 (strongly disagree) to 5 (strongly agree). CFA confirmed the scale's model fit ( $\chi^2(50) = 67.303, P < 0.001$ ; CFI = 0.990, GFI = 0.987, RMR = 0.065, RMSEA = 0.029), indicating construct validity.

**Creative Process Engagement:** Creative process engagement was measured using Zhang and Bartol's [13] scale, covering problem identification, information searching, and idea generation ( $\alpha = 0.793, 0.770, 0.866$ ). A sample item is, "I invest time in understanding the nature of the problem." The scale was rated from 1 (strongly disagree) to 5 (strongly agree). CFA results showed good fit ( $\chi^2(41) = 45.712, P < 0.001$ ; CFI = 0.997, GFI = 0.980, RMR = 0.052, RMSEA = 0.017), confirming the scale's validity.

**Intrinsic Motivation:** Intrinsic motivation was gauged using a 3-item scale ( $\alpha = 0.758$ ), adapted from Amabile [80] and Tierney *et al.* [84]. A sample item is, "I enjoy solving complex problems." The scale was rated from one (strongly disagree) to five (strongly agree).

**Employee Creativity:** Employee creativity was assessed with a 13-item scale ( $\alpha = 0.885$ ) developed by Zhou and George [85]. An example item is, "I suggest new methods to reach goals." Respondents rated from 1 (strongly disagree) to 5 (strongly agree).

**Control Variables:** Demographic variables were included as control factors based on prior studies. These variables included gender (coded as 1 for male, 2 for female), age (measured in years), education level (based on qualifications), and job tenure (number of years employed). These factors were selected as they could influence the statistical outcomes [13, 34, 78, 86-88].

## Analysis and Findings

To evaluate the proposed model, structural equation modeling (SEM) was utilized with the software AMOS 22.0. Following the two-step approach outlined by Anderson and Gerbing [89], we first conducted a CFA to verify the validity of the measurement scales. In the second step, SEM was applied to assess how well the hypothesized model corresponded to the collected data.

### Factor Analysis

We carried out exploratory factor analysis (EFA) to examine six core factors: employee creativity, creative process engagement, intrinsic motivation, transformational leadership, psychological empowerment, and empowering leadership. The results indicated a satisfactory KMO value of 0.834 and a significance level of  $P < 0.001$ , confirming the appropriateness of the data for factor analysis. Kaiser's criterion was applied, leading to the retention of 17 factors, with all eigenvalues exceeding 1.170, explaining 68.042% of the variance.

Next, a CFA was performed to assess the fit of the six-factor model, which consisted of 17 components: employee creativity, creative process engagement, intrinsic motivation, transformational leadership, psychological empowerment, and empowering leadership. The fit indices revealed that the hypothesized model was well-supported by the data ( $\chi^2 = 2,431.294, df = 2008, RMSEA = 0.022, CFI = 0.966, TLI = 0.963$ ), indicating that the model adequately represented the data. The CFA results are summarized in Table 1.

### Structural Equation Modeling

To validate the research hypotheses, three different SEM models were evaluated. Model 1, the six-factor model, examines the impact of both transformational leadership and empowering leadership on employee creativity, with intrinsic motivation, creative process engagement, and psychological empowerment as mediators. Model 2, a five-factor model, focuses on the effects of empowering leadership alone on employee creativity through the same mediators. Model 3, also a five-factor model, looks at the influence of transformational leadership on creativity, mediated by the same factors.

The comparison of models, as shown in Table 1, reveals that model 1, the six-factor model, provides the best fit for the data. It outperforms models 2 and 3, with significant differences in the  $\chi^2$  values, indicating a stronger alignment with the data.

