T.C.
ISTANBUL OKAN UNIVERSITY
INSTITUTE OF GRADUATE EDUCATION

PhD THESIS

FOR THE DEGREE OF BUSINESS ADMINISTRATION

ASHRAF ALAMEDDINE

EFFECT OF LEADERSHIP STYLES ON PERCEIVED ORGANIZATIONAL PERFORMANCE AND ORGANIZATIONAL EFFECTIVENESS: THE MEDIATION ROLE OF INNOVATION CULTURE IN THE LEBANESE INDUSTRIAL SECTOR

SUPERVISOR

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Advisor : Asst. Prof. Canan Koçer Durmaz (İstanbul Okan Üniversitesi)

Jury Members : Prof. Dr. Uğur Yozgat (İstanbul Nişantaşı Üniversitesi)

Prof. Selma Arıkan (istanbul Medeniyet üniversitesi)

Asst. Prof. Beynaz Uysal (İstanbul Okan Üniversitesi)

Asst. Prof. Didem Demir (İstanbul Okan Üniversitesi)

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Ashraf Alameddine

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EFFECT OF LEADERSHIP STYLES ON PERCEIVED ORGANIZATIONAL PERFORMANCE AND ORGANIZATIONAL EFFECTIVENESS: THE MEDIATION ROLE OF INNOVATION CULTURE IN THE LEBANESE INDUSTRIAL SECTOR

Şirketlerin etkinlik ve performanslarını sürekli olarak artırmaları son derece önemlidir. Rekabetçi piyasada karşılaşılan zorlukların üstesinden gelmek için işletmelerin performanslarını sürekli olarak yükseltmeye çalışmaları gerekmektedir. Doğru insanların doğru zamanlarda doğru görevlerle stratejik olarak uyumlu hale getirilmesi hayati önem taşır. Bu çalışma, liderlik tarzları ile algılanan örgütsel performans ve örgütsel etkililik arasındaki arabuluculuk rolünü incelemeyi amaçlamaktadır. Bu amaçla, Lübnan endüstriyel sektöründe bir vaka çalışması seçilmiştir, bu da özellikle Lübnan'ın şu anda ciddi ekonomik endişelerle karşı karşıya olduğu göz önüne alındığında, bu sektörün verimliliğinin geliştirilmesine yardımcı olabilir. Bu çalışma, karizma, ilham verici motivasyon, entelektüel uyarılma ve bireysel düşünme gibi dönüşümcü liderlik özellikleri ile yönetim-by-exception ve koşullu ödül gibi dönüşümcü olmayan liderlik bileşenleri arasındaki karmaşık ilişkileri keşfetmeyi amaçlamaktadır. Bu ilişkilerin örgütsel performans ve etkililik üzerindeki toplu etkilerini ayırt etmek amacıyla. Bu çalışma, Lübnan Gümrük Genel Müdürlüğü'nde çalışan 384 Lübnan firmasının çalışanları üzerinde uygulanan nicel çıkarımsal bir araştırmadır. Bu örneklem, Lübnan endüstriyel sektörünü temsil eder ve 4.700'den fazla şirketi ve 318.000 çalışanı kapsar ve GSYİH'nın yaklaşık %8'ini (4,2 milyar ABD doları) oluşturur ve yerel işgücünün %20'sini istihdam eder.

Bu araştırmanın sonuçları, bu çalışmada incelenen dönüşümcü liderlik ve dönüşümcü olmayan liderlik değişkenlerinin, organizasyonun yenilik kapasitesini önemli ölçüde teşvik etme ve uzun vadeli performansı ve etkililiği artırma potansiyeline sahip olduğunu göstermektedir. Yenilik kültürü, bağımsız değişkenler ile bağımlı değişkenler arasındaki ilişkiyi arabulucu olarak kabul edilir ve algılanan örgütsel performansı ve örgütsel etkililiği şekillendirerek ve sağlamlaştırarak ortaya çıkar. Çalışmanın bulguları, yenilik kültürünün,

dönüşümcü liderlik ve dönüşümcü olmayan liderlik faktörlerinin, Lübnan endüstriyel sektöründe yüksek performansı ve etkililiği teşvik etmede önemli etkilerinin altını çizmektedir, bu da onları ihtiyaç duyanlar için kolayca erişilebilir kılmaktadır.

Anahtar kelimeler: İnovasyon, Liderlik Tarzı, Örgüt, Endüstri Sektörü, Performans, Etkililik, Kültür, Dönüşümcü liderlik, İşlemsel liderlik.
Tarih: Temmuz, 2024

ABSTRACT

EFFECT OF LEADERSHIP STYLES ON PERCEIVED ORGANIZATIONAL PERFORMANCE AND ORGANIZATIONAL EFFECTIVENESS: THE MEDIATION ROLE OF INNOVATION CULTURE IN THE LEBANESE INDUSTRIAL SECTOR

It is crucial for companies to consistently enhance their effectiveness and performance. To navigate challenges in the competitive market, businesses should continuously strive to elevate their performance. The strategic alignment of the right individuals with the right tasks at the right time is vital. This study aims to examine the mediation role of innovation culture in leadership styles and perceived organizational performance and organizational effectiveness. A case study in the Lebanese industrial sector has been chosen which might assist in developing this sector's productivity especially since Lebanon is currently experiencing critical economic concerns. This study seeks to explore the intricate dynamics between transformational leadership attributes, including charisma, inspirational motivation, intellectual stimulation, and individual consideration, alongside transactional leadership components such as management-by-exception and contingent reward, aiming to discern their collective impact on organizational performance and effectiveness. This study is quantitative deductive research applied on a sample of 384 Lebanese firms' employees working within the Lebanese General Directorate of Customs. This sample represents a population of the Lebanese industrial sector that consists of over 4,700 companies and 318000 employees accounting for around 8% of GDP (USD 4.2 billion) and employs 20% of the local labor force.

The outcomes of this research, lead us to the conclusion that transformational leadership and transactional leadership variables examined in this study possess the potential to significantly encourage an organization's capacity for innovation, and enhance long-term performance and effectiveness. Innovation culture emerges as a key contributor and is considered to mediate the relation between the independent variables and the dependent variables, shaping and solidifying perceived organizational performance and

organizational effectiveness. The study's findings underscore the substantial impact of innovation culture, transactional leadership, and transformational leadership factors in promoting heightened performance and effectiveness within the Lebanese industrial sector, making them readily accessible to those in need.

Keywords: Innovation, Leadership Styles, Organization, Industrial Sector, Performance, Effectiveness, Culture, Transformational leadership, Transactional leadership.
Date: July, 2024

ABBREVIATIONS

VIF **:** Variance Inflation Factor

SPSS **:** Statistical Package for Social Science

CFA : Confirmatory Factor Analysis

EFA : Exploratory Factor Analysis

KMO **:** Kaiser-Meyer-Olkin

TKM ; Total Quality Management

TF : Transformational Leadership

TR : Transactional Leadership

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CHAPTER ONE

1. INTRODUCTION

Every corporation requires people with exceptional business performance to survive and prosper, adapt to changing external conditions, and maintain a competitive advantage. Leaders can try to improve organizations' performance by creating a positive work environment and fostering an optimistic organizational climate through arrangements that encourage individuals to be optimistic. Effective leadership practices based on the values of respect, trust, and open communication are critical in creating a quality work environment where employees are respected and valued, which helps to keep them motivated, satisfied, and committed to the organization. Ineffective leadership practices are becoming a growing concern in organizations, with negative implications for organizations' performance (Abdelaliem & Abou Zeid, 2023).

Since innovation is recognized to have an impact on performance, businesses that want to compete successfully in the fiercely competitive climate of today must constantly innovate and present new ideas in order to be successful and maintain their existing position (Ahmed et al., 2023). It is never out of date to discuss innovation. All organizations around the globe seek to discover what determines their success or failure and what influences it, and since they are related to innovation, experts and academics continue to research this topic. Innovation is now regarded as a fundamental component of competitiveness and survival in organizations, embedded in the structure, products, processes, and services within the organization (Gunday et al., 2011). Innovation is also considered as a major determinant of a firm's performance and effectiveness by several scholars (Adegoke et al., 2012; Wang, 2000; Wang, 2003). According to Garcia et al. (2014), a leader's leadership style plays a key role in determining the relationship between innovation and the success of the organization, since leaders can set specific goals and encourage subordinates to promote innovation. The objective of any firm is not just to survive but also to build up its existence by boosting its performance. Firms should constantly strive to increase their performance to be able to address the issues they face in the competitive market. It is crucial to have the right person doing the right things at the

right time as leaders can create a path when there is not. Moreover, an organization should also strive to increase its effectiveness as organizational effectiveness leads to effective, sagacious, and utilizing the organization's human, financial, and technological resources strategically to gain a competitive edge (Daft, 2010). Moreover, organizational culture also enables leaders to alter employees' behavior in a way that is in the organizational best interest. In other words, Employee values and beliefs are influenced by organizational culture (Eskiler et al., 2016).

This study's main focus is on innovation culture to study its mediating role in the relationship between leadership styles and organizational performance and effectiveness. According to Riaz et al. (2012), innovative culture focuses mainly on the firm's internal framework and its capacity to add an upper hand by empowering receptiveness to novel ideas. So, for an organization to be successful it must have an innovative culture, which encourages people to develop new ideas and take on new risks as well as to create better products and services.

1.1. STATEMENT OF THE PROBLBEM

It is known all over the world that organizations are constantly under pressure to stay competitive and up to date with continuous advancement and to constantly develop high- quality products and services that can compete globally as well as providing their country with the necessary needs. For example, according to the General Directorate of Customs, Lebanon suffers from dependency on foreign organizations to supply most of its needs which is one of the factors that caused the Lebanese financial crises due to the continuing deficit in the trade balance over the years. As reported by the General Directorate of Customs, Lebanese imports in 2020 amounted to about 11.3 billion dollars, and exports were worth 3.5 billion dollars. This resulted in a trade deficit of $7.8 billion, and it is the same case for the last 30 years (Hsu, 2023). This deficit might be due to the lack of innovation to develop products and services instead of importing them from other countries. Also, maybe due to the adaptation of inadequate leadership styles which led to creating a poor innovative culture that hindered performance which eventually led to producing low-quality products and dependence on foreign production. Therefore, the

issue is that the effect of innovation culture on the relation between leadership styles and organizational performance and effectiveness at the Lebanese industrial sector is not clear yet and that's what the research is trying to find out.

1.2. PURPOSE OF THE STUDY

It is worthy to state that for organizations to stay ahead of their competition, they must continuously improve the way they operate. But most performance-driven organizations fail rather than succeed because many leaders fail to understand the gravity of innovation as a key component for success. The objective of this study is to examine the mediation role of innovation culture in leadership styles and perceived organizational performance where a case study in the Lebanese industrial sector has been chosen which might assist in developing this sector's productivity especially since Lebanon is currently experiencing economic issues. The various economic and financial issues have affected various sectors, including the industrial sector, which is considered as one of its anchor industries (Hubbard, 2020). So, under these circumstances, it is crucial to focus on developing appropriate leadership behavior that would help in reducing the negative effects of these problems which are not very easy. There is a need for organizations to respond to the rapid changes and to be competitive in the current brutal economic environment that has encouraged to conduct this research and focus on innovation culture as a tool that might help in improving the firm's performance and effectiveness as well as adapting to the current economic changes.

1.3. RESEARCH SIGNIFICANCE

The study of the relationship between leadership style and innovation culture and its effect on performance and effectiveness in the Lebanese industrial sector is significant. First, academia, as it focuses on innovation culture, contributing to the discussion about the relationship between leadership styles and organizational outcomes in Lebanon. Second, this research should play a role in reinforcing existing studies thus providing useful insights to academics. Third, it is interesting to find out how the following variables

“innovation culture, leadership styles, organizational performance, and organizational effectiveness” play a role in interacting and affecting the organizational business environment as well as to understand their mechanism. Moreover, this study is important due to its impact on Business management practice as the results would create awareness of innovation culture as a key factor for higher performance in such businesses, as their leaders can be trained and aided to be aware of this relationship and to apply it to stimulate innovation within their organizations. Furthermore, this research might help organizations in the Lebanese industrial sector to be more competitive, grow, create additional jobs, and thrive.

The importance of this subject also comes from the major value of having an innovational culture that might play a significant role in overcoming obstacles and changes in the organization’s environment. In addition, this research will also reflect on the effectiveness of leadership in the organization, which will reflect on the quality and production of the entire industry. Finally, innovation culture and leadership are considered the foundation of any organization and they play an important role in affecting organizational performance and effectiveness.

1.4. STRUCTURE OF THE DISSERTATION

This study comprises of five chapters and other sections, its framework is as follows: Chapter one discusses a brief introduction to the topic of discussion, and it also gives an insight into the purpose of the study, significance, and objectives of this research. Chapter two, literature review dives into leadership styles and their relationship with organizational performance and organizational effectiveness as well as the role of innovation culture as a mediator. Chapter three discusses the Research Methodology of the study, hypothesis, and framework. Chapter four discuses research data collection and analysis. In the last chapter, you will find the discussion, results, limitation, conclusion, and further research recommendations sections.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. LEADERSHIP BACKGROUND

Leadership has been a topic of interest for thousands of years (back into ancient Greek, Latin, and Chinese classics), but it has not been a topic of research until the 20th century. Leadership as a research topic went into different theme categories: traits, behaviors, and contingencies research approaches.

The traits approach of leadership focuses on the attributes of great leaders, under the idea suggested "Leaders are born, not made." The second approach of behavioral leadership discusses what effective leaders do, rather than how they are seen by others. The behavioral approach discussed the function of leadership and its styles. The behavioral studies of leadership looked at the leaders in their organizational context, categorizing their behaviors (which can be taught to people) that increase organizational effectiveness. The contingency approach which is the third wave of research, where the three main ingredients of leadership research were interacting (traits, behaviors, and context/ situation) assumed that leadership success is contingent on the effects of these variables and the proper interaction among them (Odeh et al., 2023).

The focus of leadership study has shifted more toward strategic leadership, which places an excessive emphasis on the significance of vision, how it inspires others, and how it exerts control through adaptable cultures and organizational principles. The leadership approaches of the past century are top-down bureaucratic paradigms that are better suited for an era centered on products than for an economy based on knowledge. These approaches prioritized leadership as the primary managerial role rather than the role of managers of quality (Odeh et al., 2023).

Leadership is defined in terms of a "person" might not be the right way due to its high association with the workforce. Observing leadership in terms of a "process" offers an improved fit, so leaders are seen as a part of an organizational culture where they highly interact with their followers (Horner, 1997).

According to Waldman (1993), leadership is a process that occurs within the context of an organizational culture. Culture may restrict the emergence of leadership behavior oriented towards change, development, and degree of risk associated with TQM. Traditionally, leadership has been defined in terms of personality traits, behaviors, influence exercised over other people, patterns of interaction with others, roles played, and authority derived from a formal administrative position (Horner, 1997). Leadership is not only the process and activity of the person who is in a leadership position but also encompasses the environment this leader creates and how this leader responds to the surroundings, as well as the particular skills and activities of the people being led (Kanji & Moura, 2001). It is also a process whereby an individual influences a group of individuals to achieve a common goal (Fry & Vu, 2003). Moreover, leadership is the art of mobilizing others to struggle for shared aspirations" (Edet & Ogundipe, 2023). "Leadership should be seen not only as position and authority but also as an emergent, interactive dynamic complex interplay from which a collective impetus for action and change emerges when heterogeneous agents interact in networks in ways that produce new patterns of behavior or new modes of operating. Furthermore, leadership is a process that hold the entire employees accountable for achieving a particular task or goal and influences their behavior on others (Kumar & Sharma, 2018).

Leadership is defined by most researchers in terms of their own perspectives and their own particular interest in the phenomenon. Leadership is defined as a set of traits, behaviors, interaction patterns, roles, and occupations. Researchers found out that there are numerous numbers of people who have tried to define the definition of leadership. (Shaaban, 2017).

In the following statements there are leadership definitions from the past 50 years:

- Leadership is the behavior of individuals leading the actions of a group of people toward a common objective (Malik & Azmat, 2019).
- Leadership is the influence that goes above and beyond routine compliance with the organization's routine instructions (Katz & Kahn, 1978).
- In order to motivate, engage, and satisfy others, people must mobilize their organizational, political, psychological, and other resources (Burns, 1978).
- To lead is to influence people to accomplish something (Buble et al., 2014).

- Leadership is about stepping out of culture and bringing about adaptive evolutionary change (Schein, 1992).

Some of the major words that stand out in leadership definitions are processes, influences and goals. The concept of leadership as a process that invalidates the traditional assumption that leadership comes naturally. Influence is also worth mentioning since making effective changes is practically impossible without it. Finally, goals are what keep an organization or institution motivated or moving forward. These facts make this definition concise yet comprehensive and valid (Northouse, 2007).

Leadership is a mindset that involves leaders getting involved in various events with the mindset of achieving short-term and long-term goals. Moreover, a leader needs to possess the attitude and behavior of one who assembles and leads his followers to achieve their goals. Furthermore, the role of a leader is to communicate with individuals or a group. Hence, leadership is vital in all firms and for an organization to succeed (Capella, 2016).

2.2. LEADERSHIP THEORIES

In the 20th century, Classical leadership theories were developed, and the main reason for the development of these theories was to identify specific traits and behaviors that show the characteristics of effective leaders. The Trait theory for example that was outlined by Stogdill (1948) suggested that some inherent traits cause people to be more predisposed to leadership roles, as this theory played a role in identifying the set of characteristics that differentiates leaders from non-leaders. Moreover, Ohio State University (1940) explored the behavioral theory, which played an important role in shifting the focus from traits to observable behaviors and actions. This theory sheds light on specific leadership behaviors, such as focusing on structure and consideration as key attributes of having an effective leader. Furthermore, Fiedler (1964) developed the Contingency Theory, which considers effective leadership is contingent upon several factors. It also considers that the effectiveness of leadership styles depends on the context in which they are applied. While these theories set a foundation for the understanding of leadership, critics argue that they oversimplify the complications of leadership dynamics mostly regarding individual attributes. In contrast to classical theories, modern theories

have evolved to consider a more complete understanding of leadership dynamics. Here are some of these theories; transformational leadership, articulated by Bass (1985), shifts the focus towards encouraging and motivating followers to work towards achieving goals beyond self-interest and drawing attention to collective vision. Moreover, transactional leadership theory emphasizes the exchange between leaders and followers. Leaders in a transactional framework encourage their followers through a reward and punishment system, focusing on achieving specific goals and sustaining order within the organization (Burns, 1978). Furthermore, Greenleaf's Servant leadership theory introduces a paradigm where leaders give greater importance to serving others, fostering personal and professional growth (Greanleaf, 1970). In addition, Goleman's Emotional Intelligence Theory brings emotional awareness and management into the leadership equation, arguing that a leader's ability to understand and navigate emotions significantly contributes to effectiveness (Goleman, 1995). These modern theories acknowledge the contextual and relational aspects of leadership, marking a departure from the individual-centric focus of classical theories.

In conclusion, classical leadership theories set the groundwork for understanding leadership traits and behaviors, while modern theories broaden the scope by incorporating factors such as inspiration, service, and emotional intelligence. Both sets of theories contribute to our evolving understanding of leadership dynamics, offering valuable insights for contemporary leadership practices.

2.3. LEADERSHIP STYLES

Leadership has been the most researched area in business for decades, it has become a compulsory part of every organization as attaining goals needs leadership which is impossible to achieve without direction and vision (Bryman, 2007).

Many studies suggest that adopting the right style of leadership is critical to achieving organizational goals and improving employee performance (Awamleh & Gardner, 1999; Conger, 1999; Dubinsky et al., 1995; Yammarino et al., 1993).

leadership styles are defined as a leader’s characteristic behaviors or behavioral patterns when directing, guiding, and motivating groups of people, influencing – in turn –

followers' behaviors, an answer to the question "How do leaders lead?". Many previous studies developed sets of a leader's characteristic behaviors assigned to specific leadership styles and introduced measurement tools that help to identify a certain leadership style (Piwowar & Iqbal, 2023).

A manager's primary task is to create and maintain an environment in which subordinates can take on tasks in the best possible way that achieves the highest required performance. Hence, it is of utmost significance that the leader of an organization builds quality agreeable relationships with his subordinates (Delić et al., 2017). Moreover, leadership styles are the ability to use a variety of different characteristics, traits, and behaviors by the leader of an organization to interact with their subordinates. leadership is also considered as a design that is correlated with managerial behavior that combines organizational and personal interests to achieve specific objectives (Mitonga & Coetzee, 2012).

Harris et al. (2007) considers a leader's leadership style as the way he or she engages people to get them to work together towards achieving a shared goal. Modern leadership styles are divided into four types: (1) transformational leadership styles, (2) transactional leadership styles, (3) culture-based leadership styles, (4) charismatic leadership styles, and (5) visionary leadership styles.

Transformative leadership involves influencing major changes in organizational perspectives to achieve organizational objectives, while transactional leadership involves following established rules and procedures within an organization. Transformational leadership and transactional leadership styles are chosen by this research as they are mostly used in studying the impact of leadership styles on organizational performance and are considered the most prominent of the various leadership theories related to effective organizational change management, they are also well-suited for today's fast-paced and highly technological workforce (Saowalux & Peng, 2007; Burns, 1978; Bass, 1985). Moreover, this model of leadership has become the most popular, generating much discussion and research, since it represents a change in what is perceived as effective leadership and is considered the best for creating strategy and fostering organizational change. Furthermore, a transactional leadership approach is also considered the most effective approach for maximizing operational efficiency where both leadership styles are

considered highly effective in organizations nowadays (Burns, 1978). In addition, I chose transformational and transactional leadership theories for my study as they offer unique perspectives on leadership that align with my research objectives. Transformational leadership focuses on inspiring followers to achieve their full potential, fostering a culture of innovation and positive change within a firm. This aspect is extremely relevant in today's rapidly fluctuating business environment. On the other hand, transactional leadership provides insights into the day-to-day interactions within a structured firm. It emphasizes the exchange of rewards and punishments to encourage compliance with established goals. This approach is necessary for understanding how leaders manage routine tasks, enforce policies, and maintain stability.

While there are many other leadership theories such as situational, servant, or authentic leadership, I believe that the combination of transformational and transactional perspectives provides a comprehensive understanding of leadership dynamics. These theories complete each other by addressing both the visionary aspects of leadership and the practical, task-oriented dimensions. By exploring these two theories, I aim to contribute to a nuanced understanding of effective leadership practices that can be applied in various organizational contexts.

The relationship between change management and leadership styles, particularly transformational and transactional leadership, is pivotal in understanding how organizations navigate change effectively. Transformational leadership is characterized by leaders who inspire and motivate their followers to exceed their own self-interests for the good of the organization. These leaders are adept at creating a vision for change, fostering an environment of innovation, and encouraging employees to embrace new directions. Transformational leaders facilitate change by building a culture of trust, commitment, and empowerment among their followers, which is crucial during times of transition (Bass & Avolio, 1994). On the other hand, transactional leadership focuses on structured tasks and the maintenance of routine operations through clear expectations and rewards for performance. While this style is more rigid, it can be beneficial in managing the short-term stability required during the initial phases of change. Transactional leaders ensure that the necessary systems and processes are in place to support the change, thereby providing a stable foundation for transformational efforts to take root (Burns, 1978). Both leadership

styles are essential in different phases of change management, with transformational leadership driving innovation and vision, while transactional leadership ensures stability and adherence to established processes.

2.3.1. Transformational Leadership

To survive and grow, organizations nowadays must broaden their organizational changes and deepen their understanding of the environment. This makes it clearer how important it is for leaders to steer their organization towards the future, acknowledge environmental needs, and help bring about the necessary adjustments. Transformational leaders are those executives that have the power to enhance the organization's work environment and foster a sense of fairness and understanding among the workforce (Korejan, & Shahbazi, 2016).

2.3.1.1. Transformational Leadership Concept

Transformational leadership is a complex and dynamic process in which leaders influence their followers' values, beliefs, and goals. These leaders move organizations toward the future, recognize environmental needs, and facilitate appropriate changes. They also create perspectives of potential opportunities for employees and develop a commitment to change, culture improvement, and the need to design new strategies for efficient use of energy and sources.

Bass & Avolio (1994) discussed transformational leadership in a study on infantry leaders. In this style of leadership, leaders, and subordinates have the opportunity to exchange ideas and work together to achieve a high level. Later in 2003, four characteristics of transformational leadership were identified such as idealized influence (II) which is a leadership quality that leads to role models being admired, respected and imitated as well as inspirational motivation (IM) which refers to leaders who have a forward-thinking mindset and assign meaningful and demanding tasks to their subordinates so they can become inspired individuals (Mittal & Dhar, 2015). The leadership quality known as intellectual stimulation (IS) encourages followers to let go of old beliefs, values, and

customs to spark curiosity in novel ideas. A leader who practices individualized consideration (IC) considers the needs and talents of their subordinates in order to provide them with further mentoring (Guay, 2013). Transformational leader was recently defined as a proactive leader that drives change, elevates subordinates' consciousness by highlighting their common benefits, and supports extraordinary aims (Bagga et al., 2023).

Transformational leaders are the type of leaders who guides and encourage mindfulness in employees by expressing a vision that increases awareness and consideration of the importance of the organization's values, goals, and achievements (Jensen, 2018). Transformational leaders have their greatest impact on followers' feelings by cultivating in them a sense of accomplishment and competence. Transformational leaders can improve organizational outcomes in line with market needs by developing human resources and making reasoned changes (Ghasabeh et al., 2015; Greimel et al., 2023).

The issue of leadership is one of the most important topics for many researchers in the field of organizational behavior and human resources, because of the leadership's focus on the joints and axes of the organization. The effectiveness of the leader is one of the main reasons for the success or failure of organizations. Is the inspirational or inspirational process that influences others and makes them more committed to accomplishing the tasks required of them, as well as motivating others to use their skills and abilities to implement tasks and achieve objectives, hence leadership is the essence of process management and even its beating heart. Transformational leadership has been called by several names, including (charismatic, inspirational, symbolic, and pioneering leadership), and accordingly, transformational leadership can be defined as it occurs when leaders consider the needs of workers and raise the interest of employees beyond their self-interests to achieve the goals of the organization (Al Jubouri, 2023).

Transformational leadership has its roots in the classic work of political scientist James McGregor Burns in 1978. The influence of leadership on the process had been an interest of Burns and prompted further studies (Bass & Avolio,1993). Burns described transformational leadership as a process via which followers and leaders grow in motivation. Burns contends that followers should be managed by keeping their motivation and morals in check. As employees are attracted to organizations that adopt a mission

statement, Thus, transformational leaders must take on the mission of their organization and guide their followers in that spirit (Burns, 1978).

Transformational leadership is defined as an approach to leadership that brings change in individuals and social systems (Burns, 1978). Also, Bass (1985) defined transformational leadership as the process by which leaders and their subordinates work together to achieve high levels of motivation and morale. Moreover, Rodriguez & Ferreira (2015) viewed transformational leadership as a process involving a leader's capacity to motivate and influence the actions of others. Transformational leadership ideally brings about valuable positive change in subordinates aimed at developing them into leaders. In this style of leadership, the leader works with subordinates to identify needed changes, creates a vision for guiding the changes, and implements the changes with committed group members (Prasertcharoensuk & Tang, 2016). In addition, transformational leadership motivates employees to act beyond their interests for the benefit of the organization as well as strengthening the awareness and increasing commitment of the employees by defining new visions and strategies they create (Avolio & Bass, 2004). Finally, transformational leadership plays a significant role in altering moods, evoking symbolic images and expectations, as well as directing specific activities and achieving goals (Egri & Herman, 2000; Fischer & Sitkin, 2023).

2.3.1.2. Dimensions of Transformational Leadership

The four elements of transformational leadership are charisma, individual consideration, intellectual stimulation, and inspirational motivation (Bass, 1990). Charisma, or idealized influence, is a leader who has a perception of a mission and vision and is widely respected and trusted by his subordinates and imposes pride in the group (Humphreys & Einstein, 2003). Moreover, Inspirational motivation is concerned with having a leader whom people look up to and are roused by. An inspirational leader enhances awareness and understanding of desired goals through emotional appeal. Furthermore, Intellectual stimulation helps in creating new ideas that challenge subordinates and motivate them to break out of old habits (Bass, 1985). Finally, Individual consideration is the last aspect of transformational leadership, which involved

in coaching and instructing the subordinates (Bass, 1985; Bass & Avolio, 1994; Al Jubouri, 2023).

2.3.1.2.a. Idealized influence

Transformational leaders try to be idols to their followers. Leaders of this caliber are appreciated, admired, and respected. Leaders of this style are idealized by their followers and have a desire to imitate them. They create positive feelings, maintain trust-based relations with their followers and consider their followers needs over their personal needs. Moreover, transformational leadership is consistent rather than arbitrary, and involves sharing risk with their follower's. Furthermore, they are trusted for handling things the right way and establishing high ethical and moral values. In addition, they do not take advantage of their power for their gain but rather use it only when needed (Dvir et al., 2002).

According to Bass (1985), Transformative leaders exhibit unique traits, such as putting the benefit of the group first instead of the benefit of individuals, presenting high ethical standards, and setting a good example for their followers. Moreover, some studies suggest that charismatic leaders tend to govern their followers' behaviors, beliefs, and feelings according to their values (Shamir et Al., 1993; Kilag, 2023; Alboliteeh, 2023).

2.3.1.2.b. Inspirational motivation

The method by which leaders are considered idols and encourage their followers to accomplish both their personal and corporate goals is known as inspirational motivation. (Al Jubouri, 2023).

Leaders inspire their followers with purpose when they have an eager and positive outlook on the future, provide a workable vision with clear communication, and teach them how to get to their destination (Avolio & Bass, 2004). Moreover, transformational leader motivates and inspires by giving their work purpose and challenge to people around them. Also, the leader must communicate their expectations of their followers and to demonstrate their commitment to the shared vision (Avolio & Bass, 2002; Kehr et al., 2023).

The leader inspires others to have higher aspirations by presenting a clear, positive, and attainable vision of the future condition., simplifies complex topics, and uses simple language to describe the mission, leading to increased willingness of followers to exert extra effort (Shackleton et al., 1995).

2.3.1.2.c. Intellectual stimulation

To be able to increase innovation, transformational leaders encourage their followers to reframe problems, reframe assumptions, and find new approaches to previous problems. In this type of leadership, Creativity is encouraged; Individual members are not publicly criticized for their mistakes as innovative and creative problem-solving is sought from followers, who are engaged in solving problems and addressing issues. Moreover, Leaders don't criticize their followers when their ideas differ from theirs, and followers are motivated to try new approaches (Avolio & Bass, 2002). Furthermore, a transformative leader challenges his followers to rethink how they do things or to break with tradition, as Support is provided for followers to question their values, beliefs, and expectations of themselves and the organization (Hollander, 1993).

Leaders who use this approach encourage followers to try new approaches and come up with effective methods for dealing with organizational issues (Northouse, 2001). Furthermore, Den Hartog et al. (1997) suppose that intellectual stimulation causes followers to question their values, assumptions, and beliefs as well as the values of those around them. In addition, if curious followers make mistakes, they will not be publicly criticized. Moreover, transformational leaders welcome the followers' ideas and solutions when they stimulate the followers to consider new approaches to old problems so that the followers can recognize and solve the unanticipated problems by the leader (Avolio & Bass, 2004; Rahmatulloh et al., 2023).

Intellectual stimulation incorporates creativity, issue-solving ability, and challenging the status quo. Intellectual stimulation is connected to love. In other words, the ability to push people to consider creative ways of thinking (Sarros & Santora, 2001).

2.3.1.2.d. Individualized consideration

This dimension refers to interacting with followers in a way that is more personal than treating them as part of a group (Dionne et al., 2004). To satisfy followers, transformational leaders advise, support, and motivate them to develop themselves, as well as listen to their needs. The leader's goal here is not just to recognize and meet the needs of his followers, but to mentor and train them to achieve their full potential as well. Moreover, a leader must also make sure that the organizational climate promotes new learning opportunities and self-improvement for followers to achieve these goals (Tuna, 2009).

