



The Role of Transformational Leadership in Building Learning Organizations: An Analytical Study

Saadoon Mohsin Salman¹, Noor Khalil Ibrahim², Alaa Abdulkareem Ghaleb Almado^{3*}

^{1,2,3}College of Administration and Economics, University of Baghdad, Iraq; saadoon@coadec.uobaghdad.edu.iq (S.M.S.)
noorkhalil@coadec.uobaghdad.edu.iq (N.K.I.) alaa.abdulkareem@coadec.uobaghdad.edu.iq (A.A.G.A.)

Abstract. This study investigates the relationship between transformational leadership and the adoption of a learning organization culture. Specifically, it aims to answer the following questions: How does transformational leadership influence the adoption of organizational learning? Which dimensions of transformational leadership are most critical in fostering a learning culture? And what are the mechanisms through which transformational leadership creates a learning-oriented environment? A quantitative research methodology was employed, using a survey to collect data from a sample of academicians. The Multifactor Leadership Questionnaire (MLQ) and the Organizational Learning Scale (OLS) were used to measure the study variables. Data analysis was conducted using SPSS. The findings revealed a significant positive correlation between transformational leadership and organizational learning. Notably, the dimensions of intellectual stimulation and individualized consideration played a crucial role in enhancing employees' learning behaviours. These results support previous theories linking transformational leadership to organizational learning. This study contributes to the existing literature by providing empirical evidence on the positive impact of transformational leadership on organizational learning. The findings suggest that leaders can foster a learning culture by inspiring their followers, encouraging intellectual stimulation, and providing individual support. The study's implications for practice include the need for organizations to invest in developing transformational leaders and creating learning-oriented environments.

Keywords: Individualized Consideration, Intellectual Stimulation, Learning Culture, Organizational Learning, Transformational Leadership.

1. INTRODUCTION

Transformational leadership is one of the most important concepts that have attracted the attention of researchers in the field of management and organization in recent decades. It represents a leadership style that aims to inspire and change individuals and organizations and motivate them to achieve higher and more ambitious goals. In light of the rapid changes in the global business environment, it has become necessary for organizations to adapt to these changes and build a culture of continuous learning to ensure their survival and competitiveness. (Udin, 2023), The importance attached to organizational learning is increasing as a critical element in the success of organizations. Through continuous learning, organizations can develop their capabilities and skills, innovate their products and services, and adapt to environmental changes.

This study aims to investigate the relationship between transformational leadership practices and the adoption of a culture of organizational learning within organizations. Specifically, the study seeks to answer the following questions:

- What is the relationship between transformational leadership practices and the adoption of the concept of organizational learning in organizations? Is there a positive relationship between the level of application of transformational leadership and the degree of adoption of the concept of organizational learning?
- Which dimensions of transformational leadership play a more important role in promoting organizational learning? How does transformational leadership contribute to building a learning culture within the organization?
- What are the mechanisms used by transformational leadership to create an environment that encourages continuous learning and innovation? How does transformational leadership contribute to changing the prevailing beliefs and values in the organization to support learning?
- What are the factors that affect the impact of transformational leadership in building learning organizations? Are there other organizational or environmental factors that affect this relationship? And what are the challenges facing transformational leaders in building learning organizations?

The importance of this study lies in the fact that it contributes to a deeper understanding of the mechanisms that link transformational leadership and organizational learning, which enables organizations to develop more effective strategies to enhance learning and innovation. The results of this study will also help leaders develop their leadership skills and adopt practices that stimulate continuous learning.

The study expects a positive relationship between transformational leadership practices and the adoption of an organizational learning culture. It also assumes that dimensions of transformational leadership, such as inspirational motivation and intellectual stimulation, play a crucial role in enhancing organizational learning.

A research methodology based on a questionnaire will be used to collect data from a sample of employees. The data will be analyzed using descriptive and inferential statistics programs to determine the relationship between the various variables.

The results of this study are expected to contribute to the development of theories related to transformational leadership and organizational learning and provide practical guidance for practitioners in the field of management and organizational development. The research concludes with a review of the findings of the study and the areas that are available for further research.

2. LITERATURE REVIEW

Transformational leadership is one of the most important factors that affect the performance and success of organizations. Many studies have focused on the role of transformational leadership in enhancing organizational learning. This literature review aims to review previous research that addressed the relationship between transformational leadership and organizational learning and to identify knowledge gaps in this area. The review will focus on analyzing the different dimensions of transformational leadership and the mechanisms of its impact on the adoption of a learning culture in organizations. It will also discuss the factors that affect this relationship, such as the size of the organization and organizational culture. The main topics of the theoretical aspect include:

2.1. Transformational Leadership

Transformational leadership is one of the most important concepts that have attracted the attention of researchers in the field of management and organization in recent decades. It represents a leadership style that aims to inspire and change individuals and organizations and motivate them to achieve higher and more ambitious goals. In this section, we will learn about the roots of this concept and its historical development while highlighting the most prominent researchers who contributed to its formulation and development.

The emergence of the concept of transformational leadership dates back to the mid-twentieth century. Researchers began to wonder about the factors that distinguish successful leaders from others. In this context, the importance of the role played by the leader in motivating and inspiring subordinates and exceeding the traditional goals of the organization emerged (Khanin, 2007; Burns, 1978; Burns, 2003; Burns, 2012; Riggio et al., 2004; Bass, 1985). The most prominent researchers and their contributions:

- James MacGregor Burns is considered one of the most prominent pioneers of the concept of transformational leadership. In his book (*Leadership*) in 1978, he presented a comprehensive definition of transformational leadership. He focused on transformational leaders raising the level of awareness among subordinates and motivating them to achieve common goals.
- Bernard Bass: Bass developed a comprehensive model of transformational leadership and identified four main dimensions: idealized influence, inspirational motivation, intellectual stimulation, and empowerment. He contributed significantly to the generalization of the concept of transformational leadership and its application in various fields (Bass & Riggio, 2006; Bass, 1985).
- Abraham Zaleznik Zaleznik presented a unique vision of leadership, as he considered transformational leaders to be artists who create a new reality through their vision and creativity. This perspective has influenced our understanding of the creative role of leadership in organizations (Zaleznik, 2004).

Over the past decades, the concept of transformational leadership has witnessed significant developments as its scope has been expanded and applied to various types of organizations and fields. The most prominent of these developments are:

- Linking transformational leadership to organizational culture: Some studies focus on the relationship between transformational leadership and building a positive organizational culture that supports learning and innovation (1996 (Den et al.,).
- The role of transformational leadership in change management: The importance of transformational leadership in managing complex change processes in organizations has been emphasized (Jamshidian & Yazdanshenas, 2008).
- Application of transformational leadership in various fields: Transformational leadership has been applied in fields such as education, health care, and the nonprofit sector (Bose & Haque, 2021; Duressa & Asfaw, 2014; Esquilin, 2018; Sunaengsih et al., 2021).

Therefore, studying transformational leadership is of great importance for several reasons (Sun & Anderson, 2012; Zefeiti & Mohamad, 2015; Bass & Riggio, 2006):

- Better understanding of effective leadership: Studying transformational leadership helps us understand the factors that contribute to the success of leaders and achieve positive results for organizations.
- Developing leaders: The principles of transformational leadership can be used in designing training programs to develop leaders' skills and raise their efficiency.
- Building more effective organizations: Organizations that adopt the principles of transformational leadership can achieve better performance and achieve their strategic goals.

Therefore, transformational leadership is considered one of the most important contemporary theories in the field of management and organization, and this theory has developed significantly over the years, as many researchers have contributed to its formulation and development. Understanding the roots of this theory and its development helps us appreciate its importance and role in building more effective and innovative organizations.

2.1.1. Definition of Transformational Leadership

Researchers have provided many definitions of transformational leadership, but they all agree that transformational leadership is more than just business management; it is rather a deep human interaction. The most prominent of these definitions are: James MacGregor Burns believes that transformational leadership is a

process that occurs when one or more people engage with others in a way that enables leaders and followers to raise each other to higher levels of ethics, motivations, and behaviours (Burns, 2012). Bernard Bass presented a comprehensive model of transformational leadership, focusing on four main dimensions, which are ideal influence, inspirational motivation, intellectual stimulation, and empowerment (Bass & Riggio, 2006). Abraham Zaleznik believes that transformational leaders are artists who create a new reality through their vision and creativity (Zaleznik, 2004). Al-Husseini et al. (2021) explained that transformational leadership is an important and influential factor in innovation and knowledge management systems. Similarly, (Rafique et al. 2022) research revealed that transformational leadership positively affects employee engagement, knowledge sharing, and creating an environment of trust.

Therefore, transformational leadership can be defined as a leadership style that aims to inspire and change individuals and organizations and motivate them to achieve higher and more ambitious goals. This leadership is characterized by the leader's ability to transform his vision into a tangible reality by involving and developing the capabilities of his subordinates.

As for the main dimensions of transformational leadership, they are represented by the following (Tari et al., 2023; Karimi et al., 2023):

- Vision and inspiration: This dimension is represented by the leader's ability to ignite the spark of enthusiasm and optimism in subordinates, instil a clear vision for the future, and motivate them to make the utmost efforts to achieve goals.
- Individual motivation: This dimension focuses on the leader's interest in his subordinates, appreciating their efforts, and providing them with support, which increases their sense of importance and belonging.
- Trust and appreciation: The transformational leader encourages critical and creative thinking among subordinates and supports them in proposing new ideas and solving problems in innovative ways.
- Individual growth: The transformational leader is a good role model for his subordinates and is characterized by integrity and high ethics, which inspires them to follow his example and strive for perfection.