Table 1. Comparison of measurement models

Models	Factors	$\chi^2$	df	CFI	TLI	RMR	RMSEA
Model 1		2,831.120	2123	0.953	0.950	0.073	0.028
Model 2		1,584.561	1111	0.947	0.943	0.075	0.032
Model 3		1,883.233	1414	0.943	0.941	0.077	0.028

Table 2 provides the descriptive statistics along with the correlation results for the variables in this study. It reveals that empowering leadership and transformational leadership have a positive impact on psychological empowerment ( $r = 0.248$  and  $0.447$ , respectively). Additionally, psychological empowerment is significantly associated with both creative process

engagement and intrinsic motivation ( $r = 0.302$  and  $0.178$ , respectively), and these factors are strongly related to employee creativity ( $r = 0.292$  and  $0.305$ , respectively).

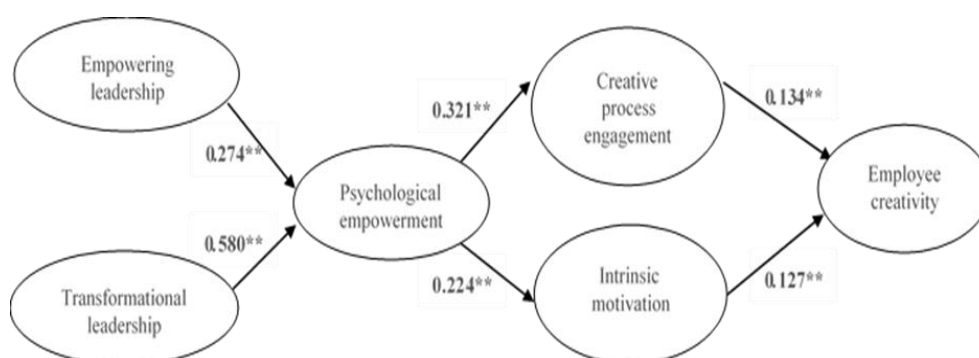
**Table 2.** Means, standard deviations, and correlations

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Gender	1.550	0.498	1									
2. Age	1.410	0.597	-0.209**	1								
3. Education	2.030	0.449	0.062	-0.030	1							
4. Job tenure	2.340	0.944	-0.179**	0.667**	-0.019	1						
5. Empowering leadership	3.564	0.565	-0.033	0.009*	-0.031	-0.048	1					
6. Transformational leadership	3.320	0.520	-0.060	-0.036	-0.016	-0.034	0.056	1				
7. Psychological empowerment	3.504	0.694	0.018	-0.007	-0.045	0.006	0.248**	0.447**	1			
8. Creative process engagement	3.203	0.737	-0.001	0.017	-0.017	0.010	0.437**	0.134**	0.302**	1		
9. Intrinsic motivation	3.673	0.871	-0.045	0.088	0.050	0.112*	0.378**	0.032	0.178**	0.473**	1	
10. Employee creativity	3.655	0.516	-0.010	0.025	0.070*	0.017	0.227**	0.093	0.120*	0.292**	0.305**	1

Notes:  $n = 420$ ; \* $P < .05$ ; \*\* $P < .01$

The structural model analysis confirms that the proposed model is a good fit for the data ( $\chi^2 = 2,831.120$ ,  $df = 2123$ ,  $CFI = 0.953$ ,  $TLI = 0.950$ ,  $RMR = 0.073$ ,  $RMSEA = 0.028$ ). Three different models were assessed, with the proposed model, based on its coefficients, emerging as the most suitable. It demonstrates the connections between empowering and transformational leadership and employee creativity, with psychological empowerment acting as a mediator.

Figure 1 illustrates the full structural model along with the standardized path estimates. All hypotheses, including H1, H2, H3, H4, H5, and H6, were supported. Both empowering and transformational leadership showed significant effects on psychological empowerment ( $\beta = 0.274$  and  $0.580$ , respectively,  $P < 0.01$ ). Psychological empowerment, in turn, was positively related to both creative process engagement and intrinsic motivation ( $\beta = 0.321$  and  $0.224$ , respectively,  $P < 0.01$ ). Additionally, both creative process engagement and intrinsic motivation exhibited significant positive relationships with employee creativity ( $\beta = 0.134$  and  $0.127$ , respectively,  $P < 0.01$ ).