According to Avolio & Bass (2001), transformational leaders make sure to support each individual's ambitions and growth in their role as mentors. Furthermore, Individualized consideration is practiced as follows:

- New learning opportunities and a supportive environment are created.
- Individual differences are recognized in terms of desires and needs.
- Leaders' behavior shows acceptance of differences among individuals.
- The practice of "management by walking around" is encouraged as a way to encourage two-way communication.
- Leadership that is individually considerate is one that listens efficiently.
- Monitor delegated tasks to check if followers need any guidance and support and to assess progress.
- Leadership involves delegating tasks to develop followers.
- Following should not feel like it is being checked up on.

2.3.2. Transactional Leadership

Transactional leadership behavior provides the basis for specifying expectations, negotiating contracts, clarifying responsibilities, and providing the rewards and recognition to achieve goals and expected performance between leaders and followers. Transactional leaders can foster employee engagement with new ideas by providing tangible recognition or rewards for successful initiatives and the development of new ideas, so the leaders'

commitment to a certain goal is communicated directly to followers (Bass, 1985 & Odero, 2023).

2.3.2.1. Transactional Leadership Concept

An effective transactional leader is someone who identifies their subordinates' expectations and responds by establishing a tight link between effort and reward (Burns,1978). Also, Ramayah & Min (2010) considered transactional leadership as the process of rewarding subordinates in exchange for their performance. Furthermore, Goodwin et al. (2001) Describe transactional leaders as those who encourage their followers through rewards or discipline, and who clarify the types of rewards that can be expected for different behaviors. In this way, it is a process of implicit negotiation between the leader and follower in accordance with their contractual commitments. Moreover, transactional leadership is considered as a leadership that motivates subordinates through the arrangement of financial rewards (Hussain, 2017).

The contingent reward system and the exception management system are the two fundamental elements of this system. The contingent reward provides extrinsic or intrinsic rewards for doing a good job which is recognized accordingly. Management-by-exception is about the leader’s interference when the subordinates do not meet the required standards and take corrective measures to get them back on track (Hussain et al., 2017; Almansoori & Ahmad, 2023).

An important concern of transactional leaders is ensuring subordinates are performing their tasks effectively to achieve the organization's goals and objectives (Egri et al., 2000). By giving contingent rewards to employees, leaders can gain their commitment. Therefore, Kuhnert & Lewis, (1987) suggest the expectations of their followers should be regularly met by an effective transactional leader. Moreover, an effective transactional leader recognizes their followers' wants and needs and explains how these wants and needs will be satisfied in exchange for doing specific tasks or achieving predetermined goals. Thus, followers receive rewards for achieving their goals, while leaders profit from completing their tasks. Furthermore, transactional leaders focus on the present and keep the organization running smoothly and efficiently. They typically excel

at traditional managerial functions such as planning and budgeting and handle the impersonal aspects of the job well. Clarifying expectations can prove quite effective in transactional leadership where leaders help in building the follower's confidence. In addition, taking care of subordinates' needs can boost productivity and morale (Vecchio, 2002).

2.3.2.2. Dimensions of Transactional Leadership

Transactional leadership refers to exchanges done on a daily basis between subordinates and managers ensuring that routine performance is achieved. These exchanges are characterized by contingent rewards and exception management.

2.3.2.2.a. Contingent reward

In terms of motivating others to achieve higher levels of performance and development, constructive transactions have been shown to be effective in achieving this, but not as effective as any of the transformative components (Avolio & Bass, 2002). Contingent rewards are based on interactions that have a mutually positive reinforcing effect between leader and follower. Essentially, this is a reward exchange agreement in which the leader decides what the subordinate must do to receive the reward and provides the reward only when they are doing what is required to obtain those rewards (Shackleton et al., 1995). Den Hartog et al. (1997) also define Contingent reward as rewarding employees who achieve the specified performance levels.

Transactional leaders clearly describe what is expected and provide rewards when objectives are met. As a result, the leader provides contingent rewards based on contractual obligations to reward followers materially and psychologically for their efforts and performance levels (Sarwar et al., 2023).

2.3.2.2.b. Management by exception

In general, this type is less effective, but it may be required in certain circumstances. Those people who practice management by exception rely implicitly on their employees to

complete jobs in a satisfactory manner. Workers under these leaders do not achieve beyond what is expected of them (Northouse, 2001). So only when something goes wrong, the leader intervenes to correct the situation. Moreover, there are two forms of management by exception: active and passive. Leaders who use active management by exception proactively look for mistakes, errors, and rule violations in their followers and take appropriate corrective action. Passive leaders on the other hand wait for deviations, issues, and errors to happen before taking corrective action. So, action is taken only in case some deviations have occurred. Leadership exhibiting such behaviors clarifies the standard to be met and punish the followers who don't comply with the required standards (Den Hartog et al., 1997). The difference between active and passive forms is that in the active form before abnormalities arise, leaders act. In essence, as compared to contingent rewards, management by exceptions uses more negative reinforcement (Northouse, 2001; Bass & Avolio, 2002). Moreover, leaders who engage in this behavior act by monitoring employee performance and correcting errors. Leaders expect employees to contact them when they make mistakes or if things go wrong or standards are not met. In this form, there isn't a systematic approach for problem-solving or unexpected situations, and expectations are not clarified for the required standards or what should be accomplished. (Avolio & Bass, 2004).

2.3.3 Comparison Between Transformational Leadership and Transactional Leadership

Transactional leaders are known for motivating their followers to do their job well, they are also able to become bureaucrats, executive leaders, and party leaders. However, a transformational leader goes beyond and insist on fulfilling the employees' needs and they are able to become intellectual leaders and leaders or leaders who do reforms and revolutionize (Burns, 1978). Moreover, Bass (1999) considers both leadership styles to be vision owners and transformational leadership plays a role in increasing the effect of transactional leadership. Furthermore, transformational leadership focuses on trust, creativity, communication, and the followers while transactional leadership focuses on areas such as self-performance, success, and meeting both follower and leader's

expectations through mutual exchange (Bass, 1980). In addition, Leaders and followers with transactional leadership interact with each other to please their mutual desires while in transformational leadership, the goal is to establish a more creative environment for all stakeholders. Furthermore, Change is desired by transformational leaders in organizations. However, transactional leaders would like to preserve the status quo. At last, Transformational leaders look for long-term solutions to big challenges while transactional leaders, on the other hand, plan for short-term gains (Judge & Piccolo, 2004).

2.4. PERCEIVED ORGANIZATIONAL PERFORMANCE

Organizational performance depends on leaders' ability to create a collaborative work environment and their ability to lead a team. Effective outcomes require participants' emotional engagement and empathy with activities undertaken within a team to provide solutions to problems that need to be resolved in the most professional way possible (Gabriela, 2020).

2.4.1. Organizational Performance Concept

The notion of performance has attained increasing attention over the past couple of decades due to its ubiquitous nature in almost every human endeavor, and multiple studies are often carried out over time due to its importance and/or need for improvement in every entity. Even though the term is frequently used in scholarly literature, it is not often fully understood since it is confused with concepts such as profitability, efficiency, effectiveness, productivity, economy, etc.

Generally, the concept of organizational performance refers to the voluntary association of resources, including human, physical, and capital, to achieve a shared objective (Alchian & Demsetz, 1972; Barney, 2001; Jensen & Meckling, 1976; Simon, 1976).

Business literature has extensively discussed organizational performance. It is the ability of a firm to achieve its objectives, like making a high profit which is an important indicator of success, producing high-quality products, and acquiring a large market share

using a certain strategy (Koontz & Donnell, 1993). Moreover, Muda et al. (2014) describe organizational performance as a measure that indicates the ability of an organization to achieve its objectives efficiently. The performance of an organization can also be viewed as a measure of its progress. It estimates how much an association is progressing and achieving its objectives. Organizational performance also reveals if an organization is doing well to accomplish its goals and vision. Moreover, organizational performance refers to the results of an organization, or its actual outputs, against which it can be measured against its intended objectives, goals, and outcomes. (Gavrea, et al., 2011). In addition, Organizational performance is about making the best out of the least possible input and converting it into output to improve organizational productivity (Paliszkiewicz et al., 2015). In addition, according to Noye et al. (2022), performance is achieving the goals stated in the intersection of enterprise orientations, in other words, it is not a mere finding of an outcome, but a comparison of the outcome with the objective. Furthermore, Lebas (1995) Describes performance as future-oriented, reflecting specific characteristics of each individual or organization, and based on a causal model and considered performance as subjective and interpretive as it is considered to be related to cost lines, which emphasizes its ambiguity.

So, in essence, organizational performance is recognized as the performance of a worker at a workplace, which has a direct bearing on an organization's success. Thus, a company's productivity and success are entirely dependent on employee performance (Shaikh et al., 2017).

2.4.2. Types of Performance Concept

Organizational performance can be measured in two ways: subjectively and objectively. Objective performance is known as “financial performance” and subjective performance is considered “non-financial performance”. It is the researcher's choice whether to use objective or subjective measures of performance.

2.4.2.1. Financial Performance

Financial performance is known as an objective assessment, it is measured through financial data such as profit, revenue, return on investment (ROI), return on equity (ROE), return on assets (ROA), share price, liquidity, and operational efficiency. (Narver & Slater, 1990). It is true that objective measures of performance can reduce the chance of common method variance (Wall & Wood, 2005), It is also possible to avoid normative and descriptive theory-building (Lumpkin & Dess, 1996). Despite the advantage of objective measures, it can be difficult to obtain consistent and comparable data on objective measures of performance for an entire sample of firms. Usually, this occurs when companies are not publicly traded or if they are private companies that do not have to report their financial details. Also, there may not be financial data for all companies under study in cross-country studies, and even if they are available, Accounting and reporting standards may differ among the companies, making them incompatible (Hult et al., 2008; Thang, et al., 2008). Moreover, financial performance measurement usually focuses on short-term success elements of a business. The primary focus of the following elements measures are revenues, profits, and cash flows of the firm. Furthermore, financial performance indicators deliver a limited scope in terms of long-term boosting of shareholder's prosperity. Additionally, these can be manipulated by the management of a firm by putting creative accounting or window-dressing (Sule et al., 2021).

2.4.2.2. Non- Financial Performance

Non-financial performance consists of non-economic factors such as product development, market share, employee satisfaction, sales growth, and competitive advantage. Subjective measures of performance are based on the opinion of the respondent or employee (Narver & Slater, 1990). To overcome these real and potential difficulties, researchers have successfully employed subjective measures of performance in their studies such as labor turnover, absence of employees, conflict, quality of products or services, and innovation to overcome potential difficulties in assessing the performance of firms through financial performance (Hult et al., 2008; Thang, et al., 2008). Moreover,

non-financial performance measurement specifies deficiencies in sectors of business that can have an impact on the long-term strategic triumph of a firm. The main focal point of these measures is the satisfaction of clients and how to retain them, brand development, employee inspiration and market share, etc. Furthermore**,** non-financial performance measures take into consideration all the aspects of a business that can nourish a well-grounded organizational strategy, these metrics have a lower chance of fabrication if composed, implemented and estimated properly (Sule et al., 2021).

2.4.3. Performance Management

As a focus on predetermined goals and objectives of an organization and the outputs that employees are expected to produce, performance management is defined as a calculated and integrated approach towards employee performance, focused on bringing the best out of them (Qureshi & Hassan, 2013). Performance management also involves employee development and performance appraisal, as it is the "Achilles heel" of human resource management in organizations. Usually, the process involves establishing mechanisms for decision-making use over time. Its ultimate objective is to align the efforts of employees with organizational goals (Pulakos, 2004). Moreover, Bhushan, (2014) considers Performance management as a continuous process where employees and management work together to strategize, monitor, and evaluate an employee's job objectives or goals, as well as their accomplishments and overall contribution to the company. Also, Bushan (2014) considers performance management as a critical element for an organization since it is that avenue through which employees are intimated with the desired goals, targets, and the organization's objectives, thus allowing their efforts to be channeled in the right direction for success. Furthermore, the employees are aware that management will compare real results with desired results, and on this basis, judgment will be made; in addition, they know that the system of management performance will determine payments and packages. So, Managers need to consider first whether there is a functional human resource management process capable of supporting the intended performance management system before embarking on its development. These practices

include having a well-written job description, a supportive environment, effective supervision, and comprehensive training for employees (Bhushan, 2014).

Pulakos (2004) developed a practice guideline, based on academic research literature, involving a process to develop an effective performance management system: To start with performance planning, the expected behavior required by the management is reviewed. Behaviors show how an employee will approach his or her task, such as how they will work in a team or communicate with management. To be effective, managers must ensure their employees understand the behavioral norms that relate to their unique job description as continuous feedback is viewed as the single most significant factor in the success or failure of a performance management system. Moreover, there should be two-way communication as this stage involves getting employees to assess their performance standards or to prepare statements of key results to compare with those of management. Furthermore, the accomplishments of employees should include the challenges they faced, and the actions they took to achieve a particular goal. Also, Evaluation of performance using competency models that consider knowledge, capabilities, skills, and other factors critical to success, and constant performance review to determine where changes need to be made. If done properly, performance management may have a positive impact on an organization's bottom line (Dorsey & Mueller-Hanson, 2017).

These outcomes as postulated by Pulakos, (2004) include:

• Group and individual productivity will be enhanced.
• Provisional basis for creating operational capital decisions
• Job responsibilities and expectations will be clarified
• The management-employee relationship is improved through improved communication.
• Employees' capabilities are developed to their full potential through effective feedback.

2.5. ORGANIZATIONAL EFFECTIVENESS

Organizational effectiveness is one of the most complex and understudied problems in the study of social organizations. Many difficulties arise in attempts to adequately define organizational effectiveness (Alshamrani et al., 2023).

2.5.1. Organizational Effectiveness Concept

All organizations intend to become more effective as effectiveness studies aim to find scientific methods for enhancing the productivity and efficiency of organizations (Arıkan, 2009). Based on Georgopoulos & Tannenbaum (1957) definition, Organizational effectiveness is the extent to which, given a set of resources, a given organization achieves its goals without endangering its members or exhausting the resources and means at its disposal. Moreover, Although the word "organizational effectiveness" is frequently used in literature, no single definition or theory exists for it. Because of that, there are 26 different criteria that researchers used as indicators of organizational effectiveness, including productivity, efficiency, quality, revenue, absenteeism, workplace accidents, job satisfaction, flexibility and adaptability, and employee empowerment, training, and development. These indicators of organizational effectiveness vary depending on the study (Steers, 1975; Cameron & Whetten, 1981; Wilkins & Ouchi, 1983; Ridley & Mendoza, 1993; Wang & Shieh, 2008). Those 26 criteria are grouped into several main categories as follows: economic indicators, technical indicators, organizational indicators, and social indicators. (Kıroğlu, 2008; Cabibihan et al., 2023). The various prominent ideas throughout organizational history can be used to explain the variations in organizational effectiveness definition, criteria, and scope in organizational literature.

2.5.2. Models of Organizational Effectiveness

There are four main types of organizational effectiveness models: goal models, system models, strategic constituency models, and competing values models (Kıroğlu, 2008; Muñoz & Solanellas, 2023). To start with, according to the goal model, organizations are rational tools for achieving economic goals where two basic assumptions underlie this model: First, organizations have goals that they aim to accomplish. Second, those goals can be defined and measured correctly (Steers, 1975; Öge, 2002). Moreover, the system model of organizational effectiveness is associated with the modernist view of organizations as organisms living in systems with organizations themselves being part of those systems (Hatch & Schultz,1997; Isoraite, 2005). Moreover, Organizations are seen

as open systems that take inputs from their surroundings, including raw materials and other resources, by transforming inputs into outputs, such as goods and services, organizations transform inputs into value (Hatch & Schultz, 1997). Furthermore, the strategic-constituencies model incorporates the importance of managerial goals and adapting to changing environments to survive. In addition, it considers the expectations and interests of the various powerful groups involved in your organization. These stakeholders include investors, employees, customers, suppliers, financial creditors, governments, and society (Kıroğlu, 2008). At last, the competing values model of organizational effectiveness has been developed by Quinn & Rohrbough (1983)**,** This model emphasizes that organizational effectiveness is determined by the ability of the organization and managers to meet multiple conflicting performance criteria. As Cameron (1986) puts it; organizational effectiveness is inherently paradoxical.

2.5.3. Indicators of Organizational Effectiveness

There are nine key indicators of organizational effectiveness. Starting with the concept of productivity, along with related components such as performance, effectiveness, and efficiency, it is one of the most difficult to define in the organizational literature. These terms are used across different disciplines and levels of analysis (Neal & Hesketh, 2002). Moreover, the term productivity is usually considered to describe the performance of groups and organizations (Huselid, Jackson & Schuler, 1997; Neal & Hesketh, 2002; Kıroğlu, 2008). As opposed to this, efficiency measures how much output can be produced with how much input (Öge, 2000; Neal & Hesketh, 2002). Organizations that are more efficient use fewer resources to produce the same unit output as their competitors (Öge, 2000; Kıroğlu, 2008). The second indicator is a company's quality, which is determined by how dedicated its staff is to providing superior products and services. It is more likely that a company will have more loyal customers and a better reputation when it provides high-quality products and services. As a result of the quality of the products, the companies invest in quality-enhancing systems to provide customers with more value (Kıroğlu, 2008). The third indicator is organizational cohesion, it involves staff morale, interpersonal relationships, willingness to work together, and a strong sense of belonging to a company

or group. (Pounder, 2000). It is through cohesion that employees can agree on goals, commit, motivate, and put extra effort into their work (Kıroğlu, 2008). Moreover, it is common for managers in organizations with cohesive employees to take positive steps to create an environment for their staff members to feel valued, and to provide mechanisms for them to work together and share problems and solutions (Pounder, 2000). The fourth indicator is adaptability and readiness; an organization with a high capacity to adapt to its environment is flexible, open to change, and puts a high value on innovation (Kıroğlu, 2008). Readiness refers to an organization's ability to track developments around its environment and prepare for new challenges and developments through research and development. Furthermore, to be flexible and adaptable, organizations must empower their employees and have a flexible organizational structure. (Pounder, 2000). The fifth indicator is information Management; an organization is said to be effective in this dimension if it can provide employees with accurate information, they need to perform their jobs and help by distributing necessary information on time. Moreover, in addition to spreading information from top to down, bottom-to-top mechanisms are also introduced (Pounder, 2000). The sixth indicator is growth as organizations' ability to grow is determined by their ability to acquire more resources, secure external support, and increase their capabilities. (Pounder, 2000). The growth of a company can be measured in terms of its plant capacity, its number of employees, its sales, profits, assets, market share, etc. (Isoraite, 2005; Huselid, Jackson & Schuler, 1997; Pounder, 2000). The seventh indicator is planning and goal setting as achieving goals and objectives and systematically planning for reaching them is related to organizations' ability to plan. Organizers have missions and visions, and to realize those visions, departmental and employee goals are broken down into specific and action-oriented objectives. Moreover, departments' budgets can also be considered part of planning and goal setting (Pounder, 2000). The eighth indicator is human Resource Development; It is seen as a means of achieving employee morale and cohesion in the interpersonal values of the competing values framework (Smart, 2003; Pounder, 2000). Additionally, organizations that rank highly in talent development emphasize training and development, encourage employee participation in decision-making, and empower employees. (Birdi et al., 2008). The last indicator is stability and Control; it is mentioned that achieving stability and control requires effective information management and

communication (Smart, 2003; Pounder, 2000). Moreover. stability refers to maintaining an organization's structure, functions, and resources during a stressful period, as it is important to allow the company to control information flow and work and direct its members' behaviors (Kıroğlu, 2008).

2.6. THE RELATION BETWEEN PERCEIVED ORGANIZATIONAL PERFORMANCE AND ORGANIZATIONAL EFFECTIVENESS

As performance measurement models and organizational effectiveness evolve, they can be metaphorically compared to the paths taken by two brothers who have been raised similarly. Despite similar influences from their parents and social environment, the brothers progress in different ways and make their own choices. Despite this, older brothers are expected to influence their younger siblings. Based on this perspective, Models for organizational effectiveness and performance measurement have evolved differently under the same theoretical and practical pressures. In addition to being the older brother of performance measurement models, organizational effectiveness models have also contributed to them in some way. In essence, performance measurement is an evaluation tool, but organizational effectiveness is the result of organizational activity (Henry & Lahikainen, 2024).

Organizational effectiveness is approached primarily by focusing on the concept's definition as it pertains to the assessment and conceptualization of the concept. It initially focused on attaining goals (goal models) before considering the resources and processes needed to achieve those goals (Goodman, 1977).

In contrast, Performance measurement is a process-oriented approach that focuses on quantifying an action's effectiveness and efficiency through a set of metrics. Before adopting a holistic perspective based on several non-financial measures, performance measurement functions as an independent process integrated into broader activities, performance measurement is primarily based on financial measures and is an integral part of the planning and management cycle (Neely et al., 1995). Furthermore, Traditional performance measurement focuses on capturing performance data, controlling feedback,

and influencing work behavior as part of the planning and control cycle and monitors strategy implementation (Flamholtz et al., 1985; Simons, 1990).

2.7. INNOVATION CULTURE

Innovation was mainly associated with the development of new products and the creation of new processes. This new perspective on innovation applies to trade as well as to industry or services. It is therefore of increasing interest to gain a deeper insight into factors affecting innovation performance (Hilmarsson, 2014).

2.7.1. Innovation Culture Concept

A company's culture consists of its shared values and practices (Deshpande & Webster, 1989). Also, it refers to the behaviors and expectations employees have adopted within the organization (Martins & Terblanche, 2003). It is becoming increasingly difficult for organizations to maintain their current performance and keep on differentiating their products and services by developing innovative ideas (Polychroniou & Trivellas, 2018; Pawirosumarto et al., 2017; Yesil & Kaya, 2013). Organizational culture was considered by specialists as a factor that impacts innovation, development, and financial performance (Blackwell, 2006). As organizations grow and become differentiated by different divisions and departments, organizational cultures have a profound influence on leadership emergence and effectiveness. Moreover, leadership in organizations relies heavily on influencing the values, beliefs, and behavioral expectations of employees. This is why leaders devote a lot of time and effort to the maintenance, development, and change of organizational culture (Bass & Avolio, 1993). In this research, the focus is going to be on innovation culture.

Nowadays, a successful organization must have an innovative culture if it wants to succeed as it is considered a new type of organizational culture. Morris (2007) defines innovation culture as “Beliefs, ideas, and behaviors of people, both past and present. For people who are members of an innovative culture, innovation is a key value. Moreover, Dobni (2008), defined innovation culture as “a multidimensional innovation context

encompassing innovation intention, innovation infrastructure, operational level behavior necessary to influence value orientation, and innovation implementation environment. In addition, A company's innovative culture is considered a precious resource that distinguishes it from its competitors and affects its performance significantly. Moreover, according to Riaz et al., (2012), By encouraging openness to new ideas, innovative cultures focus on the inner workings of an organization and its edge over competitors. Furthermore, an innovation culture is one where organizations learn from past mistakes and beliefs that caused them to fail and focus on the future by using innovative ideas (Rehman et al., 2019).

Currently, the business climate is marked by rapid technological changes, exceptional global rivalry, and continually changing customer preferences that organizations need to adapt to succeed (Droge et al., 2008). Innovation is considered one of the critical components of sustaining competitive advantage and organizational success gave these intricacies (Damanpour & Gopalakrishnan, 2001). Moreover, Innovative organizations are more adaptable and can react more quickly to changes, taking advantage of potential opportunities as they arise (Drucker, 1985). Therefore, Innovation is considered a vital component of an organization’s prosperity and is a fundamental tool for adjusting to a continually evolving business environment (Blackwell, 2006).

2.7.2. Dimensions of Innovation Culture

Shani & Divyapriya (2011) defined six essential dimensions of innovative culture which are Relationships, risk-taking, resources, knowledge, rewards, and Tools. First, the relationship dimension means innovations tend to emerge in an environment where people think differently, the environment is diverse, etc. Such an environment improves innovation growth. In addition, the "risk-taking" dimension refers to creating a culture that encourages people to try new ideas without punishing them when they fail, instead allowing them to learn from failures. Moreover, Resource dimensions include not only finances but can also refer to a variety of other things. Among the resources that can be used to produce innovations are time, autonomy, and power. Furthermore, knowledge and information are important as well for companies to run smoothly by having info shared and accessible for all the employees. In addition, rewards can Innovate employees and

encourage innovative behavior in the organization. Finally, Innovative thinking, idea management, and implementation are supported by tools.

Plsek (2014) & Scott et al., (2003) suggested that leaders can reinforce innovation by focusing on seven key dimensions of an innovative culture: “risk-taking”. The study considers innovative human services, social services, and healthcare organizations as being able to experiment and ready to benefit from opportunities as well as conducting balanced risk assessments. Innovative leaders are more accepting of innovative ideas and are supportive of risk-taking. As a learning process, failure is viewed as an opportunity rather than a punishment, and failure to learn is the only true failure. Furthermore, “Resources”. It is important to have access to funding, time to spend on innovation, and the ability to test ideas in order to innovate. Moreover, Team members should feel empowered to act on innovative ideas and learn why they may not feel that way. They should also convert strategic innovations into formal projects with allocated resources and seek non-traditional resources for their efforts. In addition, “Knowledge”. As innovative ideas often combine ideas from other sources, information, and knowledge should be gathered from a wide range of sources and beyond each industry's limits. Moreover, Employees are encouraged to seek out new ideas and share them with peers from other industries, organizations, and departments, as well as ask people from other industries how they might approach similar challenges or opportunities. Moreover, “goals”. Goals provide a specific target, but not an explanation of how to achieve it. To ensure resources are available and to present a clear case for need, goals must be tied to the organization's strategic plan. A leader can also ask staff to experiment with several novel ideas and present what they have learned as part of their personal development plan, contract, or annual evaluation. Furthermore, “rewards”. Innovative efforts should be recognized. A recognition strategy might include praising employees or giving staff the chance to work on their projects or develop their ideas. Moreover, the ability to maintain and increase motivation is easier when rewards appeal to an individual's intrinsic motivations and values. In addition, “tools and methods”. There are numerous tools and techniques for data gathering, value stream mapping, and incremental improvement. People should be trained in creative, design, and innovation skills in addition to these tools and techniques to expand their thinking. For example, brainstorming sessions and formal cognitive training are effective ways to increase

creativity. At last, “relationships”. The characteristics of innovative organizations include a diversity of teams and an emphasis on teamwork.

It is critical to provide opportunities for diverse people to collaborate. Moreover, job shadowing, brief rotations, and lengthier secondments can all help to increase knowledge of and appreciation for various ways of thinking and doing. At last, the seven dimensions could be implemented in any group of people, regardless of whether it is a single event or a multi-organizational system. If you pay attention to them, you will maximize the innovative potential of your team or organization.

2.7.3. Innovative Corporate Culture

There is an increasing number of organizations today that are looking for ways to be more innovative, where many focus on process excellence and strive to minimize risk. So, in such an environment, changing corporate culture is one of the most challenging issues companies face today so that innovation is accepted and embraced (Moiseev & Koroleva, 2012).

For varied people to be able to collaborate, it is crucial to establish chances for them; job shadowing, short-term rotations, and extended secondments to increase understanding and appreciation of various ways of thinking and working (Nieminen, 2020).

Phillips (2007) determined five essential aspects that help in changing culture within organizations; “The first factor is senior management”. for organizations to become oriented on innovation prosperity, senior executives must constantly reinforce the significance of innovation and promote it on a strategic level for it to become an integral part of organizational culture. “The second factor is compensation”. The consequences of people's actions motivate them, so compensation motivates them to behave a certain way, and when corporate culture promotes process excellence, employees are encouraged to perform the same tasks without taking any risks. Employees also lack the time and motivation to work on additional projects since they are too busy carrying out daily tasks. on the other hand, encourages individuals to create new ideas, since it is willing to take the risk to develop new products, services, or processes. Furthermore, it is expected that employees will participate in the innovation creation process in a company with an

innovative culture. “The third factor is communication”. An innovative culture encourages communication at different levels within an organization so that employees receive innovative messages, where leaders are responsible for ensuring such continuous and repeated communication takes place. “The fourth factor is training”. Employees can be taught innovative methods and tools through training, this should include a variety of techniques that result in "new ideas, new ways of capturing and evaluating them, as well as new attitudes and approaches to innovation. To get improved results it is vital to prepare people to new processes. “The fifth factor is measurements”. The activity should be planned strategically and with a plan. It is important to measure the number of ideas, how many people are involved, how much time is required, and so on, when it comes to innovation. Moreover, innovation goals must be aligned with strategic goals as the process of innovation can also be measured clearly through measurements.

2.7.4. Activities That Foster the Growth of Innovation Culture

Investment in research and development is one activity that can help grow innovative cultures, as this department can drive innovation on different levels, that need to be integrated at the same time as standard functionality. Benchmarking is also an activity that involves analyzing an organization's internal and external operations from the perspective of innovation (Birdi et al., 2001). Furthermore, direct customer engagement can also help foster a culture of innovation as it is a source of information for improving a business's products or services. Moreover, usually among many ideas, only a few are successful, so companies must accept the mistakes and failures of their employees and must reward both outcomes and efforts. Additionally, " Developing a learning culture, "reward systems for innovation", "and training for creativity and innovation" " contribute to the development of innovative cultures as well (Birdi et al., 2001).

Morris (2007) considers that “everyone in the organization can be a creative genius”. New ideas must be encouraged by a company that is open to everyone. Recruiting is another situation. It is important for an organization to hire someone who can accept and embrace innovation in the future, someone who has potential from an innovation

standpoint. Otherwise, if an organization wants to build an innovative culture, then it must accept the risk of hiring such a person.

2.8. THE RELATION BETWEEN LEADERSHIP STYLES AND PERCEIVED ORGANIZATIONAL PERFORMANCE

Leadership styles are considered one of the key factors affecting organizational Performance (Zhu et., 2005). The influence of leadership styles is regarded as a powerful factor in management, advancement, and sustaining competitive advantage (Avolio, 1999; Lado et al., 1992). There is a need to examine the impact of leadership on organizational performance, as several researchers consider leadership to be one of the most vital components for improving performance. For example, transactional leadership is a technique for helping organizations achieve their current goals more proficiently by binding job performance to an esteemed reward as well as guaranteeing that they have the required resources to achieve their goals (Zhu et al., 2005). Moreover, Visionary leaders create a strategic vision and impart it to their subordinates as well as build commitment towards the vision which would help the organization to reach its long-term objectives (Avolio, 1999; McShane & Glinow, 2000). Furthermore, a study of 227 nurses from four Saudi Arabian hospitals discovered a positive correlation between transformational leadership and job performance (Almutairi, 2016). In addition, Wang et al. (2021) proved that firms performed better when their CEOs or managers expressed a more positive attitude toward employees as leadership behaviors from the CEO that is relationship- and task-focused directly affect the organization's capabilities. Moreover, Dhawan et al. (2011) showed that leadership style significantly affects employees' loyalty to their organization, which results in positive productivity outcomes for the organization. Furthermore, Doh & Quigley (2014) showed that organizational productivity was negatively affected by leaders who were inclusive and integrated stakeholders across various levels. In addition, leadership styles have been proven to have an impact on a company's culture, which would also influence the organization's performance as well (Al Khajeh, 2018). In addition, Individuals and organizations interact through leadership in a very dynamic manner. Thus, management's ability to execute "collaborative efforts" is dependent on leadership skills.

It is vital as well to point out that a profound leader not only attracts subordinates to the organization but also takes care of their needs as part of achieving organizational objectives (Lee & Chuang 2009). Moreover, obtaining followers' trust, respect, and admiration is the key to success for leaders (Allen et al., 2013). In addition, a study hypothesized the moderating impact of leader-member exchange (LMX) on the relationship between two leadership styles and the organizational commitment of employees. One hundred and fifty-six Malaysian executives voluntarily were collected. Though the hypotheses for direct effects received low to moderate support for transformational leadership styles, the moderating hypothesis received substantial support, with a stronger relationship particularly in the case of the professional respect dimension of LMX (Kim et al., 2010).

Piccolo & Colquitt (2006) concluded that transformational leadership increases organizational performance. Transformational leadership have a major effect on job engagement practices and business performance (Eliyana & Ma'arif., 2019). In this vein, leaders exhibiting transformational leadership can help to develop subordinates' potential abilities, thus leading to their improved work performance. Accordingly, transformational leaders improve the relevance and importance of the subordinates' work; therefore, these employees will thus have an increased willingness to make extra efforts to achieve work performance (Avolio et al., 2004).

