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# Leadership Styles, Organizational Culture, and Innovation in Healthcare: A Conceptual Framework

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**Abstract**
This study examines the importance of leadership styles and how they relate to organizational innovation, which is vital in organizations because it enhances systems, services, procedures, and goods, especially in developing nations. Innovation can inspire a proactive, self-assured mindset that encourages taking chances and moving things along while also helping to develop a culture of innovation. The paper aims to propose a conceptual framework to investigate the relationship between the organizational innovation and leadership styles in the healthcare sector. The proposed model also aims to investigate the mediating role of organizational culture in relationship to leadership styles and organizational innovation. The framework is based on findings from reviewing key theories and concepts along with the relevant literature in the areas of leadership and organizational innovation. The framework can be used to empirically test a leadership style, and organizational culture suitable to promote administrative and technological innovation in hospitals and healthcare units. Methodologically, the framework will be tested by using quantitative methods and data will be collected through a cross-sectional survey design. Statistical software such as SmartPLS will be used for data analysis and to understand the relationships between the variables. The conceptual framework is expected to add to the body of knowledge both theoretically and in terms of practical implications for regulators, human resources, and healthcare practitioners. Further research will provide empirical data to the practitioners and policymakers of health and public sector organizations on the skills and competencies of the leaders that must be possessed to run healthcare institutions and deliver services to the masses at the optimum level. The health managers will further understand organizational leadership, innovation, and culture dynamics by having a framework that will help them to reassess capabilities and shortcomings. The paper also highlights the key determinants, and the importance of innovation in providing adequate patient care services and facilities within the context of healthcare sector in developing countries.
**Keywords:** Transformation Leadership, Transactional Leadership, Ambidextrous Leadership, Organizational Innovation, Organizational Culture

## Introduction

The role and importance of healthcare systems in the quality of life and social welfare have been broadly well recognized. The achievements in global health, particularly in the last several decades, are remarkable. The healthcare systems of industrialized countries have evolved into engines of innovation, developing and widely disseminating innovative, life-enhancing treatments and providing customers with a diverse range of options (Marjanovic et al., 2017). As a result, these countries achieved an overall increase in life expectancy and provided high-quality patient care by using advanced technologies and diagnostic techniques. However, in the developing world, the health sector has been slow in adopting innovation and the overall healthcare systems are in urgent need of reforms (Zweifel, 2019; Kamal, 2019).

In resource-scarce countries, maintaining a proper healthcare system in terms of quality and accessibility is a challenge. A significant percentage of the population (70%) relies on private healthcare facilities as public hospitals cannot cope with the huge influx of patients (Hashami, 2020). The health statistics of these countries indicate grave gaps in public service delivery, and all aspects of the health sector require significant reforms. The condition of the public sector reflects a bleak situation due to severe mismanagement of resources, gaps in leadership skills, and lack of innovation (Khaliq and Ahmad, 2018). There is an urgent need to improve healthcare leadership governance and introduce innovations at all levels. Healthcare leaders need to be more creative and promote a climate of innovation to find new methods of improving current services and products to meet the rising demands and cope with the technological innovations. The aims of healthcare development cannot succeed if the situation of neglected human capital prevails, and improved skills and innovations are not introduced (Khaliq and Ahmad, 2018).

Medical treatment has benefitted from significant developments over the years. Nevertheless, the level of service and delivery of the treatment in developing countries are primarily inefficient, ineffective, and not patient-friendly (Khalid and Abbasi, 2018). The well-known problems range from medical errors, which by some accounts are the leading cause of death, to the soaring cost of healthcare threatening the economic future of government, businesses, and individuals. Such issues necessitate creative solutions incorporating all aspects of healthcare, including patient care, diagnostic technologies, treatment techniques, and business models (Demircioglu, 2017; Marjanovic et al., 2017; Raghavan et al., 2021).

