



Study of the Relationship between Transformational Leadership, Organizational Culture, Followers' Creativity, Organizational Learning, and Organizational Innovation: Evidence from the United Arab Emirates

Dissertation

Presented to
The Academic Faculty

By

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In partial fulfillment
of the requirements for the degree of
Doctor of Business Administration

Abu Dhabi University
College of Business
June 2014

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STUDY OF THE RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP,
ORGANIZATIONAL CULTURE, FOLLOWERS' CREATIVITY, ORGANIZATIONAL
LEARNING, AND ORGANIZATIONAL INNOVATION: EVIDENCE FROM THE UAE

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I don't punish those who work and make mistakes; quite the opposite, I support them and encourage them to be more creative, even if they make more mistakes.

—HH Sheikh Mohammed Bin Rashid Al Maktoum

Abstract

In recent years, the government of the United Arab Emirates (UAE) has sought to improve the performance of the public sector by implementing certain changes in its principles and processes. These changes require leadership to focus on organizational innovation, which, in turn, motivates those with leadership ability to emerge as the role models for change. The purpose of this study was to examine the impact of transformational leadership on organizational innovation effected by culture, followers' creativity, and organizational learning. The majority of researchers in this area have either paid little attention to the private sector or used only the Western countries as case studies. A questionnaire survey was conducted, and the data were collected from the public, semi government, and private sectors. The participants were 497. The present study used a correlational research method with multilevel structural equation modeling. The results indicate that transformational leadership has a significant influence on organizational innovation and that culture, creativity, and organizational learning are significant factors of organizational innovation. In addition, it can be inferred from the results that developing transformational leadership may be instrumental in motivating employees and ensuring individual and organizational innovation. To the best of my knowledge, this research is one of the first to investigate transformational leadership and its effects on organizational innovation in the UAE. By exploring the effects of transformational leadership, the study expands the general understanding of the concept as well as its association with several other variables related to organizational output and performance.

Keywords: transformational leadership, organizational culture, followers' creativity, organizational learning, organizational innovation, UAE, Dubai

Abbreviations

Abbreviation	Meaning
TL	Transformational leadership
OI	Organizational innovation
OC	Organizational culture
FC	Followers' creativity
OL	Organizational learning
UAE	United Arab Emirates
EFQM	European Foundation for Quality Management
ECC	Emirates Competitiveness Council
SEM	Structural equation modeling
SPSS	Statistical Package for the Social Sciences

Dedication

I dedicate this dissertation first to Shk. Mohamed Bin Zayed. Your support and the scholarship that I received from you influenced me immensely and had a significant impact on my life.

In addition, I dedicate this dissertation to my mother—your prayers, unlimited support, and encouragement helped me fully realize my potential—and to my children Rashid, Mohamed, and Aisha—I thank Allah every day of my life for the infinite love that I received from all of you. Moreover, I dedicate this work to my family; my wonderful friends Dr. Safyeh Alkhajah, Ayasha Alghas, Fatma Hilal and Khadejah Al Seraidi; my teammates in MOFA, especially Talal Altunaiji, Dennis Dewilde, Harald Boss, and Adnan Saqf Alhait; and my teammate in AlDewan AlAmiri, Deba Alhesen.

Finally, I dedicate my dissertation to someone who always had an impact on me during my life, being a rock of support in every difficult moment, to my soul that shall never disappear.

Thank you for sharing my dream and making it a reality.

I thank you and love you all.

Acknowledgments

To begin, I would like to thank Allah for giving me this blessing to finish my studies in the DBA program. In addition, I am grateful to my chair, Dr. Mohamed Behery, for his encouragement, guidance, and friendship over the past four years through to the completion of my journey at Abu Dhabi University. Thank you for everything you have done to support me.

Second, I would like to thank the members of my committee, Dr. Salam Abdullah and Dr. Abbas Ali. Thank you for your valuable inputs into this process and for guiding this work to completion.

In addition, I would like to thank Dr. Vlad Krotov for his support during the four years of my studies at Abu Dhabi University.

I would also like to thank my group members who started this journey with me four years ago. We have created a tight-knit family. Your support and laughter have made the past four years a wonderfully enjoyable experience.