A considerable amount of literature is available on transformational leadership and its impacts on innovation and organizational performance (Howell & Avolio, 1993). For example, Avolio et al. (1998) found that transformational leadership had a positive impact on followers' creativity in a computer-mediated brainstorming exercise. Keller (1992) also found that transformational leadership positively influenced the performance of research and development (R&D) project teams in a large R&D organization, enhanced subordinate innovativeness, and impacted the extent to which their innovative orientation added unique value to the projects that they finished. For example, Wang et al. (2022) stated that transformational leadership can positively influence performance using data from 162 supervisor-employee dyads. Wang & Colbert (2011) also reported that transformational leadership has a positive effect on performance, based on a meta-analytic review of 117 independent samples. Moreover, Dvir et al. (2002) carried out a longitudinal experiment and proposed that transformational leadership has a positive influence on direct

subordinates' work performance. Leadership behavior in general and transformational leadership in particular has long been considered an important individual factor that influences innovation and performance in the workplace (İşcan et al., 2014). it is strongly predicted that transformational leaders will have significant contributions to improve organizational performance. They encourage employees to take the risk, and such risk-taking yields positive effects on performance in uncertain environments (Waldman et al., 2001). Moreover, Hiwa et al. (2021) found that the transformational leadership style positively and significantly affected performance.

Previous studies have suggested the need to examine the effect of leadership style on organizational performance within the nonprofit context (Kim, 2022; Cole et al. 2008). For example, Rowold and Rohmann (2009) used data from German nonprofit orchestras and found that transformational leaders contribute to organizational performance by motivating and inspiring their followers. Rowold et al. (2014) also found that transformational leaders increased organizational performance by painting an optimistic future that provided both meaning and challenges for followers in fire departments and Protestant church offices in Germany.

Studies that link transformational leadership with higher performance are mainly based on observational cross-sectional data, which may overestimate effects (Judge & Piccolo 2004; Jung & Avolio 2000; Jacobsen et al. 2022; Oberfield, 2014). Transformational leadership has been associated with positive performance effects among public employees (nurses) when they are also exposed to job design initiatives in a lab-like field experiment (Bellé, 2014). Moreover, literature generally associates transformational leadership with increased performance (Kelloway et al., 1996; Rauf et al., 2010; Helleur et al., 2000; Parry & Sinha 2005; Rao & Abdul, 2015). Hopkins et al. (2007) reported that transformational leadership has a positive impact on follower performance and firm outcomes. Muzondiwa et al. (2022) stated that leadership is one of the vital factors for improving organizational performance. According to Nukić & Matotek, (2014), empirical research and analysis indicated that transformational leadership has a positive effect on individual performance and organizational outcomes.

Scholars have studied the relationship between leadership and organizational performance since the early 1980s, and İşcan et al. (2014) in particular predicted that

transactional leaders, who place a high priority on implementing strategies, enhancing hierarchical structure, and rewarding employee performance, can make a significant contribution to enhancing organizational performance. Long regarded a key individual component that affects creativity and effectiveness at work, leadership behavior in general and transformational leadership in particular (Keegan & Den Hartog, 2004). Further, Waldman et al. (2001), based on upper echelons theory, proposed that transactional leadership would be positively related to organizational performance. Sivasubramaniam et al. (1996) found support for this positive relationship through a meta-analysis research study. Apart from transactional leadership, it is strongly predicted that transformational leaders will have significant contributions to improve organizational performance. They encourage employees to take the risk, and such risk-taking yields positive effects on performance in uncertain environments (Waldman et al., 2001).

At the beginning of 80s, scholars investigated the impact of leadership and organizational performance, and in particular, İşcan et al. (2014) expected that since transactional leaders highly concentrate on implementing strategies, improving hierarchical structure, and rewarding employee performance and exhibiting active management by exception behavior to correct mistakes, they can devote significant contribution to improve organizational performance. Furthermore, Puraman et al. (2001), based on upper echelons theory, proposed that transactional leadership would be positively related to organizational performance. Also, Yang et al. (2010) and Sivasubramaniam et al. (1996) mentioned that there is a high degree of association between transactional leadership and organizational performance. Moreover, Kim (2022) stated that there is a positive association between transactional leadership and organizational performance.

The literature provides evidence for positive relationships between transactional leadership and perceived organizational performance (Ibrahim et al., 2014; Katou, 2015; Men & Stacks, 2013). In addition, Masa'deh (2016) found that transactional and transformational leadership styles have a positive and significant impact on job performance. In addition, Hiwa et al. (2021) found that the transactional leadership style contributed positive effect on the performance of the FSSC 22000 food safety management system and it can be concluded that leadership was important for the implementation of the FSSC 22000 Food Safety Management System. However, Thapa & Parimoo (2022) found

that there is no direct relationship between transactional leadership and organizational performance. Therefore, the following hypothesis is formulated as follows:

H1.1: Transformational leadership affects perceived organizational performance.

H1.2. Transactional leadership affects perceived organizational performance.

2.9. THE RELATION BETWEEN LEADERSHIP STYLES AND ORGANIZATIONAL EFFECTIVENESS

Studies investigating leadership and organizational effectiveness in sports have seldom been undertaken. This is even more the case in South Africa where leadership and organizational effectiveness studies, even in general business, are few. It has been argued that the transformational leadership theory is the answer to a call for a more encompassing theory that is universally applicable to modern organizations and that a positive relationship exists between this style of leadership and organizational effectiveness (Bass & Avolio, 1994). Furthermore, Hassan et al. (2011) made it obvious that rational or collegial methods of decision-making positively impact organizational effectiveness, while autocratic or political methods negatively affect it. Moreover, Ristow et al. (1999) found that there is a positive relationship between transformational leadership and organizational effectiveness.

Leadership accounts for a lot of variances in the work-related behaviors of subordinates and the effectiveness of organizations with a positive impact of transformational leadership on organizational effectiveness (Asgari et al., 2008; Morgan, 1993). The impact of transformational leadership on organizational effectiveness has been frequently noted and supported in past literature, (Parry et al., 2002; Labrague et al., 2020; Posner & Schmidt, 1984). However, some scholars have failed to link transformational leadership behavior with organization level effectiveness (Wang et al., 2014).

The impact of transactional leadership on organizational effectiveness has been an object of interest in many studies conducted in the Middle East. However, the extant literature on transactional leadership is still polarized towards the Western world whereas its effectiveness for studies elsewhere has not been sufficiently examined (Al-ababneh, 2013; Mohamadkhani & Lalardi, 2012). A study by Nazarian et al. (2021) found that there

is no direct impact of either transformational or transactional leadership style on effectiveness in small and medium-sized independent hotels whereas this contradicted the study conducted by Dai et al. (2013) on international tourist hotels in Taipei City which found that leadership styles have a positive impact on organization effectiveness.

According to Jacobsen et al. (2022), there is a positive relationship between transactional leadership and organizational effectiveness. Moreover, Erkutlu et al (2008), found that there is a significant relationship between leadership and organizational effectiveness. Furthermore, Taylor & Taylor (2014) found that transactional leadership has a significant and positive correlation with organizational effectiveness. Moreover, Purwanto (2020) found that there is a positive relationship between transactional leadership and organizational effectiveness. Therefore, the following hypothesis is formulated as follows:

H2.1 Transformational leadership affects organizational effectiveness.

H2.2: Transactional leadership affects organizational effectiveness.

2.10. THE RELATION BETWEEN LEADERSHIP STYLES AND INNOVATION CULTURE

In many industries, innovation, and creativity are what drive success. However, for creativity to occur, leaders must actively promote it. Therefore, leadership is the source of creative and innovative thinking in an organization.

In essence, leaders must establish a climate that cultivates renewal, and an organizational culture that promotes creativity and innovation for firms to achieve constant innovation. Creativity in organizations is also influenced by how leaders oversee and encourage diversity within the organization, as well as fostering a successful leadership structure to boost innovation (Nadler & Tushman,1997). For example, Bass (1985) Thinks of transformational leadership to promote innovation in organizations, since this style of leadership urges employees to think critically, challenge assumptions, and regulate issues. In addition, a study was conducted to establish a link between employee creativity and organizational transformation, it turned out that transformational leadership has a positive impact on individual creativity (Shin & Zhou, 2003). Moreover, in Pakistan, transactional

leadership is positively correlated with innovation propensity (Ryan & Tipu, 2013). Furthermore, Prasad & Junni (2016) considered both transactional and transformational leadership to play a role in organizational innovation, but transformational leadership has a greater impact in a dynamic environment. Furthermore, as per the study of 32 Taiwanese companies by Wu, & Chow (2008), a direct and positive relationship exists between transformational leadership and organizational innovation. Additionally, another study discovered the role of leadership in organizational innovation by reviewing several publications that debate the relationship between various leadership styles and innovation. Findings indicated that various leadership styles had a positive impact on organizational innovation either directly or indirectly, by influencing the organizational climate, employees' and leaders' behaviors, or other organizational variables such as learning and knowledge sharing. Some leadership styles had both direct and indirect impacts on organizational innovation (Alblooshi et al., 2021).

According to Aragón-Correa et al. (2007), leaders have a huge impact on matters such as the introduction of new ideas, setting specific goals, and encouraging innovation in an organization. He also considered innovation to have a significant relationship with transformational leadership as well. So, it is obvious that leadership styles have a significant impact on influencing innovation in organizations and boosting creativity in individuals. In addition, a positive relationship was indicated between organizational innovation and leadership styles in the healthcare sector and also a positive relationship between the mediating role of organizational culture in relationship to leadership styles and organizational innovation (Wipulanusat et al., 2017).

Transformational leadership has been associated with several positive outcomes across samples and cultures in the public and for-profit sectors (Wang et al., 2011; Murray et al., 2004). Transformational leadership is commonly assumed to facilitate employee innovation in all cultures. Drawing upon field studies from 17 countries, this meta-analysis revealed that supervisor transformational leadership is positively related to individual- and team-level innovation regardless of national boundaries. However, the relationship trended somewhat more strongly in countries with higher levels of uncertainty avoidance. These findings suggest that employee innovation in most countries can be enhanced by investing in supervisor transformational leadership, but organizations operating in countries with

higher levels of uncertainty avoidance may benefit more from this strategy (Watts et al., 2020). In addition, other studies also showed that there is a positive relationship between transformational leadership and innovation culture (Lei et al., 2020; Keegan & Hartog, 2004).

Bass & Avolio (1992) found that an organization's culture derives from its leaders and that culture affects the development of its leadership. Furthermore, effective leaders need to be attentive to the beliefs, values, and assumptions in an organizational culture. In addition, Al-Husseini et al. (2021) found that transformational leadership in Iraqi HEIs can create a culture that supports innovation through knowledge sharing instead of having a direct effect on innovation which means that transformational leadership indirectly enhances product and process innovation by creating an organizational culture. Accordingly, Wu et al. (2003) found that transformational leadership could directly and indirectly enhance innovation. In addition, Pancasila et al. 2020 found that leadership style plays a key role in affecting the innovation culture. Furthermore, several studies found that transformational leadership links team members together, and consequently affects innovation culture (Mach et al., 2022; Kittikunchotiwut, 2019).

Leadership styles has been underlined as one of the most important individual influences on firm innovation because leaders can directly decide to introduce new ideas into an organization, set specific goals, and encourage innovation initiatives from subordinates (Harborne & Johne, 2003). Also, researchers have found that organizational structure and leadership roles are key factors in the discovery, incubation, and implementation of innovations (O'Connor & DeMartino, 2006). Numerous other research findings have considered leadership as one of the organizational attributes underlying change and innovation (Kanter, 1984; Peters & Waterman, 1984). Also, several scholars have focused on understanding the impact of different leadership styles and have highlighted it as an especially important influence on innovation (Harborne & Johne, 2003; Kanter, 1984). It is the leadership style that creates the appropriate climate for entrepreneurship and innovation in an organization. Leaders can direct employees' efforts by articulating a vision that emphasizes long-term over short-term business outcomes and steers them toward innovative work processes and outcomes (Amabile et al., 1996).

Other scholars have found that transformational leaders play a significant role in shaping firms' potential to generate innovations by encouraging an appropriate environment and making decisions that promote the successful generation and implementation of knowledge (Kanter, 1984). Furthermore, transformational leaders may also influence management innovation by reducing the uncertainty and complexity associated with its pursuit (Birkinshaw et al., 2008) by communicating a shared vision, supporting change, and developing a certain type of organizational culture. Kahai et al. (1997) found evidence that as compared to other leadership types, transformational leadership was more effective at encouraging followers to think "out of the box" and to adopt generative and exploratory thinking processes that yielded more creative ideas and solutions. A similar finding has been reported by several other scholars, where innovation was linked to transformational leadership style and adaptive leadership behaviors (Howell & Avolio, 1993; Sivasubramaniam et al., 1996; Avolio & Gardner, 1998;). Moreover, transformational leadership is considered more often linked to successful innovation than transactional leadership (Dess & Picken, 2000). Transformational leadership is also found to be linked with greater job-related satisfaction and higher motivation (Shapiro et al., 1989).

Transactional leadership has an important role in achieving an innovation culture. McCann & Sparks (2020) prove that transactional leadership has a significant effect on innovative culture, while the result of Sethibe & Steyn (2017) found that transactional leadership has no effect on innovative culture. By analyzing 107 respondents, the results of this study conclude that transactional leadership has an insignificant effect on innovative work behavior (Nungky et al., 2020). Hansen & PihlThingvad (2019) add that only one dimension of transactional leadership (namely management by exception) has no effect on culture innovation. Even (Afsar et al. 2019; Pieterse et al. 2010) found that transactional leadership negatively affects cultural innovation. In addition, Kittikunchotiwut (2019) investigated the relationship between transactional leadership and cultural innovation in 135 software industries in Thailand. The findings of the study indicated a positive relationship between transactional leadership and cultural innovation. Moreover, other studies indicated a positive relationship between transactional leadership and innovation

culture as well (Gumusluoglu & Ilsev, 2009; Sarros et al., 2008; Miles, 2007; Hughes et al., 2018). Therefore, the following hypothesis are developed:

H3.1: Transformational leadership affects innovation culture.

H3.2: Transactional leadership affects innovation culture.

2.11. THE RELATION BETWEEN INNOVATION CULTURE AND PERCEIVED ORGANIZATIONAL PERFORMANCE

Innovation refers to the execution of a new idea within a firm. Innovation in an organization could be the process of adding a new product, service, technology, strategy or even a new administrative program or structure that would affect the whole organization (Damanpour & Evan, 1984).

Innovation allows firms to be capable of being adaptable to external and internal changes in the organization's environment as rigid firms might lead to a loss of stability and agility to react to these changes (Gulati et al., 2005). So, it is important for firms to be able to adapt quickly and respond to the changes and the needs of their environment. Furthermore, adaptable organizations are Known to be evidence that innovative employees are willing to take risks and take advantage of their previous experience to become better (Denison et al., 2000). Moreover, innovation has been shown to directly affect organizational success in numerous studies that demonstrate that performance is mediated by organizational culture (Al-Hakim & Hassan, 2016; El-Kassar & Singh, 2019; Gracia-Morales et al., 2012; Nawab et al., 2015). In addition, according to some researchers, innovation mediates the relationship between organizational performance and organizational culture (Demircan & Erturk, 2010). Moreover, Previous studies found that innovation cultures positively influence firm performance (Behram & Özdemirci's, 2014; Jalilvand, 2017). Stuart et al. (2002) conducted research on the effect of culture on organizational performance, which showed a statistically significant relationship between organizational culture and performance. Therefore, innovation is essential for the development and success of all organizations. Thus, the following hypothesis is developed:

H4: Innovation culture affects perceived organization performance.

2.12. THE RELATION BETWEEN INNOVATION CULTURE AND ORGANIZATIONAL EFFECTIVENESS

Organizational culture refers to shared assumptions, values, and norms (Schein, 1985). Organizational culture is a source of sustained competitive advantage (Barney, 1991) and empirical research shows that it is a key factor in organizational effectiveness (Gordon & Di Tomaso, 1992; Wilkins & Ouchi, 1983). In particular, (Denison & Mishra, 1995; Fey & Denison, 2003) identified and validated four dimensions of organizational culture that are conducive to organizational effectiveness: adaptability, consistency, involvement, and mission.

Organizational culture does not directly lend its influence on organizational effectiveness; rather, it exerts its influence by shaping the behavior of organizational members. In an ambiguous and uncertain world, the most important part of decision-making is to digest the information from the environment to structure the unknown (Waterman, 1990). Furthermore, the sense-making mechanisms entailed in knowledge management also serve as antecedents to other outcomes of culture such as commitment, ethical behavior, job stress, and self-confidence that have a bearing on organizational effectiveness.

Many previous studies have confirmed the effect of organizational culture on effectiveness (Hartnell et al., 2011; Grabowskietal., 2014). Behram & Özdemirci's (2014) found a positive impact of corporate entrepreneurship on organizational culture and organizational effectiveness. A study of hotel employees in Isfahan, Iran, shows that innovation culture has a significant influence on hotel effectiveness (Jalilvand & Hidari, 2017). The organizational culture and organizational effectiveness path were the only path that was significant; this indicates that the path was negatively correlated (Muzondiwa et al., 2022). In addition, the idea of effectiveness continues to grow with organizational effectiveness being exchanged to increase organizational employee performance and productivity. Thus, Quinn & Rohrbaugh (1981) have defined organization as agility in decision-making, innovativeness, adaptability to the changing environment, competing with rivals, optimal utilization of resources, and talent retention". Nevertheless, the literature has stressed that organizational culture is a critical factor in determining

organizational effectiveness and efficiency (Hassan et al., 2021). Organizational culture is one of the most important features of effectiveness as it determines the standards and values of an organization. Furthermore, Chatman and O'Reilly (2016) highlighted that organizational culture shapes organizations and provides a better understanding of their effectiveness. Therefore, organizational culture is related to organizational effectiveness. Moreover, a statistical analysis also showed that the adaptation of innovation had a significant effect on organizational effectiveness. It was found that organizational effectiveness and innovation dimensions (management and technological) were proportionally correlated (Hrassi et al., 2016). In addition, the competing values by Langer & Le Roux, (2017) described that organizational culture is suggestively related to organizational effectiveness. Gregory et al., (2009) also indicated a positive relationship between organizational culture and effectiveness. Furthermore, recent research has shown that organizational culture has a significant impact on organizational effectiveness (Ryu et al., 2021; Adisa et al.,2020; Volkova & Chiker, 2020). Thus, the following hypothesis is developed:

H5: Innovation culture affects organizational effectiveness.

2.13. THE MEDIATION EFFECT OF INNOVATION CULTURE BETWEEN LEADERSHIP STYLES AND PERCEIVED ORGANIZATIONAL PERFORMANCE

There are several studies conducted to find the relationship between leadership styles, performance, and organizational culture. Imran et al. (2012) conducted a study on leadership styles, performance, and culture and found a positive relationship between all these variables. A study was conducted in seven regencies/cities in East Java Province, with 165 SMEs on superior indigenous food and beverage. The results showed that transformational leadership has a positive and significant effect on innovation culture and performance directly and indirectly. Transactional leadership has a direct positive and insignificant effect on innovation culture and performance (Nungky et al., 2020). In addition, a study was conducted to find the relation between leadership style and

organizational performance; further mediating the effects of innovation culture. It was found that innovation culture mediated the relationship between transactional leadership styles and organizational performances (Novitasari et al., 2021). Moreover, some studies showed that transformational leadership style is positively associated with innovation, and in turn, innovation is positively associated with organizational performance (Matzler et al., 2008; Noruzy et al., 2013). Interestingly enough, the studies that show no relationship between transformational leadership and organizational innovation also reveal a statistically significant positive relationship between transactional leadership and organizational innovation (Sethibe & Steyn, 2015). Thus, the following hypothesis is developed:

H6.1: Innovation culture mediates the relation between transformational leadership style and perceived organizational performance.

H6.2: Innovation culture mediates the relation between transactional leadership style and perceived organizational performance.

2.14. THE MEDIATION EFFECT OF INNOVATION CULTURE BETWEEN LEADERSHIP STYLES AND ORGANIZATIONAL EFFECTIVENESS

Due to the highly competitive environment, managers of need to enhance organizational effectiveness. Therefore, it is crucial to understand what factors affect effectiveness. A study tested if transformational and transactional leadership-styles could indirectly influence organizational effectiveness through market and adhocracy organizational culture. This study conducted in Iran confirms that leadership and organizational culture are strong contributors to organizational effectiveness (Kafashpoor et al., 2013). Iran was chosen because it is a developing country with a growing tourist industry that has been under many restrictions since the revolution. Survey data were gathered from managers of independent hotels in Iran and 340 questionnaires were returned out of 1050 distributed and examined using structural equation modelling. The findings show that the transformational leadership style has an indirect relationship with organizational effectiveness through the market and adhocracy culture types. In addition, some studies indicated that innovation culture is partially mediated between leadership

style and organizational effectiveness (Villaluz & Hechanova, 2019). According to Randeree (2009), Organizational culture is a mediator between organizational effectiveness and transformational leadership in multinational corporations. However, there was a negative relationship between transformational leadership and organizational culture as well as between organizational culture and organizational effectiveness in some studies as well (Muzondiwa et al., 2022). Thus, the following hypothesis is developed:

H7.1: Innovation culture mediates the relation between transformational leadership style and organizational effectiveness.

H7.2: Innovation culture mediates the relation between transactional leadership style and organizational effectiveness.

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1. RESEARCH OBJECTIVES

The purpose of this study is to investigate the relationships between various variables in the Lebanese industrial sector and determine whether the independent variables transformational leadership and transactional leadership have an impact on the dependent variables under investigation which are perceived organizational performance and organizational effectiveness under the mediating effect of innovation culture. The objectives are as follow:

- To explore the relationship between leadership styles and perceived organizational performance
- To explore the relationship between leadership styles and organizational effectiveness.
- To explore the mediating role of innovation culture on the relationship between leadership styles and perceived organizational performance.

3.2. THEORETICAL MODEL

Theoretical framework:

Figure 1 shows the relationship between perceived organizational performance & organizational effectiveness (with factors such as transformational leadership and transactional leadership) as well as the mediating role of innovation culture on the relationship between the two variables.

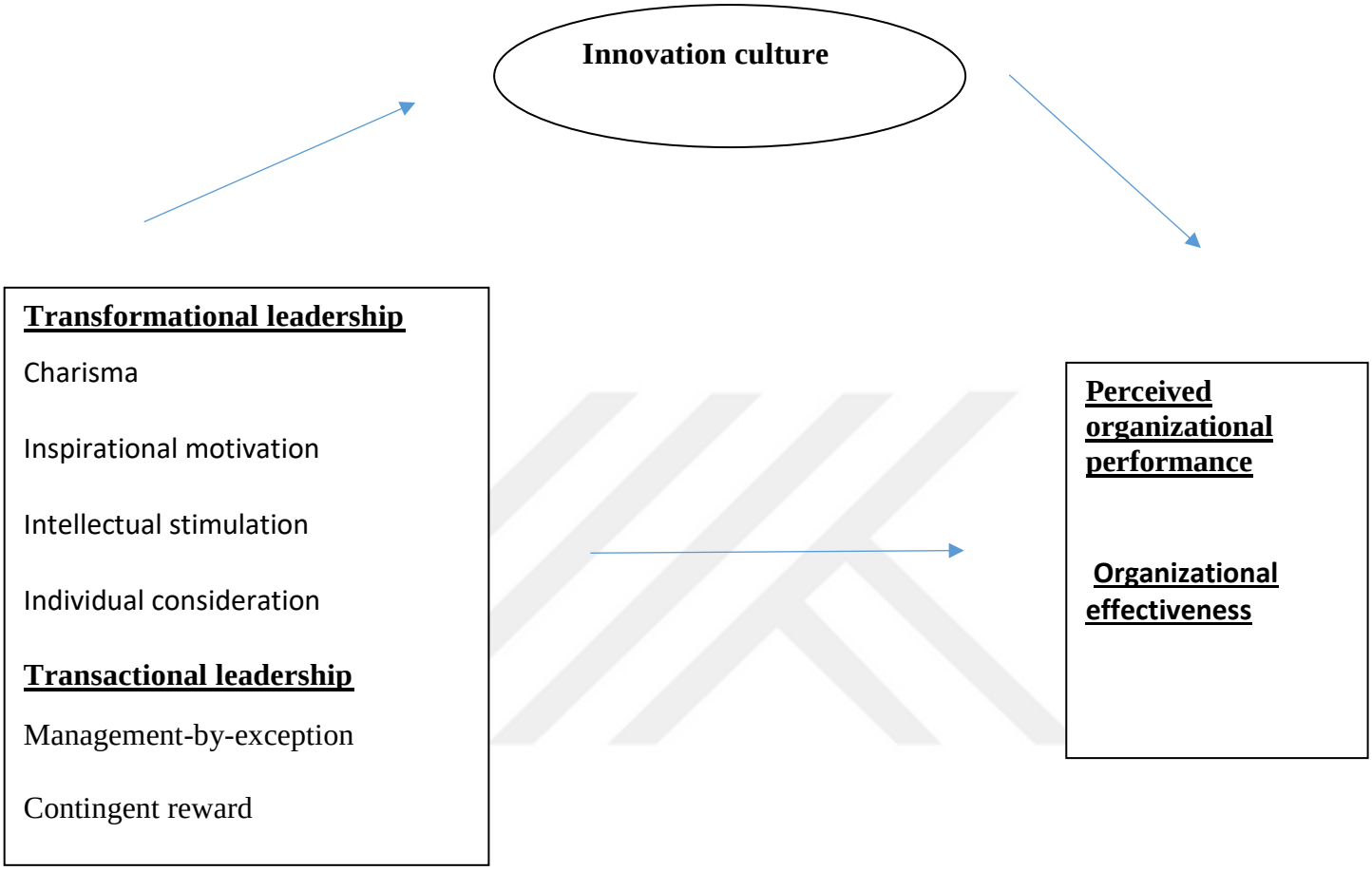

Figure 1: Conceptual framework

H1: Leadership styles affect Perceived organizational performance.

H 1.1: Transformational leadership style affects Perceived organizational performance.

H 1.2: Transactional leadership style affects Perceived organizational performance.

As it is stated above, it is assumed that transformational leadership style and transactional leadership style affect organizational performance.

H2: Leadership styles affect organizational effectiveness.

H 2.1: Transformational leadership style affects organizational effectiveness.

H 2.2: Transactional leadership style affects organizational effectiveness.

As it is stated above, it is assumed that transformational leadership style and transactional leadership style also affects organizational effectiveness.

H3: Leadership styles affect innovation culture.

H 3.1: Transformational leadership style affects innovation culture.

H 3.2: Transactional leadership style affects innovation culture.

As it is stated above, it is assumed that transformational & transactional leadership style affects innovation culture.

H4: Innovation culture affects perceived organizational performance.

H5: Innovation culture affects organizational effectiveness.

H6: Innovation culture mediates the relation between leadership styles and perceived organizational performance.

H6.1: Innovation culture mediates the relation between transformational leadership style and perceived organizational performance.

H6.2: Innovation culture mediates the relation between transactional leadership style and perceived organizational performance.

H7: Innovation culture mediates the relation between leadership style and organizational effectiveness.

H7.1: Innovation culture mediates the relation between transformational leadership style and organizational effectiveness.

H7.2: Innovation culture mediates the relation between transactional leadership style and organizational effectiveness.

3.3. POPULATION AND SAMPLING METHODS

This study is quantitative deductive research where a survey is going to be distributed and filled by white collar employees from random companies in the Lebanese industrial sector. The research population refers to the entire set of data that is of interest to the researcher, which is the Lebanese industrial sector that consist of over 4,700 companies. According to the General Directorate of Customs In 2018, the sector accounted for around 8% of GDP (USD 4.2 Billoion) and employed 20% of the local labor force around 318,000 employees (Koein, 2022). The "target population" refers to a set of individuals or things from which the sample should be taken because it is not practical to collect data from the full population. In this research, the target population is a small number of these companies where an appropriate number of random participants ranged

from entry-level employees to senior management were selected as a large sample allows for maximum representation of the entire population. Consequently, results are generalized to the entire population. So, the population of whom the sample will be chosen from is 318000 and the estimated sample is 384 as 48 invalid forms of the study were excluded, and then the analysis was conducted on 336 valid forms for the study according to 5% margin of error. There will be no additional special requirements for employees that could be used as samples (Ochoa, 2015).

3.4. DATA COLLECTION METHOD OF THE RESEARCH

In this research, a questionnaire will be used as the instrument for measurement and the results analyzed through SPSS (Statistical Package for the Social Sciences) software version 25 and Amos version 24.

The questionnaire consists of 5 parts. Demographic Questions, Leadership Style Questionnaire, Innovation culture Questionnaire, perceived organizational performance Questionnaire and organizational effectiveness Questionnaire. An example of questionnaire form is shown in Appendix 1.

3.4.1. Demographic Questions

First, five demographic questions are asked to identify the sample's characteristics. This part includes information about the employees, gender, age, education, work experience and position.

3.4.2. Leadership Styles

In this study, to measure leadership style; Bass and Avolio's (1985) Multifactor Leadership Questionnaire: cited in Tuna, (2009) & Zahoor (2023), have been used to measure both transformational and transactional leadership behavior. Moreover, this questionnaire has 2 scales: transformational leadership, transactional leadership. The respondents were asked to answer each question on 5- point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

3.4.2.1. Transformational Leadership Scale

The questions measuring transformational leadership scale in the questionnaire are 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20. Transformational leadership consists of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The example items for the transformational leadership scale dimensions can be found below. Idealized influence: It emphasizes the importance of having a shared mission. Questions 1, 2, 4, 9, 7, 8, 10, 11 measure idealized influence. Inspirational motivation: “demonstrates the confidence that will achieve goals”. Questions 3, 6, 14, 15 measure inspirational motivation. Intellectual stimulation: “Considers how it can approach the work done differently”. Questions 5, 13, 16, 12 measure intellectual stimulation. Individualized consideration; “Actively engages in teaching and coaching”. Questions 17, 18, 19, 20 measures individualized consideration.

3.4.2.2. Transactional Leadership Scale

There are three dimensions of transactional leadership: contingent reward, management by exception active, and management by exception passive. The questions that measure transactional leadership scale are; 24, 30, 28, 21, 23, 26, 22, 31, 27, 29, 32, 25. Items representing the dimensions are; Contingent reward; “Ensures it receives appropriate rewards for accomplishments”. Questions 24, 21, 22, 23 measure contingent reward. Management by exception active; “Maintains a record of mistakes”. Questions 30, 29, 31, 32 measure management by exception active. Management by exception passive; “"Problems must become chronic before action can be taken. “Questions 28, 26, 27, 25 measure management by exception passive.

3.4.2.3. Innovation Culture Scale

The expression of innovation in an organization is frequently demonstrated by actions or projects that have a clear result. This can include the implementation of new products or services or the modification of existing ones. The following initiatives could

be of assistance: restructuring or cost-savings initiatives, improved communications, and process-related personnel plans (technology/research and development based), distinctive employee behaviors (based on behavior), or organizational reactions to opportunities (Dobni, 2008).

Damanpour (1991) examined the relationship between organizational innovation and 13 possible determinants. Nine of the determinants showed a statistically significant correlation. he examined; 33, 34, 35,36,37,38,39,40,41. These had to do with specialization, functional differentiation, and managerial behavior toward change, technical specialization, and communication with others and within the organization.

3.4.2.4. Perceived Organizational Performance Scale

Performance refers to employees' achievement level within their assigned responsibilities and duties, where everyone's performance is evaluated, and the individual is asked to rate his or her own performance. The perception of organizational performance was assessed using the 5-item scale developed from (Bayar, 2019) study. The questions used to study perceived performance are questions 42, 43, 44,45,46,47,48,49,50 where participants are going to be inquired about their perceptions of their performance at work.