The public sector hospitals are under pressure because the costs of equipment and services are constantly increasing, and the governments are trying to reduce budgets while at the same time pushing to improve quality (Kumar and Bano, 2017). Therefore, the public sector hospitals need to introduce new services, techniques, and technologies as innovative solutions to improve patient care and service quality. From the patient's point of view, the desired benefit will be either better health or less suffering during illness. From an organizational perspective, the desired advantages will be often increased internal operational performance or customer care reliability and decreased mortality ratio. (Marjanovic et al., 2017; Young, 2017).

The health innovation increases healthcare efficiency, effectiveness, quality, sustainability, and safety. These innovations may include new or improved health policies, practices, systems, products and technologies, services, and delivery methods that improve healthcare. It is proved by many research findings that innovation in organizations has a significant positive relationship with leadership. Leadership and innovation are considered vital

determining factors of healthcare advancements and progression. Leadership plays a crucial role in providing strategic directions, resource allocation, employee empowerment, and enhancing creativity and innovation. Liability, transparency, and significant community participation are characteristics of good governance and leadership (Zaman and Saeed, 2019). In addition, the leadership plays an essential role in the public health sector for the sustainability of donor-funded health systems projects. Therefore, leadership and innovation are recognized as critical factors in the innovativeness of an organization.

Organizational innovation is essential since it leads to the development of new products and services on the market. Secondly, innovation helps to improve the existing services or products. Thirdly, organizational innovation can lead to new business opportunities. This form of innovation will create new market opportunities and yield higher profits. Fourthly, organizational innovation may result in an alternative supply chain, such as materials, equipment, and other inputs. Finally, organizational innovation leads to significant changes in organizational structure, among other things. It also helps develop creative and innovative employees (Kahn, 2018a; Arranz et al., 2020; Harel et al., 2020). In addition, Bayraktar et al., (2017) demonstrated that organizational innovation has a positive impact on several types of innovative outcomes, considerably enhancing firms' ability to implement new technologies and processes. Furthermore, organizational innovation significantly builds competitive advantage (Kafetzopoulos et al., 2020).

In the innovation literature, most examples and references are inclined towards large organizations like Google, Microsoft, 3M, and Apple. However, smaller businesses and other sectors are also constantly innovating new products and services (Taylor et al., 2019). Application of innovation is not restricted to one sector or industry, and other not-for-profit sectors such as healthcare are no exception. Healthcare institutions and professionals are equally affected by technological advancements and strive to innovate and stay competitive continuously.

The elements that contribute to boosting employee creativity and innovative performance have been examined by organizational researchers and have concluded that particular leadership characteristics and behaviors, such as creativity and innovation, improve organizational performance (Derue et al., 2011). Numerous investigators have found a positive association among leadership and individuals, team, organizational culture, and organizational outcomes (Xie et al., 2018). It is found that organizational leaders improve innovation by enhancing employees' beliefs and motivation, and help them in achieving greater performance (Afsar and Masood, 2018).

A recent meta-analysis on a large number of empirical studies conducted by Hughes et al (2018); Lee et al (2019) revealed that all positive leadership styles have a significant positive relationship with innovation and creativity. It has also been discovered that leadership styles are the critical determinant of organizational creativity and innovation. Their analysis found that Empowering Leadership and Servant Leadership have a higher level of correlation with organizational innovation as compared to Transformational Leadership. Similarly, in an earlier meta-analysis Rosing et al (2011) compared leadership styles and explained the heterogeneity of the leadership-innovation relationship. They argued that the dynamic nature of innovation processes that leads to changes in the specifications of these processes (opening and closing relationships) has largely been ignored by current research.