Finally, I would like to thank my family members, especially Ali, Rashid, Obaid, and Khalid AL Salami, all my friends, Al Bedwawi family, Al Salami family and the Khamis Aldhanhani family, who so lovingly and patiently supported me during my time at Abu Dhabi University. Your belief in me has motivated me more than you can imagine. I feel blessed to have each of you in my life.

Table of Contents

Abstract.....	v
Abbreviations.....	vi
Dedication.....	vii
Acknowledgments.....	viii
Table of Contents.....	ix
List of Tables	xii
List of Figures	xiii
Operational Definitions.....	xiv
Chapter 1: Introduction	15
1.1 Statement of the Problem	2
1.2 Purpose of the Research	3
1.3 United Arab Emirates and Innovation.....	4
Chapter 2: Literature Review.....	8
2.1 Transformational Leadership	9
2.1.1 Theoretical background of transformational leadership.....	9
2.1.2 Sub dimensions of transformational leadership.....	11
2.2 Organizational Innovation.....	15
2.3 Transformational Leadership and Innovation	17
2.4 Organizational Culture	21
2.4.1 Impact of organizational culture.....	24
2.5 Followers' Creativity.....	30
2.5.1 Impact of followers' creativity	35
2.6 Organizational Learning.....	40

2.6.1 Impact of organizational learning.....	43
2.7 New Insight: Identifying Theoretical Gaps.....	48
2.8 Theoretical Framework	48
2.8.1 Basic model	49
2.8.2 General model.....	50
Chapter 3: Data and Methodology	52
3.1 Identification of Samples	52
3.2 Data Collection Procedure	52
3.3 Measurement	53
3.3.1 Transformational leadership	54
3.3.2 Organizational culture	55
3.3.3 Followers' creativity.....	55
3.3.4 Organizational learning	55
3.3.5 Organizational innovation	56
3.3.6 Demographic variables	56
3.4 Analysis of the Basic Model	56
3.4.1 Data analysis of the basic model	57
3.4.2 Results of the basic model	62
3.5 Analysis of the General Model	64
3.5.1 Factor analysis	68
3.5.2 Reliability analysis	72
3.5.3 Correlation analysis	73
3.5.4 Structural equation modeling results	75
Chapter 4: Discussion of Results	84
4.1 Hypotheses	84

4.1.1 Hypothesis 1: Transformational leadership is positively related to OI	84
4.1.2 Hypothesis 2: Transformational leadership is positively related to OC	85
4.1.3 Hypothesis 3: Organizational culture is positively related to OI.....	85
4.1.4 Hypothesis 4: Transformational leadership is positively related to FC.....	86
4.1.5 Hypothesis 5: Followers’ creativity is positively related to OI.....	87
4.1.6 Hypothesis 6: Transformational leadership is positively related to OL	87
4.1.7 Hypothesis 7: Organizational learning is positively related to OI.....	88
4.1.8 Summary of hypothesized relationships and answering the research questions	88
Chapter 5: Implications and Suggestions for Future Research.....	93
5.1 Research Implications	93
5.2 Practical Implications.....	94
5.3 Limitations	95
5.4 Future Research Directions	96
5.5 Conclusion.....	96
References.....	98
Appendix A. Permissions From Authors	115
Appendix B. Research Questionnaire	119

List of Tables

Table 1. Terms and Operational Definitions

Table 2. Some Studies That Support the Relationship between TL and OI

Table 3. Some Studies That Support the Effect of OC in the Relationship between TL and OI

Table 4. Some Studies That Support the Effect of FC in the Relationship between TL and OI

Table 5. Some Studies That Support the Effect of OL in the Relationship between TL and OI

Table 6. Reliability Analyses of the Paper Model

Table 7. Two-Dimensional Solution with Ordinal Measurement (Paper Model)

Table 8. Descriptive Statistics and Correlations among Latent Variables (Paper Model)

Table 9. Descriptive Statistics and Correlations among Exogenous Variables (Paper Model)

Table 10. Path Model Estimation (Paper Model)

Table 11. Independent *t* Tests (Paper Model)