3.4.2.5. Organizational Effectiveness Scale

The efficiency of an organization in meeting its goals with the resources it has without putting its employees under stress is measured by Organizational effectiveness. According to the original questionnaires there are nine dimensions measuring Organizational effectiveness including productivity – efficiency, cohesion, information management – readiness, adaptability – planning, communication – goal setting, and stability – control which comes from Pounder's (2002: cited in Arikan, 2009). The questions used for this scale for the Organizational Effectiveness questionnaire are 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87 and the response scale is from 1 strongly disagree to 5 strongly agree.

3.5. DATA ANALYSIS

After gathering the requisite data and information pertaining to the study variables, they were encoded and inputted into the computer system to extract statistical results. The Statistical Package for the Social Sciences (SPSS) version 25 and Amos version 24 were utilized to process the data collected during the field study from the sample. The researcher employed the following statistical methods to address the study's inquiries and test its hypotheses:

1. Descriptive Statistics: This method was used to elucidate the characteristics of the study sample and to assess the extent to which it reflects the attributes of the community from which it was drawn.
2. Pearson Correlation: Utilized to evaluate the internal construct validity of the scales.
3. Cronbach's Alpha Coefficient: Employed to gauge reliability.
4. Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity: Utilized to ensure the adequacy of the sample size.
5. Exploratory Factor Analysis (EFA): A statistical technique used in multivariate analysis to uncover the underlying structure of a set of variables.
6. Confirmatory Factor Analysis (CFA): Employed to confirm the structural validity of the scale.
7. Variance Inflation Factor (VIF) and Tolerance: Used to verify that there is no high correlation (multicollinearity) between independent variables.
8. Multiple and Simple Linear Regression Analysis: Employed to examine the relationships between study variables.
9. Process Macro in SPSS: Utilized to model regression path analysis using the bootstrapping method developed by Hayes.

In summary, descriptive statistics were employed alongside various other statistical techniques to comprehensively analyze and interpret the data collected for the study.

CHAPTER FOUR

4.RESEARCH FINDINGS

This chapter presents the findings of the empirical study conducted using The Statistical Package for Social Sciences (SPSS) version 25.0. It begins by elucidating the characteristics of the respondents, as revealed through the application of descriptive statistical methods, and explores the relationships among demographic variables.

The results of the descriptive statistical analysis of the data, which include the arithmetic means, standard deviations and evaluation for all study variables, and the constituent elements for each variable, were considered (a Likert-type scale) used in the study graded as follows:

Table 1: Likert-type scale

Strongly agree	**Agree**	**Not sure**	**Disagree**	**Strongly Disagree**
5	4	3	2	1

Based on the foregoing in table 1, the values of the arithmetic averages reached by the study will be dealt with as follows:

Table 2: Arithmetic averages

Strongly agree	**Agree**	**Not sure**	**Disagree**	**Strongly Disagree**
4.20 - 5	3.40 - 4.19	2,60 - 3,39	1.80 - 2.59	1 - 1,79

As for the reversed questions in table 2, they will be coded and evaluated in reverse.

4.1. RESPONDENTS PROFILE

The first analysis with the data was done to find out the profile of the respondents. Table 3 presents these results.

Table 3: Sample details

variables	N=335	%
Gender		
Male	164	49.0
Female	171	51.0
Age		
21-27	81	24.2
28-32	122	36.4
33-37	62	18.5
38-42	45	13.4
Above 42	25	7.5
Marital status		
Single	163	48.7
Married	137	40.9
Divorced	7	2.1
Widowed	28	8.4
Educational level		
High School	22	6.6
Bachelor's degree	223	66.6
Postgraduate	54	16.1
Associate's degree	36	10.7
Working experience		
Less than 1	29	8.7
1-5	149	44.5
11-15	84	25.1

Table 3 Continuing: Sample details

6-10	41	12.2
Above 15	32	9.6
Working experience in this organization		
Less than 1	70	20.9
1-5	164	49.0
11-15	60	17.9
6-10	26	7.8
Above 15	15	4.5
Position		
Non-managerial	259	77.3
Managerial	76	22.7

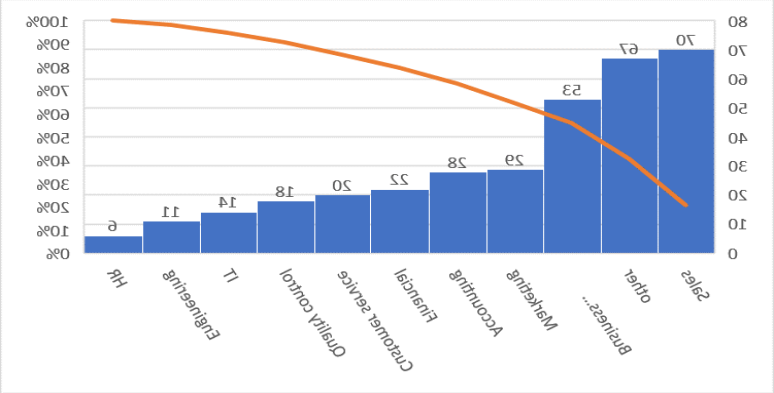

Figure 2: Distribution of sample members by department

As can be seen table 3 presents a detailed breakdown of the sample characteristics, encompassing 338 participants. The gender distribution shows a nearly equal split, with 49% male and 51% female participants. In terms of age, the largest segment falls within the 28-32 age range, comprising 36.4% of the sample, while those above 42 years represent 7.5%.

Examining marital status, a significant portion of participants are single 48.7%, and married individuals account for 40.9%. Regarding educational backgrounds, the majority possess a Bachelor's degree 66.6%, reflecting a well-educated sample.

When considering work experience, 44.5% of participants have accumulated 1-5 years, and those with over 15 years' experience constitute 9.6%. Looking specifically experiences at organization, 49% have been with the organization for 1-5 years, while 4.5% have over 15 years of experience.

Finally, in terms of positions, non-managerial roles dominate the sample at 77.3%, while managerial positions account for 22.7%. This integrated overview offers a comprehensive understanding of the demographic composition within the study, encompassing gender, age, marital status, education, work experience, organizational tenure, and professional positions.

4.2. THE VALIDITY AND RELIABILITY OF MEASUREMENT INSTRUMENT

Ensuring the accuracy and dependability of statistical analysis holds significant importance for researchers in validating their findings. This process aids in determining whether the results derived from the analysis can be applied to the broader study population or if they are limited in generalizability. The reliability aspect pertains to the effectiveness of the tools employed in scientific research, gauging their capability to accurately measure the meanings and information acquired during the research process.

Before delving into deeper analyses, it is essential to compute the validity and reliability of each scale, even if they have been previously tested by other researchers. All scales in this study require a reassessment of their validity and reliability due to the potential variations in results when using different datasets. This reevaluation is crucial to ensure the consistency of each factor's inter-item reliability. To measure the stability of the research tool, the researcher relies on the Cronbach’s Alpha coefficient for assessing reliability. Additionally, Pearson's correlation coefficient is employed to validate the internal construction. The results of these validity assessments are detailed in Table 4, while the reliability assessments are outlined in Table 5.

Table 4: Validate estimates for the measurement scales

Transformational leadership								Transactional leadership				Innovation culture		Perceived organizational performance		Perceived organizational effectiveness	
Charisma		IM		IS		IC		Contingent reward		Management-by-exception							
I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R	I	R
1	.813**	1	.762**	1	.835**	1	.897**	1	.929**	1	.670**	1	.766**	1	.849**	1	.860**
2	.809**	2	.795**	2	.850**	2	.890**	2	.890**	2	.647**	2	.791**	2	.809**	2	.798**
3	.769**	3	.829**	3	.846**	3	.874**	3	.921**	3	.670**	3	.812**	3	.867**	3	.865**
4	.782**	4	.803**	4	.840**	4	.900**	4	.897**	4	.657**	4	.819**	4	.824**	4	.852**
5	.800**									5	.584**	5	.791**	5	.853**	5	.862**
6	.761**									6	.551**	6	.799**	6	.813**	6	.785**
7	.792**									7	.550**	7	.807**	7	.867**	7	.881**
8	.817**									8	.465**	8	.743**	8	.815**	8	.511**
												9	.721**	9	.815**	9	.448**
																10	.498**
																11	.839**
																12	.435**
																13	.851**
																14	.842**
																15	.475**
																16	.435**
																17	.822**
																18	.507**
																19	.449**
																20	.853**

Table 4 Continuing: Validate estimates for the measurement scales

																21	.524**
																22	.815**
																23	.496**
																24	.852**
																25	.835**
																26	.853**
																27	.848**
																28	.750**
																29	.850**
																30	.878**
																31	.454**
																32	.819**
																33	.877**
																34	.869**
																35	.855**
																36	.453**
																37	.593**

Table 4 displays correlation coefficients for the measurement scales, indicating the strength and direction of the relationships between items within each scale. The table includes correlations for transformational leadership, transactional leadership, innovation culture, perceived organizational performance, and organizational effectiveness.

Values represent the degree of correlation between each item and its factor, with higher correlations indicating stronger ties. ** indicates that these correlations are statistically significant at the 0.01 level (2 tailed), which highlights the validity of the measurement scales.

Table 5: Reliability estimates for the measurement scales

dimensions	Factor	Number of items	Cronbach's Alpha
Transformational leadership	Charisma	8	0.92
	Inspirational motivation	4	0.81
	Intellectual stimulation	4	0.86
	Individual consideration	4	0.91
Transactional leadership	Contingent reward	4	0.93
	Management-by-exception	8	0.73
Leadership styles		28	0.95
Innovation culture		9	0.92
Perceived organizational performance		9	0.95
Perceived organizational effectiveness		37	0.97
Total questionnaire		87	0.98

Table 5 provides reliability estimates for the measurement scales, indicating the internal consistency of each factor. The Cronbach's alpha coefficients are reported for each factor, with higher values suggesting greater reliability.

These Cronbach's alpha values reflect high levels of internal consistency within each dimension, reinforcing the reliability of the measurement scales used in the study. and all were above the minimum acceptable (70%) in social and educational studies.

4.3. EXPLORATORY FACTOR ANALYSIS (EFA)

The aim of conducting factor analysis is to identify clusters of closely related variables, known as factors (Hair et al., 2006). In this study, factor analysis is employed for each concept to ascertain how respondents perceive different dimensions within the concepts and whether these perceptions align with those in the original dataset used to develop the scale. Essentially, factor analysis is utilized to determine if consistent results as defined in existing literature can be replicated with different datasets.

Before conducting each factor analysis, the sampling adequacy is assessed to ensure the suitability of the data (Sipahi et al., 2006). Measures such as kaiser-meyer-olkin (KMO) and bartlett's test of sphericity are employed for this purpose. KMO indicates whether the data forms a cohesive set of variables with correlations between them. Typically, a KMO value above 0.50 is considered acceptable (Hair et al., 2006). Conversely, Bartlett's test determines whether there are significant correlations among the variables, with a p-value below 0.05 indicating statistical significance (Hair et al., 2006). In this study, both KMO and bartlett's tests demonstrate satisfactory results for all concepts, as indicated in the lower-left section of each factor analysis table.

4.3.1. EFA for Leadership Styles Scale

Table 6 presents the outcomes of the factor analysis conducted on leadership styles, incorporating a total of 32 items. The analysis reveals six factors with eigenvalues exceeding unity (>1) and deemed interpretable. None of the items are excluded from the study. The composition of items within each factor appears satisfactory, as items originally associated with the same dimensions are predominantly grouped together under the same factor.

It's noteworthy that the kaiser-meyer-olkin test for leadership styles yields a value of 0.925, indicating a cohesive dataset suitable for factor analysis. Additionally, bartlett's test confirms the statistical significance of correlations. Table 6 provides detailed information on item loadings and the variance explained by each factor.

Based on the provided information, table 6 presents the factor analysis results of a leadership styles scale in total, 32 items are included in the analysis. After analysis 7 factors are found with eigen-values in excess of unity (>1) of which were interpretable. None of the items are extracted from the study.

Table 6: Factor analysis results of leadership styles scale

Factor 1: Charisma	**Var.: 16.696**		**Item Loadings**
7.Acts in ways that build respect.			0.749
8.Displays a sense of power and confidence.			0.723
11.Emphasizes the importance of having a collective sense of mission			0.712
2.Instills pride in me for being associated with him/her.			0.709
10. Specifies the importance of having a strong sense of purpose.			0.704
1. Talks about his/her most important values and beliefs			0.701
9. Goes beyond self-interest for the good of the group			0.671
4. Considers the moral and ethical consequences of decisions.			0.666
Factor 2: Management-by-exception Passive	**Var.: 10.253**	**Cronbach's Alpha: 0.90**	**Item Loadings**
26. To move, bad things must have happened			0.863
25. In order to act, problems need to become chronic.			0.861
28. Never interferes till problem become serious			0.819
27. He believes in the needlessness to take precautions unless he is obliged to.			0.782
Factor 3: Contingent reward	**Var.: 10.197**		**Item Loadings**
21. Supports me when she/he realizes my efforts			0.815
23. Appreciates good performance			0.809
22. Provides adequate award when we achieve performance goals			0.788
24. Makes clear what one can expect to receive when performance goals are achieved.			0.763
Factor 4: Individual consideration	**Var.: 9.889**		**Item Loadings**
17. Spends time teaching and coaching.			0.785
20. Approaches each of us as individuals with different needs and abilities.			0.772
19. Treats me as an individual, not as a member of the team.			0.772
18. Helps me to develop my strengths.			0.742
Factor 5: Inspirational motivation	**Var.: 9.028**		**Item Loadings**
14. Drag us after him with his dreams about the future			0.805
15. Talk enthusiastically about what needs to be accomplished			0.776
3. Talks optimistically about the future.			0.736
6. Expresses confidence that goals will be achieved.			0.720
Factor 6: Intellectual stimulation	**Var.: 7.566**		**Item Loadings**
5. Re-examines critical assumptions whether they succeeded.			0.718
13. Suggests new ways of looking at how to complete assignments			0.663
12. Gets me to look at problems from many different angels			0.658
16. Seeks different perspectives when solving problems.			0.578
Factor 7: Management-by-exception Active	**Var.: 7.300**	**Cronbach's Alpha: 0.74**	**Item Loadings**
29. Wastes of his/her time			0.852
31. Never forgets my mistakes.			0.773
30. Warns us for our mistakes.			0.733
32. Never overlooks failure in reaching the goals			0.660
Kaiser, Meyer-Olkin Measure of Sampling Adequacy: 0.925			
Barlett's Test of Sphericity: .000	**Chi-Square: 7190.127**		**df: 496**

4.3.2. EFA for Innovation Culture Scale

Table 7 presents the outcomes of the factor analysis conducted on innovation culture, incorporating a total of 9 items. The analysis reveals one factor with eigenvalues exceeding unity (>1) and deemed interpretable. None of the items are excluded from the study. The composition of items within factor appears satisfactory, as items originally associated with the same dimension are predominantly grouped together under the same factor.

It's noteworthy that the kaiser-meyer-olkin test for innovation culture yields a value of 0.917, indicating a cohesive dataset suitable for factor analysis. Additionally, bartlett's test confirms the statistical significance of correlations. Table 7 provides detailed information on item loadings and the variance explained by each factor.

Table 7: Factor analysis results of innovation culture scale

Factor 1: Innovation culture	**Var.: 61.471**	**Item Loadings**
32. We have an innovation vision that is aligned with projects, platforms, or Initiatives		0.827
31. Our senior managers are able to effectively cascade the innovation message throughout the organization		0.815
35. Innovation is a core value in this organization		0.806
34. There is a coherent set of innovation goals and objectives that have been articulated		0.804
30. Our business model is premised on the basis of strategic intent		0.790
33. This organization's management team is diverse in their thinking in that they have different views as to how things should be done		0.790
29. At our company, innovation is an underlying culture and not just a word		0.765
36. We have continuous strategic initiatives aimed at gaining a competitive advantage		0.739
37. Our strategic planning process is opportunity oriented as opposed to process oriented		0.713
Kaiser, Meyer-Olkin Measure of Sampling Adequacy: 0.917		
Barlett's Test of Sphericity: .000	**Chi-Square: 1857.453**	**df: 36**

4.3.3. EFA for Perceived Organizational Performance Scale

Table 8 presents the outcomes of the factor analysis conducted on perceived organizational performance, incorporating a total of 9 items. The analysis reveals one factor with eigenvalues exceeding unity (>1) and deemed interpretable. None of the items are excluded from the study. The composition of items within factor appears satisfactory, as items originally associated with the same dimension are predominantly grouped together under the same factor.

It's noteworthy that the kaiser-meyer-olkin test for perceived organizational performance yields a value of 0.897, indicating a cohesive dataset suitable for factor analysis. Additionally, bartlett's test confirms the statistical significance of correlations. Table 8 provides detailed information on item loadings and the variance explained by each factor.

Table 8: Factor analysis results of perceived organizational performance scale

Factor 1: Perceived organizational performance	**Var.: 69.738**	**Item Loadings**
40. Making new investments in our company is considered an important performance indicator and our company is in a good position in its sector		0.866
44. The low employee turnover rate in our company is considered an important performance indicator and our company is in a good position in its sector.		0.864
42. Increasing customer satisfaction is an important performance indicator and our company is in a good position in its sector.		0.854
38. Profitability is adopted as an important performance indicator in our company and our company is in a good position in its sector		0.849
41. Increasing the quality of the products or services we offer is considered an important performance indicator and our company is in a good position in its sector		0.827
45. In our company, attracting talented/competent human resources to the company is considered an important performance indicator and our company is in a good position in its sector		0.818

Table 8 Continuing: Factor analysis results of perceived organizational performance scale

46. We consider the innovation and widening of innovation perspective of our company employees as an important performance indicator and our company is in a good position in its sector		0.812
43. Profitability indicator (Earnings Before Interest, Tax, Depreciation and Amortization) is accepted as an important performance indicator in our company and our company is in a good position in its sector		0.811
39. Increasing the market share in our company is considered as an important performance indicator and our company is in a good position in its sector		0.811
Kaiser, Meyer-Olkin Measure of Sampling Adequacy: 0.897		
Barlett's Test of Sphericity: .000	**Chi-Square: 2618.521**	**df: 36**

4.3.4. EFA for Organizational Effectiveness Scale

Table 9 presents the outcomes of the factor analysis conducted on organizational effectiveness, incorporating a total of 37 items. The analysis reveals two factors with eigenvalues exceeding unity (>1) and deemed interpretable. None of the items are excluded from the study. The composition of items within each factor appears satisfactory, as items originally associated with the same dimensions are predominantly grouped together under the same factor.

It's noteworthy that the kaiser-meyer-olkin test for organizational effectiveness yields a value of 0.960, indicating a cohesive dataset suitable for factor analysis. Additionally, bartlett's test confirms the statistical significance of correlations. Table 9 provides detailed information on item loadings and the variance explained by each factor.

Before using the factors in further analysis, their reliability, or in other words their internal consistency, must be tested. Therefore, cronbach's alpha was calculated for each factor and it was confirmed that it was higher than the acceptable limit of 70%.

Table 9: Factor and reliability analysis results of organizational effectiveness scale

Factor 1: employee-oriented effectiveness	**Var.: 53.825**	**Cronbach's Alpha: 0.99**	**Item Loadings**
83. Periodic reviews are conducted to measure the financial value provided by each department to the institution			0.937
84. The management successfully fulfills its part in order to ensure the sense of belonging of the employees in our institution.			0.932
57. According to the internal and external changes, the institution is able to successfully adapt its structure to change			0.931
85. Adequate width and necessary equipment are provided in the working environment for the efficiency of the employees			0.928
80. Our management has the ability to manage its employees under external pressures.			0.924
76. Duties and objectives of the organization are well known by the employees			0.921
55. The main target is continuous development and progress			0.920
79. Our organizational is ready to adapt to changing conditions			0.917
77. Prepared plans are carried out exactly and in accordance with the targeted time			0.916
51. The morale of those who work in our institution is high			0.915
54. Quality of work done at all levels of the institution is highly valued			0.913
53. predetermined tasks are performed well to increase productivity			0.911
60. Every employee is aware of how important her/his job is			0.906
75. In this organization, all departments and individuals are encouraged to use resources e4ficiently			0.905
63. Attention is paid to the quality of interpersonal communication			0.903
70. Employees attach great importance to the analysis of the quality of the products or services they produce			0.897
61. This organization is sensitive to the needs of its employees			0.889
82. Employees in this company are informed about new product studies and their intention to enter new markets in a timely manner			0.883
74. Teamwork activities in our institution is successfully implemented			0.878
67. This organization offers employees personal development opportunities to improve themselves			0.875
72. Employees are involved in organizational decision-making			0.848

Table 9 Continuing: Factor and reliability analysis results of organizational effectiveness scale

78. Methods such as "brainstorming are used to improve the quality of products and services			0.831
56. The hierarchical order in the company, will ensure the flow of information from top to bottom			0.825
52. Regular meetings are held regarding productivity issues			0.823
87. Employees keep quality measurements and records of the work they do			0.662
Factor 2: organizational oriented effectiveness	**Var.: 22.122**	**Cronbach's Alpha: 0.95**	**Item Loadings**
57. The company's products and services are well promoted.			0.887
68. The management of the institution has the ability to ensure the continuity of the organization even in the face of external pressures			0.884
59. Actions taken to fulfill the organizations future plans are consistent			0.829
62. The management of the institution has the ability to control the work flow even in the face of external pressures			0.827
65. The company's market share is increasing			0.824
69. There has been consistent success in implementing the low-cost strategy			0.820
86. The objectives and strategies of the organization's plans are updated annually			0.816
60. Long-term goals and the culture of the organization is determined appropriately			0.814
66. Each unit/department prepares its own budget according to the plans for the next year			0.766
73. The institutions profitability is increasing			0.759
81. The sales volume of the organization is increasing			0.735
71. The organization successfully implemented programs update according to changing internal and external demands			0.732
Kaiser, Meyer-Olkin Measure of Sampling Adequacy: 0.960			
Barlett's Test of Sphericity: .000	**Chi-Square: 17926.095**		**df: 666**

4.4. CONFIRMATORY FACTOR ANALYSIS (CFA)

Confirmatory factor analysis (CFA) is a statistical technique used to test the hypothesis that the observed variables are indicators of latent constructs, or factors, as hypothesized by the researcher (Brown, 2015). Unlike exploratory factor analysis (EFA), where factors are allowed to emerge from the data, CFA involves specifying a priori models based on theory or previous research and testing whether the observed data fit these models (Byrne, 2016).

The primary goal of CFA is to assess the goodness-of-fit between the observed data and the proposed factor structure (Brown, 2015). It allows researchers to evaluate the degree to which the observed variables (indicators) reflect the underlying latent constructs (factors) and to identify any discrepancies between the proposed model and the data (Brown, 2015). CFA provides information about how well the model reproduces the observed covariance structure, the strength of relationships between variables and factors, and the uniqueness of each variable (Kline, 2015).

The process of conducting CFA involves several steps, including model specification, estimation, evaluation of model fit, and model modification if necessary (Brown, 2015; Kline, 2015). Researchers typically assess model fit using various fit indices, such as chi-square, comparative fit index (CFI), tucker-lewis's index (TLI), root mean square error of approximation (RMSEA).

4.4.1. CFA for Leadership Styles Scale

The fit indices for the leadership Styles Scale, as presented in table 4.8, indicate a reasonably good fit of the model to the observed data. The comparative fit index (CFI) and tucker-lewis-index (TLI) values are both above the commonly recommended threshold of 0.90, with CFI at 0.943 and TLI at 0.943, suggesting acceptable fit. The root mean square error of approximation (RMSEA) value is 0.049, which falls within the acceptable range typically considered indicative of good fit.

The chi-square to degrees of freedom ratio (CMIN/DF) is 1.792, which is below the often-used threshold of 3, indicating a relatively good fit of the model. The goodness

of fit index (GFI) and adjusted goodness of fit index (AGFI) values are 0.871 and 0.846 respectively, both of which are relatively close to the recommended threshold of 0.90, further supporting the adequacy of the model fit.

In summary, based on the fit indices provided, the leadership styles scale demonstrates a satisfactory fit to the observed data, indicating that the model adequately represents the relationships among the latent constructs measured by the scale.

Table 10: Indicators of good fit for leadership styles scale

CFI	TLI	CMIN	DF	SIG (χ2)	CMIN/DF	GFI	AGFI	RMSEA
0.943	0.95	792.031	442	0	1.792	0.871	0.846	0.049

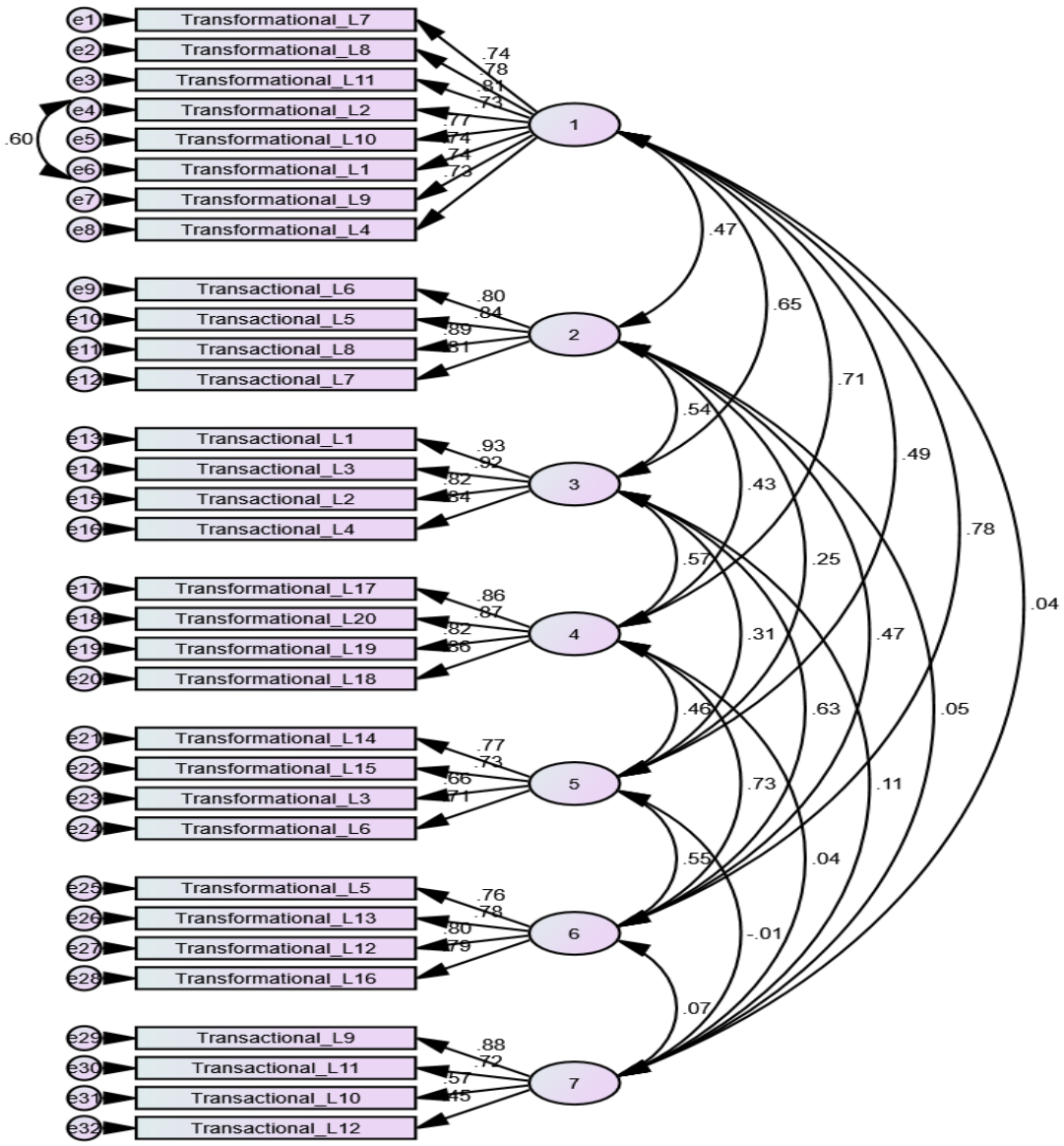

Figure 3: CFA for leadership styles scale

4.4.2. CFA for Innovation Culture Scale

The fit indices for the innovation culture scale, as presented in table 11, suggest an excellent fit of the model to the observed data. The comparative fit index (CFI) and tucker-lewis index (TLI) values are both well above the commonly recommended threshold of 0.90, with CFI at 0.988 and TLI at 0.980, indicating a very good fit.

The root mean square error of approximation (RMSEA) value is 0.056, which falls well within the acceptable range typically considered indicative of good fit. The chi-square to degrees of freedom ratio (CMIN/DF) is 2.044, which is below the often-used threshold of 3, further indicating a good fit of the model. Additionally, the goodness of fit index (GFI) and adjusted goodness of fit index (AGFI) values are 0.972 and 0.942 respectively, both of which are significantly above the recommended threshold of 0.90, providing further evidence of the model's adequacy.

In summary, based on the fit indices provided, the innovation culture scale demonstrates an excellent fit to the observed data, suggesting that the model effectively represents the relationships among the latent constructs measured by the scale.

Table 11: Indicators of good fit for innovation culture scale

CFI	TLI	CMIN	DF	SIG (χ2)	CMIN/DF	GFI	AGFI	RMSEA
0.988	0.980	44.976	22	0.003	2.044	**0.972**	**0.942**	0.056

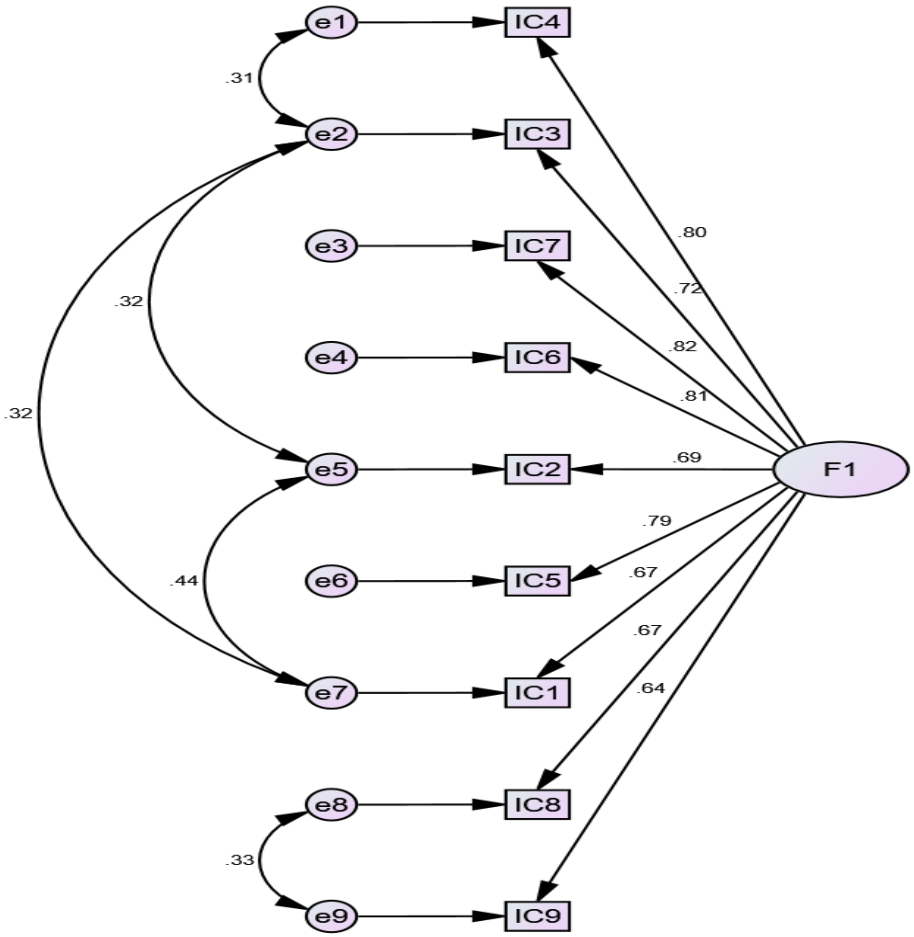

Figure 4: CFA For innovation culture scale

4.4.3. CFA for Perceived Organizational Performance Scale

The fit indices for the perceived organizational performance scale, as presented in table 12, indicate a reasonable fit of the model to the observed data. The comparative fit index (CFI) and tucker-lewis index (TLI) values are both above the commonly recommended threshold of 0.90, with CFI at 0.980 and TLI at 0.963, suggesting acceptable fit. However, the root mean square error of Approximation (RMSEA) value is 0.090, which is slightly higher than the typical threshold of 0.08, indicating some degree of model misfit. The chi-square to degrees of freedom ratio (CMIN/DF) is 3.698, which exceeds the often-used threshold of 3, further suggesting potential inadequacies in the model fit. The

goodness of fit index (GFI) and adjusted goodness of fit index (AGFI) values are 0.958 and 0.901 respectively, which are relatively close to the recommended threshold of 0.90, providing some support for the adequacy of the model fit.