Leadership only enhances innovation under certain conditions. Some leadership style components have a strong positive relationship with innovation, whereas some components have a weak relationship. One possible reason is that organizational culture may play an

important role. Leadership may only promote innovation in certain kinds of organizational cultures. Several studies have investigated the cultural factors contributing to employees' innovative behaviors (Szczepańska-Woszczyna, 2015; Naqshbandi and Tabche, 2018; Wipulanusat, et al., 2018). In organizations with a value orientation, competitiveness, assertiveness, growth, variety, risk-taking, creativity, flexibility, higher levels of employee innovation have consistently been found compared to organizations without having such values (Prajogo and McDermott, 2011). Therefore, organizational culture appears to be a possible mediator (Lee, 2008; Sarros et al., 2008; Sattayaraksa and Boon-itt, 2016; Villaluz and Hechanova, 2018) that can support the leadership-innovation relationship. Specifically, organizational innovation-friendly culture may allow a positive leadership-innovation relationship, while an unsupportive culture can preclude a positive relationship.

To conclude, healthcare innovation is vital to ensuring that the governments appropriately address health disparities and the specific health issues of rapidly growing populations. Moreover, encouraging innovation may result in improved processes procedures, and technologies, allowing public-sector hospitals to remain key players in clinical research, quality of care, and health equalities across the countries. Therefore, in view of the above, there is an urgent need to assess the role of leadership in organizational innovation in overcoming the aforementioned problems within the context of healthcare sector.

**Literature Review**

A few researchers have studied the health delivery system issues, and how leadership and innovation can improve the prevailing situation. Batool (2017) examined the effect of public health and socio-economic conditions on child health. Similarly, Shabbir et al (2016) studied service quality with patient loyalty. Patient satisfaction was tested as a mediator. They found out that there is much difference between the service quality of the public and private sector hospitals as perceived by the patients. To evaluate hospitals' performances, Raza et al. (2018) also shed light on hospitals' issues by investigating three variables: personnel motivation, innovation, and participation in leadership. The findings showed a significantly positive relationship between the variables. In an earlier study, Rasool et al (2015)  explored the impact of transformational and transactional leadership styles on staff performance. They observed that transformational leadership was the leading style in the health industry. They also observed a significant positive relationship between the performance of the employee and transformational and transactional leaders. The findings reported by these studies are of a limited nature. There is a paucity of literature to identify the leadership styles which can promote technological and administrative innovations in the healthcare system. Hence this problem is the primary focus of the present framework.

Some of the previous studies on leadership styles have found a positive impact on organizational innovation (Lee et al., 2019). Specifically, transformational and transactional leaders and their relationships with innovation were studied by (Price, 2017; Sethibe and Steyn, 2018; Xie et al., 2018; Alkindi and Chandler, 2018; Gunzel-Jensen et al., 2018; Jia, et al., 2018; Ur Rehman et al., 2019; Berraies and El Abidine, 2019; Le and Lei, 2019). Ambidextrous leadership, a relatively new style introduced by Rosing et al (2011) while highlighting the duality of innovation, has also been studied by  (Bledow et al., 2011; De Visser et al., 2015; Alghamdi, 2018). Although the transformational leadership style is regarded as the most effective leadership style for innovation, studies have reported mixed findings. The researchers claimed that one leadership style is not sufficient because of the duality of innovation (exploration and exploitation). Hence, there is a need to investigate the

relationship between several leadership factors and innovation (Rosing et al., 2011). Furthermore, there exists a gap in the literature on the extent of relationships between certain leadership styles, their components, and organizational innovation (Hughes et al., 2018). Therefore, this framework will attempt to fill the gap in the healthcare leadership and innovation literature, and strengthen the understanding of their relationships.