**Figure 1.** Results of a structural equation modeling

Note: \*\*  $P < 0.01$

## Discussion and Conclusion

### Discussion

The main aim of this research was to examine the impact of leadership styles on employee creativity, focusing on the mediating factors. All the proposed hypotheses were confirmed, with statistical significance ( $P < 0.01$ ).

The results indicate that both empowering and transformational leadership styles influence employee creativity through mediators. Empowering and transformational leadership both have a positive effect on psychological empowerment, but the effect of transformational leadership is stronger. This finding supports the conclusions of prior studies by Amundsen and Martinsen [52], Chen *et al.* [90], Dust *et al.* [86], Joo and Lim [91], Kundu *et al.* [92], Raub and Robert [34], Tung [93], and Zhang and Bartol [13]. Additionally, psychological empowerment was found to positively correlate with both intrinsic motivation and creative process engagement, although the impact on creative process engagement was not significantly stronger than on intrinsic motivation. Zhang and Bartol [13] observed a similar positive relationship, noting that the effect of psychological empowerment on intrinsic motivation is more pronounced than on creative process engagement. Both intrinsic motivation and creative process engagement were found to positively influence employee creativity, with no major difference

in their level of influence. This is consistent with the findings of Zhang and Bartol [13], who suggested that both factors play a significant role in creativity, with creative process engagement having a slightly stronger impact.

On demographic factors, empowering leadership was found to be linked to age [34, 86], and employee creativity was found to be associated with education level [94].

### *Theoretical Implications*

The study makes valuable contributions to leadership and creativity theories. It provides a deeper understanding of how empowering leadership and transformational leadership influence employee creativity. Both leadership styles promote behaviors conducive to a culture of innovation and experimentation [95].

The research also highlights the importance of considering leadership styles as contextual elements when studying employee creativity. In line with Bandura's social cognitive theory (1986), intrinsic motivation and cognitive processes are shaped by environmental factors, including leadership characteristics. This finding expands on previous research that emphasized the importance of leadership in fostering creativity [40, 84], with a particular focus on transformational leadership [82].

Moreover, this study extends the work of Zhang and Bartol and [13] by incorporating both empowering and transformational leadership styles. The study shows that these two leadership styles have a significant impact on employee creativity through mediating variables such as creative process engagement, intrinsic motivation, and psychological empowerment.

### *Practical Implications*

In practice, leaders need to recognize that their leadership style has a significant effect on employee creativity through the mediating factors. This is particularly important in industries like telecommunications, where innovation is key to staying competitive [96].

Leaders can enhance employee creativity by influencing psychological empowerment, intrinsic motivation, and creative process engagement. Adjusting leadership styles can shift psychological empowerment, which in turn influences creative engagement and intrinsic motivation, ultimately boosting employee creativity. The study confirms that both empowering leadership and transformational leadership styles have a positive impact on psychological empowerment, with transformational leadership having a more substantial effect. Thus, leaders in the telecommunications industry should prioritize these leadership styles, especially transformational leadership, to foster creativity and innovation among their employees.

### *Limitations*

This study has three key limitations. First, it focused on two leadership styles—empowering leadership and transformational leadership—among various other leadership approaches, and examined their influence on employee creativity through several mediators. Future research should explore additional leadership styles to determine their effect on employee creativity. Second, the study didn't examine the direct impact of empowering leadership and transformational leadership on employee creativity, despite existing studies, such as those by Jyoti and Dev [58], Özarallı [97], and Slåtten *et al.* [51], which have highlighted direct relationships between these leadership styles and creativity. Third, the research did not cover all telecommunication companies in Vietnam, as it focused on approximately 20% of the currently operating firms in the sector.

## **Conclusion**

This study has enhanced our understanding of how empowering and transformational leadership indirectly influence employee creativity through mediators like creative process engagement, intrinsic motivation, and psychological empowerment. Based on the findings regarding the impact of each leadership style on employee creativity, leaders in the telecommunications sector can consider adjusting their leadership approaches to align with future innovation and creativity goals. Additionally, the interrelationships among the mediating variables and their link to employee creativity emphasize the indirect effect of leadership styles on fostering creativity.

