

TRANSFORMATIONAL LEADERSHIP AND EMPLOYEE INNOVATION: EXPLORING THE CLIMATE PATHWAY IN PUBLIC EDUCATIONAL ADMINISTRATION

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ABSTRACT

The purpose of the present study was to find out the impact of transformational leadership style on innovative work behavior among the employees of administrative section of public sector educational institutions from Sargodha district and mediating role of organizational climate. The study was consisted of sample of (N =280). The purposive sampling technique was used to collect the data from participant of the study. The multifactor leadership scale by (Bass & Avolio, 1995), innovative work behavior scale by (Butt, 2006) and organizational climate scale by (Yildiz, 2016). which have were used to measure the construct of the present study. To achieve the objectives multiple statistical analyses were also conducted including descriptive statistics, reliability analyses and Pearson correlation of the variables. Mediation was computed with PROCESS for examine the direct and indirect effect. Statistical analysis revealed that all variables were correlated in the expected directions. Organizational climate mediated the relation of transformational leadership and innovative work behavior. Finally, implications of these results and limitations of the study were discussed in line with the literature and suggestions for future studies were reflected upon.

Key words: Transformational Leadership, Organizational Climate, Innovative Work Behavior

INTRODUCTION

In today's competitive work environment, organizations depend on the creative and innovative behavior of their employees to remain successful and adapt to rapid changes. Innovative work behavior (IWB) refers to the generation, promotion, and implementation of new and useful ideas within the workplace (Scott & Bruce, 1994). Employees who show innovative behavior help organizations improve performance, introduce new processes, and maintain long-term growth (Janssen, 2000). Many researchers agree that leadership style plays an important role in encouraging or discouraging such behavior

(Hughes et al., 2018). Among different styles, transformational leadership is considered the most effective in promoting creativity and innovation because it focuses on inspiring, motivating, and intellectually stimulating employees (Afsar & Umrani, 2020).

Transformational leadership not only influences employees directly but also shapes the overall climate of the organization. A positive organizational climate characterized by trust, support, and openness creates a safe environment where employees feel encouraged to share and apply new ideas (Amabile & Pratt, 2016). Studies

have shown that transformational leaders establish such climates by promoting collaboration, recognizing contributions, and supporting autonomy (Lin, 2023). Therefore, organizational climate is often seen as a key link or mediator between transformational leadership and innovative work behavior (Srirahayu, 2024). When employees perceive their organization as supportive and fair, they are more likely to take risks and contribute to innovation, translating leaders' vision into practical results (Chen & Khan, 2025). Transformational leadership style is the most influential leadership as this approach is constructive and development for individuals and organization. Transformational leaders support their follower to do more than required are proactive and these leaders help their followings to attain unpredicted goals move followers beyond instant self-interest this leadership style is related to the supporters' inspirational ability to bring about great things. Transformational leadership used interchangeably as charismatic leadership. But many differences lies between these two terms i.e. charisma is quality of transformational leaders rather than sole element, charisma deemphasized by transformational leaders, situational favorableness or uncertainty have effect on both approached, charismatic leadership have negative effects because the charismatic leader's supposed as self-centered (Tipu, 2012). Four I's idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration distinguishing transformational leaders' style (Avolio, Bass & Jung, 1999)

Idealized influence (charisma) leader behaves in impressive ways It is a critical step to become a transformational leader, to achieve charisma and impress the followers. The charismatic leaders who give a sense of shared mission and an obvious image and an obvious image are trusted by their followers (Avolio & Gibbons, 1988). Transformational type leaders cleared an idea to attract and inspire their subordinates. The strong sense of purpose helps the leaders to inspire and motivate their subordinates to higher standards. Symbolic action and personal example are the source of communication between purpose and meaning. These symbolic actions and personal examples drive individuals and groups forward through providing energy (judge & piccolo, 2004).

Intellectual stimulation refers as the degree in which the ability of leaders encouraged their

subordinates' creativity and careful problem solving method and old organizational problems are thoughts with a new angle (Limsila&Ogunlana, 2008) And Individualize consideration is the degree in which followers are supported, encouraged, and coached by the leaders (Yukl, 2006).