Both (Kilag et al., 2023 Pratiwi & Amini, 2023 Alanazi et al., 2023 Wibowo et al., 2023 Al Amin et al., 2023) point to the importance of transformational leadership in its ability to achieve positive change, as transformational leadership contributes to achieving radical changes in organizations, by motivating individuals to adopt new ideas and develop themselves. Enhancing innovation and creativity, as transformational leadership encourages thinking outside the box, creates a work environment that stimulates innovation and creativity. Increased job satisfaction and productivity, as well as the sense of belonging and appreciation provided by the transformational leader, leads to increased job satisfaction among employees, which is positively reflected in their productivity. Transformational leadership also helps build strong relationships based on trust and mutual respect between the leader and his subordinates. Therefore, transformational leadership is an effective leadership style that contributes to achieving organizational success in the long term; by understanding its main dimensions and applying its principles, leaders can transform organizations into stimulating and innovative work environments.

2.1.2. Transformational Leadership Models

Transformational leadership is one of the most important concepts that has attracted the attention of researchers in the field of management and organization. Many researchers have contributed to developing different theoretical models to describe and explain this leadership style. In this section, we will discuss in detail some of the most prominent of these models, focusing on the Prince and Prince models and the Bass and Baum models.

- Prince Model (Bruns, 1978): James Burns is considered one of the first researchers to address the concept of transformational leadership in depth. In his book *Leadership*, Burns provided a comprehensive definition of transformational leadership and focused on the ability of transformational leaders to raise the level of awareness among subordinates and motivate them to achieve common goals. The main points in Burns' model are:
 - 1) Interaction between the leader and the subordinate: Burns believes that transformational leadership is a process of interaction between the leader and subordinates, where the leader seeks to inspire and change subordinates. In contrast, subordinates seek to achieve self-realization through achieving the organization's goals.
 - 2) Raising awareness: The transformational leader aims to raise awareness among subordinates about important issues and motivate them to think critically and creatively.
 - 3) Achieving common goals: The transformational leader focuses on building a common vision between him and his subordinates and motivating them to work together to achieve this vision.
- Bass & Avolio Model (1994): Bernard Bass and Bruno Avolio developed a comprehensive model of transformational leadership, where they identified four basic dimensions of this leadership style:
 - 1) Idealized influence: This dimension represents the leader's ability to gain the respect and appreciation of subordinates and act as a good role model for them.

- 2) Inspirational motivation: This dimension focuses on the leader's ability to motivate subordinates and encourage them to do their utmost to achieve goals.
- 3) Intellectual stimulation: The transformational leader encourages critical and creative thinking among subordinates and supports them in proposing new ideas and solving problems.
- 4) Empowerment: The transformational leader gives subordinates the confidence and authority to make decisions and supports them in developing their skills and abilities.

In addition to the Prince and Prince models and the Bass and Wavelio models, many other models have addressed transformational leadership from different angles, such as:

- 1) Ethical leadership model: This model focuses on the importance of ethics and values in transformational leadership (Jamobawo, 2018).
- 2) Values-based leadership model: This model links transformational leadership to the organization's values (Kusakci & Busatlic, 2022).
- 3) Creative leadership model: This model focuses on the role of transformational leadership in stimulating innovation and creativity (Zurai, 2017).

Studying transformational leadership models is of great importance in understanding this leadership style and applying it effectively in various fields. By understanding these models, leaders can develop their leadership skills, improve the performance of work teams, and build more effective and innovative organizations.

2.1.3. The Mechanisms Through Which Transformational Leadership Works

Transformational leadership is a leadership style that aims to motivate and develop employees and transform them into cohesive team members to achieve the organization's goals. This leadership works through several main mechanisms, which are (Choi et al., 2017; Lehmann et al., 2015; Nohe & Hertel, 2017):

- 1) Inspiration and influence: The transformational leader inspires his team with a clear vision for the future and becomes a role model.
- 2) Individual motivation: The leader appreciates the achievements of employees and encourages them to develop.
- 3) Creative thinking: The leader encourages thinking outside the box and innovation.
- 4) Building trust: The leader builds relationships based on trust and mutual respect.
- 5) Focusing on collective goals: The leader works to unify the team's efforts to achieve common goals.

The result of these mechanisms will be increased employee satisfaction, higher levels of commitment to work, improved performance and productivity, and the creation of a positive work environment. Transformational leadership makes employees feel that they are an important part of the organization and motivates them to do their best to achieve success (To et al., 2015; Yasin et al., 2013).

2.2. Organizational Learning

Organizational learning is a continuous process that includes organizations acquiring and developing knowledge and applying this knowledge to improve their performance and adapt to environmental changes. It is not just an individual process but rather a collective process that includes all members of the organization and its different levels. Definitions of organizational learning vary, but they all agree on the essence of this process, which is the organization's ability to learn and develop (Nimran et al., 2024; Inthavong et al., 2023).

Argyris and Schön describe organizational learning as the process of discovering and correcting errors, the process in which the organization seeks to develop its knowledge through individuals seeking to build their knowledge through the relationships that link behaviour and actions to results (Gijbels & Spaenhoven, 2021; Mitchell & Larry, 2021). Senge sees the organizational learning process as the continuous testing or review of managerial experiences and transforming them into knowledge that the organization can obtain and use for its main purposes (Sajek, 2019; Gusmao et al., 2018). Huber defines organizational learning as the correct processing of acquired information that accompanies or results in a change in the organization's behavior (Garmaki et al., 2023, Grossan et al., 1995). Organizational learning is of great importance in achieving sustainable success for organizations because it contributes to (Argote et al., 2021; Antunes & Pinheiro, 2020; Liethwood et al., 2021, Bianchi & Testa, 2022):

- 1) Increasing competitiveness: by developing new products and services and improving their quality.
- 2) Improving performance: by leveraging knowledge to improve processes and procedures.
- 3) Increasing innovation: by encouraging new ideas and turning them into reality.
- 4) Responding to changes: through the ability to adapt to environmental and organizational changes.
- 5) Enhancing team spirit and teamwork: by exchanging knowledge and experiences.

Therefore, organizational learning is a vital process that contributes to the development of organizations and achieving their strategic goals.

Organizational learning is considered the basis for achieving institutional excellence and sustainability. Its importance lies in the organization's ability to adapt to rapid changes in the surrounding environment, improve its continuous performance, and the multiple dimensions of organizational learning that contribute to achieving this goal, the most important of which are (Smere, 2017; Crossan 2003; Santos et al., 2012; Sony & Naik, 2012;

Oh & Ha, 2020; Ivaldi et al., 2022): 1. Learning culture: In a learning culture, a spirit of inquiry prevails, where everyone is encouraged to ask questions and inquire about everything around them, an atmosphere of openness to new ideas prevails, and individuals exchange their opinions freely without fear of criticism. Leaders are the first supporters of this quality, as they encourage continuous learning and provide everything necessary for this. 2. Learning from mistakes: In an environment that promotes learning from mistakes, mistakes are not viewed as a catastrophic failure but rather as gateways to growth and development. Instead of hiding mistakes or placing responsibility on a specific individual, they are turned into valuable opportunities for learning and development. Each mistake is carefully analyzed to uncover the root causes that led to it, and then appropriate solutions are proposed to avoid its recurrence in the future. Not only that but the lessons learned from these mistakes are shared with all team members to ensure that everyone benefits from them and avoids making the same mistakes. In this way, the organization becomes more flexible and able to learn and develop. 3. Innovation and renewal: In an environment that encourages innovation, new ideas flow like a waterfall, and individuals feel completely free to share their creative ideas, no matter how strange or unconventional they are. All the support and resources necessary to transform these ideas into a tangible reality are provided, whether financial or human resources. Not only that but individuals are encouraged to take risks and discover, as mistakes are a natural part of the innovation process and an opportunity to learn and develop. In this way, the organization turns into an environment that nurtures creativity, where new ideas flourish and turn into innovative products and services that contribute to the organization's advancement. Adopting these three dimensions of organizational learning is a long-term investment in the organization's success, as it contributes to building a flexible organization capable of adapting to continuous changes (Argote et al., 2021).

2.2.1. Organizational Learning Models

- 1) Argyris and Schon model: This model focuses on the importance of learning through discovering and correcting mistakes. Argyris and Schon believe that individuals in organizations often adopt defensive patterns that prevent them from admitting their mistakes and learning lessons from them. Therefore, the model emphasizes the importance of creating a safe organizational environment that allows individuals to freely express their opinions and concerns and thus learn from mistakes and develop themselves and the organization (Auqui-Caceres & Furlan, 2023).
- 2) Senge model: Senge presents in his book "The Glorious Fifth" a comprehensive model of organizational learning based on five main dimensions (Lau & Mackechnie, 2023):
 - 3) Shared vision: The existence of a clear and shared vision among all members of the organization.
 - 4) Personal learning: Developing individuals' capabilities and skills.
 - 5) Mental model: Challenging assumptions and preconceptions.
 - 6) Professional competence: the ability to work effectively in teams.
 - 7) Systemic thinking: seeing the organization as an interconnected whole.
- 8) Griffin's model: Griffin divides organizational learning into five stages (Ramos & Ellitan, 2023):
 - Realization: realizing the need for change.
 - Initiation: starting the change process.
 - Diffusion: spreading new knowledge throughout the organization
 - Deepening: integrating new knowledge into processes and systems.
 - Transformation: transforming the organization into a learning organization.