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## **References**

1. Shalley CE, Gilson LL. What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *Leadership Q.* 2004;15(1):33-53.
2. George JM. Creativity in organizations. *Acad Manag Ann.* 2007;1(1):439-77.
3. Amabile TM. *Creativity in context.* Boulder, CO: Westview Press; 1996.
4. Shalley CE, Zhou J, Oldham GR. The effects of personal and contextual characteristics on creativity: Where should we go from here? *J Manag.* 2004;30(6):933-58.
5. Woodman RW, Sawyer JE, Griffin RW. Toward a theory of organizational creativity. *Acad Manag Rev.* 1993;18(2):293-321.
6. Amabile TM, Schatzel EA, Moneta GB, Kramer SJ. Leader behaviors and the work environment for creativity: Perceived leader support. *Leadership Q.* 2004;15(1):5-32.
7. Reiter-Palmon R, Illies JJ. Leadership and creativity: Understanding leadership from a creative problem-solving perspective. *Leadership Q.* 2004;15(1):55-77.
8. Mumford MD, Scott GM, Gaddis B, Strange JM. Leading creative people: Orchestrating expertise and relationships. *Leadership Q.* 2002;13(6):705-50.
9. Gupta V, Singh S, Kumar S, Bhattacharya A. Linking leadership to employee creativity: A study of Indian R&D laboratories. *Indian J Ind Relat.* 2012;48(2):120-36.
10. Chen CC, Lee YT. *Leadership and management in China: Philosophies, theories, and practices.* Cambridge: Cambridge University Press; 2008.
11. Zhou J. A model of paternalistic organizational control and group creativity. *Res Manag Groups Teams.* 2006;9:75-95.
12. Avolio BJ, Walumbwa FO, Weber TJ. Leadership: Current theories, research, and future directions. *Annu Rev Psychol.* 2009;60:421-49.
13. Zhang X, Bartol KM. Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Acad Manag J.* 2010;53(1):107-28.
14. Spreitzer GM. Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Acad Manag J.* 1995;38(5):1442-65.
15. Ahearne M, Mathieu J, Rapp A. To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behavior on customer satisfaction and performance. *J Appl Psychol.* 2005;90(5):945-55.
16. Haider S, Jabeen S, Ahmad J. Moderated mediation between work life balance and employee job performance: The role of psychological wellbeing and satisfaction with coworkers. *J Work Organ Psychol.* 2018;34(1):29-37.
17. Humborstad SIW, Nerstad CG, Dysvik A. Empowering leadership, employee goal orientations and work performance. *Pers Rev.* 2014;43(2):246-71.
18. Ahangar RG, Rooshan AA. Building managers as transformational leaders in public sector banks. *Int Rev Bus Res Pap.* 2009;5(5):355-64.
19. McShane SL, Von Glinow MA. *Organizational behavior: Emerging realities for the workplace revolution.* New York: McGraw Hill Companies; 2003.
20. Wang AC, Chiang JTT, Tsai CY, Lin TT, Cheng BS. Gender makes the difference: The moderating role of leader gender on the relationship between leadership styles and subordinate performance. *Organ Behav Hum Decis Process.* 2013;122(2):101-13.
21. Wang P, Rode JC. Transformational leadership and follower creativity: The moderating effects of identification with leader and organizational climate. *Hum Relat.* 2010;63(8):1105-28.
22. Gong Y, Huang JC, Farh JL. Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. *Acad Manag J.* 2009;52(4):765-78.
23. Gumusluoglu L, Ilsev A. Transformational leadership, creativity, and organizational innovation. *J Bus Res.* 2009;62(4):461-73.
24. Bass BM, Riggio RE. The transformational model of leadership. In: Hickman GR, editor. *Leading organizations: Perspectives for a new era.* 2nd ed. Thousand Oaks, CA: Sage; 2010. p. 76-86.
25. Amundsen S, Martinsen ØL. Self-other agreement in empowering leadership: Relationships with leader effectiveness and subordinates' job satisfaction and turnover intention. *Leadership Q.* 2014;25(4):784-800.
26. Sharma PN, Kirkman BL. Leveraging leaders: A literature review and future lines of inquiry for empowering leadership research. *Group Organ Manag.* 2015;40(2):193-237.
27. Seibert SE, Wang G, Courtright SH. Antecedents and consequences of psychological and team empowerment in organizations: A meta-analytic review. *J Appl Psychol.* 2011;96(5):981-1003.
28. Burpitt WJ, Bigoness WJ. Leadership and innovation among teams: The impact of empowerment. *Small Group Res.* 1997;28(3):414-23.