There are a several factors which are consider to influence the innovation in any organizational environment. Such factors have very strong effect on the individual's innovative behavior at different level in the organizations. At individual level; personality values, intellectual ability and job nature and job characteristics; at the group level; leadership styles and work group feature and at organizational level; factors considered such as organizational environment, organizational values, organizational design, nature organizational culture and organizational climate (Zoubi, 2006). Organizational climate was considered a very important and fundamental central element which associated with the organizational success. For the growth and development of the organization depend upon that organization was build a climate which promote the creativity of worker at both level organizational level and individual level. The organization's climate is the continue feature of behavior, attitudes, values, traditions and feelings, which are exhibited in the daily environment of the organization and the individuals of the organization experience and understand that phenomena of the climate. Organizational climate is not a single dimension of construct it has been displayed as a multidimensional approach such factor or dimensions, comprising of freedom or autonomy and complete control, degree of structure, rewards and consideration, and warmth and supportive environment (Parker, et al. 2003).

The creation of new knowledge and ideas to facilitate new business outcomes, aimed at improving internal business processes and structures and to create market driven products and services. Epistemologically, the term innovation derived innovative work behavior. Generally scholars defined that innovation is consisted on the generation of new ideas and the application of that ideas, whereas the creativity component originate new ideas (Yuan & Woodman, 2010). A comparatively new dimension of research emerged in the field of innovation in recent years is individual's future oriented and self-initiated behaviors. These actions are aimed at changing or bringing improvement in one's

current situation (Parker et al., 2006). Such behaviors include proactive work behavior and IWB (Janssen, 2000). The connotation of innovative behavior is to generate innovative output and benefit to the organization. The two concepts of creativity and IWB are thought to be overlapped and used interchangeably by many researchers. IWB is defined by De Jong (2006) as “Individuals’ behaviors directed toward the initiation and intentional introduction of new and useful ideas, processes, products or procedure within a work role, group or organization.

Literature review

Transformational leadership has been widely recognized as a key factor that promotes innovative work behavior among employees. Recent research has consistently shown a positive relationship between transformational leadership and innovative work behavior. According to Lin (2023) found that transformational leaders significantly encourage employees to engage in idea generation, promotion, and implementation by creating confidence within the workplace. Similarly, Jun (2023) reported that leaders who use transformational styles increase followers commitment to change and openness to new experiences, which ultimately leads to higher innovative behavior. This leadership style encourages employees to question old practices and develop new methods to improve organizational processes (Karimi, 2023).

According to Pham et al. (2024) demonstrated that transformational leadership enhances employees’ person-organization fit and job satisfaction, which are both linked with higher levels of creativity and innovation at work. Another study conducted by Bektaş (2025) found that in healthcare organizations, nurses under transformational leaders exhibited more innovative behavior because their leaders built trust, empowerment, and emotional commitment. These findings align with earlier studies that describe transformational leadership as a style that promotes vision, psychological safety, and empowerment, leading employees to engage more actively in innovative work

A supportive climate can either strengthen or weaken the influence of leadership on innovation. Recent studies have shown that transformational leaders create a positive climate by fostering collaboration, communication, and risk-taking, which then stimulates employees’ innovative behavior. A study conducted by Srirahayu (2024) found that innovation-supportive climate significantly mediated the relationship between transformational leadership and innovative work behavior, meaning that leaders shape a work environment that makes employees more confident and willing to experiment with new ideas.

Other recent studies also confirm the mediating effect of climate. A study conducted by Pham et al. (2024) discovered that transformational leadership first improves perceptions of organizational support and fairness, which then encourage employees to express creative ideas and take initiative. In the same way, Lin (2023) found that a positive organizational atmosphere, marked by trust and shared goals, explained a large portion of the link between leader inspiration and employee innovation. When employees perceive their workplace as open and supportive, they feel safe to take risks, which strengthens the effect of leadership on innovation (Jun, 2023). Similarly, Karimi (2023) concluded that transformational leadership shapes a climate that values creativity and continuous learning, providing psychological safety for employees to develop and apply new ideas.