The theoretical models of organizational learning are valuable tools to help organizations build a strong learning culture and achieve excellence. Each model offers a unique perspective that organizations can leverage to develop their learning strategies.

2.2.2. Factors Affecting Organizational Learning

The factors affecting organizational learning can be divided into two main factors (Inthavong et al., 2023; Shaikh & Siponen, 2024; Nimran et al., 2024; Garmaki et al., 2023; Da'as et al., 2023; Rass et al., 2023; Zhang et al., 2023):

2.2.2.1. Internal Factors: Including

- 1) Organizational culture: It includes the values, beliefs, and behaviours shared among the organization's members. An encouraging learning culture contributes greatly to facilitating the learning process.
- 2) Organizational structure: It includes how work is organized, and responsibilities are instilled. A flexible and flat structure encourages cooperation and communication between individuals.
- 3) Leaders and managers: They play a crucial role in encouraging learning and providing the necessary support to employees.
- 4) Information systems: They help collect and analyze data and exchange knowledge among individuals.
- 5) Organizational resources: include financial and human resources that support the learning process.

2.2.2.2. External Factors Include

- 1) Competitive environment: The ongoing competitive environment requires continuous learning and development to survive.
- 2) Technological changes: Rapid technological changes require the development of skills and knowledge among employees.
- 3) Economic changes: Economic changes affect organizations' strategies and learning capabilities.
- 4) Government regulations: Government regulations play a role in determining the work environment and directing the behaviour of organizations.

The relationship between transformational leadership and organizational learning: Transformational leadership is the cornerstone of building organizations capable of continuous learning and development. It plays a crucial role in creating a stimulating environment for learning and encourages individuals to exceed their limits and achieve the organization's goals (Udin, 2023; Purwanto et al., 2023; Soelton, 2023). How transformational leadership affects the creation of a supportive environment for organizational learning through the mechanisms of linking transformational leadership and organizational learning, as follows (Kim & Park, 2020; Begun et al., 2020; Althnayon et al., 2022):

- 1) Inspiring a shared vision: Setting a clear vision as the transformational leader contributes to formulating a clear and inspiring future vision for the organization, which gives individuals a common goal to strive to achieve. Linking individual goals to the organization's vision, as the leader, helps individuals understand how their personal goals are related to the organization's vision, which increases their enthusiasm and engagement in achieving it. By building trust and optimism through the leader's belief in his team's capabilities and potential, he creates an atmosphere of trust and optimism, which encourages individuals to take risks (Bakker et al., 2023; Bunjak et al., 2022).
- 2) Intellectual stimulation: By encouraging critical thinking, the transformational leader supports creative, critical thinking among individuals and encourages them to ask questions and challenge the status quo. They are providing continuous learning opportunities, as the leader offers a stimulating environment for continuous learning by providing training courses and development programs. As well as learning about new ideas, as the leader encourages the exchange of ideas and knowledge between individuals (Khan et al., 2022; Sutanto et al., 2021; Saad, 2021).
- 3) Ideal influence: Including good example, as the transformational leader is considered a good example for his individuals, as he practices the values and principles he calls for. He builds strong relationships based on mutual respect and trust with his individuals, which creates an atmosphere of cooperation and teamwork. In supporting personal growth, the leader encourages the development of individuals' skills and abilities, which contributes to their professional and personal growth (Budur, 2020; Khan et al., 2020). 4- Personal considerations: The transformational leader shows genuine interest in the needs and aspirations of each of his members. The leader provides opportunities for training and development in line with the needs of each individual. The leader gives individuals the authority to make decisions and responsibility for their actions (Bakker et al., 2023; Jaroliya & Gyanchandani, 2022).
- 4) Framework of the study: The framework presented in Figure (1) presents the hypothesized relationship of the current study between the independent variable (transformational leadership) and the dependent variable (organizational learning). This study relied on the descriptive analytical approach. The theoretical framework and literature review form the basis for the framework that links the independent variable to the dependent variable, which led to the formulation of the following hypotheses:

Hypothesis 1 H1: There is no significant correlation between transformational leadership and organizational learning.

H₁₋₁ There is no significant correlation between the dimension of vision and inspiration and organizational learning.

H₁₋₂ There is no significant correlation between the dimension of individual motivation and organizational learning.

H₁₋₃ There is no significant correlation between the dimension of trust and appreciation and organizational learning.

H₁₋₄ There is no significant correlation between the dimension of individual growth and organizational learning.

Hypothesis 2 H2: There is no significant effect of transformational leadership on organizational learning.

H₂₋₁ There is no significant effect of the dimension of vision and inspiration on organizational learning.

H₂₋₂ There is a significant effect of the dimension of individual motivation on organizational learning.

H₂₋₃ There is no significant effect of the dimension of trust and appreciation on organizational learning.

H₂₋₄ There is no significant effect of the dimension of individual growth on organizational learning.

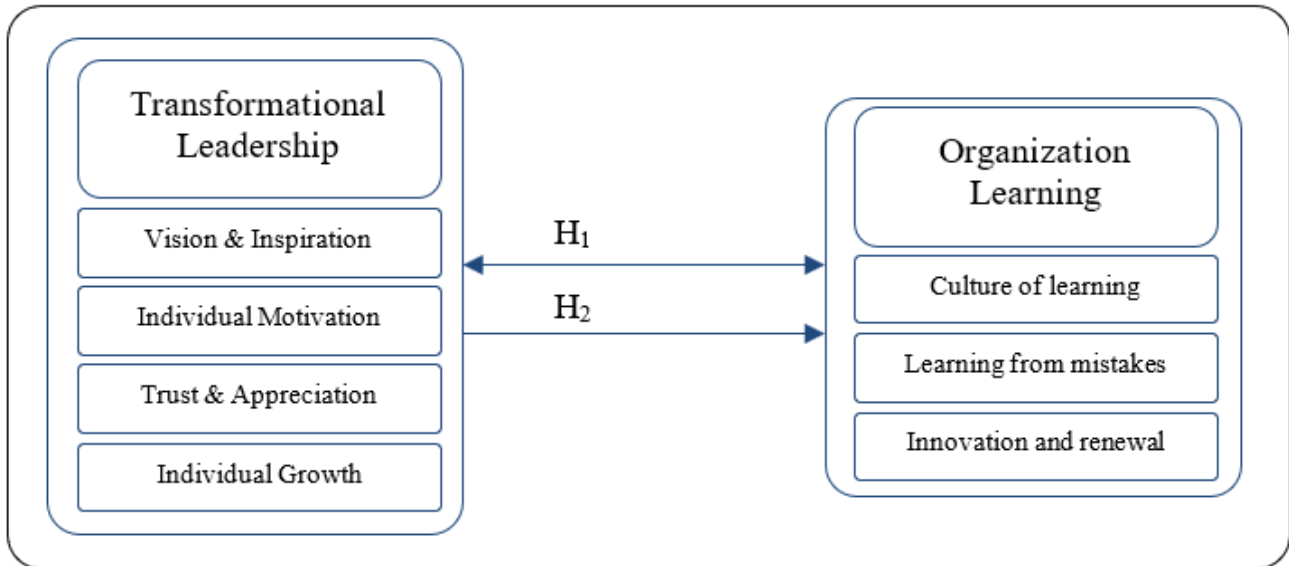


Figure 1: The hypothetical research models.

3. MYTHOLOGY

3.1. Research Design

Quantitative data were collected through questionnaires directed to a random sample of academics in (100) universities in the (private academic education) sector. The MLQ scale was used to measure the dimensions of transformational leadership (Multifactor Leadership Questionnaire - MLQ) is a commonly used research tool to measure the dimensions of transformational leadership. This scale was developed by prominent researchers in the field of leadership and aims to provide a reliable and validated means to assess the extent to which leaders practice transformational leadership styles), according to the scale (Bass & Avolio, 1996). The OLS scale to evaluate the variables and dimensions of organizational learning (Organizational Learning Scale - OLS) is a research tool specifically designed to measure the level of organizational learning in organizations. This scale aims to provide a clear picture of the organization's ability to acquire, develop and apply knowledge to improve its performance), according to the scale (Goh & Richards, 1997). These sources were selected to ensure the validity and reliability of the data collected. The following is a breakdown of the main points:

- Source of the scale: The items used to measure the variables (transformational leadership, organizational learning) were taken from previously published studies.
- Specific sources: The exact studies in which these items were originally found were cited
- Reason for selection: The researchers selected these specific studies because they are considered reliable sources in the field.

Purpose of selection: The goal was to ensure that the data collected using these measures would be accurate and reliable.

In simple terms, this statement says that the researchers built their survey questions based on the work of other researchers who had already developed reliable measures of these concepts.

Using online surveys certainly offers many advantages, such as speed and access to a large sample. However, it also exposes us to some limitations related to response biases. These biases can significantly affect the validity and reliability of the results we obtain. The most prominent biases in online surveys are sampling bias, social desirability bias, and response bias. Ways to mitigate these biases include:

- Carefully design the survey: This includes asking clear and concise questions, ordering the questions logically, and pretesting the study.
- Increase response rates: This can be achieved by personalizing invitation messages, emphasizing the importance of the research, following up with participants, and making the survey available in multiple languages or on different devices.
- Carefully analyze the data: Check the quality of the data and use appropriate statistical methods.