29. Conger JA, Kanungo RN. The empowerment process: Integrating theory and practice. *Acad Manag Rev.* 1988;13(3):471-82.
30. Thomas KW, Velthouse BA. Cognitive elements of empowerment: An interpretive model of intrinsic task motivation. *Acad Manag Rev.* 1990;15(4):666-81.
31. Albrecht SL, Andreetta M. The influence of empowering leadership, empowerment and engagement on affective commitment and turnover intentions in community health service workers. *Leadersh Health Serv.* 2011;24(3):228-37.
32. Bester J, Stander MW, Van Zyl LE. Leadership empowering behaviour, psychological empowerment, organisational citizenship behaviours and turnover intention in a manufacturing division. *SA J Ind Psychol.* 2015;41(1):1-14.
33. Chow IHS. The mechanism underlying the empowering leadership-creativity relationship. *Leadersh Organ Dev J.* 2018;39(2):202-17.
34. Raub S, Robert C. Differential effects of empowering leadership on in-role and extra-role employee behaviors: Exploring the role of psychological empowerment and power values. *Hum Relat.* 2010;63(11):1743-70.
35. Burns JM. *Leadership.* New York: Harper and Row; 1978.
36. Bass BM. *Leadership and performance beyond expectations.* New York: Free Press; 1985.
37. Bass BM, Avolio BJ, editors. *Improving organizational effectiveness through transformational leadership.* Thousand Oaks, CA: Sage; 1994.
38. Herold DM, Fedor DB, Caldwell S, Liu Y. The effects of transformational and change leadership on employees' commitment to a change: A multilevel study. *J Appl Psychol.* 2008;93(2):346-57.
39. Hirst G, Van Knippenberg D, Zhou J. A cross-level perspective on employee creativity: Goal orientation, team learning behavior, and individual creativity. *Acad Manag J.* 2009;52(2):280-93.
40. Oldham GR, Cummings A. Employee creativity: Personal and contextual factors at work. *Acad Manage J.* 1996;39(3):607-34.
41. Hoang LH. *Creation and the main conditions to stimulate the creativity of Vietnamese people today.* Hanoi: Social Science Publishing House; 2002.
42. NooriSepehr M, Keikavoosi-Arani L. The Relationship between Effective Factors on Knowledge Sharing among Faculty Members of Alborz University of Medical Sciences. *Entomol Appl Sci Lett.* 2019;6(2):24-32.
43. Kinicki A, Kreitner R. *Organizational Behavior.* New York: McGraw-Hill; 2004.
44. Shalley CE, Perry-Smith JE. Effects of social-psychological factors on creative performance: The role of informational and controlling expected evaluation and modeling experience. *Organ Behav Hum Decis Process.* 2001;84(1):1-22.
45. Sergeeva MG, Sokolova NL, Pryazhnikova EY, et al. Personal Educational Medium of A Creative Teacher In The Continuing Education System. *Amazonia Investiga.* 2020;9(26):511-9.
46. Herrmann D, Felfe J. Moderators of the relationship between leadership style and employee creativity: The role of task novelty and personal initiative. *Creat Res J.* 2013;25(2):172-81.
47. Qu R, Janssen O, Shi K. Transformational leadership and follower creativity: The mediating role of follower relational identification and the moderating role of leader creativity expectations. *Leadersh Q.* 2015;26(2):286-99.
48. Srivastava A, Bartol KM, Locke EA. Empowering leadership in management teams: Effects on knowledge sharing, efficacy, and performance. *Acad Manage J.* 2006;49(6):1239-51.
49. Zhang X, Zhou J. Empowering leadership, uncertainty avoidance, trust, and employee creativity: Interaction effects and a mediating mechanism. *Organ Behav Hum Decis Process.* 2014;124(2):150-64.
50. Li M, Zhang P. Stimulating learning by empowering leadership. *Leadersh Organ Dev J.* 2016;37(8):1168-86.
51. Slåtten T, Svensson G, Sværi S. Empowering leadership and the influence of a humorous work climate on service employees' creativity and innovative behaviour in frontline service jobs. *Int J Qual Serv Sci.* 2011;3(3).
52. Amundsen S, Martinsen ØL. Linking empowering leadership to job satisfaction, work effort, and creativity: The role of self-leadership and psychological empowerment. *J Leadersh Organ Stud.* 2015;22(3):304-23.
53. Mayer RC, Davis JH, Schoorman FD. An integrative model of organizational trust. *Acad Manage Rev.* 1995;20(3):709-34.
54. Howell JM, Avolio BJ. Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. *J Appl Psychol.* 1993;78(6):891-902.
55. Mumford MD. Managing creative people: Strategies and tactics for innovation. *Hum Resour Manag Rev.* 2000;10(3):313-51.
56. Jung DI, Chow C, Wu A. The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings. *Leadersh Q.* 2003;14(4-5):525-44.
57. Sosik JJ. Effects of transformational leadership and anonymity on idea generation in computer-mediated groups. *Group Organ Manag.* 1997;22(4):460-87.
58. Jyoti J, Dev M. The impact of transformational leadership on employee creativity: the role of learning orientation. *J Asia Bus Stud.* 2015;9(1):78-98.