A study conducted by Chen and Khan (2025) showed that transformational leaders create a culture of innovation through supportive climate practices. Another study conducted by Bektaş (2025) found that the presence of an empowering and supportive climate explained why transformational leadership resulted in more innovation in healthcare teams. Together, these studies suggest that transformational leadership alone cannot fully explain innovative work behavior; rather, it works through a favorable organizational climate that encourages and sustains innovation.

Conceptual framework

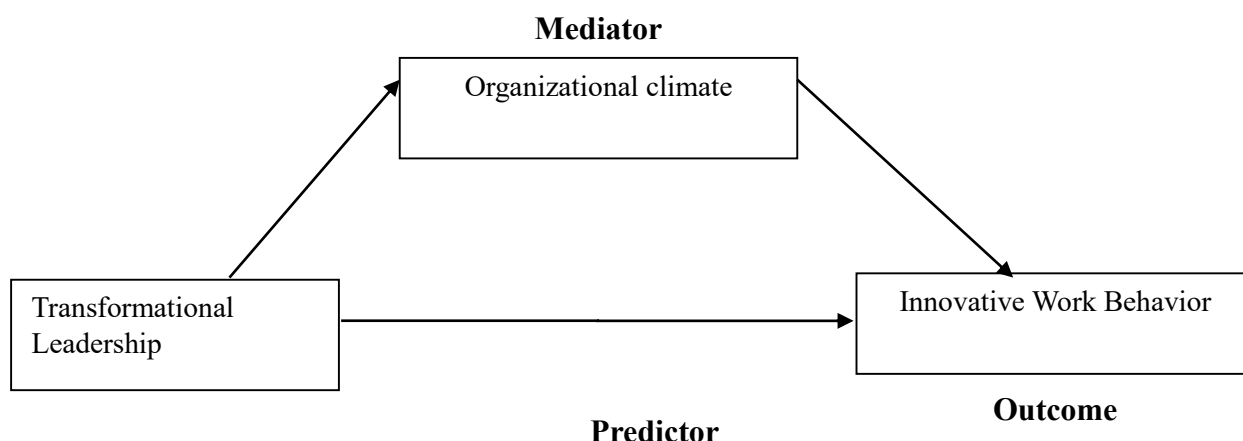


Figure 1: Modular summary for direct and indirect effect of transformational leadership and innovative work behavior through organizational climate

Methodology

Objectives

To investigate the mediating role of organizational climate between transformational leadership and innovative work behavior' sub scales.

To find out the impact of transformational leadership on innovative work behavior.

Hypotheses

H1. There will be a significant positive correlation between transformational leadership and innovative work behavior.

H3. Organizational climate will mediate the relationship between transformational leadership and innovative work behavior.

Instruments

Multifactor Leadership Questionnaire

Transformational leadership was measured using a 20-item subscale from the Multifactor Leadership Questionnaire (Bass & Avolio, 1995). The MLQ has been extensively used and is considered a well-validated measure of transformational leadership. All items were rated on a 5-point scale ranging from 0 = not at all to 4=frequently, if not always. Individual can minimum obtain scores 0 whereas maximum scores cannot exceed than 80. Obtained scores on this scale were interpreted in terms of low and high scores rather than cut off scores Cronbach's alpha coefficient of the scores for the present sample was established as .90.s

Innovative Work Behavior Questionnaire

Innovative Work Behavior Scale developed by (Butt, 2006). It is consisted of 28 items. Items are rated on a 5-point Likert type response rate 1 = strongly disagree to 5 = strongly agree. Individual can minimum obtain scores 28 whereas maximum scores cannot exceed than 140. Obtained scores on this scale were interpreted in terms of low and high scores rather than cut off scores. Alpha reliability of this scale was .94

Organizational Climate Measure

Organizational climate was measured by (Yildiz, 2016). It is consisted of 15 items. Items are rated on a 5-point Likert type response rate 1 = strongly disagree to 5 = strongly agree. Individual can minimum obtain scores 15 whereas maximum scores cannot exceed than 75. Obtained scores on this scale were interpreted in terms of low and high scores rather than cut off scores. Alpha reliability of this scale was .85

Sample

The present study was consisted on cross-sectional survey research design. Sample of the present study was consisted of employees belong to administrative section (N = 280) from different colleges and universities. Purposive sampling technique was used to collect the information. Informed consent will obtained from the participants before administering the questionnaires.