Organizations should understand their culture before implementing leadership initiatives. Adhocracy or market culture types (Cameron and Quinn, 1999) are positively related to the innovation culture, but results have been mixed (Eisenbeiss and Boerner, 2013). When a leader works in adhocracy and market culture, his innovation performance may increase (Isaksen and Akkermans, 2011; Tien and Chao, 2012). Thus, additional research is a prerequisite to finding if culture mediates the relationship between leadership and innovation, such that leadership surges innovation in a supportive environment. Some studies have investigated the role of culture as a moderator, and some studies have examined its impact as a mediator  (Lin and McDonough, 2011). Rabbani et al (2014) examined the role of mediation in the relationship between leadership styles and organizational innovation and organizational creativity. Li et al (2017) examined the relationship between transformational and transactional leadership on organizational innovation with a mediating role played by the organizational culture.  Sharifirad and Ataei (2012); Abdi et al (2018) studied it as an essential organizational dimension that promotes organizational innovation along with several other variables such as knowledge management and organizational learning. These studies have indicated mixed findings leaving a gap in the literature prompting further investigation of the role of organizational culture with reference to leadership styles and innovation. In addition, there is a paucity of literature on the effects of organizational culture in the healthcare sector. It could be concluded from the above discussion and the available evidence that this area of research has received limited attention, and there is a need to further study the relationship between transformational, transactional, and ambidextrous leadership styles on the administrative and technological innovation in healthcare units and the mediating effect of organizational culture on the relationship between leadership styles and organizational innovation. The proposed framework can empirically explore ways to promote innovation to stop the further worsening of the healthcare sector. Thus, the primary goal of this conceptual framework is to develop a healthcare leadership and innovation framework to achieve better healthcare for the people. The framework could assist various stakeholders, such as human resource practitioners, health departments, and the researchers in understanding the relevant issues of leadership and innovation.

**Theoretical Framework**
The present framework is based on theories from where the independent and dependent variables have been derived. The leadership theories, organizational culture, and organizational innovation theories, form the theoretical foundation. Leadership theories (Burns, 1978; Bass, 1981; March, 1991); Graen and Uhl-Bien (1995) suggest that leaders increase beliefs and motivations in others, provide opportunities, support followers to achieve high performance, and be more innovative. Organizational culture theory suggests that organizational culture mainly comprises artifacts, values, and assumptions (Schein, 1988; Hogan and Coote, 2014), affecting employees' attitudes and beliefs (Antonakis and House, 2014). Innovation theory suggests that organizational resources, structure, strategy, size, and employees' behaviors affect, directly or indirectly, the organizations' ability to innovate (Damanpour, 1991; Scott and Bruce, 2018).

Based on these established theories and the reviewed literature, the following section presents relationship between the variables.

**The Relationship between Transformational Leadership and Organizational Innovation**
There is a strong theoretical support that leadership is an important determinant of organizational innovation (Anthony, 2013; Li et al., 2019; Taylor et al., 2019). Transformational leadership style is one of the most investigated leadership styles concerning innovation (Lee et al., 2019). This leadership style is described as shifting the supporters or followers ahead of their personal interests by certain leadership qualities such as idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1999). Leaders with this style radically change followers by raising awareness of the significance of tasks, leading them to go beyond their personal interests by prioritizing organizational achievements and trigger better outcomes (Yukl, 2006).

Specifically, the four kinds of behaviors are an essential element of transformational leadership: idealized influence, where leaders are greatly loved, well-regarded, and have dominant feelings among supporters; individualized consideration supports, encourages, and coaches followers, as well as encourages fresh learning possibilities and a supportive follow-up development climate; inspirational motivation promotes strong vision and leadership actions provide motivation to supporters by making the job of followers meaningful and challenging; and, intellectual stimulation promotes innovation and creativity of supporters by prototyping and encouraging experimentation to discover better alternatives and approaches (Bass et al., 2003b; Bass, 1999). Transformational leadership stresses the giving priority to followers and promote individuals' creativity and intellectual capital. The existing literature holds this leadership style as one of the most effective styles for organizational innovation (Gumusluoglu and Ilsev, 2009; Ilsever and Ilesever, 2016).