Table 12. Demographic Information of the Respondents

Table 13. Component Matrix: Organizational Innovation

Table 14. Rotated Component Matrix^a

Table 15. Reliability Analysis

Table 16. Descriptive Statistics and Correlation Matrix of the Endogenous Variables

Table 17. Descriptive Statistics and the Correlation Matrix of the Exogenous Variables

Table 18. Maximum Likelihood Estimates: Dubai Model in General

Table 19. Maximum Likelihood Estimates: Public Sector

Table 20. Maximum Likelihood Estimates: Semi government Sector

Table 21. Maximum Likelihood Estimates: Private Sector

Table 22. Summary of the Research Hypotheses Outcomes

List of Figures

Figure 1. EFQM Model

Figure 2. Global Competitiveness Report 2013-2-14 (United Arab Emirates)

Figure 3. Basic Model

Figure 4. General Model

Figure 5. Component Loadings of the Three Factors (Basic Model)

Figure 6. Organization Type (Public, Semi government, and Private)

Figure 7. Respondents' Age

Figure 8. Respondents' Gender

Figure 9. Organizational Experience

Figure 10. Respondents' Job Position

Figure 11. Respondents' Educational Level

Figure 12. Standardized Coefficients of the General Structural Model

Operational Definitions

Table 1. Terms and Operational Definitions

Variables	Definitions
Transformational leadership (Harrison, 2013)	Leadership behaviors that inspire followers, resulting in both leader and follower raising each other up to higher levels of morality, motivation, and performance based on the four categories of leader behavior, namely, inspirational motivation, idealized influence, and individualized consideration and intellectual stimulation
Inspirational motivation (Harrison, 2013)	A component of transformational leadership, consisting of behaviors that reveal the leader's commitment to the goals of the organization, enhancing the meaningfulness of followers' work experiences, offering challenging goals and opportunities
Idealized influence (Harrison, 2013)	A component of transformational leadership also referred to as <i>charisma</i> , which includes leader behaviors of motivational language, vision communication, and setting an example of what it means to carry out the proposed vision
Individualized consideration (Harrison, 2013)	A component of transformational leadership that includes the leader's actions that guide followers toward reaching their respective levels of potential; thus, the leader acts as a mentor and coach, offering followers work opportunities that challenge their growth and development
Intellectual stimulation (Harrison, 2013)	The transformational leader's desire to challenge follower thinking about problem-solving strategies and promote creativity and innovation

Organizational innovation (Gumusluoglu & Ilsev, 2009a)	The tendency of the organization to develop new or improved products/services and its success in bringing those products/services to the market
Organizational culture (Roberts & Boyacigiller, 1984)	A system of shared meaning held by members that distinguishes one organization from another.
Followers' creativity (Cheung & Wong, 2010)	Employees using a range of their diversified skills, abilities, knowledge, views, and experience to generate new ideas for decision making, problem solving, and completion of tasks in efficient ways
Organizational learning (Jogulu, 2011)	A process that facilitates individual change and gives corporations a sustainable competitive advantage

Chapter 1: Introduction

In this chapter, I underscore the importance of innovation in organizations, especially in the United Arab Emirates (UAE). By doing so, I briefly review the literature on innovation and leadership. I have focused on them to identify the gap in literature that the previous researchers have not addressed. In addition, I discuss the purpose of the study and explain the importance of this research in the UAE, especially in Dubai.

We, in the UAE, have no such word as ‘impossible’; it does not exist in our lexicon. Such a word is used by the lazy and the weak, who fear challenges and progress. When one doubts his potential and capabilities as well as his confidence, he will lose the compass that leads him to success and excellence, thus failing to achieve his goal. I require you, youth, to insist on being number one. (HH Sheikh Mohammed Bin Rashid Al Maktoum, 2013)

Peter Drucker argued that “As the trees get rotten from the top and die, organizations suffer from degradation and destruction when the managing director of that organization can’t manage it” (quoted in Hassan & Faezeh, 2011, p. 422). This statement highlights the significant role that managers play in the success or failure of corporations. Indeed, senior managers are pivotal not only in articulating goals but also in executing strategies needed to competitively position a corporation in the marketplace.