In summary, while the perceived organizational performance scale demonstrates acceptable fit to the observed data based on some fit indices such as CFI and TLI, there are indications of potential misfit based on other indices such as RMSEA and CMIN/DF. In general, most fit indices for a measure of perceived organizational performance indicate a reasonable fit of the model to the observed data.

Table 12: Indicators of good fit for perceived organizational performance scale

CFI	TLI	CMIN	DF	SIG (χ2)	CMIN/DF	GFI	AGFI	RMSEA
0.980	0.963	70.271	19	0.000	3.698	0.958	0.901	0.090

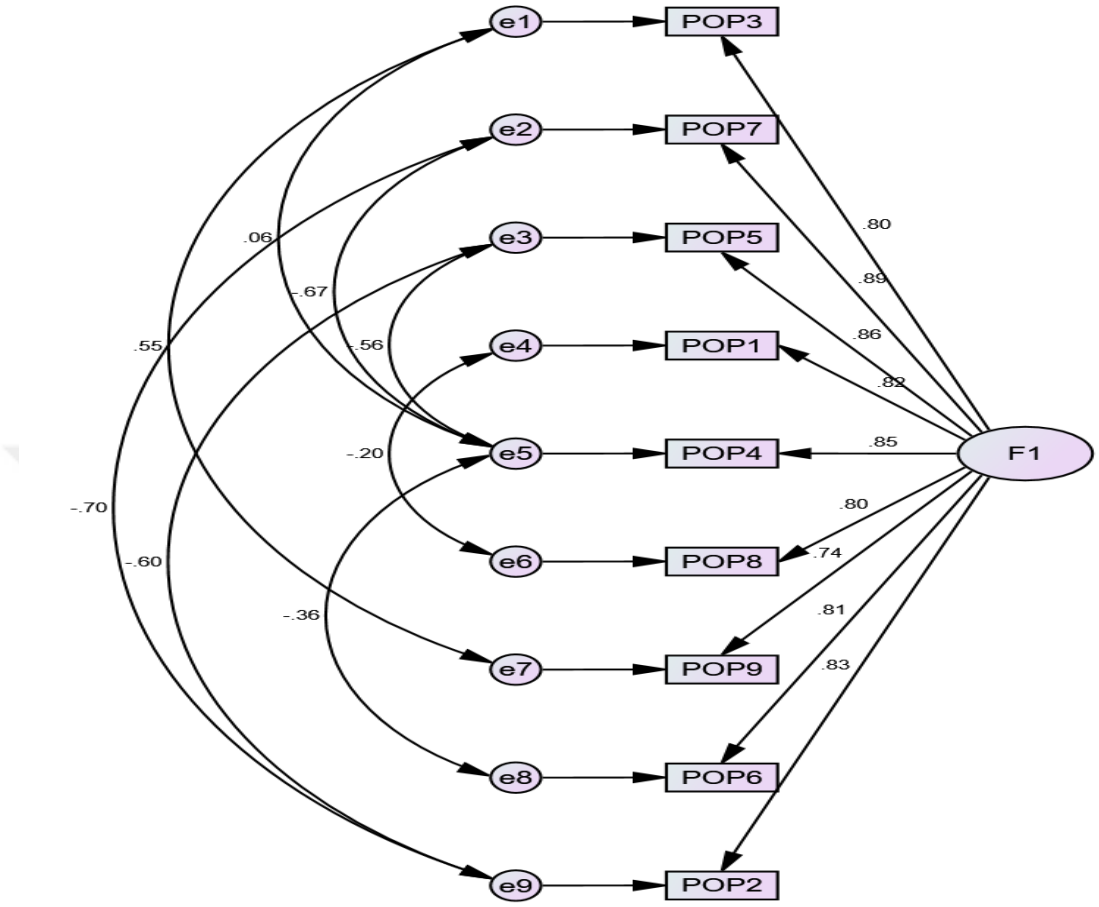

Figure 5: CFA For perceived organizational performance scale

4.4.4. CFA for Organizational Effectiveness Scale

The fit indices for the perceived organizational effectiveness scale, as shown in table 13, suggest a reasonably good fit of the model to the observed data. The comparative fit index (CFI) and tucker-lewis-index (TLI) values are both above the commonly recommended threshold of 0.90, with CFI at 0.932 and TLI at 0.927, indicating acceptable fit.

The root mean square error of approximation (RMSEA) value is 0.077, which falls within the acceptable range typically considered indicative of good fit. The chi-square to degrees of freedom ratio (CMIN/DF) is 2.967, which is below the often-used threshold of 3, suggesting a relatively good fit of the model. However, the goodness of fit index (GFI)

and adjusted goodness of fit index (AGFI) values are 0.771 and 0.740 respectively, which are slightly below the recommended threshold of 0.90, indicating potential inadequacies in the model fit.

In summary, based on the fit indices provided, the perceived organizational effectiveness scale demonstrates an acceptable fit to the observed data.

Table 13: Indicators of good fit for organizational effectiveness scale

CFI	TLI	CMIN	DF	SIG (χ2)	CMIN/DF	GFI	AGFI	RMSEA
0.932	0.927	**1836.34**	**619**	**0.000**	**2.967**	**0.771**	**0.740**	0.077

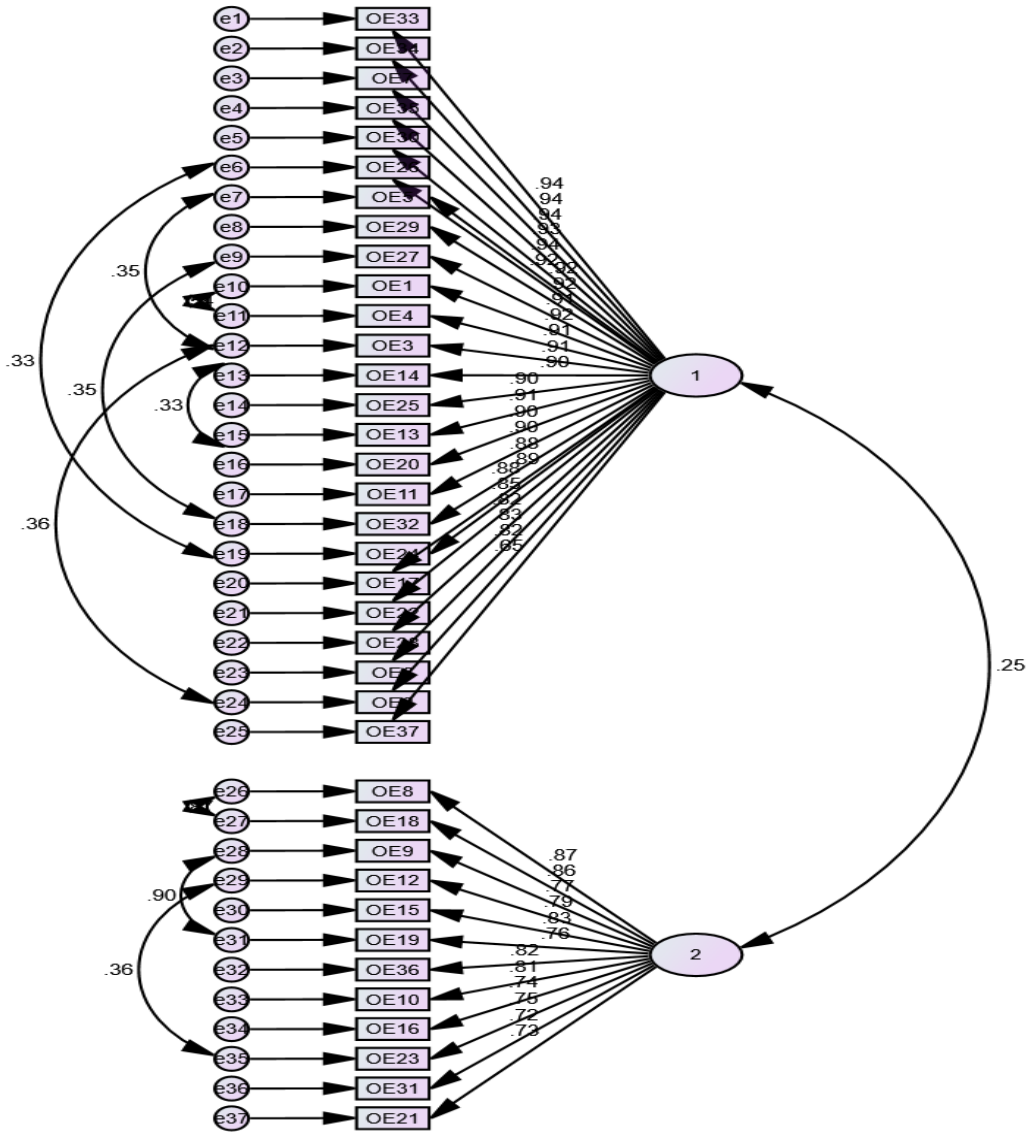

Figure 6: CFA For organizational effectiveness scale

4.5. DESCRIPTIVE STATISTICS

Descriptive statistics are numerical summaries that describe the main features of a dataset. They provide information about the central tendency, dispersion, and shape of the data distribution. Common descriptive statistics include measures such as mean and standard deviation. These statistics are useful for understanding the characteristics of a dataset and for summarizing its key attributes.

Descriptive statistics are essential for summarizing and interpreting data in various fields, including statistics and economics. They provide valuable insights into the characteristics of a dataset and can help researchers and analysts make informed decisions based on data analysis.

4.5.1. Descriptive Statistics for Charisma Factor

Table 14 presents the mean, standard deviations, and sample orientation of the responses from the study sample members regarding the charisma factor. The mean scores for each item on the charisma factor provide insight into the level of agreement among respondents regarding various aspects of charismatic. A higher mean score suggests a stronger agreement with the statements related to charisma. The standard deviation values indicate the variability in responses around the mean. Lower standard deviation values suggest less variability, while higher values indicate greater variability among respondents' perceptions of charismatic.

The "sample orientation" column provides an overall assessment of the sample's orientation towards charismatic leadership. In this context, the sample orientation is categorized as "Agree," indicating that, on average, respondents agreed with the statements related to charisma. These findings suggest that within the industrial sector in Lebanon, respondents generally perceive leadership behaviors associated with charisma positively. This understanding contributes to the broader investigation into the relationship between leadership styles and organizational performance within the Lebanese industrial context, as explored in the dissertation.

Table 14: Mean, standard deviations and sample orientation of the responses of the study sample members of charisma factor

N	item	Mean	SD	Sample orientation
1	Talks about his/her most important values and beliefs	4.24	0.81	Strongly agree
2	Instills pride in me for being associated with him/her.	4.32	0.79	Strongly agree
3	Acts in ways that build respect.	4.10	0.74	Agree
4	Displays a sense of power and confidence.	4.05	0.70	Agree
5	Goes beyond self-interest for the good of the group	4.16	0.77	Agree
6	Specifies the importance of having a strong sense of purpose.	4.04	0.79	Agree
7	Emphasizes the importance of having a collective sense of mission	4.06	0.79	Agree
8	Acts in ways that build respect.	4.06	0.82	Agree
	total	4.13		Agree

4.5.2. Descriptive Statistics for Inspirational Motivation Factor

Table 15 presents the mean, standard deviations, and sample orientation of the responses from the study sample members regarding the inspirational motivation factor. The mean scores indicate the average level of agreement among respondents regarding various aspects of inspirational motivation. Higher mean scores suggest a stronger endorsement of statements related to inspirational motivation. Standard deviation values reflect the degree of variability in responses around the mean. Lower standard deviation values indicate less variability among respondents' perceptions of inspirational motivation, while higher values suggest greater variability. The "sample orientation" column provides an overall assessment of the sample's orientation towards inspirational motivation. In this context, the sample orientation is categorized as "Agree," indicating that, on average, respondents agreed with the statements related to inspirational motivation.

These findings suggest that, within the industrial sector in Lebanon, respondents generally perceive leadership behaviors associated with inspirational motivation positively. This understanding contributes to the broader investigation into the relationship between leadership styles and organizational performance within the Lebanese industrial context, as explored in the research study.

Table 15: Mean, standard deviations and sample orientation of the responses of the study sample members of inspirational motivation factor

N	item	Mean	SD	Sample orientation
1	Talks optimistically about the future.	4.16	0.70	Agree
2	Expresses confidence that goals will be achieved.	4.13	0.72	Agree
3	Drag us after him with his dreams about the future	4.10	0.75	Agree
4	Talk enthusiastically about what needs to be accomplished	4.20	0.72	Strongly agree
	total	4.15		Agree

4.5.3. Descriptive Statistics for Intellectual Stimulation Factor

Table 16 presents the mean, standard deviations, and sample orientation of the responses from the study sample members regarding the inspirational motivation factor. the sample orientation is categorized as "Agree" based on the mean score of 4.15. This indicates that, on average, respondents agreed with the statements related to inspirational motivation. Each item is accompanied by its corresponding mean score, standard deviation, and sample orientation. For instance, item 4 ("Talk enthusiastically about what needs to be accomplished") received a mean score of 4.20, indicating a strong agreement among respondents. Similarly, items 1 to 3 also received mean scores indicating agreement with statements related to inspirational motivation.

Overall, the study sample tends to agree with statements related to inspirational motivation, as indicated by the mean scores and sample orientation.

Table 16: Mean, standard deviations and sample orientation of the responses of the study sample members of intellectual stimulation factor

N	item	Mean	SD	Sample orientation
1	Re-examines critical assumptions whether they succeeded.	4.16	0.78	Agree
2	Gets me to look at problems from many different angels	4.05	0.78	Agree
3	Suggests new ways of looking at how to complete assignments	4.10	0.81	Agree
4	Seeks different perspectives when solving problems.	4.10	0.81	Agree
	total	4.10		Agree

4.5.4. Descriptive Statistics for Individual Consideration Factor

Table 17 presents the mean, standard deviations, and sample orientation of the responses from the study sample members regarding the individual consideration factor. the sample orientation is categorized as "Agree" based on the mean score of 4.11. This indicates that, on average, respondents agreed with the statements related to individual consideration. Each item is accompanied by its corresponding mean score, standard deviation, and sample orientation. For instance, item 1 ("Spends time teaching and coaching") received a mean score of 4.16, indicating agreement among respondents. Similarly, items 2 to 4 also received mean scores indicating agreement with statements related to individual consideration.

Overall, the study sample tends to agree with statements related to individual consideration, as indicated by the mean scores and sample orientation.

Table 17: Mean, standard deviations and sample orientation of the responses of the study sample members of individual consideration factor

N	item	Mean	SD	Sample orientation
1	Spends time teaching and coaching.	4.16	0.83	Agree
2	Helps me to develop my strengths.	4.10	0.82	Agree
3	Treats me as an individual, not as a member of the team.	4.05	0.80	Agree
4	Approaches each of us as individuals with different needs and abilities.	4.14	0.87	Agree
	total	4.11		Agree

4.5.5. Descriptive Statistics for Transformational Leadership Scale

The table 18 compares the mean scores of factors for the transformational leadership scale. the evaluation for all factors is categorized as "Agree" since the mean scores for charisma, inspirational motivation, intellectual stimulation, individualized consideration, and the general mean are all above 4.00.

Overall, the study sample tends to agree with all factors of the transformational leadership scale, indicating positive perceptions towards charismatic, inspirational, intellectually stimulating, and individually considerate leadership behaviors.

Table 18: Comparison between the mean of the variables for the transformational leadership scale

factor	mean	Sample orientation
Charisma	4.13	Agree
Inspirational Motivation	4.15	Agree
Intellectual Stimulation	4.10	Agree
Individualized Consideration	4.11	Agree
general mean	4.12	Agree

4.5.6. Descriptive Statistics for Contingent Reward Factor

The table 19 presents the mean, standard deviations, and sample orientation of the responses from the study sample members regarding the contingent reward factor. the sample orientation is categorized as "Agree" based on the mean score of 3.88. This indicates that, on average, respondents agreed with the statements related to contingent rewards. Each item is accompanied by its corresponding mean score, standard deviation, and sample orientation. For instance, item 1 ("Supports me when she/he realizes my efforts") received a mean score of 3.89, indicating agreement among respondents. Similarly, items 2 to 4 also received mean scores indicating agreement with statements related to contingent rewards.

Overall, the study sample tends to agree with statements related to contingent rewards, as indicated by the mean scores and sample orientation.

Table 19: Mean, standard deviations and sample orientation of the responses of the study sample members for contingent reward factor

N	item	Mean	SD	Sample orientation
1	Supports me when she/he realizes my efforts	3.89	0.69	Agree
2	Provides adequate award when we achieve performance goals	3.87	0.68	Agree
3	Appreciates good performance	3.90	0.67	Agree
4	Makes clear what one can expect to receive when performance goals are achieved.	3.85	0.65	Agree
	total	3.88		Agree

4.5.7. Descriptive Statistics for Management-By-Exception Passive Factor

Table 20 presents the mean, standard deviations, and sample orientation of the responses from the study sample members regarding the management-by-exception factor. the sample orientation is categorized as "Disagree" based on the mean score of 3.61. This indicates that, on average, respondents disagreed with the statements related

to management by exception. The questions for this factor were considered negative questions and the coding was reversed. Each item is accompanied by its corresponding mean score, standard deviation, and sample orientation. For instance, item 1 ("In order to act, problems need to become chronic") received a mean score of 3.50, indicating disagreement among respondents. Similarly, items 2 to 4 also received mean scores indicating disagreement with statements related to management by exception.

Overall, the study sample tends to disagree with statements related to management by exception, as indicated by the mean scores and sample orientation.

Table 20: Mean, standard deviations and sample orientation of the responses of the study sample members for management-by-exception passive factor

N	item	Mean	SD	Sample orientation
1	In order to act, problems need to become chronic.	3.50	0.88	Disagree
2	To move, bad things must have happened	3.65	0.83	Disagree
3	He believes in the needlessness to take precautions unless he is obliged to.	3.67	0.91	Disagree
4	Never interferes till problem become serious	3.62	0.83	Disagree
	total	3.61		Disagree

4.5.8. Descriptive Statistics for Management-By-Exception Active Factor

Table 21 The responses to the management-by-exception active factor reveal interesting insights into how the sample perceives managerial behavior within the organization. The mean scores indicate that, on average, participants tend to disagree with the idea of their time being wasted by management, as evidenced by the mean score of 3.70. Furthermore, the items related to management's approach towards mistakes and goal achievement also received relatively lower mean scores, suggesting a lack of agreement with the proactive management approach. Specifically, while participants agree that they are warned about their mistakes (mean = 3.99), there seems to be uncertainty (mean = 3.32) regarding whether management forgets their mistakes. Additionally, the mean score of 3.99 for the item related to not overlooking failure in

reaching goals indicates a lack of agreement with this aspect of management behavior. Overall, the sample's orientation towards the management-by-exception active factor can be characterized as one of disagreement, highlighting potential areas for improvement in managerial practices within the organization.

Overall, the study sample tends to disagree with statements related to management by exception active, as indicated by the mean scores and sample orientation.

Table 21: Mean, standard deviations and sample orientation of the responses of the study sample members to the management-by-exception active factor

N	item	Mean	SD	Sample orientation
1	Wastes of his/her time	3.70	0.983	Disagree
2	Warns us for our mistakes.	3.99	0.746	Disagree
3	Never forgets my mistakes.	3.32	1.225	Not sure
4	Never overlooks failure in reaching the goals	3.99	0.726	Disagree
	total	3.75		Disagree

4.5.9. Descriptive Statistics for Transactional Leadership Scale

Table 22 compares the average scores of the factors for the transactional leadership scale. The conditional reward rating is rated as “Agree” because the average score is 3.88, indicating agreement with conditional reward practices. Conversely, management evaluation by exception passive is rated as “disagree” with the average score being 3.61, indicating agreement with management by exception passive practices is going well. also, management evaluation by exception active is rated as “disagree” with the average score being 3.75, indicating agreement with management by exception active practices is going well. The overall average, which represents the average transactional leadership, is also rated as “Agree” based on a mean score of 3.75.

In general, the study sample members tend to agree that transactional leadership is going well, as indicated by the average scores and trends of the sample.

Table 22: Comparison between the mean of the variables for the transactional leadership scale

factor	mean	Sample orientation
Contingent reward	3.88	Agree
Management-by-exception passive	3.61	Disagree
Management-by-exception active	3.75	Disagree
general mean	3.81	Agree

4.5.10. Descriptive Statistics for Innovation Culture Scale

Table 23 presents the mean, standard deviations, and sample orientation of the responses from the study sample members regarding the innovation culture factor. The sample orientation is categorized as "Agree" based on the mean score of 4.09. This indicates that, on average, respondents agreed with the statements related to innovation culture. Each item is accompanied by its corresponding mean score, standard deviation, and sample orientation. For instance, item 7 ("Innovation is a core value in this organization") received a mean score of 4.21, indicating strong agreement among respondents. Similarly, items 1 to 6 and 8 to 9 also received mean scores indicating agreement with statements related to innovation culture.

Overall, the study sample tends to agree with statements related to innovation culture, as indicated by the mean scores and sample orientation.

Table 23: Mean, standard deviations and sample orientation of the responses of the study sample members for innovation culture factor

N	item	Mean	SD	Sample orientation
1	At our company, innovation is an underlying culture and not just a word	4.10	0.78	Agree
2	Our business model is premised on the basis of strategic intent	4.10	0.79	Agree
3	Our senior managers are able to effectively cascade the innovation message throughout the organization	4.06	0.80	Agree
4	We have an innovation vision that is aligned with projects, platforms, or Initiatives	4.07	0.72	Agree
5	This organization's management team is diverse in their thinking in that they have different views as to how things should be done	4.04	0.82	Agree
6	There is a coherent set of innovation goals and objectives that have been articulated	4.13	0.73	Agree
7	Innovation is a core value in this organization	4.21	0.84	Strongly agree
8	We have continuous strategic initiatives aimed at gaining a competitive advantage	4.03	0.76	Agree
9	Our strategic planning process is opportunity oriented as opposed to process oriented	4.06	0.78	Agree
	total	4.09		Agree

4.5.11. Descriptive Statistics for Perceived Organizational Performance Scale

Table 24 presents the mean, standard deviations, and sample orientation of the responses from the study sample members regarding the organizational performance factor. the sample orientation is categorized as "Agree" based on the mean score of 4.11. This indicates that, on average, respondents agreed with the statements related to organizational performance. Each item is accompanied by its corresponding mean score, standard deviation, and sample orientation. For instance, item 1 ("Profitability is adopted

as an important performance indicator in our company and our company is in a good position in its sector") received a mean score of 4.18, indicating strong agreement among respondents. Similarly, items 2 to 8 also received mean scores indicating agreement with statements related to organizational performance.

Overall, the study sample tends to agree with statements related to organizational performance, as indicated by the mean scores and sample orientation.

Table 24: Mean, standard deviations and sample orientation of the responses of the study sample members for perceived organizational performance factor

N	item	Mean	SD	Sample orientation
1	Profitability is adopted as an important performance indicator in our company and our company is in a good position in its sector.	4.18	0.80	Agree
2	Increasing the market share in our company is considered as an important performance indicator and our company is in a good position in its sector.	4.04	0.77	Agree
3	Making new investments in our company is considered an important performance indicator and our company is in a good position in its sector.	4.09	0.82	Agree
4	Increasing the quality of the products or services we offer is considered an important performance indicator and our company is in a good position in its sector.	4.13	0.75	Agree
5	Increasing customer satisfaction is an important performance indicator and our company is in a good position in its sector	4.15	0.77	Agree
6	Profitability indicator (Earnings Before Interest, Tax, Depreciation and Amortization) is accepted as an important performance indicator in our company and our company is in a good position in its sector.	4.11	0.80	Agree

Table 24 Continuing: Mean, standard deviations and sample orientation of the responses of the study sample members for perceived organizational performance factor

7	The low employee turnover rate in our company is considered an important performance indicator and our company is in a good position in its sector.	4.11	0.87	Agree
8	In our company, attracting talented/competent human resources to the company is considered an important performance indicator and our company is in a good position in its sector.	4.08	0.75	Agree
9	We consider the innovation and widening of innovation perspective of our company employees as an important performance indicator and our company is in a good position in its sector.	4.09	0.82	Agree
	total	4.11		Agree

4.5.12. Descriptive Statistics for Employee-Oriented Effectiveness Factor

Table 25 presents the mean, standard deviations, and sample orientation of the responses from the study sample members regarding the employee-oriented effectiveness factor. the sample orientation is categorized as "Agree" based on the mean score of 3.65. This indicates that, on average, respondents agreed with the statements related to employee-oriented effectiveness. Each item is accompanied by its corresponding mean score, standard deviation, and sample orientation. For instance, item 1 ("The morale of those who work in our institution is high") received a mean score of 3.62, indicating agreement among respondents. Similarly, items 2 to 25 also received mean scores indicating agreement with statements related to employee-oriented effectiveness.

Overall, the study sample tends to agree with statements related to employee-oriented effectiveness, as indicated by the mean scores and sample orientation.

Table 25: Mean, standard deviations and sample orientation of the responses of the study sample members for employee-oriented effectiveness factor

N	item	Mean	SD	Sample orientation
1	The morale of those who work in our institution is high	3.62	0.78	Agree
2	Regular meetings are held regarding productivity issues	3.66	0.74	Agree
3	predetermined tasks are performed well to increase productivity.	3.66	0.69	Agree
4	Quality of work done at all levels of the institution is highly valued.	3.65	0.77	Agree
5	The main target is continuous development and progress.	3.68	0.74	Agree
6	The hierarchical order in the company, will ensure the flow of information from top to bottom.	3.65	0.72	Agree
7	According to the internal and external changes, the institution is able to successfully adapt its structure to change.	3.67	0.72	Agree
8	This organization is sensitive to the needs of its employees	3.61	0.79	Agree
9	Attention is paid to the quality of interpersonal communication.	3.64	0.77	Agree
10	Every employee is aware of how important her/his job is.	3.68	0.71	Agree
11	This organization offers employees personal development opportunities to improve themselves.	3.64	0.77	Agree
12	Employees attach great importance to the analysis of the quality of the products or services they produce.	3.72	0.74	Agree
13	Employees are involved in organizational decision-making.	3.59	0.78	Agree
14	Teamwork activities in our institution is successfully implemented.	3.65	0.77	Agree

Table 25 Continuing: Mean, standard deviations and sample orientation of the responses of the study sample members for employee-oriented effectiveness factor

15	In this organization, all departments and individuals are encouraged to use resources efficiently.	3.69	0.75	Agree
16	Duties and objectives of the organization are well known by the employees.	3.69	0.75	Agree
17	Prepared plans are carried out exactly and in accordance with the targeted time.	3.64	0.73	Agree
18	Methods such as "brainstorming are used to improve the quality of products and services.	3.56	0.79	Agree
19	Our organizational is ready to adapt to changing conditions.	3.62	0.69	Agree
20	Our management has the ability to manage its employees under external pressures.	3.64	0.72	Agree
21	Employees in this company are informed about new product studies and their intention to enter new markets in a timely manner.	3.66	0.74	Agree
22	Periodic reviews are conducted to measure the financial value provided by each department to the institution.	3.67	0.69	Agree
23	The management successfully fulfills its part in order to ensure the sense of belonging of the employees in our institution.	3.67	0.72	Agree
24	Adequate width and necessary equipment are provided in the working environment for the efficiency of the employees.	3.65	0.74	Agree
25	Employees keep quality measurements and records of the work they do.	3.61	0.69	Agree
	total	3.65		Agree

4.5.13. Descriptive Statistics for Organizational Oriented Effectiveness Factor

Table 26 presents the mean, standard deviations, and sample orientation of the responses from the study sample members regarding the organizational oriented effectiveness factor. the sample orientation is categorized as "Agree" based on the mean score of 4.14. This indicates that, on average, respondents agreed with the statements related to organizational oriented effectiveness. Each item is accompanied by its corresponding mean score, standard deviation, and sample orientation. For instance, item 1 ("The company's products and services are well promoted") received a mean score of 4.22, indicating strong agreement among respondents. Similarly, items 2 to 12 also received mean scores indicating agreement with statements related to organizational oriented effectiveness.

Overall, the study sample tends to agree with statements related to organizational oriented effectiveness, as indicated by the mean scores and sample orientation.

Table 26: Mean, standard deviations and sample orientation of the responses of the study sample members for organizational oriented effectiveness factor

N	item	Mean	SD	Sample orientation
1	The company's products and services are well promoted.	4.22	0.77	Strongly agree
2	Actions taken to fulfill the organizations future plans are consistent.	4.11	0.74	Agree
3	Long-term goals and the culture of the organization is determined appropriately.	4.14	0.75	Agree
4	The management of the institution has the ability to control the work flow even in the face of external pressures	4.17	0.78	Agree
5	The company's market share is increasing.	4.20	0.77	Strongly agree
6	Each unit/department prepares its own budget according to the plans for the next year.	4.10	0.78	Agree

Table 26 Continuing: Mean, standard deviations and sample orientation of the responses of the study sample members for organizational oriented effectiveness factor

7	The management of the institution has the ability to ensure the continuity of the organization even in the face of external pressures.	4.22	0.78	Strongly agree
8	There has been consistent success in implementing the low-cost strategy.	4.11	0.75	Agree
9	The organization successfully implemented programs update according to changing internal and external demands	4.16	0.75	Agree
10	The institutions profitability is increasing.	4.16	0.78	Agree
11	The sales volume of the organization is increasing.	4.05	0.75	Agree
12	The objectives and strategies of the organization's plans are updated annually.	4.07	0.76	Agree
	total	4.14		Agree

4.5.14. Descriptive Statistics for Organizational Effectiveness Factor

Table 27 compares the mean scores of variables for the organizational effectiveness scale. both employee-oriented effectiveness and organizational-oriented effectiveness have a sample orientation categorized as "Agree" since their respective mean scores are 3.65 and 4.14, indicating agreement with both factors. The general mean, representing the average of all factors, is also categorized as "Agree" based on the mean score of 3.90.

Overall, the study sample tends to agree with both employee-oriented effectiveness and organizational-oriented effectiveness, as indicated by the mean scores and sample orientation.

Table 27: Comparison between the mean of the variables for the organizational effectiveness scale

factor	mean	Sample orientation
employee-oriented effectiveness	3.65	Agree
organizational oriented effectiveness	4.14	Agree
general mean	3.90	Agree

Table 28: Mean and correlations for all variables

factor	mean	TF	TR	IC	OP	OE
Transformational leadership	4.12	1				
Transactional leadership	3.74	.52**	1			
Innovation culture	4.09	.77**	.49**	1		
Perceived organizational performance	4.11	.76**	.46**	.75**	1	
Perceived organizational effectiveness	3.90	.50**	.44**	.48**	.47**	1
**. Correlation is significant at the 0.01 level (2-tailed).						

Table 28 presents the means and correlations among different variables in the study. The mean scores indicate the average ratings given by participants for each variable. Transformational leadership (TF) has a mean score of 4.12, indicating that, on average, participants rated this leadership style positively. Transactional leadership (TR) has a lower mean score of 3.74, suggesting slightly lower ratings compared to transformational leadership. Innovation culture (IC) received a mean score of 4.09, indicating that participants generally perceived their organization to have a strong culture of innovation. Perceived organizational performance (OP) and perceived organizational effectiveness (OE) both received mean scores of 4.11 and 3.90, respectively, indicating positive perceptions of organizational performance and effectiveness.