Al-Husseini et al (2019); Taylor et al (2019); Pradhan and Jena (2019) have confirmed that transformational leadership significantly influenced employees' innovative work behavior. Similarly, Zuraik and Kelly (2019) investigated the connection between transformational leadership, climate for innovation, and innovation through exploration and exploitation. Furthermore, Pradhan and Jena (2019b) study found a significant relationship between transformational leadership and innovative work behavior in manufacturing industries. In another similar study, Hansen and Pihl-Thingvad (2019) discovered that transformational leadership and single factor "verbal rewards" of transactional leadership positively correlate with employees' innovative work behavior.

In a nutshell, the empirical investigations by Li et al (2017); Al-Farhan (2018); Liu and Lee (2018); Sattayaraksa and Boon-itt (2018); Al-Husseini et al (2019); Li et al (2019); Taylor (2019); Pradhan (2019); Zuraik and Kelly (2019) have consistently reported positive relationships between transformational leadership and organizational learning, organizational performance, organizational support, culture, employee creativity, innovative work behavior, innovation climate, and organizational innovation.

***The Relationship between Transactional Leadership and Organizational* Innovation**
Transactional leadership is an essential element of the Full Range Leadership Model and is based on rewarding and punishing the followers by their leaders depending on their performance (Bass and Avolio, 1994). Transactional leaders can keep their supporters motivated for the short term by using a rewards and punishment model. Leaders who use transactional leadership as their model keep track of followers' performance and take

corrective actions wherever necessary. Such leadership is efficient both in crises and emergencies and for projects that need to be implemented in a particular manner. Several studies on transactional leadership style provided evidence that this style differs in the level of leaders' actions and the nature of followers' relationships. Bass and Avolio's (1994) observations found transactional leadership as an active and positive exchange of contingent-reward leadership, where followers are acknowledged or rewarded for achieving predefined goals. The leader could express gratitude for promotions, bonuses, and achievements. The leaders could also concentrate on mistakes and delay decision-making. This kind of behavior is called management-by-exception and could be divided into passive or active operations.

Several studies on transactional style provided evidence that this style differs in the level of leaders' actions and the nature of followers' relationships (Sethibe, 2017; Li et al., 2017). Bass and Avolio (1994) had similar observations, which found transactional leadership as an active and positive exchange of contingent-reward leadership, where followers are acknowledged or rewarded for achieving predefined goals. In this style, the leader could express gratitude for promotions, bonuses, and achievements (Burns, 1978).

Prasad and Junni (2016); Khan et al (2016) found a strong association between transactional leadership and organizational innovation. Chang et al (2015); Gross (2016) found a significant positive relationship between innovative behavior and entrepreneurial orientation. However, contingent reward received greater attention and has also been studied against several other leadership models such as Empowering Leadership, Authentic Leadership, Destructive, Authoritarian, and Servant Leadership (Lee et al., 2019), establishing its strong relationship with leadership and innovation.

Public and private healthcare have a significant difference in their provision of resources, structures, and service provision. For example, public sector hospitals are more bureaucratic and largely provide free patient care or at a minimum cost. In contrast, private sector hospitals are less bureaucratic and run as a charity as well as a pure business model.

In a nutshell, The reward and recognition by the transactional leader can encourage innovative behavior of employees (Khan et al., 2012; Oke et al., 2009) have suggested that transactional leaders can facilitate innovative processes and practices by setting performance standards and negotiating demands. Ebrahimi et al (2016) found a relationship between the exploitative nature of innovation and established transactional leadership as an essential element of innovation. Moreover, Prasad and Junni (2016); Khan et al (2016) found a strong association between transactional leadership and organizational innovation. Similarly, Fatima (2009) found a positive relationship between transactional leadership and innovation.

## Ambidextrous Leadership and Organizational Innovation

The ambidextrous theory of leadership suggests that flexibility in the leadership behavior in response to changing circumstances is an essential characteristic of ambidextrous leadership (Oluwafemi et al., 2019). Rosing et al (2011) observed that traditional leadership styles are not entirely suited for the innovation process due to their complex nature and exploration and exploitation level. In different situations, organizations require different kinds of leadership. The environment is often highly competitive and faces a variety of complicated conditions. Therefore, an effective leader should be ambidextrous with the capacity to simultaneously perform different activities and undergo various learning procedures at various levels.