1.1 Statement of the Problem

Most organizations have no choice but to compete in today’s dynamic environment distinguished by rapid change in technology, globalization, and shortening product life cycles (Garcia-Morales, Llorens-Montes, & Verdu-Jover, 2007). To survive in such an environment, these organizations try to develop unique ways to perform better. However, they will not be able to reach this goal unless they have managers who are able to motivate employees to be innovative and achieve stated goals, especially those of the long term.

Innovation is one of the main factors that determine the success and competitive advantage of organizations. It allows organizations to improve their services and increase their efficiency and effectiveness, which would lead to long-term survival (Gumusluoglu & Ilsev, 2009a). Many researchers have sought to determine the factors that affect organizational innovation (OI). Some researchers have found that the type of leadership style is the most important factor affecting innovation in any organization (Jung, Chow, & Wu, 2008). Sabir, Sohail, and Asif Khan (2011) identified two types of leadership styles according to Burns’ (1978) model: transformational leadership (TL) and transactional leadership as instrumental for creating an organizational culture (OC) that nurtures innovation. TL highlights the necessity of change and promotes creativity and innovation in the organization, whereas transactional leadership focuses on the status quo and fostering performance through

well-defined tasks to meet set performance objectives (Eisenbeiss, Knippenberg, & Boerner, 2008).

Transformational leaders motivate subordinates to contribute and achieve their organizational goals through four unique behavioral components: charisma, intellectual stimulation, consideration, and inspiration (Jaskyte, 2004). Moreover, transformational leaders also indirectly support innovation by influencing the followers' commitments and building an organizational atmosphere that motivates them to generate new ideas and sustain the long-term survival of the organization (Avolio, Zhu, Koh, & Bhatia, 2004). As a result, these employees are expected to be more satisfied while working and are more likely to pursue innovation, which will, in turn, contribute to the success of the organization (Elenkov & Manev, 2005).

1.2 Purpose of the Research

This research is designed to look at the role of TL in influencing OI. It also examines the relationship between TL and innovation through OC, followers' creativity (FC), and organizational learning (OL). Prior research on the relationship between innovation and leadership styles has been carried out primarily in the Western context. There are very few studies that have been conducted in a Middle Eastern cultural setting (Mozhdeh, Wan, & Amin, 2011). In addition, the majority of these empirical studies pay attention to the private sector (Sarros, Cooper, & Santora, 2011). Public sector organizations across the world are facing many challenges to exercise the functions of government and provide public service. However, few empirical studies have focused on the public sector (Hartley, 2005). Because of the existence of such challenges, public sector organizations require new and innovative ways to deal with the complexities associated with the sector (Borins, 2002; Prajogo & Ahmed, 2006). Therefore, it is essential that these organizations devote all their efforts and

engage themselves in supporting continuous processes of innovation (Hartley, 2005). Moore and Hartley (2008) noted that dealing with the challenges in the public sector needs leadership strategies based on the understanding and analysis of the available approaches of leadership as well as leadership styles that can lead to innovation in the end.

1.3 United Arab Emirates and Innovation

I don't want you to aspire for anything less than the first place because there is number one and no one knows who came second. You may be the last or settle for the middle, but the first has always been the most desirable for everybody. If one is convinced that he cannot be the 'first', he may as well have sentenced himself to failure. (HH Sheikh Mohammed Bin Rashid Al Maktoum, 2013)

The UAE, established in 1970, is a federation of seven emirates that has since become a commercial and industrial hub of the Middle East (Al-Ansari, 2014; Dubai Chamber of Commerce and Industry, 2011; Rettab, Brik, & Mellahi, 2009; UAE MFT, 2012). The UAE focused on innovation for infrastructure development and information communication needs (Sadik & Elbadawi, 2012). The country has great value and initiative to maintain innovation (Perry, 2011). It is diversifying its economy with service-related sectors preparing for a better outlook in the future. With this far sight, there is a high chance for businesses and investments to prosper and the economy to grow with a bright future (Al-Banawi, 2012; OECD, 2013). The UAE government has reinforced the requirement for innovation by instituting excellence awards and leadership programs (Al Marashi & Bhinder, 2008). The first two excellence awards in the UAE are the Sheikh Khalifa Excellence Award instituted in 1999 and the Dubai Quality Award instituted in 1994 (Al-Banawi, 2012). They played an important role in the process of development and innovation. The UAE government is taking full advantage of these awards and creating awareness among managers, customers, and employees. It has started to develop a quality road map for government offices through the excellence criteria (Budhwar & Mellahi, 2006). The government has adopted the excellence