59. Jaiswal NK, Dhar RL. Transformational leadership, innovation climate, creative self-efficacy and employee creativity: A multilevel study. *Int J Hosp Manag.* 2015;51:30-41.
60. Henker N, Sonnentag S, Unger D. Employee creativity and transformational leadership: the mediating role of promotion focus and creative process engagement. *J Bus Psychol.* 2015;30(2):235-47.
61. Menon S. Employee empowerment: An integrative psychological approach. *Appl Psychol.* 2001;50(1):153-80.
62. Bandura A. Social foundations of thought and action. Englewood Cliffs, NJ: Prentice Hall; 1986. p. 23-28.
63. Avolio BJ. Full leadership development: Building the vital forces in organizations. Thousand Oaks, CA: Sage; 1999.
64. Avolio BJ, Zhu W, Koh W, Bhatia P. Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *J Organ Behav.* 2004;25(8):951-68.
65. Blase J, Blase J. The micropolitical orientation of facilitative school principals and its effects on teachers' sense of empowerment. *J Educ Adm.* 1997;35(2):138-64.
66. Bono JE, Judge TA. Personality and transformational and transactional leadership: a meta-analysis. *J Appl Psychol.* 2004;89(5):901-10.
67. Luthans F, Avolio B. Authentic leadership development. San Francisco: Berrett-Koehler; 2003. p. 241-58.
68. Laschinger HKS, Wilk P, Cho J, Greco P. Empowerment, engagement and perceived effectiveness in nursing work environments: does experience matter? *J Nurs Manag.* 2009;17(5):636-46.
69. Grant AM. Leading with meaning: Beneficiary contact, prosocial impact, and the performance effects of transformational leadership. *Acad Manage J.* 2012;55(2):458-76.
70. Amabile TM, Barsade SG, Mueller JS, Staw BM. Affect and creativity at work. *Adm Sci Q.* 2005;50(3):367-403.
71. Gilson LL, Shalley CE. A little creativity goes a long way: An examination of teams' engagement in creative processes. *J Manag.* 2004;30(4):453-70.
72. Amabile TM. The social psychology of creativity: A componential conceptualization. *J Pers Soc Psychol.* 1983;45(2):357-76.
73. Deci EL, Ryan RM. A motivational approach to self: Integration in personality. Lincoln: University of Nebraska Press; 1991.
74. Utman CH. Performance effects of motivational state: A meta-analysis. *Pers Soc Psychol Rev.* 1997;1(2):170-82.
75. Mishra AK, Spreitzer GM. Explaining how survivors respond to downsizing: The roles of trust, empowerment, justice, and work redesign. *Acad Manage Rev.* 1998;23(3):567-88.
76. Quinn RE, Spreitzer GM. The road to empowerment: Seven questions every leader should consider. *Organ Dyn.* 1997;26(2):37-49.
77. Wilkinson A. Empowerment: theory and practice. *Pers Rev.* 1998;27(1):40-56.
78. Bin Saeed B, Afsar B, Shahjeha A, Imad Shah S. Does transformational leadership foster innovative work behavior? The roles of psychological empowerment, intrinsic motivation, and creative process engagement. *Econ Res.* 2019;32(1):254-81.
79. Amabile TM. A model of creativity and innovation in organizations. *Res Organ Behav.* 1988;10(1):123-67.
80. Amabile TM. Motivation and creativity: Effects of motivational orientation on creative writers. *J Pers Soc Psychol.* 1985;48(2):393-9.
81. Amabile TM, Conti R, Coon H, Lazenby J, Herron M. Assessing the work environment for creativity. *Acad Manage J.* 1996;39(5):1154-84.
82. Shin SJ, Zhou J. Transformational leadership, conservation, and creativity: Evidence from Korea. *Acad Manage J.* 2003;46(6):703-14.
83. Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Am Psychol.* 2000;55(1):68-78.
84. Tierney P, Farmer SM, Graen GB. An examination of leadership and employee creativity: The relevance of traits and relationships. *Pers Psychol.* 1999;52(3):591-620.
85. Zhou J, George JM. When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Acad Manage J.* 2001;44(4):682-96.
86. Dust SB, Resick CJ, Mawritz MB. Transformational leadership, psychological empowerment, and the moderating role of mechanistic-organic contexts. *J Organ Behav.* 2014;35(3):413-33.
87. Jada UR, Mukhopadhyay S, Titiyal R. Empowering leadership and innovative work behavior: a moderated mediation examination. *J Knowl Manag.* 2019;48(3):707-30.
88. Li Y, Wei F, Ren S, Di Y. Locus of control, psychological empowerment and intrinsic motivation relation to performance. *J Manag Psychol.* 2015;30(4):422-38.
89. Anderson JC, Gerbing DW. Structural equation modeling in practice: A review and recommended two-step approach. *Psychol Bull.* 1988;103(3):411-23.