Schindler (2015) recognized ambidexterity as a necessity for innovation and attempted to validate Rosing et al (2011) ambidextrous leadership model. The results endorsed that both opening and closing leadership behaviors were necessary to contribute to innovative team results. This equilibrium meant that both behaviors should be present simultaneously, but depending on the scenario to a distinct degree. Similarly, Oluwafemi (2018) studied the ambidextrous leaders' reaction towards the complex nature of innovation and its role in enhancing staff's creative habits and general company success. His findings disclosed that opening and closing leadership actions anticipated explorative and exploitative innovation behaviors of employees. Mixing the two leadership behaviors also anticipated the ambidexterity of employees. Adaptive leadership mediated the effect of ambidextrous leadership behaviors on workers' innovative behavior. In another more in-depth study, he further explored the connection between personal characteristics, emotional intelligence, adaptive leadership, transformational and transactional leadership, to ambidextrous leadership behaviors. Findings from the study indicated that the ambidextrous style of leaders has a significant positive relationship in enterprises that seek to improve employees' innovative work behavior.

Lukoschek et al (2018) tested two forms of innovative leadership behaviors in managers: fostering the generation of ideas and fostering the realization of ideas. The findings observed a significant relationship between the goal orientations of managers and dual leadership behaviors for innovation.

Applying the same Rosing et al (2011) theory, Alghamdi (2018) found a strong relationship between exploration and exploitation of activities perceived by subordinates. Similarly, in an earlier study. Zacher and Rosing (2015) reported that ambidextrous leadership anticipated self-reported innovative performance beyond opening leadership behaviors, closing leadership behaviors, and other controlled variables. Bledow, Frese, and Mueller (2011) looked at innovation leadership and suggested that efficient leaders various alternate behaviors and adjust them to varying requirements, which is the quality of ambidextrous leadership. An ambidextrous leadership takes distinct forms depending on contextual circumstances. The authors addressed culture as a significant contextual condition for efficient ambidextrous leadership. It was suggested that leaders should consider cultural context when leading for innovation.

**Organizational Culture as a Mediator**

In general, a mediating variable represents the mechanism through which the independent variable can influence the dependent variable (Baron and Kenny, 1986). The current research framework may examine organizational culture as a mediator of the relationship between leadership styles and innovation at the organizational level. Organizational culture effectiveness uses four culture types: Clan culture, Adhocracy culture, Market culture, and Hierarchy culture. In a clan culture, people have a lot in common, and the leader acts as a facilitator, mentor, and team builder. In an adhocracy culture type, the workplace is dynamic, entrepreneurial and the leader is an innovator, entrepreneur, and visionary. Market culture is result-oriented where a primary concern is getting the job done, and the leader acts as a driver, competitor, and producer. Whereas a hierarchy culture is very formal and structured, and the leader's role is coordinator, monitor, and organizer.

The organizational culture as a mediating variable with the independent and dependent variables has been the subject of a number of studies. Zheng, et al (2019) examined the combined effect of leadership style and organizational culture on the innovation behavior of

staff in construction companies. The results indicated that consistency between transformation, transactional leadership, and organizational culture could improve the innovative behavior of staff members. Furthermore, disproportionate impacts were discovered when the organizational culture was stronger with the two leadership styles. Specifically, employees demonstrated a higher level of innovation when the organizational culture was stronger. The findings showed the crucial role that leaders play in promoting innovation among organizations.

Similarly, Krasnicka, et al (2018) studied the innovation-leadership and corporate performance relationship and determined the role of the pro-innovation corporate culture. Results showed the existence of relations between innovative leadership and corporate performance. The mediating role of organizational culture was found to be partially supported. Naranjo-Valencia, et al (2011) analyzed the type of culture that promotes or inhibits the innovation and imitation approach of the organization. Several variables determine an innovative organization. According to the findings, organizational culture is the most crucial component in innovation strategy. In addition, the culture of adhocracy nurtures innovation, and hierarchical culture fosters a culture of imitation. If managers follow innovation/imitation strategies, they must give priority to organizational culture.