criteria using the European Foundation for Quality Management (EFQM) model (Figure 1) for various organizations focusing on the employees, customers, and the society (Model Criteria, 2013). By using this model, the UAE government has started to develop a quality road map for government offices and has focused on innovation and learning because they are the derivatives of the model (Dale, Wiele, & Iwaarden, 2013).

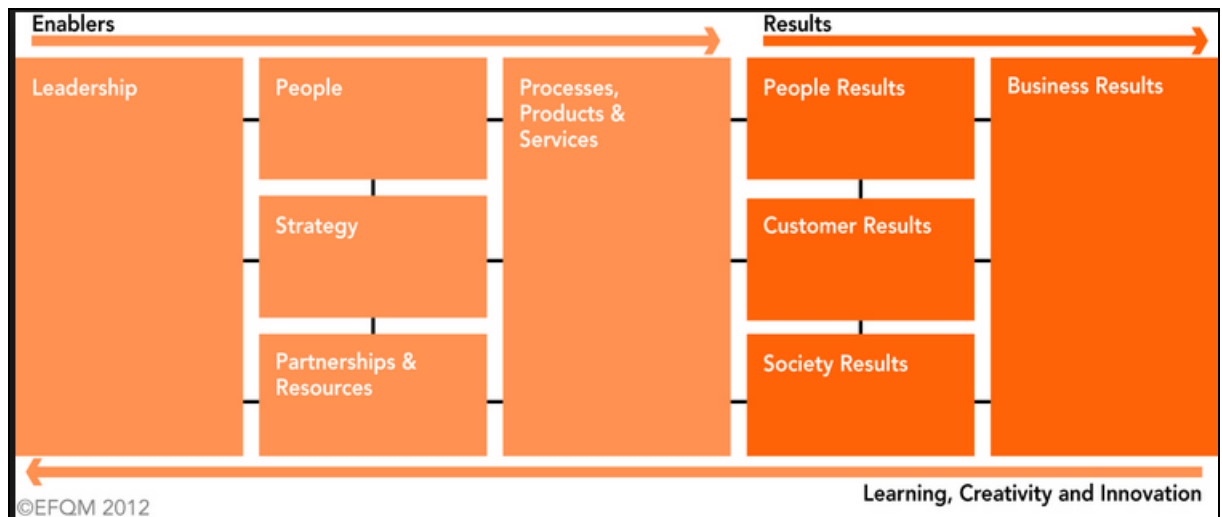


Figure 1. EFQM Model

The ranking of the UAE in the Global Competitiveness Report 2013–2014 is 24th based on innovation and sophistication factors (Schwab, 2013, p. 378).