In addition, the use of open-ended questions allows participants to express their opinions freely. By implementing these measures, we can reduce biases in the online survey and improve the quality of the collected data.

3.2. Research Approach

The descriptive analytical approach was adopted in this study as it is the best method for studying the relationship between transformational leadership and organizational learning. This approach was chosen for its ability to describe and deeply analyze this relationship accurately. It contributes to testing the hypothesis that transformational leadership positively affects organizational learning and institutional performance.

In addition, in-depth interviews will be conducted with a smaller sample of leaders and employees to collect qualitative data about their experiences and beliefs about transformational leadership and organizational learning. Quantitative data will be analyzed using SPSS. This study is expected to reveal the relationship between transformational leadership and organizational learning and identify the factors that affect this relationship.

3.3. Population and Sample of the Study

To achieve fair representation, (114) questionnaires were distributed to senior and middle leaders in a number of private colleges in Baghdad. (100) valid questionnaires were analyzed, providing a strong database for analyzing the relationship between the studied variables. Table (1) shows the relative distribution of the sample across the different colleges. The questionnaires were sent to the selected participants after conducting validity and reliability assessments of the initial test of the prepared scale.

Table 1: Relative distribution of the sample by each college.

Colleges	Distributed Forms	Returned Forms	Percentage
Hikmah University college	11	10	10
University of Dijlah	17	16	16
Al Salam University college	18	15	15
Al Mamoun University College	15	13	13
Al Nisour University College	15	10	10
Baghdad College of Economic Sciences University	8	7	7
Al-Turath University	14	14	14
Al-Hadi College	9	8	8
Al-Bani University College	7	7	7
total	114	100	100

4. DATA ANALYSIS

This study used SPSS and partial least squares structural equation modelling (PLS-SEM) on Smart Pls v.4 to analyze the data and followed a two-stage strategy to analyze the measurement model and structural model, respectively. The following main standards and techniques are used to estimate the external and internal role of transformational leadership in enhancing organizational learning. In the first stage, unidimensionality, reliability, convergent validity, and discriminant validity are considered. In contrast, in the second stage, the goodness of fit and the scope of the research hypotheses are assessed (Lee and Chen, 2013).

4.1. Confirmatory Factor Analysis of Research Scales

4.1.1. Confirmatory Factor Analysis of Transformational Leadership

The transformational leadership model as an independent variable consists of four basic dimensions, namely (vision and inspiration, individual motivation, trust and appreciation, and individual growth) with (12) questions. Figure (2) shows the confirmatory structure of the scale. The values of the composite reliability coefficient and the achieved Cronbach's alpha coefficient indicate that they are greater than 0.70, indicating that the scale has a high level of internal stability and consistency. This data reflects the reliability of the model and its ability to provide accurate and consistent results. The value of the average variance extracted (AVE) reached more than 0.50, indicating that the variables used explain more than half of the variance in the indicators of the latent variables. This enhances the credibility of the scale and confirms the quality of the model used in the analysis, as shown in Table 2, as the extracted quality of fit indicators confirmed the validity of the scale and its readiness for use in subsequent studies.

Table 2: Quality of match indicators for transformational leadership.

Dimensions	AlphaCronbach	CR	AVE
Vision & inspiration	0.837	0.838	0.631
Individual motivation	0.764	0.844	0.577
Trust & appreciation	0.783	0.792	0.559
Individual growth	0.807	0.819	0.598

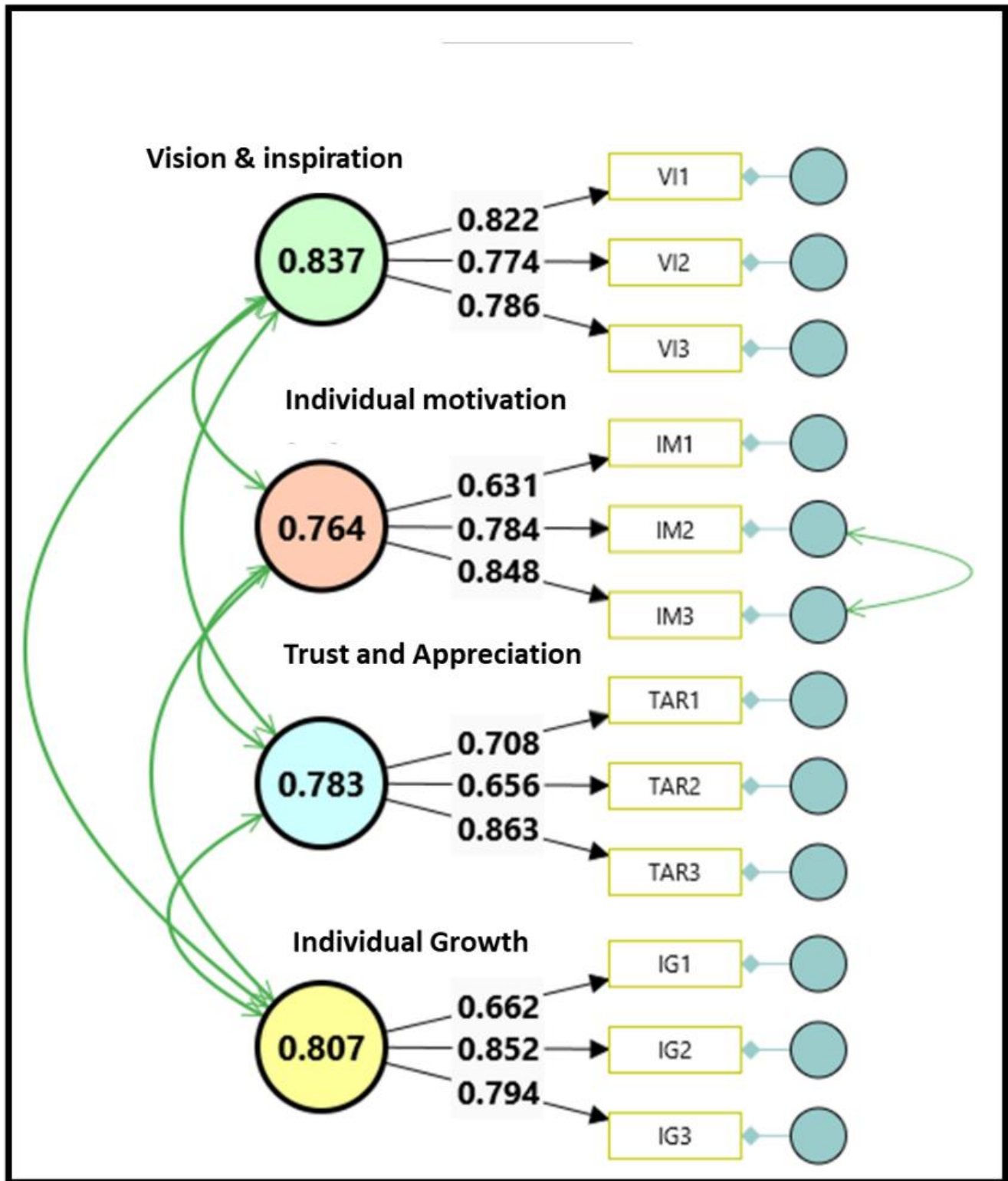


Figure 2: Confirmatory factor analysis of transformational leadership.

Note: The numbers inside the circle indicate the values of the Cronbach's alpha coefficient.

The results of the statistical analysis, as shown in Table (3), indicate that all questions of the dimension related to transformational leadership are highly statistically significant, as the values of the standard estimates range between (0.863-0.631) and the values of the t between (8.644-5.788), which ensures the reliability of these dimensions in measuring transformational leadership in subsequent analyses.

Table 3: Estimates for the dimensions of the transformational leadership variable.

Dimensions--< Questions	Estimates	T	P
VI1 <- Vision and Inspiration	0.822	-	-
VI2 <- Vision and Inspiration	0.774	8.341	0.000
VI3 <- Vision and Inspiration	0.786	8.644	0.000
IM1 <- Individual Motivation	0.631		
IM2 <- Individual Motivation	0.784	5.788	0.000
IM3 <- Individual Motivation	0.848	5.983	0.000
TAR1 <- Trust and Appreciation	0.708		
TAR2 <- Trust and Appreciation	0.656	6.150	0.000
TAR3 <- Trust and Appreciation	0.863	7.951	0.000
IG1 <- Individual Growth	0.662		
IG2 <- Individual Growth	0.852	6.934	0.000
IG3 <- Individual Growth	0.794	6.669	0.000

4.1.2. Confirmatory Factor Analysis of Organizational Learning

The organizational learning model as a dependent variable consists of three basic dimensions, which are (learning culture, learning from mistakes, innovation and renewal) with (9) questions as shown in Figure (3) shows the confirmatory structure of the scale. The values of the composite reliability coefficient and the achieved Cronbach's alpha coefficient indicate that they are greater than 0.70, which indicates that the scale has a high level of internal stability and consistency. This data reflects the reliability of the model and its ability to provide accurate and consistent results. The value of the average variance extracted (AVE) reached more than 0.50, which indicates that the variables used explain more than half of the variance in the indicators of the latent variables. This enhances the credibility of the scale and confirms the quality of the model used in the analysis, as shown in Table 4, as the extracted quality of fit indicators confirmed the validity of the scale and its readiness for use in subsequent analyses.

Table 4: Quality of conformity indicators for organizational learning.