Some experts have attempted to establish connections between the type of organizational culture and organizational effectiveness. Several of them have also discovered significant relationships between organizational culture and innovation and have tested that organizations possessing the correct combination of cultural elements have a greater rate of innovation (Brettel et al., 2015). For leaders, it is difficult to change an organization's culture to boost innovation for employees when it is not supported by the type of culture that supports innovation. Additionally, organizational culture may be a strong mediator to develop leadership-innovation relationships (Sattayaraksa and Boon-itt, 2016). Therefore, an organizational culture that supports innovation could potentially boost leadership-innovation associations.

Leadership is the most significant determinant of the development and retention of culture (Schneider et al., 2014). According to West et al (2014), leaders are the maker and breaker of their authority, rewarding and punishing followers, providing opportunities for knowledge acquisition and resource development, making structural decisions; and shaping others' working lives for better or worse context shape organizational culture. Therefore, leaders command a great deal of our attention. We notice what they value what they are paying attention to, monitoring, rewarding, and strengthening. By doing so, we learn the principles that we need to embrace to gain the consent of leaders. Positive, supportive leader's supporters behave cooperatively and empathically.

Villaluz and Hechanova (2018) tested a cultural model that underlined the critical function of leadership as a catalyst for innovation culture. The researchers assumed that leaders directly forecast the culture of innovation and indirectly affect the culture of innovation with several mediating factors. They also examined the effects of leadership on innovation by ownership type. The results showed that innovation culture is predicted directly and indirectly by leadership role and backing for innovation. The leaders affect innovation through strategy, assessment, and benefits in non-family enterprises. In addition, individual ownership businesses, family and non-family businesses may need to use distinct methods to build up a culture of innovation and entrepreneurship within their organizations.

According to Abecassis-Moedas and Gilson (2018); Ali and Ishak (2017), people are regarded as leaders all over the organization. The organization promotes entrepreneurship and a

mindset that help to take risks and innovate. The leaders' objective is to produce the heritage and the people that have done excellent work. The corporate culture promotes personal development, transparency, cooperation, and individual objectives and passions in the projects. It is in the leadership's obligation to create a climate that promotes innovation and creativity.

Similarly, Nightingale (2018) also described organizational culture and clarified why the culture is essential for patients, professionals, and people operating in the health sector. The author suggested that healthcare systems should assist professionals in developing and promoting the organizational culture. His research recommended helping nurses comprehending the role of organizational culture and implement its fundamental principles at work.

Tian et al (2018) led a meta-analysis of the published literature on the effect of culture on innovation by selecting 37 years of peer-reviewed papers. The results showed that the relations between culture and innovation are complex and distinctive. While testing the role of culture empirically, Naranjo-Valencia et al (2017) emphasized that it promotes radical innovation by promoting the creative behavior of staff. The mediating role of innovation behavior was also tested on a sample of Spanish companies. Findings showed that the degree of the radicalism of product innovation was favorably linked to adhocracy and market cultures. The innovative behavior of staff mediated that relationship, but only in the case of adhocracy culture.

Thus, based on the current literature that has assessed the effectiveness of the organizational culture as a mediator by Feng-Cheng (2016); Rizki et al (2019); Berraies and Zine El Abidine, (2019); Akter and Rathnayaka (2019); Zheng et al (2019) provided some evidence that organizational culture enhances the relationships between leadership and innovation. Organizational culture supportive of innovation could increase innovation.