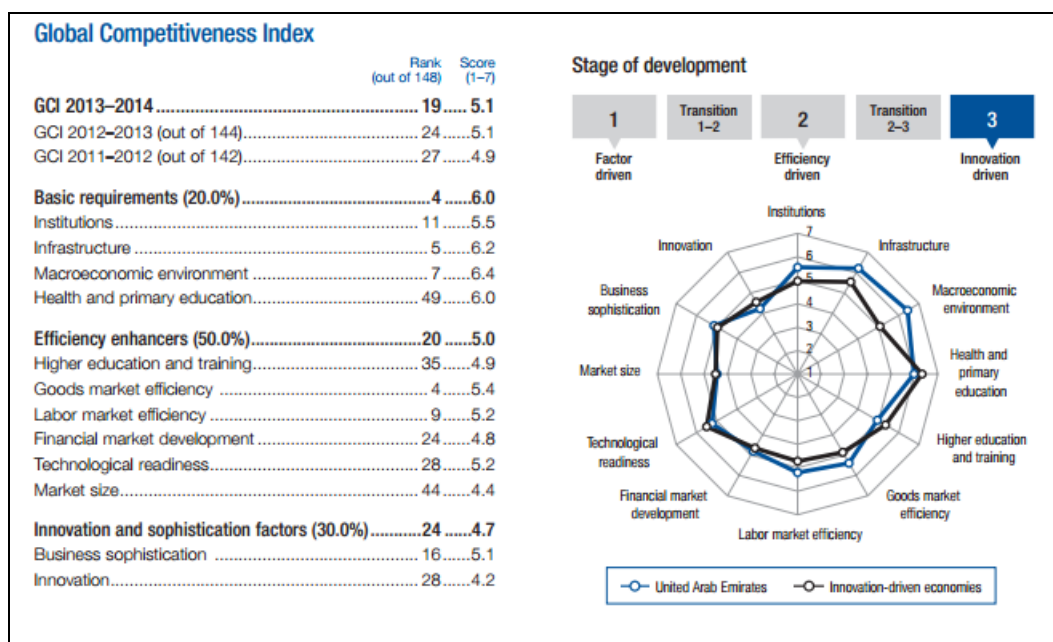


Figure 2. Global Competitiveness Report 2013-2-14 (United Arab Emirates)

Indeed, position can be improved by further leveraging innovation in organizations. The Emirates Competitiveness Council (ECC, 2012) indicated that “the UAE Government has invested heavily in the development of infrastructure and will continue to do more in the years ahead, (...).The public and private sectors are working in parallel for innovations across sectors” (p. 1).

The state of Dubai is one of the seven emirates of the UAE and is the focus of this study. It is grounded in modern innovation processes. Businesses in Dubai have an understanding of modern cluster dynamics. Various economic and social actors such as universities, investors, customers, companies, and other organizations are increasingly practicing innovation as open processes (Sadik & Elbadawi, 2012).

Dubai is making substantial progress in this field encouraged by Sheikh Mohammed bin Rashid al-Maktoum’s vision 2015 that has inspired all sections of society in Dubai—not only political leaders but also organizations and businesses (Perry, 2011). Dubai is overseeing several developmental initiatives as a result of his vision and ambition. It is developing several world-class projects that are putting it into international focus and attention (Augsburg, Claus, & Randeree, 2009). Therefore, the economy of the country will be diversified from oil to services (Hassanien, Dale, Clarke, & Herriott, 2012). Thus, the vision of Sheikh Mohammed bin Rashid al-Maktoum is realizing the economic future of Dubai. These progressive policies have propelled Dubai 10 years ahead of everybody else. With enormous creativity, energy, intelligence, and vision, Dubai is making relentless progress with innovation (Al-Banawi, 2012).

The government of Dubai seeks to improve the performance of the public sector through applying significant changes in its principles and processes. These changes will

require creating innovative organizations, which, in turn, will require TL to be effective. To achieve this, organizations in the UAE—especially Dubai—have adapted to challenges through OI.

With this background, we can see that Dubai seeks to implement a culture of innovation in all organizations. Hence, this underscores the importance of innovation as a subject and the access to OI in both the private and the public sectors. Although there is a growing reliance on innovation, there are no studies undertaken regarding the impact of leadership types (transformational versus transactional) within a Middle Eastern cultural setting. This research will provide a deeper understanding of the subject and investigate how this kind of leadership style affects OI.

The remainder of this research is organized as follows: The next section will focus on the existing literature to gain a deeper understanding of TL, OI, and the relationship between them. The following section will discuss a set of propositions regarding the relationship between transformational leaders and OI and the importance of this area of research. Finally, the research will address the most important concerns related to major issues, reflect on the implications relevant to public sector organizations in the UAE, and present a brief on the limitations and recommendations for future studies.

Chapter 2: Literature Review

In this chapter, I review the literature on TL (the independent variable), OI (the dependent variable), and the three variables: OC, FC, and OL. I summarize my arguments by identifying the theoretical gaps and research questions.