Dimensions	AlphaCronbach	CR	AVE
Learning Culture	0.812	0.813	0.591
Learning from Mistakes	0.797	0.801	0.575
Innovation and Renewal	0.825	0.830	0.616

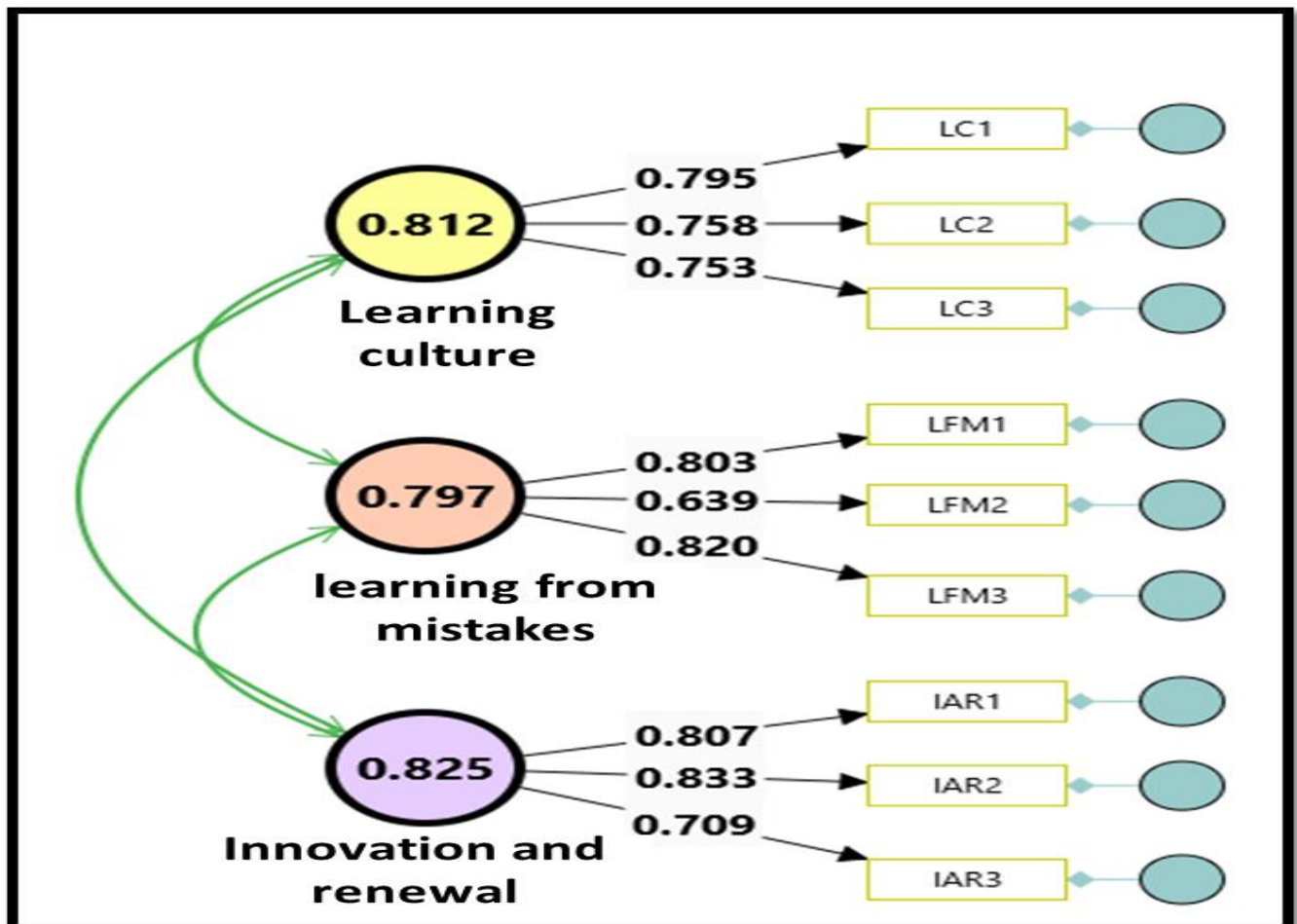


Figure 3: Confirmatory factor analysis of organizational learning.
Note: The numbers inside the circle indicate the Cronbach's alpha values

Table 5 shows the estimates values that ranged between (0.833- 0.639), indicating that all questions of the organizational learning variable are influential. It is also clear from the (T) values ranging between (8.923-6.392) that they are all greater than the tabular value of (1.984), which is a sufficient indicator to adopt the model in its final form in subsequent analyses.

Table 5: Estimates for the dimensions of the organizational learning variable.

Dimensions--< Questions	Estimates	T	P
LC1 <- Learning Culture	0.795	--	--
LC2 <- Learning Culture	0.758	7.696	0.000
LC3 <- Learning Culture	0.753	7.748	0.000
LFM1 <- Learning from Mistakes	0.803	--	--
LFM2 <- Learning from Mistakes	0.639	6.625	0.000
LFM3 <- Learning from Mistakes	0.820	8.923	0.000
IAR1 <- Innovation and Renewal	0.807	--	--
IAR2 <- Innovation and Renewal	0.833	7.582	0.000
IAR3 <- Innovation and Renewal	0.709	6.392	0.000

4.2. Descriptive Analysis of Research Variables

4.2.1. Transformational Leadership

It is clear from Table 6 that the highest general arithmetic mean was at the individual motivation dimension, as it reached (3.43) and at a good level, as its standard deviation reached (0.923) and a coefficient of variation (26.90), as this dimension came at the first level in terms of relative importance. As for the vision and inspiration dimension, it reached (3.2867) at an average level and standard deviation (1.057) and a coefficient of variation (32.17), as this dimension came at the third level in terms of relative importance. As for the trust and appreciation risks dimension, its arithmetic mean reached (3.4) and at an average level, as its standard deviation reached (0.945), while its coefficient of variation reached (27.80), as this dimension came at the second level in terms of relative importance. As for the individual growth risks dimension, its arithmetic mean reached (3.3033) and at an average level, as its standard deviation reached (1.012), while its coefficient of variation reached (30.63), as this dimension came at the fourth level in terms of relative importance. Overall, the transformational leadership variable achieved an arithmetic mean of (3.355) at an average level and with a standard deviation of (0.855), as the coefficient of variation reached (25.47), as it came at the first sequence in terms of relative importance at the level of the research variables.

Table 6: Descriptive statistics for the transformational leadership variable.

No.	Dimensions of research variables	Mean	ST. Dev.	C.v.
1.	Does your leader encourage you to develop a shared vision for the organization?	3.34	1.265	37.88
2.	Can your leader motivate you to achieve the organization's goals?	3.15	1.158	36.76
3.	Does your leader inspire you to achieve higher levels of performance?	3.37	1.228	36.44
4.	Vision and Inspiration	3.2867	1.057	32.17
5.	Does your leader care about developing your skills and abilities?	3.27	1.109	33.91
6.	Does your leader support and encourage you to achieve your personal goals?	3.52	1.185	33.66
7.	Does your leader encourage you to take responsibility and make decisions?	3.5	1.059	30.25
8.	Individual Motivation	3.43	0.923	26.90
9.	Does your leader trust your abilities and skills?	3.59	0.965	26.88
10.	Does your leader make you feel valued for your contributions to the work?	3.19	1.203	37.73
11.	Does your leader encourage you to express your opinions and suggestions?	3.42	1.216	35.55
12.	Trust and Appreciation	3.4	0.945	27.80
13.	Does your leader provide you with opportunities for learning and professional development?	3.15	1.132	35.92
14.	Does your leader encourage you to seek out new opportunities and challenges?	3.46	1.218	35.20
15.	Does your leader provide you with a work environment that encourages continuous learning?	3.3	1.219	36.93
16.	Individual Growth	3.3033	1.012	30.63
17.	Transformational Leadership	3.355	0.855	25.47

4.2.2. Organizational Learning

It is clear from Table 7 that the highest general arithmetic mean was at the innovation and renewal dimension, which reached (3.2933) at an average level, as its standard deviation reached (0.941) and a coefficient of variation (28.57), as this dimension came at the first level in terms of relative importance. As for the lowest general arithmetic mean, it was at the learning from mistakes dimension, which reached (3.1567) at a good level, a standard deviation of (0.985) and a coefficient of variation (31.21), as this dimension came at the third level in terms of relative importance. As for the learning culture dimension, its arithmetic mean reached (3.2233) at a good level, as its standard deviation reached (0.921), while its coefficient of variation reached (28.58), as this dimension came at the second level in terms of relative importance. As for the overall organizational learning

variable, it achieved an arithmetic mean of (3.2244). At an average level and with a standard deviation of (0.842), the coefficient of variation reached (26.11), as it came in the second sequence in terms of relative importance at the level of research variables.

Table 7: Descriptive statistics for the organizational learning variable.