Based on the statistical analysis of the data, strong and significant relationships among various variables in the study can be confirmed. The results of correlations analysis indicated that both transformational and transactional leadership styles significantly influence the perceived organizational performance as perceived by employees, as well as

organizational effectiveness. Furthermore, the results also revealed that leadership styles significantly affect innovation culture within the organization. Additionally, correlations analysis demonstrated that innovation culture significantly impacts both perceived organizational performance and organizational effectiveness.

4.6. REGRESSION ANALYSIS

The multiple linear regression method was used to investigate the impact of transformational leadership and transactional leadership variables on perceived organizational performance and organizational effectiveness. It was verified that there was no multicollinearity among the independent variables. Additionally, the researcher employed the simple linear regression method to examine the influence of the leadership styles on innovation culture and innovation culture variable on perceived organizational performance and organizational effectiveness. Furthermore, the macro procedure developed by Hayes was utilized to ascertain the mediating role of the innovation culture variable in the relationship between leadership styles and perceived organizational performance, as well as the relationship between leadership styles and organizational effectiveness.

4.6.1. Normal Distribution Test

In conducting the statistical analysis for my doctoral thesis, it was discovered that the collected data, sourced from a questionnaire with a sample size of 335 respondents, did not adhere to a normal distribution. Recognizing this deviation from normality, I opted to leverage the central limit theorem (CLT) as a workaround to facilitate the application of parametric tests and regression analysis. The CLT asserts that the sampling distribution of the sample mean tends towards a normal distribution as the sample size increases, irrespective of the underlying distribution of the population. By relying on this fundamental statistical principle, I was able to proceed with confidence in employing parametric techniques, ensuring the robustness and validity of the analytical approach undertaken in my research. This strategic decision enabled a comprehensive exploration of the data while

maintaining statistical integrity. The application of the CLT in this context is well-established in statistical literature (Casella & Berger, 2002; Lehmann & Casella, 1998), providing a solid theoretical foundation for the methodology employed in this study.

4.6.2. Multicollinearity Among the Independent Variables

Table 29 presents the values of variance Inflation factor (VIF) and tolerance between independent variables.

Tolerance is a measure that indicates the proportion of variance in the independent variable that is not explained by other independent variables. Higher tolerance values suggest less multicollinearity. In this case, both transformational leadership and transactional leadership have a tolerance value of 0.721.

VIF (Variance Inflation Factor): VIF is a measure that assesses the extent to which the variance of an estimated regression coefficient is increased due to multicollinearity. Lower VIF values suggest less multicollinearity. In this case, both transformational leadership and transactional leadership have a VIF of 1.387.

Overall, the values of tolerance and VIF indicate that there is no multicollinearity issue between the independent variable's transformational leadership and transactional leadership, as both tolerance values are above 0.1 and VIF values are below 10, which are commonly accepted thresholds for multicollinearity.

Table 29: The values of VIF and tolerance between independent variables:

Variable	Tolerance	VIF
Transformational leadership	0.721	1.387
Transactional leadership	0.721	1.387

4.6.3. The Impact of Transformational Leadership and Transactional Leadership on Perceived Organizational Performance

Table 30 presents the impact of transformational leadership and transactional leadership variables on perceived organizational performance through multiple linear regression analysis.

R and Adjusted R^2: These statistics represent the goodness of fit of the regression model. R is the correlation coefficient, indicating the strength and direction of the relationship between the independent and dependent variables. Adjusted R^2 is a modified version of R^2 that adjusts for the number of predictors in the model. In this case, R = 0.761 and Adjusted R^2 = 0.581, suggesting that 58.1% of the variance in perceived organizational performance can be explained by the predictors in the model. The Durbin-Watson value also indicates that there is no evidence of autocorrelation present in the model residuals.

F: The F-statistic tests the overall significance of the regression model. A high F-value indicates that the regression model is statistically significant. In this case, the F-value is 232.237, with a significance level of 0.000, indicating that the regression model is significant.

SIG: SIG represents the p-value associated with the f-statistic. A p-value less than the significance level (usually 0.05) indicates that the regression model is statistically significant. In this case, the p-value is 0.000, indicating a highly significant relationship between the predictors and perceived organizational performance.

Leadership styles coefficients (B): These coefficients represent the effect of each predictor variable on the dependent variable (perceived organizational performance) while controlling for other variables in the model.

The coefficient for the constant term (Constant) is 0.006, indicating the expected value of the dependent variable when all predictors are zero. The coefficient for transformational leadership is 0.887, suggesting that a one-unit increase in transformational leadership is associated with a 0.887 unit increase in perceived organizational performance, holding other variables constant. The coefficient for transactional leadership is 0.119, indicating that a one-unit increase in transactional leadership is associated with a 0.119unit increase in perceived organizational performance, holding other variables constant.

T: T-statistic measures the significance of each predictor variable. A higher absolute T-value indicates greater significance.

SIG (p-value): SIG associated with each predictor indicates whether the coefficients are statistically significant. A p-value less than 0.05 suggests that the predictor is significantly related to the dependent variable. In this case, both transformational leadership and transactional leadership have p-values less than 0.05, indicating that they are statistically significant predictors of perceived organizational performance.

Table 30: The impact of transformational leadership and transactional leadership on perceived organizational performance

R	**Adjusted R^2**	**Durbin-Watson**	**F**	**SIG**
0.761	0.581	1.868	232.237	0.000
Leadership **styles**	**B**	**T**		**SIG**
(Constant)	0.006	0.028		0.978
Transformational leadership	0.887	17.100		0.000
Transactional leadership	0.119	2.099		0.037

4.6.4. The Impact of Transformational Leadership and Transactional Leadership Variables on Organizational Performance According to Groups

Group 1: Transformational leadership is low and transactional leadership is low.
Group 2: Transformational leadership is low and transactional leadership is high.
Group 3: Transformational leadership is high and transactional leadership is high.
Group 4: Transformational leadership is high and transactional leadership is low.

The analysis reveals distinct patterns in how transformational and transactional leadership impact organizational performance across four different groups according to their mean difference as mentioned in table 31.

In Group 1, where both transformational leadership (TF) and transactional leadership (TR) are low, both leadership styles seem to have an impact on perceived

organizational performance, with a combined model explaining 76.5% of the variance (TF: $\beta = 0.84$, $p < 0.001$; TR: $\beta = 0.66$, $p = 0.001$).

Conversely, in Group 2, characterized by low TF and high TR, neither leadership style significantly impacts organizational performance, and the model explains only 3.8% of the variance, indicating that neither TF ($\beta = 0.12$, $p = 0.607$) nor TR ($\beta = -0.309$, $p = 0.168$) plays a meaningful role in this context.

In Group 3, where both TF and TR are high, transformational leadership demonstrates a significant positive impact on organizational performance ($\beta = 0.46$, $p = 0.04$), while the effect of transactional leadership remains insignificant ($\beta = 0.09$, $p = 0.534$). This model explains 4.4% of the variance, suggesting that TF is the more influential leadership style in this high-high context. Lastly.

In Group 4, with high TF and low TR, neither leadership style significantly affects organizational performance (TF: $\beta = 0.30$, $p = 0.186$; TR: $\beta = 0.20$, $p = 0.225$), and the model accounts for only 3.6% of the variance.

These findings highlight that the effectiveness of transformational and transactional leadership varies depending on their levels within an organization. Group 1 benefits significantly from both leadership styles, whereas in Group 3, only transformational leadership shows a positive effect. Groups 2 and 4 do not see significant impacts from either style, underscoring the importance of context and the specific combination of leadership approaches in influencing organizational performance.

Table 31: The impact of Transformational leadership and Transactional leadership variables on organizational performance according to groups

	Group1			**Group2**			**Group3**			**Group4**		
	β	T	SIG	β	T	SIG	β	T	SIG	β	T	SIG
Constant	-1.53	-3.46	0.001	4.83	3.69	0.000	1.90	1.93	0.06	2.40	2.16	0.034
TF	0.84	6.83	0.000	0.12	0.52	0.607	0.46	2.10	0.04	0.30	1.33	0.186
TR	0.66	3.67	0.001	-0.309	-1.40	0.168	0.09	0.62	0.53	0.20	1.22	0.225
R^2	0.765			0.038			0.044			0.036		
F	74.885			1.201			2.914			1.683		
SIG	.000			.308			.058			.192		

4.6.5. The Impact of Transformational Leadership and Transactional Leadership on Organizational Effectiveness

Table 32 illustrates the impact of transformational leadership and transactional leadership variables on perceived organizational effectiveness using multiple linear regression analysis.

R and Adjusted R^2: In this scenario, R = 0.546 and Adjusted R^2 = 0.293, indicating that approximately 29.3% of the variance in perceived organizational effectiveness can be explained by the predictors included in the model. The Durbin-Watson value also indicates that there is no evidence of autocorrelation present in the model residuals. the F-value is 70.232, with a corresponding p-value of 0.000, indicating that the regression model is highly significant.

The coefficient for the constant term (Constant) is 1.263, representing the expected value of the dependent variable when all predictors are zero. The coefficient for transformational leadership is 0.373, indicating that a one-unit increase in transformational leadership corresponds to a 0.373unit increase in perceived organizational effectiveness, holding other variables constant. The coefficient for transactional leadership is 0.270, suggesting that a one-unit increase in transactional leadership is associated with a 0.270 unit increase in perceived organizational effectiveness, holding other variables constant. Both transformational leadership and transactional leadership have p-values less than 0.05, signifying their statistical significance as predictors of perceived organizational effectiveness.

Table 32: The impact of transformational leadership and transactional leadership on organizational effectiveness

R	Adjusted R^2	Durbin-Watson	F	SIG
0.546	0.293	1.928	70.323	0.000
Leadership **styles**	**B**	**T**		**SIG**
(Constant)	1.263	5.813		0.000
Transformational leadership	0.373	6.884		0.000
Transactional leadership	0.270	4.560		0.000

4.6.6. The Impact of Transformational Leadership and Transactional Leadership Variables on Effectiveness According to Groups

Group 1: Transformational leadership is low and transactional leadership is low.
Group 2: Transformational leadership is low and transactional leadership is high.
Group 3: Transformational leadership is high and transactional leadership is high.
Group 4: Transformational leadership is high and transactional leadership is low.

The analysis reveals varying impacts of transformational (TF) and transactional leadership (TR) on organizational effectiveness across four distinct groups.

In group 1, characterized by low levels of both leadership styles, transformational leadership impacts effectiveness ($\beta = 0.60$, $p < 0.001$), whereas transactional leadership does not have a significant impact ($\beta = 0.26$, $p = 0.097$). This model explains 63.3% of the variance in effectiveness.

In Group 2, where TF is low and TR is high, neither leadership style significantly affects effectiveness (TF: $\beta = -0.30$, $p = 0.270$; TR: $\beta = -0.15$, $p = 0.571$), with the model explaining only 2.3% of the variance. Similarly.

In Group 3, where both leadership styles are high, neither TF nor TR has a significant impact on effectiveness (TF: $\beta = 0.24$, $p = 0.283$; TR: $\beta = -0.11$, $p = 0.436$), and the model explains a mere 1.1% of the variance.

In Group 4, characterized by high TF and low TR, neither leadership styles significantly influence effectiveness, (TF: β = -0.58, p = 0.051; TR: β = 0.42, p = 0.059), and the model accounts for 7.6% of the variance.

These findings indicate that the effectiveness of transformational and transactional leadership varies significantly across different contexts, with Group 1 showing the most substantial positive effect from transformational leadership, while the other groups do not exhibit significant impacts from either leadership style.

Table 33: The impact of Transformational leadership and Transactional leadership variables on effectiveness according to groups

	Group1			**Group2**			**Group3**			**Group4**		
	β	T	SIG	β	T	SIG	β	T	SIG	β	T	SIG
Constant	0.55	1.47	0.15	5.71	3.56	0.00	3.36	3.31	0.001	4.89	3.32	0.001
TF	0.60	5.78	0.00	-0.30	-1.11	0.27	0.24	1.08	0.283	-0.58	-1.98	0.051
TR	0.26	1.69	0.09	-0.15	-0.57	0.57	-0.11	-0.78	0.436	0.42	1.91	0.059
R^2	0.633			0.023			0.011			0.076		
F	39.705			0.721			0.719			3.670		
SIG	.000			.491			.489			.029		

4.6.7. The Impact of Transformational Leadership and Transactional Leadership on Innovation Culture

Table 34 presents the impact of transformational leadership and transactional leadership variables on innovation culture using multiple linear regression analysis. R = 0.778 and adjusted R^2 = 0.602, indicating that approximately 60.2% of the variance in innovation culture can be explained by transformational leadership and transactional leadership variables. The Durbin-Watson value also indicates that there is no evidence of autocorrelation present in the model residuals.

The F-value here is 254.001 with a corresponding p-value of 0.000, indicating that the regression model is highly significant. The constant term is 0.177. It represents the expected value of innovation culture when both transformational leadership and transactional leadership are zero. The coefficients for transformational leadership and

transactional leadership are 0.809 and 0.145, respectively. These coefficients represent the change in the dependent variable (innovation culture) for a one-unit change in the respective independent variables (transformational leadership and transactional leadership), holding other variables constant. A p-value less than 0.05 suggests that the coefficient is significantly different from zero. In this case, both transformational leadership and transactional leadership have p-values of 0.000, indicating that they are statistically significant predictors of innovation culture.

Table 34: The Impact of transformational leadership and transactional leadership on innovation culture

R	**Adjusted R^2**	**Durbin-Watson**	**F**	**SIG**
0.778	0.602	1.719	254.001	0.000
Leadership **styles**	**B**	**T**		**SIG**
(Constant)	0.177	0.939		0.343
Transformational leadership	0.809	17.362		0.000
Transactional leadership	0.154	3.027		0.003

4.6.8. The Impact of Transformational Leadership and Transactional Leadership Variables on Innovation Culture According to Groups

Group 1: Transformational leadership is low and transactional leadership is low.
Group 2: Transformational leadership is low and transactional leadership is high.
Group 3: Transformational leadership is high and transactional leadership is high.
Group 4: Transformational leadership is high and transactional leadership is low.

The analysis reveals how transformational leadership (TF) and transactional leadership (TR) influence innovation culture across four distinct groups.

In Group 1, characterized by low levels of both leadership styles, transformational leadership significantly enhances innovation culture ($\beta = 0.95$, $p < 0.001$), whereas

transactional leadership does not have a significant impact (β = 0.23, p = 0.140). This model explains 77.8% of the variance in innovation culture.

In Group 2, where TF is low and TR is high, neither leadership style significantly affects innovation culture (TF: β = 0.25, p = 0.317; TR: β = -0.12, p = 0.618), with the model explaining only 2.3% of the variance.

In Group 3, where both leadership styles are high, transformational leadership has a significant positive impact on innovation culture (β = 0.46, p = 0.019), while transactional leadership does not (β = 0.12, p = 0.345). This model explains 6.0% of the variance in innovation culture.

In Group 4, characterized by high TF and low TR, neither leadership style significantly influences innovation culture (TF: β = 0.32, p = 0.153; TR: β = -0.01, p = 0.947), and the model accounts for only 2.3% of the variance.

These findings indicate that the impact of transformational and transactional leadership on innovation culture varies significantly across different contexts. Group 1 benefits substantially from transformational leadership, demonstrating a strong positive effect, while Group 3 also sees a significant, though smaller, positive effect from transformational leadership. In contrast, Groups 2 and 4 do not exhibit significant impacts from either leadership style.

Table 35: The impact of Transformational leadership and Transactional leadership variables on effectiveness according to groups

	Group1			**Group2**			**Group3**			**Group4**		
	β	T	SIG	β	T	SIG	β	T	SIG	β	T	SIG
Constant	-0.57	-1.48	0.145	3.62	2.52	0.014	1.80	2.07	0.041	2.90	2.59	0.011
TF	0.95	8.92	0.000	0.25	1.01	0.317	0.46	2.37	0.019	0.32	1.44	0.153
TR	0.23	1.50	0.140	-0.12	-0.50	0.618	0.12	0.95	0.345	-0.01	-0.07	0.947
R^2	0.778			0.023			0.060			0.023		
F	80.727			0.700			4.083			1.040		
SIG	.000			.501			.019			.358		

4.6.9. The Impact of Innovation Culture on Perceived Organizational Performance

Table 36 presents the impact of the innovation culture variable on perceived organizational performance using simple linear regression analysis. R and Adjusted R^2: R = 0.758 and Adjusted R^2 = 0.573, suggesting that approximately 57.3% of the variance in perceived organizational performance can be explained by the innovation culture variable. the F-value is 449.114, with a corresponding p-value of 0.000, indicating that the regression model is highly significant.

The Durbin-Watson value also indicates that there is no evidence of autocorrelation present in the model residuals.

The coefficient for the constant term (Constant) is 0.745. This represents the expected value of perceived organizational performance when the innovation culture variable is zero. The coefficient for the innovation culture variable is 0.822. This indicates that a one-unit increase in innovation culture is associated with a 0.822 unit increase in perceived organizational performance, holding other variables constant. Here, the p-value is 0.000, indicating that the coefficient for innovation culture is statistically significant.

Table 36: The impact of innovation culture on perceived organizational performance

R	**Adjusted R^2**	**Durbin-Watson**	**F**	**SIG**
0.758	0.573	1.860	449.114	0.000
	B	**T**		**SIG**
(Constant)	0.745	4.675		0.000
Innovation culture	0.822	21.192		0.000

4.6.10. The Impact of Innovation Culture on Organizational Effectiveness

Table 37 illustrates the impact of the innovation culture variable on organizational effectiveness using simple linear regression analysis. R = 0.484 and Adjusted R^2 = 0.232, suggesting that approximately 23.2% of the variance in organizational effectiveness can be explained by the innovation culture variable. the F-value is 101.743, with a corresponding

p-value of 0.000, indicating that the regression model is highly significant. The coefficient for the constant term (Constant) is 2.084. This represents the expected value of organizational effectiveness when the innovation culture variable is zero. The coefficient for the innovation culture variable is 0.422. This indicates that a one-unit increase in innovation culture is associated with a 0.422 unit increase in organizational effectiveness, holding other variables constant. The p-value associated with the innovation culture coefficient indicates its statistical significance. demonstrating that the coefficient for innovation culture is statistically significant.

The Durbin-Watson value also indicates that there is no evidence of autocorrelation present in the model residuals

Table 37: The impact of innovation culture on organizational effectiveness

R	**Adjusted R^2**	**Durbin-Watson**	**F**	**SIG**
0.484	0.232	1.779	101.743	0.000
	B	**T**		**SIG**
(Constant)	2.084	12.051		0.000
Innovation culture	0.422	10.087		0.000

4.6.11. Mediating Role of Innovation Culture in the Relationship Between Transformational Leadership and Perceived Organizational Performance

Table 38 presents the results of a mediation analysis examining the role of innovation culture as a mediator in the relationship between transformational leadership styles and perceived organizational performance.

Model 1 (Total Effect): The total effect of transformational leadership on organizational performance is strong and significant ($\beta = 0.95$, $T = 21.34$, $p < 0.001$), indicating that transformational leadership positively influences perceived organizational performance.

Model 2 (Direct Effect): When innovation culture is included in the model, the direct effect of transformational leadership on perceived organizational performance remains significant but is reduced ($\beta = 0.54$, $T = 8.52$, $p= 0.001$). This suggests that part of the impact of transformational leadership on performance is mediated by innovation culture. The effect of innovation culture on perceived organizational performance is also significant ($\beta = 0.46$, $T = 8.32$, $p < 0.001$), demonstrating that innovation culture itself positively impacts perceived organizational performance.

Indirect Effect: The indirect effect of transformational leadership on perceived organizational performance through innovation culture is significant (effect = 0.41, with a 95% confidence interval ranging from 0.27 to 0.54). This indicates that innovation culture is a significant mediator in this relationship. The Sobel test confirms the significance of the mediation effect (value = 15.27, $p < 0.001$). R^2 values: The R^2 value increases from 0.55 in model 1 to 0.65 in model 2, indicating that including innovation culture in the model explains an additional 10% of the variance in perceived organizational performance. F-statistics and significance: Both models are highly significant ($p = 0.001$), as indicated by the F-statistics (455.411 for Model 1 and 309.25 for Model 2).

In summary, the findings from table 38 highlight that innovation culture significantly mediates the relationship between transformational leadership and perceived organizational performance. Transformational leadership positively influences innovation culture, which in turn enhances perceived organizational performance. The significant Sobel test further validates the mediating role of innovation culture. This underscores the importance of fostering an innovation culture within organizations to fully leverage the benefits of transformational leadership on performance.

Table 38: Mediating role of innovation culture in the relationship between transformational leadership and perceived organizational performance

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	0.21	1.16	.248	.01	.05	.961	-	-	-
Transformational leadership	.95	21.34	.000	.54	8.52	.000	-	-	-
Innovation culture	-	-	-	.46	8.32	.000	.41	.27	.54
R^2	.55			.65			-		
F	455.411			309.25			-		
SIG	.000			.000			-		
Sobel test	Value (Sobel) = 15.27						SIG (Sobel) = 0.000		

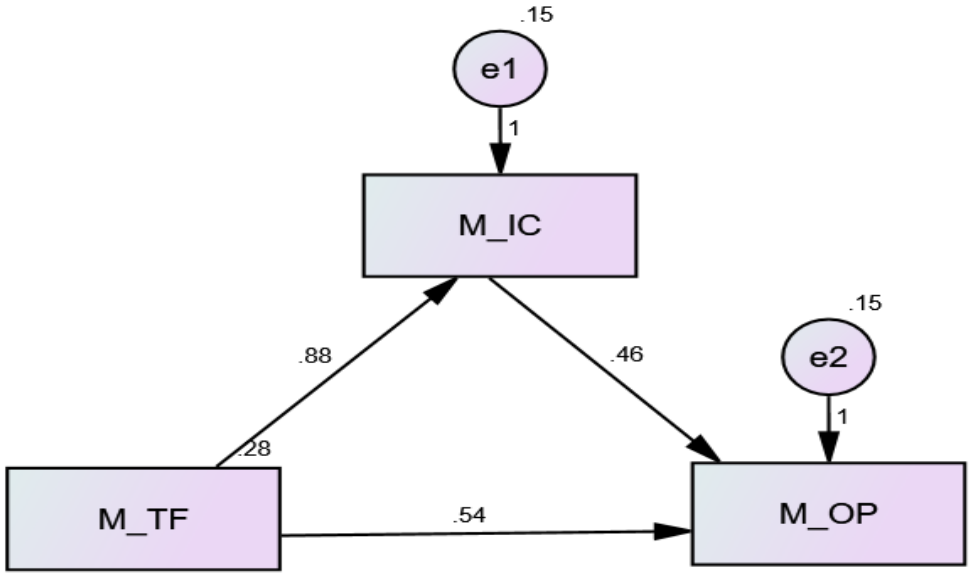

Figure 7: Innovation culture variable in the relationship between transformational leadership and perceived organizational performance

4.6.12. Mediating Role of Innovation Culture in the Relationship Between Transactional Leadership and Perceived Organizational Performance

Table 39 presents the results of a mediation analysis examining the role of innovation culture as a mediator in the relationship between Transactional leadership and perceived organizational performance

Model 1 (Total Effect): The total effect of transactional leadership on perceived organizational performance is significant ($\beta = 0.63$, $T = 9.58$, $p < 0.001$), indicating a positive influence of transactional leadership on perceived organizational performance.

Model 2 (Direct Effect): When innovation culture is included in the model, the direct effect of transactional leadership on perceived organizational performance decreases but remains significant ($\beta = 0.16$, $T = 2.89$, $p = 0.004$). This suggests that innovation culture partially mediates the relationship between transactional leadership and perceived organizational performance. Innovation culture has a strong and significant effect on perceived organizational performance ($\beta = 0.76$, $T = 17.17$, $p < 0.001$).

Indirect Effect: The indirect effect of transactional leadership on perceived organizational performance through innovation culture is significant (effect = 0.47, with a 95% confidence interval ranging from 0.29 to 0.64). This indicates that innovation culture significantly mediates the relationship. The Sobel test confirms the mediation effect (Value = 9.35, $p < 0.001$). The R^2 value increases from 0.22 in model 1 to 0.58 in Model 2, showing that including innovation culture in the model explains an additional 36% of the variance in perceived organizational performance. F-statistics and significance: Both models are highly significant ($p < 0.001$), as indicated by the F-statistics (91.757 for Model 1 and 233.74 for model 2).

In summary, the findings from table 39 highlight that innovation culture significantly mediates the relationship between transactional leadership and perceived organizational performance. Transactional leadership positively influences innovation culture, which in turn enhances perceived organizational performance. The significant Sobel test further validates the mediating role of innovation culture. This underscores the importance of fostering an innovation culture within organizations to fully leverage the benefits of transactional leadership on performance.

Table 39: Mediating role of innovation culture in the relationship between transactional leadership and perceived organizational performance

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	1.75	7.05	.000	0.41	2.08	.038	-	-	-
Transactional Leadership	0.63	9.58	.000	.16	2.89	.004	-	-	-
Innovation culture	-	-	-	.76	17.17	.000	.47	.29	.64
R^2	.22			.58			-		
F	91.757			233.74			-		
SIG	.000			.000			-		
Sobel test	Value (Sobel) = 9.35						SIG(Sobel) = 0.000		

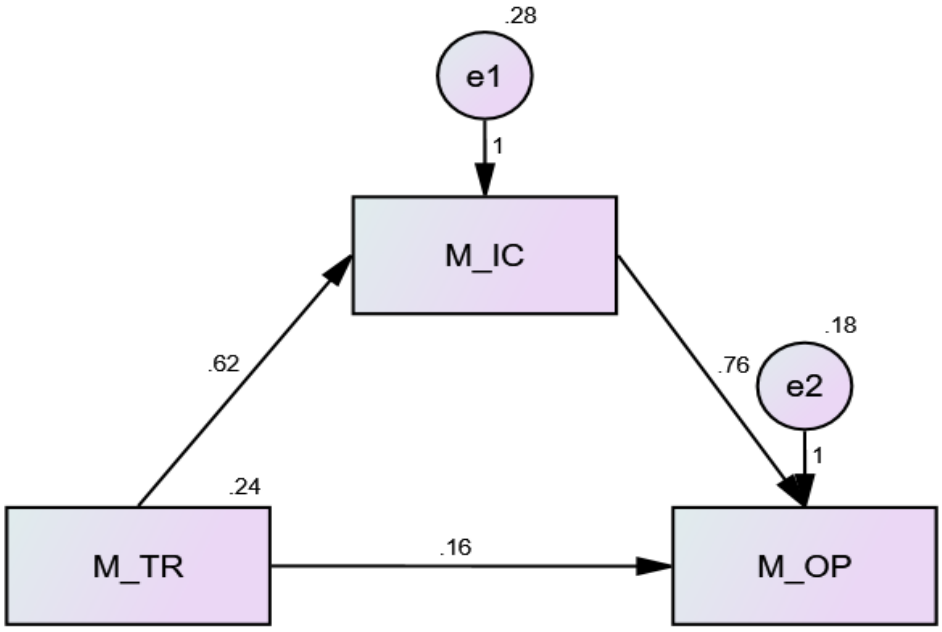

Figure 8: Innovation culture as a mediator in the relationship between transactional leadership and perceived organizational performance

4.6.13. Mediating Role of Innovation Culture in the Relationship Between Transformational Leadership and Organizational Effectiveness

Table 40 demonstrates the mediating effect of innovation culture on the relationship between transformational leadership and organizational effectiveness.

Model 1 (Total Effect): The total effect of transformational leadership on organizational effectiveness is significant ($\beta = 0.50$, $T = 10.64$, $p < 0.001$), indicating a strong positive influence of transformational leadership on organizational effectiveness.

Model 2 (Direct Effect): When innovation culture is included in the model, the direct effect of transformational leadership on organizational effectiveness decreases but remains significant ($\beta = 0.32$, $T = 4.39$, $p < 0.001$). This suggests that innovation culture partially mediates the relationship between transformational leadership and organizational effectiveness. Innovation culture has a strong and significant effect on organizational effectiveness ($\beta = 0.21$, $T = 3.22$, $p = 0.001$).

Indirect effect: The indirect effect of transformational leadership on organizational effectiveness through innovation culture is significant (effect = 0.18, with a 95% confidence interval ranging from 0.05 to 0.31). This indicates that innovation culture significantly mediates the relationship. The Sobel test confirms the mediation effect (value = 9.71, $p < 0.001$). The R^2 value increases from 0.25 in model 1 to 0.28 in model 2, showing that including innovation culture in the model explains an additional 3% of the variance in organizational effectiveness. F-statistics and significance: both models are highly significant ($p < 0.001$), as indicated by the F-statistics (113.129 for Model 1 and 63.32 for Model 2).

In summary, the findings from table 40 highlight that innovation culture significantly mediates the relationship between transformational leadership and organizational effectiveness. Transformational leadership positively influences innovation culture, which in turn enhances organizational effectiveness. The significant Sobel test further validates the mediating role of innovation culture. This underscores the importance of fostering an innovation culture within organizations to fully leverage the benefits of transformational leadership on effectiveness.

Table 40: Mediating role of innovation culture in the relationship between transformational leadership and organizational effectiveness

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	1.73	8.80	.000	1.64	8.36	.000	-	-	-
Transformational leadership	0.50	10.64	.000	0.32	4.39	.000	-	-	-
Innovation culture	-	-	-	0.21	3.22	.001	.18	.05	0.31
R^2	.25			.28			-		
F	113.129			63.32			-		
SIG	.000			.000			-		
Sobel test	Value (Sobel) = 9.71						SIG (Sobel) = 0.000		

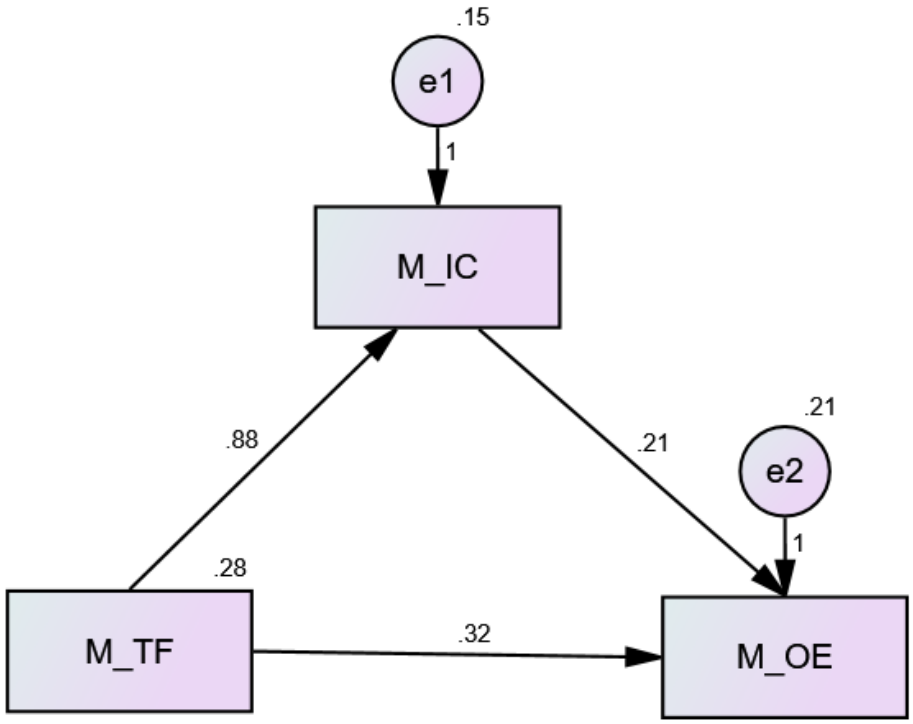

Figure 9: Innovation culture as a mediator in the relationship between transformational leadership and organizational effectiveness

4.6.14. Mediating Role of Innovation Culture in the Relationship Between Transactional Leadership and Organizational Effectiveness

Table 41 outlines the mediating effect of innovation culture on the relationship between transactional leadership and organizational effectiveness.

Model 1 (Total Effect): The total effect of transactional leadership on organizational effectiveness is significant ($\beta = 0.49$, $T = 9.05$, $p < 0.001$), indicating that transactional leadership has a strong positive influence on organizational effectiveness.