Inclusion criteria. Only administrative employees were included in the sample of the present study.

Exclusion criteria. Those employees whose are not belong to administrative section were excluded.

Procedure

With official permission, the researcher personally contacted the participants and gave a short introduction about the study's purpose, importance, and goals. They were encouraged to

take part and assured that the research was only for academic use, and their information would stay confidential. Participants were given brief instructions on how to complete the scales. The researcher stayed present while they filled them out and helped if anyone faced difficulties or had questions. After completion, the researcher sincerely thanked the participants for their voluntary contribution without any reward and acknowledged that their involvement added valuable knowledge to the field of psychology

Main study results

Pearson Correlation among study variables

Variables	M	SD	A	1	2	3
Transformational leadership	60.32	8.56	.84	~	.43***	.65***
Organizational climate	57.36	8.30	.73		~	.58***
Innovative work behavior	104.60	11.71	.76			~

Note: N = 280, ***p < .001,

Table shows Pearson correlation among study variables. The findings indicate that transformational leadership have significant positive correlation with organizational climate (r = .43, p < .001), and innovative work behavior (r = .65, p < .001). The findings indicate that organizational climate have significant positive correlation with innovative work behavior (r = .58, p < .001)

Table

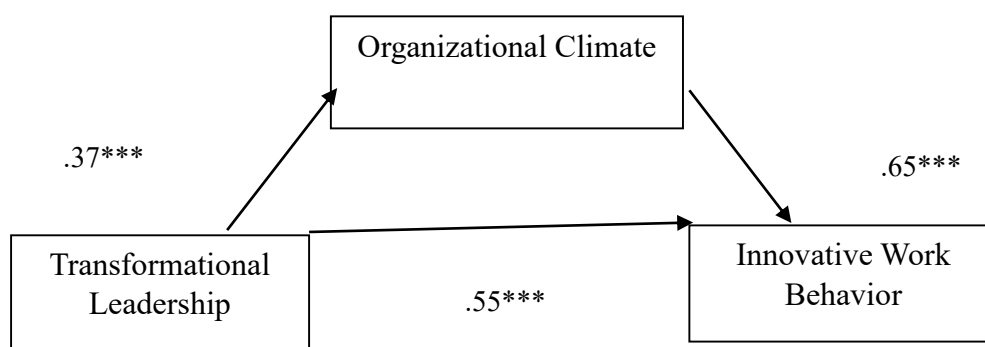
Direct and Indirect Effect of transformational leadership on innovative work behavior through organizational climate

Outcomes	Predictors	Direct Effect			Indirect Effect		
		B	95% CI		B	95% CI	
			LL	UL		LL	UL
Organizational climate	Transformational	.37***	.28	.46			
Innovative work behavior	Organizational climate	.65***	.53	.77	.24 ^a	.14	.37
	Transformational	.55***	.45	.65			

Note.^aSobel's Z = 6.35; ***p <.001

Table shows direct and indirect effect of transformational leadership on innovative work behavior. The R² value of .18 indicates that transformational leadership explained 18% variance in organizational climate with F (1, 278) = 62.19, p < .001. The R² value of .58 indicates that organizational climate and transformational

leadership 58% variance in innovative work behavior with F (2, 277) = 199.09, p < .001. The Sobel's Z value of 6.35, p < .001 confirmed the mediating effect of organizational climate between transformational leadership and innovative work behavior.



