

# Impact of Leadership Styles on Innovation, the Mediating Role of Psychological Climate

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**Abstract:** Innovation is significant for the evolution and survival of the organization. Employee innovation is considered an overall quality for company human capital. Therefore, the research aimed to explain and interpret the nature of two psychological constructs such as innovation and leadership. Therefore, the research is exploring the impact of different leadership styles on innovation using the leader-member exchange (LMX) theory. The research also aimed to evaluate the mediating role of psychological climate among leadership style and innovation. Secondary data were collected using a systematic review to evaluate the relationship among variables. The systematic review was conducted using Scopus and EDS databases for the searching process. The searches has been done in May 2022, including 24 research articles (8 on each variable) from 2020 to 2022 based on the keywords, authorship, citations, topmost organizations, titles, and journals for better outcomes. The outcomes is predict as significant among the leadership styles and innovation. In addition, the psychological climate was mediating the relationship between leadership styles and innovation. However, the limitation of secondary data through systematic review may hinder the generalizability of outcomes.

**Keywords:** Innovation, Leadership Styles, ambidextrous leadership, transformational leadership, psychological climate.

## 1 Introduction

Innovation capability is often viewed as achieving a competitive advantage in a high-performing modern organisation. Many successful organizations are looking for effective ways to develop innovative capabilities (Leaungkhamma & Le, 2020). Innovation refers to applying new ideas that result in value creation for customers and creates a new source of competitive advantage for organisations. Innovation impedes the bottom-up approach, as the innovation process within the organization is driven by an organisational culture that promotes creative thinking and tolerates risk-taking behaviour. Using a bottom-up approach, creative ideas are generated by technical employees in pursuit of transforming existing processes and products with new ones. Innovation in an organisational context is driven by individual factors, i.e. motivation and personality, and contextual factors, i.e. organisational climate and leadership, as the most important determinant of innovation. The innovation process starts with idea generation, followed by selecting ideas and their development, leading to the diffusion of ideas amongst the other business units (Alblooshi, Shamsuzzaman, & Haridy, 2020). The innovation process works in phases starting from ideation and exploitation, encompassing dual phases of instability and stability (Zuraik & Kelly, 2018).

Leadership styles are essential contextual factors influencing key organisational outcomes such as knowledge capital and human capital, an antecedent of innovative performance. Managing innovation is challenging and depends upon a leadership perspective's elusive set of drivers. Empirical research on leadership styles to drive innovation is still nascent. It offers a rich and fertile area for empirical investigation by scholars based upon the echelon characteristics of leadership styles within the organisations in Bahrain.

According to Zuraik & Kelly (2018), other contextual factors to innovation include organisational culture and climate, which is more versatile, adaptable, and imaginative in responding to the changing environmental dynamics shaped by global, legal, political, and competitive factors. In a nutshell, the organization needs to be more imaginative, versatile and adaptable in responding to the competitive dynamics of the marketplace. Leadership plays an essential role in promoting a climate of innovation within the organization by influencing contextual dynamics of the organization through the quality of

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communication, organisational structure, and infusion of trust, empowerment of employees, accountability and control system.

### Research Objective

- I. To investigate the impact of transformational leadership on innovation activities in Bahraini organisations.
- II. To investigate the impact of ambidextrous leadership on innovation activities in Bahraini organisations.
- III. To investigate the impact of psychological climate in moderating the relationship between transformational leadership and innovation.
- IV. To investigate the impact of psychological climate in moderating the relationship between ambidextrous leadership and innovation.

### Research Question

- I. What is the impact of transformational leadership on innovation activities in Bahraini organisations?
- II. What is the impact of ambidextrous leadership on innovation activities in Bahraini organisations?
- III. To what extent does psychological climate moderates the relationship between transformational leadership and innovation?
- IV. To what extent does psychological climate moderates the relationship between ambidextrous leadership and innovation?
- V.

## 2 Literature Review

### Theoretical Background

Graen and his colleagues introduced the leader-member exchange (LMX) theory, which emphasised dyadic interaction between leadership and followers as part of a relational approach to leadership (Graen, 1976). Leader-member exchange theories (LMX) suggest that leadership establishes different relationships with followers. Their intensity of relationship significantly varies amongst the followers instead of following a generic leadership style. High-quality leadership and follower relationships entail leadership offering followers access to resources, confidence and support to make decisions. (Tordera & González-Romá, 2013) Schermuly et al. (2013) suggest that situations that exhibit a high level of leadership and member exchange enable employees to receive more time and work-related information and emotional support from supervisors, resulting in innovation. LMX theory provides a relationship-based perspective that encompasses the rule-making process that ranges from low-quality transactional relationships to high-quality socio-emotional relationships. The theory suggests that the relationship between leader and member is established through the social exchange of tangible and intangible resources. LMX categorises the relationship between leadership and followers into two groups which includes "out-group relationship" for low-level quality of interaction and "in-group relationship" for high-level quality of interaction (Schermuly, Meyer, & Dämmer, 2013).