No.	Dimensions of research variables	Mean	ST. Dev.	C.v.
18.	Does the organization encourage continuous learning and self-development?	3.3	1.096	33.22
19.	Are opportunities provided for employees to train and develop?	3.2	1.101	34.41
20.	Is knowledge and experience shared among employees?	3.17	1.045	32.97
21.	Culture of learning	3.2233	0.921	28.58
22.	Are mistakes treated as opportunities for learning and development?	3.2	1.214	37.95
23.	Do you feel comfortable reporting mistakes without fear of punishment?	3.04	1.154	37.96
24.	Are mistakes analyzed to extract lessons and learn from them?	3.23	1.136	35.16
25.	Learning from mistakes	3.1567	0.985	31.21
26.	Does the organization encourage creative thinking and innovation?	3.31	1.161	35.07
27.	Is support provided for new projects and innovative ideas?	3.33	1.092	32.80
28.	Are employees who contribute to the development of new products and services rewarded?	3.24	1.026	31.67
29.	Innovation and renewal	3.2933	0.941	28.57
30.	Organizational learning	3.2244	0.842	26.11

5. DISCUSSION OF RESULTS

5.1. Examining the Initial Hypothesis

This study aims to verify the hypothesis (there is no significant correlation between transformational leadership and organizational learning), and it is clear from Table (8) and Figure () that the value of the correlation coefficient between transformational leadership and organizational learning reached (0.704**) at a significance level of (0.000), which is less than the significance level of (0.05), indicating the existence of a significant correlation at an average level between transformational leadership and organizational learning. The extracted (Z) value reached (8.620), which is greater than the tabular (Z) value of (1.96), which confirms the significance of this relationship. This result supports the rejection of the null hypothesis and the acceptance of the alternative hypothesis, which indicates the existence of a significant correlation between transformational leadership and organizational learning.

Table 8: Correlation values between transformational leadership and organizational learning.

Dep. Variable	Sig.	Z	R
Indep. variable	0.000	8.62	0.704**

As for testing the sub-hypotheses of the dimensions of transformational leadership and organizational learning, as shown in Table (9) below, the values of the correlation coefficient (R) achieved a value of (0.566**, 0.490**, 0.658**, 0.726**) at a significance level of (0.000), which is less than (0.05), indicating the existence of a significant correlation between the dimensions of transformational leadership and organizational learning. The relationship ranged from average to strong, as the extracted (Z) test values recorded a value of (6.319, 5.280, 7.773, 9.063), all of which are higher than the tabular (Z) value of (1.96), indicating the existence of a correlation between the different dimensions of transformational leadership and organizational learning. The results also showed that the highest correlation value was for the dimension of "individual growth", which amounted to (0.726**), which means that this dimension has the greatest impact on organizational learning. On the other hand, the lowest correlation value was for the dimension of "individual motivation", which reached (0.490**). Based on these results, the appropriate decision can be taken as shown in Table) 10(

Table 9: Sub-hypotheses of the influence between the dimensions of transformational leadership and organizational learning

Hypothesis Symbol	Hypothesis
H11	There is no significant correlation between the dimensions of vision, inspiration and organizational learning.
H12	There is no significant correlation between the dimension of individual motivation and organizational learning.
H13	There is no significant correlation between the dimensions of trust, appreciation and organizational learning
H14	There is no significant correlation between the dimension of individual growth and organizational learning.

Table 10: Correlation values between dimensions of transformational leadership and organizational learning.

Organizational Learning	Dimensions of Transformational Leadership		R	Z	Sig.
	Vision and Inspiration		0.566**	6.319	0.000
	Individual Motivation		0.490**	5.280	0.000
	Trust and Appreciation		0.658**	7.773	0.000
	Individual Growth		0.726**	9.063	0.000

5.2. Examining the Second Hypothesis

The second hypothesis states that (there is no significant effect of transformational leadership on organizational learning), and it is clear from Table 11 and Figure 4 the extracted (F) value between transformational leadership and organizational learning, as recorded (96.390). It is (greater) than the tabular (F) of (3.94) at a significance level of (0.05). This result provides sufficient support to accept the alternative

hypothesis, which states that (there is a significant effect of transformational leadership on organizational learning), which indicates the existence of a significant impact of transformational leadership on organizational learning, as transformational leadership was able to explain (49%) of the variables that affect organizational learning. The extracted (t) value for the transformational leadership variable was also recorded (9.818). It is greater than the tabular value (t) of (1.984) at the significance value (0.05), and this indicates the stability of the significance (β) of the transformational leadership variable, as it is clear from the value of (β) that increasing transformational leadership by one unit will lead to an increase in organizational learning by.(%69)

Table 11: Analysis of the impact between transformational leadership and organizational learning.

Dep. Variable Indep. variable	Transformational leadership					
	R ²	Sign.	t	F	B	α
Organizational Learning	%49	0.000	9.818	96.390**	0.694	0.897

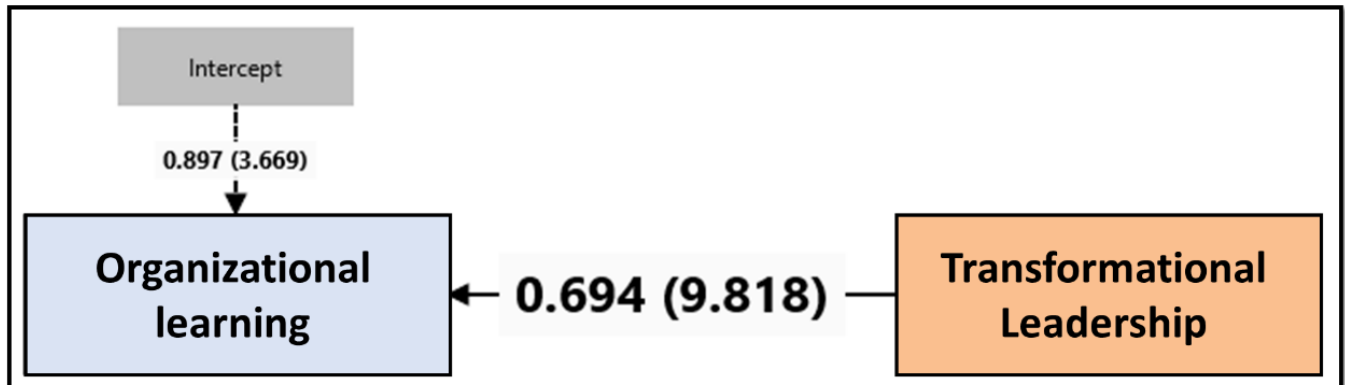


Figure 4: Analysis of the impact of transformational leadership on organizational learning.

As for testing the sub-hypotheses of the dimensions of transformational leadership and organizational learning, as shown in Table (12) below, the values of the correlation coefficient (R) achieved a value of (0.566**, 0.490**, 0.658**, 0.726**) at a significance level of (0.000), which is less than (0.05), indicating the existence of a significant correlation between the dimensions of transformational leadership and organizational learning. The relationship ranged from average to strong, as the extracted (Z) test values recorded a value of (6.319, 5.280, 7.773, 9.063), all of which are higher than the tabular (Z) value of (1.96), indicating the existence of a correlation between the different dimensions of transformational leadership and organizational learning. The results also showed that the highest correlation value was for the dimension of "individual growth", which amounted to (0.726**), which means that this dimension has the greatest impact on organizational learning. On the other hand, the lowest correlation value was for the dimension of "individual motivation", which reached (0.490**). Based on these results, the appropriate decision can be taken as shown in Table 12.

Table 12: Sub-hypotheses of the influence between the dimensions of transformational leadership and organizational learning.

Hypothesis Symbol	Hypothesis
H11	There is no significant correlation between the dimensions of vision, inspiration and organizational learning.
H12	There is no significant correlation between the dimension of individual motivation and organizational learning.
H13	There is no significant correlation between the dimensions of trust, appreciation and organizational learning.
H14	There is no significant correlation between the dimension of individual growth and organizational learning.

As for testing the sub-hypotheses of the dimensions of transformational leadership in organizational learning, it is clear from Table (13) the following: The extracted (F) value between the dimensions of transformational leadership in organizational learning achieved (46.249, 30.960, 74.826, 109.238) respectively. It is greater than the tabular (F) value of (3.94) at a significance level of (0.05). Accordingly, the decision is as shown in Table(13)

Table 13: Sub-hypotheses of the impact between the dimensions of transformational leadership in organizational learning.

Hypothesis Symbol	Hypothesis
H21	There is no significant effect of the dimension of vision and inspiration in organizational learning.
H22	There is no significant effect of the dimension of individual motivation in organizational learning.
H23	There is no significant effect of the dimension of trust and appreciation in organizational learning.
H14	There is no significant correlation between the dimension of individual growth and organizational learning.

The value of the corrected coefficient of determination Adj (²R) was (0.314, 0.232, 0.427, 0.522), which indicates that there is a difference in the interpretation of the dimensions of transformational leadership for the organizational learning variable, as it is clear that the highest explanatory percentage was at the dimension (individual growth), as it explained (52%) of the variables that occur in the organizational learning variable, while

the lowest explanatory percentage was at the dimension (individual motivation), as it explained (23%) of the variables that occur in the organizational learning variable. The extracted value of (t) for the marginal slope coefficient between the dimensions of transformational leadership in organizational learning was (6.801, 5.564, 8.650, 10.452) respectively, which is greater than the tabular value (t) of (1.984) at a significance level of (0.05). This indicates the stability of the significance of the marginal slope coefficient for the dimensions of transformational leadership, represented by (vision and inspiration, individual motivation, trust and appreciation, and individual growth). It is clear from the value of (β) for all dimensions, which is (0.451, 0.447, 0.586, 0.604), respectively, that there is a difference in the influence of the dimensions of transformational leadership on the organizational learning variable, as it is clear that the biggest impact was at the dimension (individual growth), as increasing this dimension by one unit will lead to an increase in the organizational learning variable by (60%). It is also clear that the lowest influence was at the dimension (individual motivation), as increasing this dimension by one unit will lead to an increase in the organizational learning variable by (44%).

Table 14: Analysis of the impact of the dimensions of transformational leadership on organizational learning.