90. Chen G, Sharma PN, Edinger SK, Shapiro DL, Farh JL. Motivating and demotivating forces in teams: cross-level influences of empowering leadership and relationship conflict. *J Appl Psychol.* 2011;96(3):541-57.
91. Joo BK, Lim T. Transformational leadership and career satisfaction: The mediating role of psychological empowerment. *J Leadersh Organ Stud.* 2013;20(3):316-26.
92. Kundu SC, Kumar S, Gahlawat N. Empowering leadership and job performance: mediating role of psychological empowerment. *Manag Res Rev.* 2019;42(5):605-24.
93. Tung FC. Does transformational, ambidextrous, transactional leadership promote employee creativity? Mediating effects of empowerment and promotion focus. *Int J Manpow.* 2016;37(8):1250-63.
94. Jiang J, Yang B. Roles of creative process engagement and leader-member exchange in critical thinking and employee creativity. *Soc Behav Pers.* 2015;43(7):1217-31.
95. Lee J, Lee H, Park JG. Exploring the impact of empowering leadership on knowledge sharing, absorptive capacity and team performance in IT service. *Inf Technol People.* 2014;27(3):366-86.
96. Ali AYS, Ibrahim IH. The impact of leadership style on corporate innovation: Survey from telecommunication industry in Somalia. *Int J Acad Res Manag.* 2014;3(3):233-41.
97. Özarallı N. Linking empowering leader to creativity: the moderating role of psychological (felt) empowerment. *Procedia Soc Behav Sci.* 2015;181:366-76.