### Innovation

Innovation is an antecedent of a planned and measurable combination of ideas, objects and people followed by a rigorous commercialisation process in the marketplace. Schermuly et al. (2013) define innovation behaviour as "*a broad set of activities involving creating and implementing concepts and products new to an organisation*". According to Hughes et al. (2018), innovation at work refers to the process and outcome of introducing new and improved ways of doing things through idea generation and implementing them through improved procedures and practices resulting in identifiable benefits for the organization. There are significant differences between innovation and creativity in the workplace, as creativity emphasises the cognitive and behavioural dimensions of the applied process to generate novel ideas. In contrast, innovation emphasises implementing model ideas using a combination of problem and opportunity identification, adoption and modifications (Hughes, Lee, Tian, & Newman, 2018).

Innovation can be categorised into various types in an organisational context. For example, product innovation entails new product development and considerable improvement in existing products and services. Process innovation is another form of innovation that entails implementing new ideas that influence production and delivery methods. Supply chain innovation is another form of innovation that aims to transform the method for sourcing input products from the market and to deliver finished goods to the customer. Lastly, marketing innovation refers to the evolution of new marketing methods through enhancement in product design, packaging, price and promotion (Slimane, 2015).

### Leadership

Northouse (2018) defines leadership as a "*process in which an individual influences a group of people to achieve a common goal*". Chemers (1997) defines leadership as a "*process of social influence through which a person can help and support*

other people to reach a specific goal". Leadership style comprises constant behavioural models and traits expressed by the leaders in various situations. Burns (1978) categorises leadership styles into two types which include transactional and transformational leadership styles, where transactional leadership style where compensation incentives are used to achieve exchange outcomes. Transactional leadership emphasises task-oriented behaviour and interaction between leadership and follower. Intellectual incentives transactional leaders offer to motivate subordinates to engage in problem-solving behaviour through contingent rewards and management by exception. On the contrary, transformational leadership has received more attention amongst scholars concerning developing innovative capabilities. Evidence from Hughes et al. (2018) suggests that transformational leaders create innovative capabilities amongst their followers through intellectual stimulation and inspirational motivation.

### **Transformational Leadership**

The transformational leadership style goes beyond incentives for performance by intellectually encouraging followers to transform their concerns into the organisational mission. Transformational leadership incorporates four essential dimensions: (a) idealised influence, which refers to the leadership's ability to increase loyalty and dedication without emphasising self-interest. The second trait of transformational leadership is (b) inspirational motivation which refers to the leadership's ability to create a vision which directly influences subordinates and enables them to play a vital role within the organisation. The third trait of transformation leadership is (c) intellectual stimulation which refers to the leadership's ability to foster a culture of innovation and create risk tolerance. The last trait of transformational leadership is (d) empowerment which refers to providing authority to subordinates to make decisions and deliver them (Alqatawenah, 2018).

Evidence from Mokhber et al. (2018) suggests that the transformation leadership style has significant implications on the innovation process within the enterprise. The moderating role of supporting environment complementing leadership influence on followers by encouraging them to devote themselves to innovation activities using organisational support mechanism.

Evidence from Afsar & Umrani (2020), who conducted studies on 35 firms, i.e. service and manufacturing firms in Pakistan, suggests that transformation leadership style has a significant positive impact on innovative work behaviour amongst the employees, whereas task complexity and innovative climate moderates the relationship between transformation leadership style and innovative work behaviour.

Evidence from Ahmad et al. (2019) on twenty-seven banks in Lebanon suggests that transformational leadership plays an essential role in developing innovative capabilities amongst the employees measured using the product and process innovation where inspirational motivation and idealised influence significantly impact innovation. In contrast, there is an insignificant relationship between intellectual stimulation and innovation.