Discussion

The present study examined the relationship between transformational leadership and innovative work behavior and also tested whether organizational climate mediates this relationship among employees working in the administrative section of the public education sector. The results supported both hypotheses and are in line with earlier studies that have explained how leadership and workplace conditions influence employee innovation. The first hypothesis proposed that transformational leadership has a positive relationship with innovative work behavior. This means that when leaders behave in a transformational way motivating, inspiring, and supporting their employees workers are more likely to come up with and apply new ideas. A study conducted by Afsar and Umrani (2019) found that transformational leaders increase employees' willingness to think creatively and to find new solutions at work. Another study conducted by Khan et al. (2020) reported that leaders who communicate a clear vision and encourage their teams to take initiative play a strong role in improving innovative work behavior.

Transformational leadership includes qualities such as inspirational motivation, intellectual stimulation, and individual consideration (Bass & Riggio, 2006). Inspirational motivation means leaders share a clear and exciting vision for the future, which encourages employees to contribute new ideas. Individual consideration refers to paying attention to each employee's needs and providing personal support. These behaviors make employees feel trusted and valued, which increases their Earlier studies have shown that transformational leaders influence innovation indirectly by shaping the organizational climate. Transformational leadership improves trust, communication, and

interest in contributing creative ideas. Several researchers have explained that transformational leaders build confidence and motivation among their followers, which increases innovation (Ng, 2017; Afsar et al., 2019). When leaders value employee input, employees are less afraid of making mistakes and more willing to share new suggestions. This positive relationship has been found in many organizational settings, including education, healthcare, and government sectors.

The second hypothesis of this study proposed that organizational climate mediates the relationship between transformational leadership and innovative work behavior. The results supported this hypothesis, and the findings are strongly consistent with previous research.(2019) reported that transformational leadership fosters an innovative climate by encouraging open communication, autonomy, and collaboration. This type of climate makes employees feel safe to take risks and try new methods, which leads to innovative work behavior. They explained that leadership alone is not enough to create innovation; instead, leaders influence innovation by building a climate that supports it. Khan et al. (2020) also found that transformational leadership positively affects innovative behavior, but this link becomes stronger when the organization has a good working climate. In the public sector context, where rules and structures are often rigid, a positive organizational climate helps overcome barriers to creativity. Employees in such climates feel valued and are more motivated to propose new ideas.

support within teams, which together create a climate where employees feel encouraged to share and test new ideas. Afsar et al. (2019) found that transformational leaders enhance innovative work

behavior through a positive innovation climate that encourages creativity and knowledge sharing. Their study proved that when employees perceive the climate as supportive and open, the effect of leadership on innovation becomes stronger. Another study conducted by Zuraik and Kelly

A study conducted by Makumbe's study in 2024 explored the mediation effect of knowledge sharing between transformational leadership and innovation in the manufacturing sector. The findings indicated that transformational leadership positively influences knowledge sharing, which in turn enhances innovation. This supports the idea that leadership behaviors can indirectly affect innovation through the organizational climate, as knowledge sharing is a key component of a supportive climate. Another study conducted by Yuan et al. (2023) conducted a study in higher education institutions in Guizhou, China, examining the impact of transformational leadership on employee innovative behavior through organizational culture. The results confirmed that organizational culture mediates the relationship between transformational leadership and innovative behavior. This finding aligns with your hypothesis, suggesting that the organizational climate (in this case, organizational culture) plays a crucial role in translating leadership into innovation.

A study conducted by Wang et al. (2025) investigated the role of innovation climate as a mediator in the relationship between transformational leadership and individual innovative behavior in China. Their study found that innovation climate significantly mediates this relationship, highlighting the importance of a supportive organizational environment in fostering innovation.

Conclusion

In conclusion, both hypotheses were supported by the study and by past research. Transformational leadership has a positive relationship with innovative work behavior, and organizational climate mediates this relationship. Transformational leaders play a key role in building a workplace environment where innovation is encouraged, accepted, and rewarded. In the public education administration sector, the role of leadership is very important because such organizations often have fixed systems and limited flexibility. Transformational leaders can reduce this

rigidity by supporting change and encouraging staff to participate in problem-solving and improvement. As a result, employees feel motivated to think creatively and to bring positive change to their institutions. This combination helps employees to develop and apply creative ideas that can improve the effectiveness of public educational institutions.

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