Model 2 (Direct Effect): When innovation culture is included in the model, the direct effect of transactional leadership on organizational effectiveness decreases but remains significant ($\beta = 0.30$, $T = 5.08$, $p < 0.001$). This indicates that innovation culture partially mediates the relationship between transactional leadership and organizational effectiveness. innovation culture has a strong and significant effect on organizational effectiveness ($\beta = 0.30$, $T = 6.56$, $p < 0.001$).

Indirect Effect: The indirect effect of transactional leadership on organizational effectiveness through innovation culture is significant (effect = 0.19, with a 95% confidence interval ranging from 0.10 to 0.29). This indicates that innovation culture significantly mediates the relationship. The Sobel test confirms the mediation effect (Value = 7. 21, $p < 0.001$). The R^2 value increases from 0.20 in model 1 to 0.29 in model 2, showing that including innovation culture in the model explains an additional 9% of the variance in organizational effectiveness. F-statistics and significance: Both models are highly significant ($p < 0.001$), as indicated by the F-statistics (81.849 for Model 1 and 67.60 for model 2).

Summary The findings from table 41 highlight that innovation culture significantly mediates the relationship between transactional leadership and organizational effectiveness. Transactional leadership positively influences innovation culture, which in turn enhances organizational effectiveness. The significant Sobel test further validates the mediating role of innovation culture. This underscores the importance of fostering an innovation culture within organizations to fully leverage the benefits of transactional leadership on effectiveness.

Table 41: Mediating role of innovation culture in the relationship between transactional leadership and organizational effectiveness

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	1.99	9.88	.000	1.46	7.03	.000	-	-	-
Transactional Leadership	0.49	9.05	.000	.30	5.08	.000	-	-	-
Innovation culture	-	-	-	.30	6.56	.000	.19	.10	.29
R^2	.20			.29			-		
F	81.849			67.60			-		
SIG	.000			.000			-		
Sobel test	Value (Sobel) = 7.21						SIG (Sobel) = 0.000		

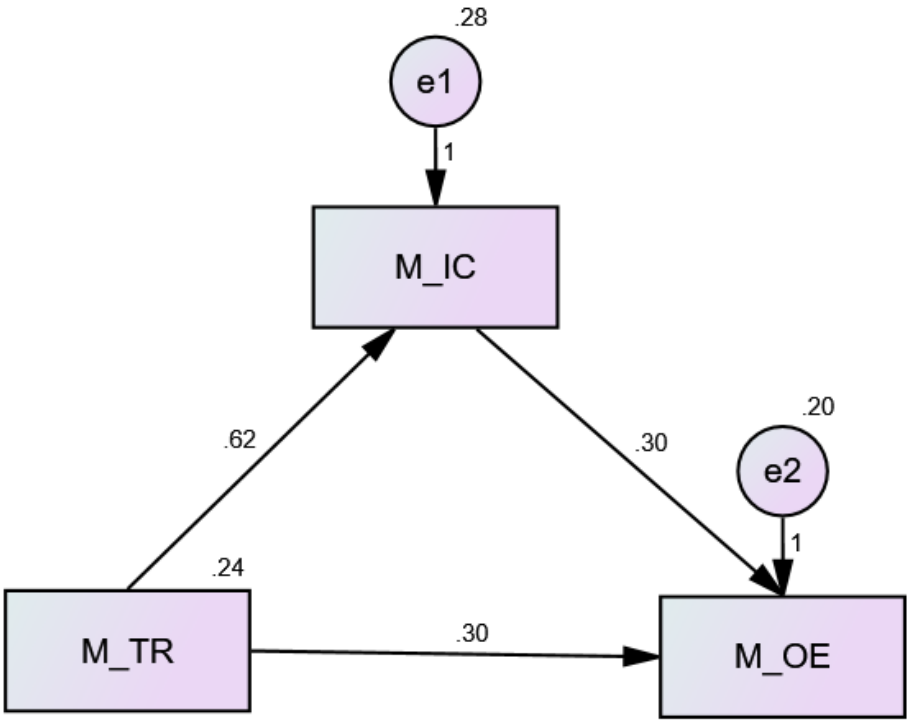

Figure 10: Innovation culture as a mediator in the relationship between transactional leadership and organizational effectiveness

4.6.15. Summary of Results

Table 42 summarizes the acceptance and rejection of hypotheses based on the study results.

Table 42: Accepting and rejecting hypothesis

Hypothesis	The result
H1.1: Transformational leadership style affects Perceived organizational performance.	Accept the hypothesis
H1.2: Transactional leadership style affects Perceived organizational performance.	Accept the hypothesis
H2.1: Transformational leadership style affects organizational effectiveness.	Accept the hypothesis
H2.2: Transactional leadership style affects organizational effectiveness.	Accept the hypothesis
H3.1: Transformational leadership style affects innovation culture.	Accept the hypothesis
H3.2: Transactional Leadership style affects innovation culture.	Accept the hypothesis
H4: Innovation culture affects perceived organizational performance.	Accept the hypothesis
H5: Innovation culture affects organizational effectiveness.	Accept the hypothesis
H6.1: Innovation culture mediates the relation between transformational leadership style and perceived organizational performance.	Accept the hypothesis
H6.2: Innovation culture mediates the relation between transactional leadership style and perceived organizational performance	Accept the hypothesis
H7.1: Innovation culture mediates the relation between transformational leadership style and organizational effectiveness	Accept the hypothesis
H7.2: Innovation culture mediates the relation between transactional leadership style and organizational effectiveness	Accept the hypothesis

CHAPTER FIVE

5. DISCUSSION AND RESULTS

5.1 RESULTS

The study utilized multiple statistical methods to investigate the relationships between transformational leadership style, transactional leadership style, innovation culture, organizational effectiveness and perceived organizational performance indicators. H1 explores how leadership styles influence perceived organizational performance, multiple linear regression analysis revealed significant effects for both transformational leadership ($\beta = 0.887$, $T = 17.100$, $p < 0.000$) and transactional leadership ($\beta = 0.119$, $T = 2.099$, $p = 0.037$) leadership styles. The model's goodness of fit statistics ($R = 0.761$, Adjusted $R^2 = 0.581$, $F = 232.237$, $p < 0.000$) suggests that it adequately explains the variance in perceived organizational performance and is statistically significant. Similarly, H2 examined the impact of leadership styles on organizational effectiveness. Through multiple linear regression analysis, it was found that both transformational leadership ($\beta = 0.373$, $T = 6.884$, $p < 0.000$) and transactional leadership ($\beta = 0.270$, $T = 4.560$, $p < 0.000$) leadership styles significantly influence organizational effectiveness. The model's goodness of fit statistics ($R = 0.546$, Adjusted $R^2 = 0.293$, $F = 70.323$, $p < 0.000$) indicates that it adequately explains the variance in organizational effectiveness and is statistically significant. Moving to H3, which investigates the relationship between leadership styles and innovation culture, multiple linear regression analysis revealed significant effects for transformational leadership ($\beta = 0.809$, $T = 17.362$, $p < 0.000$) and transactional leadership ($\beta = 0.154$, $T = 3.027$, $p < 0.003$) leadership styles on innovation culture. The model's goodness of fit statistics ($R = 0.778$, Adjusted $R^2 = 0.602$, $F = 254.001$, $p < 0.000$) suggests that it adequately explains the variance in Innovation Culture and is statistically significant. Furthermore, H4 explored how innovation culture impacts perceived organizational performance. The analysis, conducted through simple linear regression, indicated a significant effect of innovation culture ($\beta = 0.822$, $T = 21.192$, $p < 0.000$) on perceived organizational performance. Similarly, H5 investigated the impact of

innovation culture on organizational effectiveness, the analysis was conducted through simple linear regression, demonstrated a significant effect of innovation culture (β = 0.422, T = 10.087, $p < 0.001$) on organizational effectiveness. Finally, H6.1 examined the mediating role of innovation culture in the relationships between transformational leadership style and perceived organizational performance, the results show that innovation culture significantly mediates the relationship between transformational leadership and perceived organizational performance, as indicated by the significant indirect effect (0.41) and Sobel test (15.27, $p < 0.001$). Similarly, H6.2 examined the mediating role of innovation culture in the relationships between transactional leadership style and perceived organizational performance, the results show that innovation Culture significantly mediates the relationship between transactional Leadership and perceived organizational performance, as indicated by the significant indirect effect (0.47) and Sobel test (9.35, $p < 0.001$). Moreover, H7.1 examined the mediating role of innovation culture in the relationships between transformational leadership style and organizational Effectiveness**,** the results show that innovation culture mediates the relationship between transformational leadership and effectiveness, as indicated by the significant indirect effect (0.18) and Sobel test (9.71, $p < 0.001$). Similarly, H7.2 examined the mediating role of innovation culture in the relationships between transactional leadership style and organizational Effectiveness**,** the results show that innovation Culture mediates the relationship between transactional leadership and organizational effectiveness, as indicated by the significant indirect effect (0.19) and Sobel test (7.21, $p < 0.001$).

In summary, these findings underscore the critical role of leadership styles and innovation culture in shaping organizational performance outcomes, highlighting their interplay and the mediating effect of innovation culture in the relationships between leadership styles and organizational performance indicators.

The analysis also reveals that the impact of transformational leadership (TF) and transactional leadership (TR) on organizational performance, effectiveness, and innovation culture varies across different contexts.

Regarding the impact of transformational leadership and transactional leadership on perceived organizational performance, we cans see that in Group 1 (Low TF, Low TR), both TF ($\beta = 0.84$, $p < 0.001$) and TR ($\beta = 0.66$, $p = 0.001$) impact performance,

explaining 76.5% of the variance. In Group 2 (Low TF, High TR), neither TF ($\beta = 0.12$, $p = 0.607$) nor TR ($\beta = -0.309$, $p = 0.168$) significantly impacts performance, explaining only 3.8% of the variance. Group 3 (High TF, High TR) shows that TF ($\beta = 0.46$, $p = 0.04$) significantly improves performance, while TR ($\beta = 0.09$, $p = 0.534$) does not, explaining 4.4% of the variance. In Group 4 (High TF, Low TR), neither TF ($\beta = 0.30$, $p = 0.186$) nor TR ($\beta = 0.20$, $p = 0.225$) significantly impacts performance, explaining 3.6% of the variance.

Regarding the impact of transformational leadership and transactional leadership on organizational effectiveness, in Group 1 (Low TF, Low TR), TF ($\beta = 0.60$, $p < 0.001$) impacts effectiveness, explaining 63.3% of the variance, while TR ($\beta = 0.26$, $p = 0.097$) does not. In Group 2 (Low TF, High TR), neither TF ($\beta = -0.30$, $p = 0.270$) nor TR ($\beta = -0.15$, $p = 0.571$) significantly affects effectiveness, explaining only 2.3% of the variance. In Group 3 (High TF, High TR), neither TF ($\beta = 0.24$, $p = 0.283$) nor TR ($\beta = -0.11$, $p = 0.436$) significantly impacts effectiveness, explaining just 1.1% of the variance. In Group 4 (High TF, Low TR), neither TF ($\beta = -0.58$, $p = 0.051$) nor TR ($\beta = 0.42$, $p = 0.059$) significantly influences effectiveness, explaining 7.6% of the variance.

Regarding the impact of transformational leadership and transactional leadership on innovation culture, in Group 1 (Low TF, Low TR), TF ($\beta = 0.95$, $p < 0.001$) impacts innovation culture, explaining 77.8% of the variance, while TR ($\beta = 0.23$, $p = 0.140$) does not. In Group 2 (Low TF, High TR), neither TF ($\beta = 0.25$, $p = 0.317$) nor TR ($\beta = -0.12$, $p = 0.618$) significantly affects innovation culture, explaining 2.3% of the variance. In Group 3 (High TF, High TR), TF ($\beta = 0.46$, $p = 0.019$) significantly impacts innovation culture, while TR ($\beta = 0.12$, $p = 0.345$) does not, explaining 6.0% of the variance. In Group 4 (High TF, Low TR), neither TF ($\beta = 0.32$, $p = 0.153$) nor TR ($\beta = -0.01$, $p = 0.947$) significantly influences innovation culture, explaining 2.3% of the variance.

These findings emphasize the importance of transformational leadership in enhancing organizational outcomes, particularly in contexts where both TF and TR levels are low, as well as the significant role of context in determining the effectiveness of these leadership styles.

5.2 DISCUSSION

The findings of the study indicate that all of the formulated hypotheses were not only substantiated but also unequivocally backed by the empirical study undertaken during this phase. Examining the notion of leadership and its various forms is important because of the effects these findings have, both directly and indirectly on organizational dynamics. Leaders have a significant impact on an organization's performance and success due to their unique habits. At a deeper level, this impact also shapes the innovation culture, serving as a mediator that permeates the whole dynamic of the organization.

In understanding the impact of leadership, the challenge lies in deciphering the intricate web of effects at both the individual and organizational levels. The elusive nature of this impact necessitates a comprehensive examination of how different leadership styles reverberate throughout an organization. This, in turn, lays the groundwork for an in-depth exploration of how these styles contribute to organizational performance and effectiveness. Consequently, the ensuing chapters will delve into the nuanced discussions surrounding each hypothesis, unraveling the intricate connections between leadership, innovation culture, and the overarching success of an organization. The multifaceted nature of these dynamics underscores the complexity and importance of leadership in shaping the trajectory of modern organizations.

The first result revealed by the current study indicates that the transformational leadership style has a positive effect on perceived organizational performance. Thus, this indicated that H1.1 is supported. In addition, these results are consistent with previous studies (Hakim & Piccolo, 2004; Piccolo & Colquitt, 2006; Eliyana et al., 2019; Avolio et al., 2004; Wang et al., 2022; Wang, Oh, Courtright, & Colbert, 2011; Dvir et al., 2002; İşcan et al., 2014; Waldman et al., 2001; Hiwa et al., 2021; Kim, 2022; Geer et al., 2008; Rowold & Rohmann, 2009; Rowold et al., 2014; Judge & Piccolo 2004; Jung & Avolio 2000; Jacobsen et al., 2022; Oberfield 2014; Bellé 2014; Barling, et al., 1996; Hassan et al., 2010; Kelloway et al., 2000; Parry & Sinha 2005; Rao & Kareem Abdul, 2015; Harris et al., 2007; Madachian et al., 2016; Nukić & Matotek, 2014). Moreover, this result is in line with the existing studies that indicated a positive relationship between the leadership

behaviors of managers and organizational performance (Jung, Moon, & Hahm, 2008; Lowe, Kroeck, & Sivasubramaniam, 1996; Rowold, 2011; Wang, Courtright, & Colbert, 2011) where the leader can influence organizational outcomes. Furthermore, this study aligns seamlessly with the assertions of Bass (1985), who posited that leadership styles constitute a pivotal factor influencing organizational performance. According to Bass, the exhibition of transformational behaviors by leaders is believed to yield superior overall performance, as perceived by the members of the organization. In direct contrast, when leaders embrace a transformational leadership style, it exerts a positive influence on how organizational members perceive the overall performance of the entity. This suggests a reciprocal relationship wherein transformational leadership practices have the potential to significantly contribute to enhanced organizational outcomes and positively shape the perceptions of success among employees. The resonance between the findings of this study and Bass's seminal work underscores the enduring relevance and applicability of transformational leadership concepts in the contemporary organizational landscape.

The second result revealed by this study posits that transactional leadership style has a positive effect but have a lower impact on perceived organizational performance compared to transformational leadership according to the results of this research. This reveals that H1.2 is supported. These results are consistent with the literature review (İşcan et al., 2014; Waldman et al., 2001; Wei et al., 2010; Lowe et al., 1996; Kim, 2022; Ibrahim et al., 2014; Katou, 2015; Men & Stacks, 2013; Masa'deh, 2016; Hiwa et al., 2021). Moreover, transactional leaders, in particular, are characterized by their adeptness in establishing clear goals, expectations, and performance criteria. They play a pivotal role in helping employees comprehend what is anticipated of them and how their performance will be assessed. Transactional leadership, therefore, emerges as a potent force capable of not only enhancing individual and team performance but also contributing to the overall perception of organizational success. The alignment of individual and team efforts under transactional leadership is postulated to yield positive repercussions on the broader organizational performance.

In this vein, it is noteworthy that transactional leaders are meticulous in monitoring performance and providing regular feedback to their followers. This hands-on approach enables them to guide their followers toward achieving elevated levels of performance,

thereby catalyzing an upward trajectory for the organization as a whole. However, it is imperative to acknowledge discordance in the literature. While this study's findings affirm the positive relationship between transactional leadership and organizational performance, Thapa & Parimoo (2022) reported no direct link between transactional leadership and organizational performance. This incongruity highlights the nuanced nature of leadership impact, suggesting that the relationship between transactional leadership and organizational performance may be contingent on various contextual factors. Additionally, results from this study run counter to the findings of Rao et al. (2005), who suggested a significant negative effect of transactional leadership on team performance. These divergent perspectives emphasize the need for a nuanced understanding of the interplay between transactional leadership and organizational performance, considering the diverse organizational contexts and conditions.

The third result indicates that transformational leadership and organizational effectiveness are positively related. This confirms that H2.1 is accepted. These results are in line with the previous studies (Bass & Avolio, 1994; Ristow et al., 1999; Asgari et al., 2008; Muzondiwa et al., 2022; Morgan, 1993; Parry & Proctor-Thomson, 2002; Labrague et al., 2020; Mortenson et al., 1989; Posner & Schmidt, 1984). This implies that transformational leadership stands out as a distinctive leadership style characterized by leaders who transcend traditional management approaches. Transformational leaders inspire and motivate their followers by crafting a compelling vision, establishing lofty expectations, and offering unwavering support and guidance. The hallmark of transformational leadership lies in its ability to encourage followers to transcend their self-interests and actively contribute to the collective goals of the organization. Leaders exhibiting transformational qualities often demonstrate charismatic, supportive, and empowering behaviors that foster a positive and forward-looking organizational culture. In addition, the criteria for evaluating leadership effectiveness, as proposed by Yukl et al. (2010), become particularly relevant in explaining the impact of transformational leadership on organizations characterized by complex and specific structures. However, it's crucial to acknowledge that perspectives on leadership and effectiveness can vary, potentially hindering a straightforward determination of leadership’s impact on organizations. For instance, a leader emphasizing behavior geared towards increasing

organizational productivity may be perceived as lacking in the expected human relations qualifications. Conversely, a leader prioritizing positive human relations behavior may face skepticism regarding their impact on organizational productivity. Therefore, in evaluating leadership effectiveness, it becomes imperative to adopt an integrated perspective that considers leadership styles holistically. This approach enables a nuanced discussion on the impact of leaders within organizations, considering the complex interplay between leadership, organizational outcomes, and the human factor.

The fourth result posits that transactional leadership has a positive effect although it has slightly lower impact on organizational effectiveness compared to transformational leadership according to the results of this research. This confirms that H2.2 is accepted. The findings confirmed the literature review (Al-ababneh, 2013; Mohamadkhani et al., 2012; Alkahtani & Mohamad, 2015; Jacobsen et al., 2022; Erkutlu et al., 2008; Taylor & Taylor, 2014; Purwanto, 2020; Dai et al. 2013). This means that transactional leadership is a leadership style characterized by leaders who focus on maintaining the status quo and engaging in contingent exchanges with followers. When there is a positive effect of transactional leadership on organizational effectiveness, it suggests that organizations with transactional leaders tend to be more effective in achieving their goals and objectives. For this reason, the perception and attitude of a leader toward his/her followers concerning organizational outcomes is among the important indicators of the leader's effectiveness. Moreover, this study clarifies the role of the leader who can display supportive behavior to solve the problems of their followers or to make decisions or resolve conflicts to increase the efficiency of the organization (Hoy & Miskel, 2010; Nourthouse, 2010; Yukl, 2010). Nevertheless, the results of the study contradict the study conducted by Nazarian et al. (2021) who found that there is no direct impact of either transformational or transactional leadership style on effectiveness in small and medium-sized independent hotels.

The fifth result of this study indicates that the relationship between transformational leadership and innovation culture is positively related. This confirms that H3.1 is accepted. These results are in line with the literature review (Wang et al., 2011; Whittington et al., 2004; Watts et al., 2020; Lei et al., 2020; Keegan & Den Hartog, 2004; Yang et al., 2010; Bass & Avolio,1992; Al-Husseini et al., 2021; Jung, Chow et al., 2003; Pancasila et al.,

2020; Mach et al., 2022; Kittikunchotiwut, 2019,). Burcharth et al., (2017) evaluated the potential benefits of integrating innovation culture into corporate with largely similar results. Burcharth et al. (2017) also established that organizations could only fully capture the benefits of incoming and outgoing innovations when an organization is designed and structured for it. This observation underscores the pivotal role of these variables as fundamental pillars of the corporate strategy. Specifically, it signifies that the integration and prioritization of these variables are essential components in shaping the organization's overarching strategic direction. By recognizing the significance of these variables within the corporate strategy, the organization acknowledges their profound impact on its overall functioning and success. Whether through fostering innovation, cultivating a dynamic work culture, or encouraging adaptive strategies, these variables emerge as instrumental drivers guiding the organization's strategic initiatives.

Within the context of transformational leadership, the emphasis on creativity, innovation, and a proactive attitude toward challenging the status quo becomes apparent. Transformational leaders, by nature, play a central role in instilling these values within the organizational culture. They actively promote an environment where employees feel empowered to think creatively, contribute innovative ideas, and question established norms. Consequently, a positive relationship between transformational leadership and an innovation culture suggests that organizations led by transformational leaders are inherently more likely to cultivate an environment conducive to innovation. Moreover, the recognition of the interplay between transformational leadership and an innovation culture unveils a strategic alignment that goes beyond mere rhetoric. It signifies a commitment to fostering a workplace where creativity and innovation thrive, ultimately contributing to the organization's ability to adapt, evolve, and maintain a competitive edge in the ever-changing business landscape.

The sixth result of this study shows that transactional leadership has a positive effect although it slightly has less impact on innovation culture compared to the effect of transformational leadership according to this research. This confirms that H3.2. is accepted. These results are in line with (McCann & Sparks, 2020; Kittikunchotiwut, 2019; Gumusluoglu & Ilsev, 2009a; Sarros et al., 2008; Miles, 2007; Hughes et al., 2018). According to Laursen (2012), organizations can only tap into external competencies and

ideas through the creation of a proactive structure capable of broadly exploring multiple knowledge inputs, market information, and local and non-local idea sources. Additionally, Hoy & Miskel (2010) defined leadership as a social impact where good leaders have the power to change organizations, whereas very good leaders have the power to change individuals because the hearts of organizations are individuals. Particularly in places such as schools, simply by changing an individual, one can promote a substantially positive culture that encourages development and growth (Hoerr, 2005). This means that transactional leadership fosters an innovation culture by providing clear expectations and rewards for achieving targets and meeting deadlines. By emphasizing structure and efficiency, transactional leaders create an environment that encourages accountability and productivity, leading to a positive effect on the organization's innovation culture. However, the findings of this study contradict the results of the study made by Sethibe & Steyn, (2017) who found that transactional leadership had no effect on innovative culture. In addition, the findings also are not in line with the literature review (Nungky et al., 2020; Hansen & PihlThingvad, 2019; Even Afsar et al., 2019; Pieterse et al., 2010).

The seventh result in this study indicates that innovation culture has a positive effect on perceived organizational performance. Hence, H4 is supported. Moreover, these results show consistency with the previous studies (Behram & Özdemirci's, 2014; Jalilvand, 2017; Locander, Hamilton et al., 2002). Moreover, Malhotra et al., (2017) agree with the findings of this research by highlighting the efficacy of internally sourcing innovative ideas. Chappin et al., (2016) evaluated several ideas open calls as concerned the challenges of sifting through thousands of ideas and whether such ideas were implemented with any successful outcomes. This underscores the profound impact that organizational culture can exert on organizational performance. The positive effects emanate from the cultivation of a culture that nurtures collaboration, engagement, and a relentless pursuit of continuous improvement. Such a culture becomes a catalyst for synergistic teamwork, where individuals collaborate seamlessly to achieve common objectives. Moreover, an organizational culture that values continuous improvement encourages employees to embrace change, adapt to evolving challenges, and actively seek ways to enhance processes and outcomes. Furthermore, when thoughtfully fostered, this supportive cultural milieu serves as a fertile platform for invention. The creation of novel goods, services, and

procedures is aided by the culture. Consequently, the organization experiences concrete advantages such as enhanced effectiveness, higher output, more customer contentment, and eventually, a general boost in the competitiveness and performance of the firm as the company gains the ability to adjust quickly to changing market conditions and industry trends while maintaining its resilience in the face of adversity.

The eighth results in this thesis indicated that innovation culture has a positive effect on organizational effectiveness. Thus, H5 is supported. These results are confirmed by (Hartnell et al., 2011; Behram & Özdemirci's, 2014; Jalilvand & Hidari, 2017). This means that this culture positively impacts organizational effectiveness by encouraging continuous improvement, adaptability, and the ability to respond to changing market demands. It enhances the organization's ability to innovate, stay competitive, and achieve its goals more effectively. Moreover, the results of the study align with Mowday et al. (1982) that aids in making the decision of the organization, and support organizational effectiveness (Mowday, Porter, & Steers, 1982). However, these results are not confirmed with the previous study (Muzondiwa et al., 2022).

The ninth result in this thesis revealed that innovation culture mediates between transformational leadership style and perceived organizational performance as well as between transactional leadership style and perceived organizational performance, although its mediating effect is slightly lower between transactional leadership and perceived organizational performance. Thus, H6.1 and H6.2 is accepted. These results are consistent with (Imran et al., 2012; Nungky et al., 2020; Novitasari et al., 2021). This underscores the pivotal role that a supportive and empowering leadership style, exemplified by transformational and transactional leadership, plays in cultivating an innovation culture within the organization. Transformational leaders, through their inspirational and motivational approaches, create an environment that encourages employees to think creatively and embrace calculated risks. By instilling a sense of empowerment and fostering engagement, these leaders stimulate a mindset that actively seeks innovative solutions. Employees, under the influence of such leadership, are not only inspired to envision novel ideas but are also motivated to contribute their unique perspectives to the organizational landscape. As a result, the symbiotic relationship between transformational leadership and an innovation culture becomes apparent. This dynamic interaction

contributes to a workplace where employees feel not only empowered but also intrinsically motivated to actively participate in the creative process. This, in turn, catalyzes enhanced perceived performance among employees. When individuals feel valued, engaged, and motivated to contribute their innovative ideas and solutions, it translates into an improved sense of overall performance. In addition, transactional leadership provides an innovation environment by providing clear expectations and rewards for achieving goals and meeting deadlines. By focusing on structure and efficiency, transactional leaders play a role in fostering an environment that encourages accountability and productivity, which ultimately leads to a positive impact on the organization's innovation culture. Furthermore, innovation culture acts as a transformative bridge that connects effective leadership, particularly of the transformational kind, with positive perceptions of performance within the organization. It signifies a holistic approach to leadership where the cultivation of an environment conducive to innovation becomes integral to the overall performance narrative. This interconnected relationship underscores the importance of leadership styles in shaping organizational culture and, subsequently, in influencing how performance is perceived and experienced by employees.

The tenth result in this thesis revealed that innovation culture mediates between transformational leadership style and organizational effectiveness as well as between transactional leadership style and organizational effectiveness, although its mediating effect is lower between transactional leadership and organizational effectiveness. Thus, H7.1 and H7.2 is accepted. These results are consistent with (Kafashpoor et al., 2013; Nazarian et al., 2021; Villaluz & Hechanova, 2019; Randeree, 2009; Muzondiwa et al., 2022). This observation underscores the profound impact of leadership styles, exemplified by transformational and transactional leadership, in the dynamic interplay that fosters the development and nurturing of an innovation culture within the organizational context. Transformational leaders, through their inspirational and empowering approaches, act as catalysts for motivating and energizing employees. This not only stimulates creative thinking but also empowers individuals to contribute innovative ideas fearlessly. The leadership style becomes a driving force that sets the stage for the establishment of an innovation culture—a culture characterized by a collective mindset that values novelty, encourages experimentation, and embraces continuous improvement. In addition,

transactional leadership plays a crucial role in fostering an innovative culture for achieving targets and meeting deadlines. By focusing on structure and efficiency, transactional leaders encourage an environment that fosters accountability and fruitfulness, which leads to a positive impact on the organization's innovation culture.

This cultivated innovation culture, in a reciprocal manner, becomes a powerful influencer of how employees perceive the overall effectiveness of the organization. When a leadership style actively promotes and champions innovation and creativity, it inherently fosters a workplace culture that not only welcomes new ideas but also actively encourages experimentation and the exploration of inventive solutions. The result is a work environment where employees feel a sense of agency and ownership over their innovative contributions. This, in turn, leads to a heightened perception of the organization's effectiveness, as employees recognize the tangible commitment to staying at the forefront of industry trends and proactively addressing challenges.

This study focuses on the leadership styles that should be applicable to enhance organizational performance and effectiveness. As a result, the findings of this research show that to achieve high organizational performance and effectiveness, leadership styles are very essential across the organization. This research has also shown that the establishment of specialized departments and committees can significantly contribute to ensuring that the necessary expertise exists and can be accessed by all employees. Leadership style drives the Lebanese organizations into positive change and guides the organization in resource allocation, strategic direction, and motivation.

The findings of this research have shown that transformational and transactional leadership styles can significantly enhance Lebanese organization's ability to be effective and achieve high performance in the industrial sector, with a emphasis on transformational leadership as a more favorable leadership style to be used in the industrial sector as it shows in this research that it has a larger positive impact in improving innovation culture, performance and effectiveness. Moreover, the findings have shown that for an organization to fully leverage its effectiveness and performance, organizational focus and operational activities must be aligned in a manner that fully exploits culture, leadership styles, and innovation. All of these variables work together as outlined by the logic model to drive organizational performance and effectiveness. This research has shown that attracting

talented employees as well as training and appreciating them are critical functions in driving innovation as they are considered a main pillar in the organization.

This research has shown that when an organization is put in place in an effective innovation platform, it becomes easier to collect suggestions both for improvements and for the generation of new ideas. The findings reveal that innovation culture is considered a driver of organizational change. Furthermore, it approaches the implementation of change that has positively impacted performance and effectiveness within the Lebanese organization. This innovation culture offered several chances for Lebanese Employees to express their feedback and participate in organizational decision-making. In addition, innovation culture plays an important role as a mediator supporting and enabling continued and sustained leadership styles to enhance organizational performance and effectiveness in the Lebanese industrial sector.

Furthermore, across the variables tested, this research has identified a pattern representing how these variables interrelate to drive high organizational performance and effectiveness. These relationships between these variables reflect how they interact to drive desirable effectiveness while also enhancing the ability of Lebanese industrial organizations to meet their performance targets. Moreover, the research shed light on the research outcomes that have shown a greater integration and positive correlations between leadership styles and perceived organizational performance and effectiveness. Accordingly, this research has shown that when the entire organization is attuned to developing leadership styles, there are positive organizational performance and effectiveness outcomes.

In addition, the analysis showed that transformational leadership have a higher impact on organizational outcomes than transactional leadership especially on perceived organizational performance. Transactional leadership usually have a higher impact in the short term on employee performance while transformational leadership has higher impact on the long run. Furthermore, Transformational leadership style is highly effective in change management as it involves inspiring and motivating employees to embrace change through a shared vision, it focuses on creating a positive change in followers, ultimately leading to improved performance and development. Moreover, Transactional Leadership is more focused on routine and structured tasks, relying on rewards and punishments to

manage followers. While it may be less effective in driving significant change, it can be useful in maintaining stability during transitions.

In summary, Leadership styles significantly impact the effectiveness of change management efforts. Leaders who can adapt their styles to the needs of their teams and the specific demands of the change process are more likely to succeed in implementing sustainable change.

5.3 CONCLUSIONS

This thesis has examined the relationships between transformational leadership styles and perceived organizational performance, transformational leadership style and organizational effectiveness, transactional leadership style and perceived organizational performance, transactional leadership style and organizational effectiveness, transformational leadership style and innovation culture, transformational leadership style and innovation culture, innovation culture and perceived organizational performance, innovation culture and organizational effectiveness, the association between transformational leadership, transactional leadership style and organizational performance through innovation culture, and the association between transformational leadership, transactional leadership style and organizational effectiveness through innovation culture.