### **Ambidextrous leadership**

Duncan (1976) first coined the term organisational ambidexterity, which shed insight into duality in organisation structure to support innovation. Ambidexterity is defined as the "*ability of an organisation to simultaneously engage in the exploitation of current organisational capabilities and exploration of future opportunities*". Exploiting organisational capabilities means achieving efficiency and implementation, whereas exploration refers to the organisation's search, discovery, variation, and experimentation. The concept of Ambidextrous leadership can comprise two components which include (a) contextual ambidexterity and (b) structural ambidexterity. Leadership characterised by ambidextrous incorporates three elements: encouraging explorative behaviour, exploitative behaviour, and showing flexibility between two behaviours depending upon the situation (Alghamdi, 2018). Alghamdi's (2018) findings show that encouragement of leadership for explorative exploitative and mixed behaviour significantly predicts innovative employee performance. Evidence from Gerlach et al. (2020) findings on the ambidextrous leadership behavioural model suggest that instrumental leadership behaviour emphasising exploration and exploitation significantly impact innovation performance. In contrast, LMX, transactional and transformational leadership style has no significant impact on innovative behaviour. Haider et al. (2021) suggest that ambidextrous leadership positively impacts knowledge sharing among employees but harms innovative workplace behaviour. Furthermore, findings suggest that knowledge sharing mediates the relationship between ambidextrous leadership and innovative work behaviour.

## Research Methodology

This part provided information about the research methodology used to achieve the study objectives. It was based on the strategies adopted by the researcher to conduct this research study. The primary analysis of literature based on leadership styles in the Bahraini organizations found that three different research streams have conquered the current research. One to focus on the leadership styles, and the other is to focus on psychological climate and innovation. Based on these primary findings, the research analyzed these three streams and relevant keywords in the systematic literature review. In order to recognize the particular research on leadership and innovation in the organizations, the study followed the nine-stage process to perform the systematic review described by (Fries, Kammerlander, & Leitterstorf, 2021). These stages for systematic review include planning, conducting including reporting of previous literature studies and have been widely applied in the organizations of Bahrain.

The main focus of the current research is based on English based publications in academic peer-reviewed journals and articles. Therefore the study performed the bibliographic database searches on Scopus and EBSCO Discovery Services (EDS). Both the search databases used to make certain the generalizability of the searching process. Both the searches performed in 2022 and includes 24 research articles (8 on each variable) from 2020 to 2022 based on the keywords such as leadership styles, psychological climate, creativity, and innovation. In order to enhance the search output quality, the research restricted the searches to abstracts, titles and topic terms of the relevant articles. The primary searches resulted in the total number of articles identified by Scopus and EDS databases.

Moreover, to further focus on the systematic review and make certain high-quality outcomes, the study filtered the journal lists, i.e. top 10 journal rank lists related to leadership styles and innovation. Moreover, the systematic review also done on the top organizations in Bahrain, including titles and citations to enhance the quality of the search process. Moreover, the authorship was also evaluated for systematic review related to leadership styles, psychological climate, innovation, creativity, and organizations in Bahrain. The authors were mutually deliberated on the leadership styles and psychological climate recognized in the literature for authorship.

## Findings

In previous decades, the researcher has produced a strong understanding of the relationship between leadership styles and innovation. For instance, scholars have connected the autocratic leadership style to lower satisfaction in the workforce (Fries, Kammerlander, & Leitterstorf, 2021). On the other hand, the current research suggests that the researchers require evaluating association in a better systematic manner. For instance, the scholars may relate the leadership styles and innovation that are more predominant in organizations related to the impact on employee innovation to make significant conclusions regarding leadership styles and innovation. For this purpose, the scholars may construct previous understandings of the HR management in the organizations showing that employment benefits have various influences in every organization (Baù, Pittino, Sieger, & Eddleston, 2020).

Moreover, the current research also suggests that researchers require investigating the influence of various leadership styles on other aspects such as employee satisfaction, employees' attitude, and employee retention. In addition to this, the studies can also determine the positive influence of leadership styles and negative influences on the transfer process development. Additionally, the current research might develop insights related to effective leadership styles and innovation in the organizations of Bahrain that future research could transfer to the universal era of leadership and innovation.

## 3 Conclusions

The study concluded that the Bahraini organizational leadership styles, psychological climate and innovation are specific and tangled with other organizations' aspects. The better consideration of previous studies of leadership styles and innovation may permit various organizations in Bahrain to direct their corporate firms accordingly. Correspondingly, the understanding related to leadership styles and innovation can impact and structure the organizations' strategic decision making methods to provide for the organizational demands. The current study motivates the researchers and scholars to evaluate further the impact of leadership styles on innovation and other recognized research gaps. In the current research, there are some limitations related to a systematic review that, more specifically, even though the research planned to include all the peer-reviewed articles and journals related to leadership styles, innovation and psychological climate in the organizations of Bahrain, the selection of Database based on Scopus and EDS including the focus to top journals, authors and organizations, which the research highlights the high-quality research may neglect the important publications. In

addition, the selection of top journals inclines to underline the Bahrain studies while possibly neglecting other significant intuitions from other regions such as European countries and other GCC states.

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