Organizational learning	Dimensions of Transformational Leadership	α	B	R ²	Adj (R ²)	F	t	Sig.
	Vision and Inspiration	1.743	0.451	0.321	0.314	46.249	6.801	0.000
Individual Motivation	1.691	0.447	0.240	0.232	30.960	5.564	0.000	
Trust and Appreciation	1.232	0.586	0.433	0.427	74.826	8.650	0.000	
Individual Growth	1.229	0.604	0.527	0.522	109.238	10.452	0.000	

6. CONCLUSIONS AND IMPLICATIONS FOR PRACTICAL PRACTICE

Theoretical and applied studies emphasize the importance of transformational leadership in driving organizational learning. Transformational leaders, through their inspiring vision and ability to build strong relationships with their subordinates, create a stimulating environment for innovation and continuous development. They also contribute to building an organizational culture based on constant learning and knowledge exchange. However, more research is needed to identify the precise mechanisms that link transformational leadership and organizational learning, as well as to assess the impact of different contextual factors on this relationship. In the future, the concepts of transformational leadership and organizational learning are expected to witness new developments with the emergence of artificial intelligence technologies and the increasing complexity of the work environment.

The results of this study showed a strong relationship between transformational leadership and organizational learning, emphasizing the role of leaders in shaping a stimulating learning culture. Specifically, it was found that the dimensions of intellectual stimulation and individual considerations in transformational leadership play a crucial role in enhancing employee learning behaviors and raising organizational efficiency.

The study highlighted that the dimensions of intellectual stimulation and individual considerations in transformational leadership have a direct impact on employee learning behaviors. The results of this study support previous theories linking transformational leadership and organizational learning. The results of this study should be considered within the organizational context in which it was conducted, and further studies are needed to generalize the results.

Future studies can explore the mediating role of variables such as employee empowerment in the relationship between transformational leadership and organizational learning. The moderating role of organizational culture in this relationship can also be studied. Studies should be conducted on larger and more diverse samples to generalize the results.

Based on the results of this study, the following recommendations can be made to leaders who wish to promote a learning culture in their organizations:

- Develop transformational leadership: Leaders should focus on developing their skills in intellectual stimulation and individual considerations through training and self-development programs.
- Create a stimulating learning environment: Leaders should provide a safe and encouraging work environment for innovation and knowledge sharing.
- Provide learning opportunities: Diverse training programs and opportunities for continuous learning should be provided to employees.
- Rewards and incentives system: Link the rewards and incentives system to learning and professional development.
- Collaboration and knowledge sharing: Encourage collaboration among employees and the exchange of experiences and knowledge.
- Measuring and evaluating the learning culture: Developing indicators to measure the level of learning

culture and monitoring progress.

The results of this study confirm the importance of transformational leadership in promoting a learning culture in organizations. By leaders adopting transformational leadership practices, they can create work environments that encourage innovation and continuous learning, which contributes to improving the performance and long-term success of organizations. This study can contribute to building a stronger knowledge base on how to develop a strong learning culture in organizations, which leads to improved organizational performance and innovation.

These results open new horizons for researchers and practitioners alike, as they encourage further studies to deepen the understanding of the relationship between transformational leadership and organizational learning and push organizations to adopt transformational leadership practices to enhance their ability to adapt and innovate.

These results confirm the pivotal role of transformational leadership in achieving organizational excellence, as it contributes to building more flexible organizations that are able to respond to future challenges.

REFERENCES

- Ahmad Qadri, U., Ghani, M. B. A., Parveen, T., Lodhi, F. A. K., Khan, M. W. J., & Gillani, S. F. (2021). How to improve organizational performance during Coronavirus: A serial mediation analysis of organizational learning culture with knowledge creation. *Knowledge and Process Management*, 28(2), 141-152.
- Al Amin, R., Prahiawan, W., Ramdansyah, A. D., & Haryadi, D. (2023). Employee performance under organizational culture and transformational leadership: A mediated model. *Jurnal Mantik*, 7(2), 719-728.
- Alanazi, N. H., Alshamlani, Y., & Baker, O. G. (2023). The association between nurse managers' transformational leadership and quality of patient care: A systematic review. *International nursing review*, 70(2), 175-184.
- Al-Husseini, S., El Beltagi, I., & Moizer, J. (2021). Transformational leadership and innovation: the mediating role of knowledge sharing amongst higher education faculty. *International Journal of Leadership in Education*, 24(5), 670-693.
- Althnayan, S., Alarifi, A., Bajaba, S., & Alsabban, A. (2022). Linking environmental transformational leadership, environmental, organizational citizenship behaviour, and organizational sustainability performance: A moderated mediation model. *Sustainability*, 14(14), 8779.
- Antunes, H. D. J. G., & Pinheiro, P. G. (2020). Linking knowledge management, organizational learning and memory. *Journal of Innovation & Knowledge*, 5(2), 140-149.
- Argote, L., Lee, S., & Park, J. (2021). Organizational learning processes and outcomes: Major findings and future research directions. *Management science*, 67(9), 5399-5429.
- Auqui-Caceres, M. V., & Furlan, A. (2023). Revitalizing double-loop learning in organizational contexts: A systematic review and research agenda. *European Management Review*, 20(4), 741-761.
- Bakker, A. B., Hetland, J., Olsen, O. K., & Espevik, R. (2023). Daily transformational leadership: A source of inspiration for follower performance? *European Management Journal*, 41(5), 700-708.
- Bass, B. M. (1985). Leadership: Good, better, best. *Organizational dynamics*, 13(3), 26-40.
- Bass, B. M., & Avolio, B. J. (1994). *Transformational Leadership And Organizational Culture*. *International Journal of Public Administration*, 17(3-4), 541-554. <https://doi.org/10.1080/01900699408524907>
- Bass, B. M., & Avolio, B. J. (1996). Multifactor leadership questionnaire. *Western Journal of Nursing Research*.
- Bass, B. M., & Bass Bernard, M. (1985). Leadership and performance beyond expectations.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Psychology press.
- Begum, S., Xia, E., Mehmood, K., Iftikhar, Y., & Li, Y. (2020). The impact of CEOs' transformational leadership on sustainable organizational innovation in SMEs: A three-wave mediating role of organizational learning and psychological empowerment. *Sustainability*, 12(20), 8620.
- Bianchi, G., & Testa, F. (2022). How can SMEs effectively embed environmental sustainability? Evidence on the relationships between cognitive frames, life cycle management and organizational learning process. *Business Ethics, the Environment & Responsibility*, 31(3), 634-648.
- Bose, T. K., & Haque, E. (2021). Transformational leadership: Concepts, applications, criticisms and evaluations.
- Budur, T. (2020). Effectiveness of transformational leadership among different cultures. *International Journal of Social Sciences & Educational Studies*, 7(3), 119-129.
- Bunjak, A., Bruch, H., & Černe, M. (2022). Context is key: The joint roles of transformational and shared leadership and management innovation in predicting employee IT innovation adoption—*International Journal of Information Management*, 66, 102516.
- Burns, J. M. (2012). *Leadership*. Open Road Media.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Burns, J. M. (2003). *Transforming leadership: A new pursuit of happiness*. New York: Atlantic Monthly Press.
- Choi, S. B., Kim, K., Ullah, S. E., & Kang, S. W. (2016). How transformational leadership facilitates innovative behaviour of Korean workers: Examining mediating and moderating processes. *Personnel Review*, 45(3), 459-479.
- Crossan, M. M., & Berdrow, I. (2003). Organizational learning and strategic renewal. *Strategic management journal*, 24(11), 1087-1105.
- Crossan, M. M., Lane, H. W., White, R. E., & Djurfeldt, L. (1995). Organizational learning: Dimensions for a theory. *The international journal of organizational analysis*, 3(4), 337-360.
- Da'as, R. A., Schechter, C., & Qadach, M. (2023). Cognitively complex leaders: How principals influence organizational learning through climate for innovation. *Journal of Research on Leadership Education*, 18(2), 322-344.
- Den Hartog, D. N., Van Muijen, J. J., & Koopman, P. L. (1996). We are linking transformational leadership and organizational culture. *Journal of leadership studies*, 3(4), 68-83.
- Duressa, Z., & Asfaw, M. (2014). Transformational leadership and its applications in the public service organizations of Ethiopia. *International Affairs and Global Strategy*, 23.
- Esquilin-Perez, D. (2018). *Faculty Application of Transformational Leadership in a College Success Course* (Doctoral dissertation, Capella University).
- Gajek, A. (2019). Process Safety Education-Learning at the Level of the Establishment and the Human Level. *CET Journal-Chemical Engineering Transactions*, 77.