**Conceptual Framework**

This paper proposed a conceptual framework which is fundamentally based on the assumptions that organizational innovation is affected by the leadership styles in an organization. In this framework, three determinants are chosen, i.e. Transformational Leadership, Transactional Leadership, and Ambidextrous Leadership styles, which are independent variables. While the dependent variable is the organizational innovation and organizational culture is a mediating variable. Therefore, based on the literature review and discussion, a framework is conceptualized in the following figure.
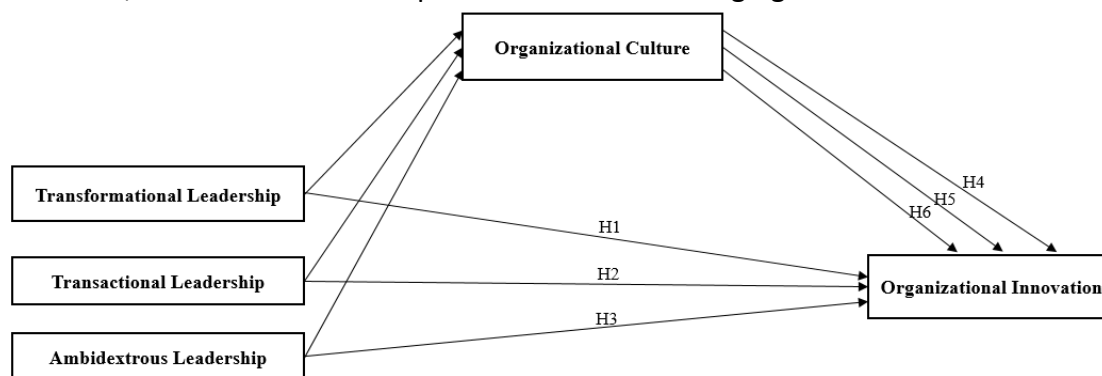


Figure: Conceptual Framework

**Prepositions**
The following prepositions are established from the above model:

**H1**: There is a significant relationship between Transformational Leadership and organizational innovation.

**H2**: There is a significant relationship between Transactional Leadership and organizational innovation.

**H3**: There is a significant relationship between Ambidextrous Leadership and organizational innovation.

**H3**: There is a significant relationship between Ambidextrous Leadership and organizational innovation.

**H4**: Organizational culture mediates the relationship between transformational leadership and organizational innovation.

**H5**: Organizational culture mediates the relationship between transactional leadership and organizational innovation.

**H6**: Organizational culture mediates the relationship between ambidextrous leadership and organizational innovation.

**Conclusions**
Healthcare innovation is essential to meet the growing population and demand for better patient care. The sector requires leadership skills to enhance innovation for better delivery of healthcare services, treatment, facilities, and create a culture that promotes innovation and creativity at the individual and organizational level. The current leadership has failed to provide solutions to the problems faced by the healthcare systems in the developing countries and steer them out of the crises. Political interventions have deteriorated further, creating a leadership gap. The literature demonstrates the lack of the availability of a suitable framework. There is a paucity of literature on how to address the innovation-leadership challenge. In addition, the concept is not fully explored in the public sector. Therefore, this framework will explore the effects of leadership styles and organizational culture on organizational innovation. The framework is expected to fill the gap in the literature by suggesting a new model within the context of the healthcare sector. The framework will contribute to the body of knowledge by examining the relationship between organizational innovation, leadership styles, and organizational culture in a single model, Theoretically, the framework is expected to contribute by taking into account the effect of independent variables on the dependent variable within the context of healthcare. Practically, the framework would assist policymakers in enhancing or restructuring existing policies as well as establishing new policies to stimulate innovation in tertiary care hospitals and healthcare facilities. The proposed framework, in particular, is predicted to have major managerial implications for the healthcare system seeking to improve its competitive advantage in patient care by improving mortality rates and patient satisfaction. Finally, the conceptual framework is likely to add to the existing innovation literature. Future researchers are encouraged to add more constructs to this model to uncover numerous causes driving organizational innovation. Moreover, the conceptual model could be applied to empirical investigations in related research fields to provide additional insights into healthcare innovation, which is significant both theoretically and practically.

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