This study used a survey to collect the primary data on a scale survey of employees conducted in the Lebanese industry. By employing SPSS for data analysis, a positive relationship showed between these constructs. Although the data are cross-sectional and the sample of the empirical analysis included in this thesis is concerned with employees in the Lebanese industrial sector, measuring and testing the relationship between the above constructs are important contributions of this study. In addition, this research required to explore how leadership style, and innovation culture, serve to drive Lebanese perceived organizational performance and Lebanese organizational effectiveness within the industrial sector by adopting a quantitative research approach, this research has evaluated the leadership style's effect on organizational effectiveness and organizational performance in the Lebanese industrial sector and how these variables align with the industrial organization to perform well and be effective.

While there is a plethora of literature on the relationship between those constructs, it appears that virtually no studies exist to link (transformational leadership style, transactional leadership style and organizational effectiveness, transformational leadership style, transactional leadership style and perceived organization performance, transformational leadership style, transactional leadership style and innovation culture, innovation culture, and perceived organizational performance, innovation culture and organizations effectiveness). Recommendations for future studies are needed to collect more robust and comprehensive data to analyze the effects of other leadership styles on organizational performance and organizational effectiveness. In the current research, the data analysis process revealed several important results.

At the industrial level, the findings of this research which several previous studies have affirmed that variables used in this research can significantly enhance the ability of the industrial sector organization to innovate and enhance performance and effectiveness over the long term. leadership and innovation culture create and enhance organizational performance and organizational effectiveness. The findings of this research have shown that these aspects have a significant contribution towards ensuring that transformational leadership and transactional leadership styles are for performance and effectiveness within the industrial sector and within reach to those who need it.

Leaders can be invaluable sources of feedback and new ideas capable of prompting several value-creating innovations. This study has also shown that internal stakeholders that form the triangle of leadership, employees, and organizational culture are necessary to create an environment that improves performance and enhances effectiveness. Lebanese industrial organization can develop a pipeline of new strategic capabilities with the potential to contribute significantly to achieve objectives. This research has also demonstrated that an innovative culture at an organization enables it to attract top talent and harness its capabilities effectively through interactive and efficient teams that are well-resourced and supported.

There are positive outcomes when the Lebanese industrial sector is structured to strongly emphasize the need for greater alignment between leadership styles, and organizational performance and organizational effectiveness. This research shows that the development of an entire department in Lebanon solely focused on driving leadership

styles and sustainable projects can be very effective. It is also important that the functions of such a department are directly mapped to the industrial sector's overall strategic direction. In addition, the results should encourage the acceptance of transformational and transactional leadership styles among top managers. Additionally, the outcomes can promote an innovative culture that improves overall organizational performance through individual thoughtfulness, inspiration, and intellectual stimulation. The results also acknowledge how critical it is to support an innovative culture within the company and to provide funds and encouragement for projects that promote innovation, risk-taking, and creativity. Moreover, this result can also encourage cooperation between the innovation and leadership teams to establish a mutually beneficial partnership.

At the organizational level, the study's conclusions are useful at the corporate level for putting transformational and transactional leadership abilities into practice and for providing leaders with resources and continuous assistance to improve their capacity to uplift and inspire their staff. Furthermore, the outcomes may establish an innovative culture within the company and provide systems for generating ideas, receiving feedback, and putting them into action to foster a climate that encourages creativity. Moreover, it can create measurements to evaluate how various leadership philosophies affect the efficacy and performance of organizations to evaluate innovation efforts' performance and how they contribute to overarching objectives regularly.

At the Management Level, the results can encourage and inspire companies to adopt transformational and transactional leadership behaviors and promote a culture of ongoing education and development. Additionally, the results can inspire Innovation projects and engage in and actively promote internal organization innovation projects. Moreover, it can enhance experimentation and innovation among teams, remove barriers, and provide resources. The results can promote collaboration throughout teams and departments to enhance the innovation culture and to create avenues for the internal sharing of ideas and best practices throughout the whole organization. Furthermore, the outcomes encourage cooperation between departments and teams to improve the culture of innovation and establish channels for internal organization-wide exchange of ideas and best practices.

At the Employees level, the results can inspire a growth mindset to promote ongoing learning and adaptation and to be receptive to new perspectives and methods, and to actively participate in the organization's innovation initiatives. Moreover, the results lead employees to look for the development of leadership prospects by benefiting from the company's leadership development initiatives and to try to get feedback and focus on improving their transformational leadership abilities contributing to innovation, engaging in creative thinking exercises and offering suggestions for enhancements contrasted with transactional leadership, which emphasizes inspiring and motivating followers to achieve higher levels of performance and personal growth.. In addition, the results encourage employees to be cooperative in teams to improve the culture of creativity.

At the researchers' level, the results push researchers to discover longitudinal studies by conducting research to evaluate the long-term influence of several leadership styles on organizational outcomes and innovation culture. These results lead practitioners to examine Cross-Cultural aspects by investigating how leadership styles and innovation culture differ across diverse cultures and contexts. This research can ensure insights into how companies can adapt leadership approaches for global effectiveness and discover mediating innovation culture as a factor that influences the relationship between leadership styles and organizational outcomes. Accordingly, the research can contribute to a deeper understanding of the nuanced relationships within these constructs.

Finally, by implementing these recommendations, organizations can enhance their leadership effectiveness, foster a culture of innovation, and ultimately improve their overall performance and effectiveness.

5.4 IMPLICATIONS

The current thesis encompasses several implications that benefit scholars and practitioners. These implications present novel perspectives to better clarify the transformational and transactional leadership style that can lead to performance and effectiveness within the organization. Generally, the findings demonstrated by this thesis imply considerable twofold implications, theoretical and management implications.

At the theoretical level, this thesis develops knowledge of the strategic literature in the context of leadership styles, innovation culture, performance, and organizational effectiveness. Referring to the examination of the relationship between transformational leadership and perceived organizational performance, this study extends the knowledge of employees' reactions related to leadership styles toward perceived organizational performance, its underlying mechanism, and conditional limit, contributing to the psychology of organizational culture and individual characteristics in three notable ways. First, this study explores the relationship between transformational leadership and perceived organizational performance from an individual perspective, which reveals the psychology of individual characters within an organization. The concept of transformational leadership emphasizes employees' involvement and participation, which is aligned with the viewpoint that organization is achieved by the characteristics and qualifications of employees. Employees embedded in an organization are influenced by transformational leadership style and simultaneously react upon the organization through their behavior. The results of this study can provide a better understanding of employees' impacts on transformational leadership style development and innovation from an individual perspective. Moreover, employees' perceptions of transformational leadership style are important and have drawn scholars' attention in recent years (Joo, 2010; Vijayakumar and Padma, 2014; Reis et al., 2016). The results of this study also indicate how employees perceive performance which is predictive of employees' characteristics.

Second, the results found that there was a significant consistency in perception between transformational leadership style and organizational effectiveness in Organizations. It shows that employees in the Lebanese industrial sector seemed to see themselves as being more effective at all levels (Individual, Team, and Organizational levels). One possible reason to explain why employees' respondents see themselves as being more effective is due to their character factors.

Third, in the current study, transactional leadership has been expressed in terms of a leadership style that focuses on maintaining and enhancing the existing organizational structure and processes through a system of rewards and punishments. It is often contrasted with transformational leadership, which emphasizes inspiring and motivating followers to achieve higher levels of performance and personal growth. This thesis looks at a new angle

by considering the characteristics of the transactional leadership style and by presenting an integrated model of the determinants of employee work character. It is imperative to note that the variable of transactional leadership is compatible with other determinants of leadership styles. On the other hand, it has been inferred that the relative importance of job factors in predicting employee characters was well documented by job demand-resource. Researchers have supported the importance of transactional leadership style on job-related variables in predicting employee performance. In addition, it has been observed from the findings of this study that it is crucial for organizational performance. Thus, the current approach adds richness and insights into the understanding of individual characters to the organizational performance. The proposed model makes an important contribution to the emerging literature on personnel psychology. The present research contributes to transactional leadership style with performance by suggesting that the the transactional leadership style has a dominant role in enhancing the perceived performance of the organization.

Fourth, the findings of this study address the gaps in previous research on transactional leadership style and organizational effectiveness and extend previous knowledge in numerous ways. It identifies the role played by transactional leadership style and organizational effectiveness. It is known from past research that transactional leadership style is nurtured by organizational effectiveness. This study contributes by identifying the role of transactional leadership in enhancing organizational effectiveness. The findings of this study help employees to experience meaning in work, bringing about positive effectiveness like enhanced management and getting rewards. According to the findings of this study, transactional leadership has an impact on organizational effectiveness and impacts businesses to a greater degree since higher management leads to positive effectiveness and outcomes. Top management can help employees in the organizations to develop effectiveness by encouraging them to derive inner meaning from their “daily work”. Additionally, the study has also contributed to a better understanding of the construct of transactional leadership styles with organizational effectiveness and how it nurtures positive work outcomes.

Fifth, this research highlights the importance of evaluating transformational leadership style from the perception of employees, which allows us to conclude that it is

necessary to have diagnoses on employees' perceptions. According to Seligman (2011), employees need to know that their work is worthwhile and has a meaning or purpose. Furthermore, the job itself must have a meaning or purpose. In this way, important information is obtained, which serves as an input to analyze the variables that favor or disfavor innovation culture. These data provide human talent areas with the necessary material to develop effective labor welfare programs, according to its organizational culture and the present and future needs of the organization according to the company's strategy and changes in the global environment. Moreover, the research concludes that organizations that measure transactional leadership manage to demonstrate their impact on the innovation culture of organizations. Through this data, top management can make important decisions, for example, for the strengthening of the work environment through the training of managerial leaders, as managers can develop programs for the strengthening of human potential with skills training focused on promoting an innovation culture.

Sixth, this study has examined the role that innovation culture plays in perceived organizational performance. This study aims to extend the knowledge surrounding innovation culture and perceived organizational performance and to check its application empirically. The interaction between innovation culture and perceived organizational performance has become crucial, and innovation culture has aimed to explain how culture has an impact on organizational performance as it corroborates the direct and positive effect of innovation culture on perceived organizational performance. Furthermore, the results of this study demonstrate that innovation culture mediates between leadership style and perceived organizational performance, when the organization adopts the leadership style and has an open-minded to accept development culture, employees will work creatively, enhance their contribution and participation of employees can increase the organizational performance. On the other hand, employees who have no chance in the workplace to be innovative and creative can decline their performance while working. This explains that the application of leadership styles and culture innovation leads employees to be positive about working as willing to listen to criticism, accept feedback positively, feel valued at work, and respect the employer (Pryce-Jones, 2010), typically this situation can stimulate performance of employees in return the performance of organizations. In addition, employees need to be aware of the sense of leadership styles is very important for

improving effectiveness achievement. Pleasant conditions can also increase effectiveness of employees, and help employees to generate new ideas, promote new ideas and realize new ideas which in turn affect organizational effectiveness. In addition, this topic of innovation culture has generated a great deal of interest among practitioners and a divergence of perspectives has emerged in the research community. A better understanding of this construct from a multitude of perspectives, along with tools to effectively measure it, would hopefully contribute to our appreciation of this phenomenon of innovation culture and would further clarify whether it provides a unique contribution to our understanding of individuals and its application in the field of strategic Development. Thus, this study provides considerable insight into the use of innovation culture instruments as valid and reliable measurements that measure organizational effectiveness. This study also reinforces the previous studies which showed that the impact of innovation culture on organizational effectiveness.

Seventh, previous studies find that organizational culture (Hogan & Coote, 2014; Naranjo-Valencia et al., 2017) and leadership styles (Pieterse et al., 2010; Aryee et al., 2012) are related to each other's, and little attention has been given to dig into the impact of the association of these two concepts (Ogbonna & Harris, 2000). This study finds that the reinforcement of organizational effectiveness arises from the interaction of innovation culture and leadership styles through psychological empowerment, which indicates that higher-level factors (organizational context and leaders) jointly shape employees' cognition and understandings of their work roles and thus their individual behavior related to innovation. Moreover, the results also suggest that leadership style can be considered as a facilitator to the effect of innovation culture on organizational effectiveness through psychological empowerment, which provides us with a new motivational perspective to investigate role that leaders play within an organization. Thus, the results show a partial mediation between leadership styles and perceived organizational performance, and between leadership styles and organizational effectiveness. This indicates the partial role that innovation culture plays in organizational effectiveness and perceived organizational performance. Moreover, the interplays among the thesis independent variable, the mediator, and the dependent variable are delignated, which gives insights the future research. These outcomes provide a chance to actually put in place innovative priorities

into a corporate strategy to develop a proper plan to enhance performance and effectiveness within the organizations.

Eighth, this dissertation is considered one of the few studies to understand organizational effectiveness and performance. Examining the influence of the leadership styles is considered a unique study which in turn adds value to the current thesis work as it assists in understanding the employees' motives which contributes in giving insights predictions toward effectiveness and performance.

Tenth, this thesis successfully contributes in bridging the research gap through enriching literature in terms of organizational effectiveness and organizational performance. This enrichment was attained by examining the estimators of employees' characters. Moreover, this thesis empirically validates and clarifies organizational performance and effectiveness. Moreover, this conceptual framework creates a new contribution within leadership, when a new business model represents a major change, leadership articulates a vision and establishes an appropriate innovation culture and an incentive system that will promote organizational performance and effectiveness goals.

Eleventh, this research helps to analyze one of the most sophisticated variables where leadership styles, perceived organizational performance, and effectiveness are represented. This research helps future studies concerning organizational effectiveness and perceived organizational performance. This research provides a platform to respond to the performance and effectiveness needs. It also drives the ability of organizations to meet its performance and effectiveness targets and objectives. Moreover, the results of this thesis help in introducing a new research insight to develop new conceptual frameworks based on the current research work. Additionally, this thesis highlights the efficient role of leadership styles in leading for innovation culture. Moreover, based on the thesis' result, this thesis sheds light on the crucial role played by innovation culture toward organizational performance and effectiveness in Lebanese industrial organizations. In addition, regarding the management level, this thesis suggested some thoughts that encounter organizational performance and organizational effectiveness. These thoughts will help decision makers to make their employees familiar with the new technologies, software and applications used in organizations. Similarly, these thoughts assist in solving research problems and achieve the objectives. Accordingly, managers in organizations should encourage leaders to

emphasize transformational leadership qualities, including charisma, inspirational motivation, intellectual stimulation, and individual consideration since these dimensions have shown positive associations with both perceived organizational performance and organizational effectiveness. Therefore, training and development programs should be arranged to focus on enhancing these transformational leadership skills among organizational leaders.

Decision makers in the organizations should focus on the human development strategy to attract, train, recognize, and direct these resources towards achieving the innovation targets. Investment in human resources development initiatives such as unlimited employee training opportunities and proper employee appreciation and encouragement structures are foundational in creating an innovative culture. Still, on human resources, retention measures for experienced employees and the ability to attract the best talent to the formation of a formidable workforce capable of driving innovation across the board. Decision makers are recommended to enhance the organizational effectiveness and organizational performance by providing training for employees in order to be familiar with technology and newness programs. Moreover, decision makers are recommended to enhance and accept an effective communication strategy to assist employees how they improve perceived organizational performance and organizational effectiveness. This could be achieved by educating employees about the importance of applying leadership style and to be innovative in culture. Accordingly, top management suggests to recruit employees who are aware in leadership styles in order to increase organizational performance and effectiveness. Furthermore, top management should communicate with employees in order to find the main issues that employees face in the workplace. In addition, this thesis helps the managers working in human resources to deeply understand leadership styles influencing organizational performance and effectiveness and to what extent the employees will understand it. This study's findings help managers in organizations to develop the important criteria to select the best strategy to apply leadership style. Accordingly, organizations should take serious steps to implement the innovative system efficiently and effectively.

This thesis may also be useful for businesses that want to invest in leadership programs that nurture and promote leadership philosophies that support an innovative

culture. Organizations may increase their capacity to promote innovation and boost overall performance by offering training and direction on leadership approaches that stimulate creativity, risk-taking, and cooperation. The selection and promotion procedures for leaders inside businesses might be improved upon as a result of the research's conclusions. Individuals with leadership philosophies compatible with building an innovation culture might be given priority by organizations. Assessing applicants' capacity to foster open communication, facilitate experimentation, and inspire and motivate workers may be part of this process. The findings can also help firms develop a welcoming innovation culture. The organizational climate and the development of a culture that promotes and rewards creative thought and behavior may be greatly influenced by leaders. This might entail encouraging independence, offering tools for exploration, and praising and recognizing creative solutions and accomplishments. Additionally, organizations should update their systems for performance assessment and feedback to add metrics that reflect the degree to which leaders are promoting an innovative culture. Organizations may connect performance management techniques with the intended leadership characteristics that spur innovation and, ultimately, increase organizational performance by integrating metrics linked to encouraging creativity, cooperation, and risk-taking. The study also emphasizes the value of cross-functional teams and cooperation in establishing an innovation culture. Organizations may support leaders in forming multidisciplinary teams that combine a range of viewpoints and specialties to address challenging problems. Organizations may take advantage of the group intelligence of their employees and improve organizational efficiency by encouraging cooperation and information exchange.

Organizations should implement transactional leadership practices, especially focusing on management by exception and contingent reward, to address specific performance issues or goals. Hence, this study suggests that transactional leadership, when applied strategically, can positively impact perceived organizational performance. Leaders can use management by exception to address deviations from the norm and utilize contingent rewards to reinforce desired behaviors.

This study therefore implies that organizational structure and communication channels might have an influence on the leadership styles impacting innovation culture. To

promote open and transparent communication across many levels and departments, organizations may need to reexamine their hierarchical structures and communication procedures. Organizations may facilitate the sharing of knowledge and ideas that spur innovation and boost performance by developing an open discussion culture.

The managers should promote a culture of innovation and by integrating transformational leadership styles, particularly emphasizing charisma, inspirational motivation, intellectual stimulation, and individual consideration. Therefore, the study indicates a positive association between transformational leadership and innovation culture. Leaders should focus on creating an environment that encourages creativity, risk-taking, and continuous improvement. Moreover, decision-making should focus on both innovation culture and transformational leadership styles where they have demonstrated positive associations with perceived organizational performance and organizational effectiveness. Hence, managers should investigate initiatives that support creativity, knowledge sharing, and a willingness to experiment can contribute to overall organizational success.

Understanding innovation culture's mediating effect is critical, and top managers should recognize its position as a mediator in the relationship between leadership styles and organizational outcomes. It is imperative for organizations to acknowledge that the cultivation of an innovative culture serves as a conduit via which leadership styles impact the efficacy and performance of the business. The combined effects of innovation culture and leadership styles should be considered in strategic planning and interventions.

It's quite common for leaders also to employ a combination of transactional and transformational leadership styles within organizations. Transactional leadership is often used for day-to-day management tasks, where clarity, structure, and accountability are crucial. It ensures that routine operations run smoothly by setting clear expectations, providing rewards for performance, and addressing any deviations from expectations promptly. On the other hand, transformational leadership is valuable for inspiring change, fostering innovation, and motivating employees to achieve higher levels of performance. It's particularly effective in situations where organizations need to adapt to new challenges, navigate change, or pursue ambitious goals. By blending elements of both styles, leaders

can effectively manage the present while also inspiring and guiding their teams toward future success. They may employ transactional approaches to maintain stability and ensure efficiency while simultaneously using transformational approaches to encourage growth, creativity, and adaptability (Avolio & Bass, 2002).

Overall, the practical implications of studying the influence of leadership styles on organizational performance and organizational effectiveness through innovation culture can guide organizations in developing strategies and practices that enhance their ability to innovate, adapt to change, and ultimately achieve higher levels of performance and effectiveness.

5.5 LIMITATIONS OF THE STUDY

While this paper provides both theoretical contributions and managerial implications, the findings should be interpreted in light of the following limitations. Firstly, most of the questionnaire items were self-reported, based on the perceptions of individual respondents, so the results may be considered subjective. However, the possibility of self-reported bias does not appear to influence the research outcomes due to evidence of construct validity between the variables. Future research could address the issue of self-reported bias by using objective metrics. Secondly, the SPSS limitation is that all factors were treated as indicators representing latent constructs, so the developed model displays only causal relationships between constructs. To address this limitation, Bayesian Networks (BN) should be conducted as an integrated approach for SEM to evaluate the interrelationships between the existing constructs at the factor level. Thirdly, a questionnaire survey does not qualitatively validate the conjectured relationships between the constructs. Thus, interview-based data collected from case studies could be conducted to verify identified relationships, thereby offering a deeper perspective on the development of the arguments and would provide more detailed context to understand organizational performance and organizational effectiveness. Fourthly, all of the items measured in this study reflect positive characteristics, which might result in a tendency of social desirability considering that respondents are likely to behave in a culturally acceptable manner (Thomas & Kilmann, 1975). Fifthly, there may be other mediators and moderators besides

innovation culture which could better explain the underlying mechanism because in this model, the path from leadership style via innovation culture to organization performance was significant although the sequential mediation between leadership style through innovation culture to organization performance was significant. Exploration of other mediators would expand understanding of these relationships. Sixthly, this thesis uses data from the Lebanese industrial sector that has predominantly a Lebanese culture, so some of the results may not be generalizable to Middle Eastern countries. Future research may implement the developed model to perform a comparative analysis between countries operating in these two circumstances, to compare results, and to gain insights into the organizational performance and effectiveness in both Eastern and Western contexts. Seventhly, a quantitative method has been applied in this research. Future research could adopt a mixed or pure quantitative approach in evaluating the relationship among the variables in the industrial organizational sector.

Seventhly, common method bias is also a potential methodological issue, this bias can happen when it is relied on a single source such as self-reported data, to measure both the predictor and criterion variables is a study (Spector, 2006). Several factors play a role in common method bias. For example, the use of Likert scales in survey questions may lead to some response tendencies, and the order in which questions are added can affect participants' responses (Podsakoff et al., 2003). Moreover, social desirability bias may impact the accuracy of self-reported data as respondents may provide answers that align with societal expectations rather than their true feelings or behaviors (Van de Mortel, 2008).

5.6 SUGGESTIONS FOR FUTURE RESEARCH

Subsequent investigations may tackle the problem of possible self-reported bias by integrating objective criteria into the evaluation. One interesting way to get over this restriction is to use Bayesian Networks (BN) in conjunction with structural equation modeling (SEM). This thorough method would enable the assessment of the links between the current constructs at the factor level, providing a more nuanced comprehension of the complex processes at work. Interview-based data from case studies might be used to

validate found associations, adding to the findings' robustness and offering a deeper perspective on the formation of arguments regarding the efficacy and performance of organizations. Furthermore, it is critical that any future research recognize the potential existence of other mediators and moderators outside of the innovation culture under investigation. Although the present model indicates a noteworthy trajectory from leadership style via innovation culture to organizational performance, more elements may exist that contribute to a more thorough comprehension of these interactions. Investigating substitute mediators may provide insightful information about the complex processes affecting organizational results.

Future studies could apply the created model for a comparative examination across nations operating in various cultural situations to broaden the area of the investigation. An in-depth analysis and insights into the manifestation of organizational performance and effectiveness in both Eastern and Western contexts would result from this cross-cultural investigation. Furthermore, to examine the relationships between variables in the industrial-organizational sector, future research projects might think about using mixed methods or a strictly quantitative approach. This would provide a more thorough and nuanced understanding of the complex dynamics at work.

Moreover, the impact of transformational leadership on generational differences is a critical area of study. For example, the generation of baby boomers often values loyalty, hard work, and a sense of accomplishment. transformational leaders can effectively motivate baby boomers by connecting their efforts to the broader organizational mission and recognizing their contributions to long-term goals (Bass & Avolio, 1994). Generation X, known for their independence and skepticism towards authority, Generation X employees appreciate transformational leaders who offer autonomy and opportunities for personal growth (Ng, Schweitzer, & Lyons, 2010). Millennials (Generation Y) seek meaningful work and opportunities for learning and development. Transformational leadership's focus on coaching, mentorship, and creating a purpose-driven work environment which aligns well with Millennials (Deal, Altman, & Rogelberg, 2010). Generation Z which is the youngest generation in the workforce values authenticity, technological integration, and social responsibility. Transformational leaders who leverage digital tools and promote a socially conscious organizational culture can effectively engage

Gen Z employees (Seemiller & Grace, 2016). In, addition, transactional leadership also impacts generational differences. For example, baby boomers often appreciate the clear structure and stability provided by transactional leadership. They value clear goals and rewards for hard work, making transactional leadership effective in ensuring consistency and reliability (Kyles, 2005). Generation X values autonomy, they can also appreciate the clarity and fairness of transactional leadership, especially when it comes to performance-based rewards and recognition. However, they may become disengaged if the leadership style is too rigid and lacks opportunities for innovation (Ng, Schweitzer, & Lyons, 2010). Gen Z employees, with their focus on quick feedback and clear expectations, can respond well to the structured nature of transactional leadership. However, they also expect leaders to be adaptable and to integrate technology seamlessly into their workflows (Seemiller & Grace, 2016). Millennials generally prefer transformational leadership but can still respond to transactional leadership if it includes regular feedback and transparent reward systems (Deal, Altman, & Rogelberg, 2010). So, future studies can be done as well to study the differences of the effect of both leadership styles on different generations as well.

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Appendix

This survey is designed to assess your opinion of your organization's performance and effectiveness. Please tick (√) in the boxes provided for the most appropriate answers.

Age (In years): **( )** 21-27 **( )** 28-32 **( )** 33-37 ( ) 38-42 ( ) above 43

Gender: **( )** Male **( )** Female

Marital status: **( )** single **( )** married (**)** divorced **( )** widow

Educational level: **( )** High School **( )** Associate's degree **( )** Bachelor's degree **( )** Postgraduate

Working Experience: ( ) Less than 1 **( )** 1-5 **( )** 6 – 10 **( )** 11- 15 (**)** Above 15

Working Experience in this organization: ( ) Less than 1 **( )** 1-5 **( )** 6 – 10 **( )** 11- 15 (**)** Above 15

Position: **( )** Managerial (**)** Non-managerial

Department: ……

Instruction: Please tick [√] in the space provided and write where necessary.

Consider the following statements with a senior manager in mind. Part 1 Indicate your level of agreement with the statements below by writing "X" in the relevant place Transformational leadership	Strongly disagree	disagree	Neither agree nor disagree	agree	Strongly agree
1. Talks about his/her most important values and beliefs					
2. Instills pride in me for being associated with him/her.					
3. Talks optimistically about the future.					
4. Considers the moral and ethical consequences of decisions.					
5. Re-examines critical assumptions whether they succeeded.					
6. Expresses confidence that goals will be achieved.					
7. Acts in ways that build respect.					
8. Displays a sense of power and confidence.					
9. Goes beyond self-interest for the good of the group					
10. Specifies the importance of having a strong sense of purpose.					
11. Emphasizes the importance of having a collective sense of mission					
12. Gets me to look at problems from many different angels					
13. Suggests new ways of looking at how to complete assignments					
14. Drag us after him with his dreams about the future					
15. Talk enthusiastically about what needs to be accomplished					
16. Seeks different perspectives when solving problems.					
17. Spends time teaching and coaching.					
18. Helps me to develop my strengths.					
19. Treats me as an individual, not as a member of the team.					
20. Approaches each of us as individuals with different needs and abilities.					

Consider the following statements with a senior manager in mind. Part 1 Indicate your level of agreement with the statements below by writing "X" in the relevant place Transactional leadership	Strongly disagree	disagree	Neither agree nor disagree	agree	Strongly agree
21. Supports me when she/he realize my efforts					
22. Provides adequate award when we achieve performance goals					
23. Appreciates good performance					
24. Makes clear what one can expect to receive when performance goals are achieved.					
25. In order to act, problems need to become chronic.					
26. To move, bad things must have happened					
27. He believes in the needlessness to take precautions unless he is obliged to.					
28. Never interferes till problem become serious					
29. Wastes of his/her time.					
30. Warns us for our mistakes.					
31. Never forgets my mistakes.					
32. Failure to achieve the goal never fails to go unnoticed.					

Part 2 Indicate your level of agreement with the statements below by writing "X" in the relevant place Innovation culture	Strongly disagree	disagree	Neither agree nor disagree	agree	Strongly agree
33. At our company, innovation is an underlying culture and not just a word					
34. Our business model is premised on the basis of strategic intent					
35. Our senior managers are able to effectively cascade the innovation message throughout the organization					
36. We have an innovation vision that is aligned with projects, platforms, or Initiatives					

37. This organization's management team is diverse in their thinking in that they have different views as to how things should be done					
38. There is a coherent set of innovation goals and objectives that have been articulated					
39. Innovation is a core value in this organization					
40. We have continuous strategic initiatives aimed at gaining a competitive advantage					
41. Our strategic planning process is opportunity oriented as opposed to process oriented					

Part 3 Indicate your level of agreement with the statements below by writing "X" in the relevant place Perceived organizational performance	Strongly disagree	disagree	Neither agree nor disagree	agree	Strongly agree
42. Profitability is adopted as an important performance indicator in our company and our company is in a good position in its sector.					
43. Increasing the market share in our company is considered as an important performance indicator and our company is in a good position in its sector.					
44. Making new investments in our company is considered an important performance indicator and our company is in a good position in its sector.					
45. Increasing the quality of the products or services we offer is considered an important performance indicator and our company is in a good position in its sector. 46. Increasing customer satisfaction is an important performance indicator and our company is in a good position in its sector.					
47. Profitability indicator (Earnings Before Interest, Tax, Depreciation and Amortization) is accepted as an					

important performance indicator in our company and our company is in a good position in its sector.					
48. The low employee turnover rate in our company is considered an important performance indicator and our company is in a good position in its sector.					
49. In our company, attracting talented/competent human resources to the company is considered an important performance indicator and our company is in a good position in its sector.					
50. We consider the innovation and widening of innovation perspective of our company employees as an important performance indicator and our company is in a good position in its sector.					

Part 3 Indicate your level of agreement with the statements below by writing "X" in the relevant place Organizational Effectiveness	Strongly disagree	disagree	Neither agree nor disagree	agree	Strongly agree
51. The morale of those who work in our institution is high					
52. Regular meetings are held regarding productivity issues					
53. predetermined tasks are performed well to increase productivity.					
54. Quality of work done at all levels of the institution is highly valued.					
55. The main target is continuous development and progress.					
56. The hierarchical order in the company, will ensure the flow of information from top to bottom.					
57. According to the internal and external changes, the institution is able to successfully adapt its structure to change.					
58. The company's products and services are well promoted.					
59. Actions taken to fulfill the organizations future plans are consistent.					

60. Long-term goals and the culture of the organization is determined appropriately.					
61. This organization is sensitive to the needs of its employees					
62. The management of the institution has the ability to control the work flow even in the face of external pressures.					
63. Attention is paid to the quality of interpersonal communication.					
64. Every employee is aware of how important her/his job is.					
65. The company's market share is increasing.					
66. Each unit/department prepares its own budget according to the plans for the next year.					
67. This organization offers employees personal development opportunities to improve themselves.					
68. The management of the institution has the ability to ensure the continuity of the organization even in the face of external pressures.					
69. There has been consistent success in implementing the low cost strategy.					
70. Employees attach great importance to the analysis of the quality of the products or services they produce.					
71. The organization successfully implemented programs update according to changing internal and external demands.					
72. Employees are involved in organizational decision-making.					
73. The institutions profitability is increasing.					
74. Teamwork activities in our institution is successfully implemented.					
75. In this organization, all departments and individuals are encouraged to use resources efficiently.					
76. Duties and objectives of the organization are well known by the employees.					
77. Prepared plans are carried out exactly and in accordance with the targeted time.					
78. Methods such as "brainstorming are used to improve the quality of products and services.					

79. Our organizational is ready to adapt to changing conditions.					
80. Our management has the ability to manage its employees under external pressures.					
81. The sales volume of the organization is increasing.					
82. Employees in this company are informed about new product studies and their intention to enter new markets in a timely manner.					
83. Periodic reviews are conducted to measure the financial value provided by each department to the institution.					
84. The management successfully fulfills its part in order to ensure the sense of belonging of the employees in our institution.					
85. Adequate width and necessary equipment are provided in the working environment for the efficiency of the employees.					
86. The objectives and strategies of the organization's plans are updated annually.					
87. Employees keep quality measurements and records of the work they do.					