- Garmaki, M., Gharib, R. K., & Boughzala, I. (2023). Big data analytics capability and contribution to firm performance: the mediating effect of organizational learning on firm performance. *Journal of Enterprise Information Management*, 36(5), 1161-1184.
- Gijbels, D., & Spaenhoven, R. (2021). On organizational learning: C. Argyris. In *Theories of Workplace Learning in Changing Times* (pp. 199-208). Routledge.
- Goh, S., & Richards, G. (1997). Benchmarking the learning capability of organizations. *European management journal*, 15(5), 575-583.
- Gusmão, F. D., Christiananta, B., & Ellitan, L. (2018). The influence of strategic leadership and organizational learning on organizational performance with organizational citizenship behaviour as an intervening variable. *International Journal of Scientific Research and Management*, 6(04).
- Inthavong, P., Rehman, K. U., Masood, K., Shaukat, Z., Hnydiuk-Stefan, A., & Ray, S. (2023). Impact of organizational learning on sustainable firm performance: Intervening effect of organizational networking and innovation. *Heliyon*, 9(5).
- Ivaldi, S., Scaratti, G., & Fregnan, E. (2022). Dwelling within the fourth industrial revolution: organizational learning for new competences, processes and work cultures. *Journal of Workplace Learning*, 34(1), 1-26.
- Jambawo, S. (2018). Transformational leadership and ethical leadership: their significance in the mental healthcare system. *British Journal of Nursing*, 27(17), 998-1001.
- Jamshidian, M., & Yazdanshenas, M. (2008). The role of transformational leadership in change management. In *Sixth International Conference on Management*.
- Jaroliya, D., & Gyanchandani, R. (2022). Transformational leadership style: a boost or hindrance to team performance in IT sector. *Vilakshan-XIMB Journal of Management*, 19(1), 87-105.
- Karimi, S., Ahmadi Malek, F., Yaghoubi Farani, A., & Liobikienė, G. (2023). The role of transformational leadership in developing innovative work behaviours: The mediating role of employees' psychological capital. *Sustainability*, 15(2), 1267.
- Khan, H., Rehmat, M., Butt, T. H., Farooqi, S., & Asim, J. (2020). Impact of transformational leadership on work performance, burnout and social loafing: a mediation model. *Future Business Journal*, 6(1), 40.
- Khan, I. U., Amin, R. U., & Saif, N. (2022). Individualized consideration and idealized influence of transformational leadership: Mediating role of inspirational motivation and intellectual stimulation. *International Journal of Leadership in Education*, 1-11.
- Khanin, D. (2007). Contrasting Burns and Bass: Does the transactional-transformational paradigm live up to Burns' philosophy of transforming leadership? *Journal of leadership studies*, 1(3), 7-25.
- Kilag, O. K., Malbas, M., Nengasca, M. K., Longakit, L. J., Celin, L., Pasigui, R., & Valenzona, M. A. V. (2024). Transformational Leadership and Educational Innovation. *International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE)*, 1(1), 110-114.
- Kim, E. J., & Park, S. (2020). Transformational leadership, knowledge sharing, organizational climate and learning: an empirical study. *Leadership & organization development journal*, 41(6), 761-775.
- Kuşakcı, S., & Busatlic, S. (2022). A value-based leadership model grounded in history. *International Journal of Business Governance and Ethics*, 16(1), 16-38.
- Lau, K. S., & Mackechnie, I. (2023, August). Review of models and components for organizational change being faced by learning organizations. In *AIP Conference Proceedings* (Vol. 2854, No. 1). AIP Publishing.
- Lehmann-Willenbrock, N., Meinecke, A. L., Rowold, J., & Kauffeld, S. (2015). How transformational leadership works during team interactions: A behavioural process analysis. *The Leadership Quarterly*, 26(6), 1017-1033.
- Leithwood, K., Jantzi, D., & Steinbach, R. (2021). Leadership and other conditions which foster organizational learning in schools. In *Organizational learning in schools* (pp. 67-90). Taylor & Francis.
- Mitchell, C., & Larry, S. (2021). Learning about organizational learning. In *Organizational learning in schools* (pp. 177-199). Taylor & Francis.
- Nimran, U., Al Musadieq, M., & Afrianty, T. W. (2024). Empowerment effect on competence and organizational commitments: Organizational learning culture as moderating. *Multidisciplinary Reviews*, 7(2), 2024038-2024038.
- Nohe, C., & Hertel, G. (2017). Transformational leadership and organizational citizenship behaviour: A meta-analytic test of underlying mechanisms. *Frontiers in psychology*, 8, 1364.
- Oh, S. Y., & Han, H. S. (2020). Facilitating organizational learning activities: Types of organizational culture and their influence on organizational learning and performance. *Knowledge Management Research & Practice*.
- Pratiwi, S. N., & Amini, A. (2023). Efforts to Increase Lecturer Involvement through Organizational Culture, Transformational Leadership and Economic Prosperity. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 7(1), 150-164.
- Purwanto, A., Fahmi, K., & Sulaiman, A. (2023). Linking of transformational leadership, learning culture, organizational structure and school innovation capacity: CB SEM AMOS analysis. *Journal of Information Systems and Management (JISMA)*, 2(3), 1-8.
- Rafique, M. A., Hou, Y., Chudhery, M. A. Z., Waheed, M., Zia, T., & Chan, F. (2022). Investigating the impact of pandemic job stress and transformational leadership on innovative work behaviour: The mediating and moderating role of knowledge sharing. *Journal of Innovation & Knowledge*, 7(3), 100214.
- Ramos, A., & Ellitan, L. (2023). The Role of Organizational Learning and Culture in Building Organizational Competitiveness. *International Journal of Trends in Scientific Research and Development (IJTSRD) Volume*, 7.
- Rass, L., Treur, J., Kucharska, W., & Wiewiora, A. (2023). Adaptive dynamical systems modelling of transformational organizational change with a focus on organizational culture and organizational learning. *Cognitive Systems Research*, 79, 85-108.
- Riggio, R. E., Bass, B. M., & Orr, S. S. (2004). Transformational leadership in nonprofit organizations. *We are improving leadership in nonprofit organizations*, 49, 62.
- Rojak, J. A., Sanaji, S., Witjaksono, A. D., & Kistyanto, A. (2024). The influence of transformational leadership and organizational culture on employee performance. *EDUKASIA: Jurnal Pendidikan dan Pembelajaran*, 5(1), 977-990.
- Saad Alessa, G. (2021). The dimensions of transformational leadership and its organizational effects in public universities in Saudi Arabia: A systematic review. *Frontiers in Psychology*, 12, 682092.
- Santos-Vijande, M. L., López-Sánchez, J. Á., & González-Mieres, C. (2012). Organizational learning, innovation, and performance in KIBS. *Journal of Management & Organization*, 18(6), 870-904.
- Shaikh, F. A., & Siponen, M. (2024). Organizational learning from cybersecurity performance: effects on cybersecurity investment decisions. *Information Systems Frontiers*, 26(3), 1109-1120.
- Smerek, R. (2017). *Organizational learning and performance: The science and practice of building a learning culture*. Oxford University Press.
- Shelton, M. (2023). Conceptualizing Organizational Citizenship Behavior and Learning Organization in the Labor Sector. *Jurnal Organisasi Dan Manajemen*, 19(1), 239-255.
- Sony, M., & Naik, S. (2012). Six Sigma, organizational learning and innovation: An integration and empirical examination. *International Journal of Quality & Reliability Management*, 29(8), 915-936.

- Sun, P. Y., & Anderson, M. H. (2012). The importance of attributional complexity for transformational leadership studies. *Journal of Management Studies*, 49(6), 1001-1022.
- Sunaengsih, C., Komariah, A., Kurniady, D. A., Suharto, N., Tamam, B., & Julia, J. (2021, April). Transformational Leadership Survey. In *Elementary School Forum (Mimbar Sekolah Dasar)* (Vol. 8, No. 1, pp. 41-54). Indonesia University of Education. Jl. Mayor Abdurachman No. 211, Sumedang, Jawa Barat, 45322, Indonesia. Web site: <https://ejournal.UPI.Edu/index.Php/mimbar/index>.
- Sutanto, H., Utami, Y., & Diantoro, A. K. (2021, October). The effect of idealized influence, inspirational motivation, intellectual stimulation, and individual consideration on HR performance. In *RSF Conference Series: Business, Management and Social Sciences* (Vol. 1, No. 3, pp. 100-109).
- Tarí, J.J., Portela Maquieira, S. and Molina-Azorín, J.F. (2023), "The link between transformational leadership and the EFQM model elements", *Business Process Management Journal*, Vol. 29 No. 2, pp. 447-464. <https://doi.org/10.1108/BPMJ-10-2022-0498>.
- To, M. L., Herman, H. M., & Ashkanasy, N. M. (2015). A multilevel model of transformational leadership, affect, and creative process behaviour in work teams. *The Leadership Quarterly*, 26(4), 543-556.
- Udin, U. (2023). Linking transformational leadership to organizational learning culture and employee performance: The mediation-moderation model. *International Journal of Professional Business Review*, 8(3), e01229-e01229.
- Wibowo, T. S., Suhendi, D., Suwandana, I. M. A., Nurdiani, T. W., & Lubis, F. M. (2023). The Role Of Transformational Leadership And Organizational Culture In Increasing Employee Commitment. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 7(2).
- Yasin Ghadi, M., Fernando, M., & Caputi, P. (2013). Transformational leadership and work engagement: The mediating effect of meaning in work. *Leadership & Organization Development Journal*, 34(6), 532-550.
- Zaleznik, A. (2004). Managers and leaders. *Harvard Business Review*, 1.
- Zefeiti, S. M. B. A., & Mohamad, N. A. (2015). Methodological considerations in studying transformational leadership and its outcomes. *International Journal of Engineering Business Management*, 7, 10.
- Zhang, X., Chu, Z., Ren, L., & Xing, J. (2023). Open innovation and sustainable competitive advantage: The role of organizational learning. *Technological Forecasting and Social Change*, 186, 122114.
- Zuraik, A. (2017). *A strategic model for innovation leadership: Ambidextrous and transformational leadership within a supportive climate to foster innovation performance* (Doctoral dissertation, Alliant International University).