Most people talk, we do things. They plan, we achieve. They hesitate, we move ahead. We are a living proof that when human beings have the courage and commitment to transform a dream into reality, there is nothing that can stop them. Dubai is a living example of that. (HH Sheikh Mohammed Bin Rashid Al Maktoum, 2013)

Leadership is the art of influencing and guiding followers appropriately to achieve common goals leading to the organization's success (Marki & Scandura, 2010). The existing literature on leadership provides several stages in the pattern of its development. The early studies of leadership focused on the attributes and characteristics of a leader. These later studies evolved into highlighting leadership behavior and finally confirmed the contextualized nature of leadership (Boseman, 2008). Previous studies have identified different types of leadership styles that contribute to building organizations (Hirtz, Murray, & Riordam, 2007). In recent years, there has been a focus on two types of leadership: transactional and transformational (Mozhdeh et al., 2011). Boseman (2008) pointed out that Burns (1978) was the first researcher who contrasted transformational and transactional leadership. These two types are discussed in the following sections.

Transactional leadership: This type of leadership involves a relationship between the leader and his followers where followers receive wages to comply with the wishes of their leader (Boseman, 2008). Moreover, this type of leadership covers contingent reward and management by exception (Mozhdeh et al., 2011). In contrast, according to Damirch, Rahimi, and Sayyedi (2011), TL can be observed when both the leader and his followers are

motivated and exhibit high morale. This is due to the influence of leaders' personality, the clarity of their vision, the ability to influence their followers to change their expectations, and the commitment to motivate their followers to work and achieve common goals.

The word “impossible” is not in leaders' dictionaries. No matter how big the challenges, strong faith, determination and resolve will overcome them. (HH Sheikh Mohammed bin Rashid Al Maktoum, 2013).

2.1 Transformational Leadership

Transformational leaders seek to induce the intrinsic motivation of their followers and have a deep interest in developing their personality (Sivanathan & Fekken, 2002). This is in addition to the aiming purposefully to reconcile the organizational needs and desired results among their followers. Horne and Jones (2001) conducted a survey of 1,500 managers—through the Chartered Management Institute in London—to explore what the employees believed were the most important characteristics their managers should possess to act like leaders. Of the employees in this survey, 55% wished to have inspirational leaders who would influence and motivate their followers through their competence and ability, 41% emphasized the need for strategic thinking, and 36% favored a forward-looking approach.

2.1.1 Theoretical background of transformational leadership

Sabir et al. (2011) and Ibraheem, Mohammad, Al-Zeaud, and Batayneh (2011) outlined the following history of the development of the concept of TL.

The theory was first proposed by Burns (1978). His idea was based on the assumption that this transformational aspect raises the level of motivation and morale of the leader to subordinate his own interest to that of the group interest, which, in turn, has a clear impact on his followers.

Previously, Bass (1985) attempted to expand Burns' (1978) theory by highlighting TL in the context of formal theory, model, and factor measurements.

Tichy and Devanna (1986, 1990) explained the characteristics of TL, which includes qualities, values, learning and ability of the visionary, openness, and courage. According to them, TL is handled during the knowledge of the need to create a new vision and to institutionalize change.

Kouzes and Posner's view (1988) is based on mutual trust between the leader and his followers. This means that the followers share a common vision with their leader because they trust him. In addition, the researchers found that executives who have the skill of persuasion can persuade the followers to follow their path. This is called the vision–involvement–persistence model.

Avolio and Bass (1988, 1994) added some aspects to the transformational leaders' skills, which include idealized influence, inspirational leadership, individualized consideration, and intellectual stimulation.

Parry (1996, 1998) mentioned some major characteristics of leadership that may influence the effectiveness and efficiency of transformational leaders such as creativity, team orientation, appreciations, teaching ability, responsibility, and recognition.

Research indicates that lower employee turnover rates and higher productivity, job satisfaction, and motivation are achieved as a result of the ability of the transformational leader to influence his followers (Deluga, 1992; Marshall, Rosenbach, Deal, & Peterson, 1992; Masi & Cooke, 2000; Medley & Larochelle, 1995; Sparks & Schenk, 2001).

Moreover, transformational leaders can inspire their followers to exceed the expected performance (Damirch et al., 2011). Bommer, Rubin, and Baldwin (2004) pointed out that transformational leaders encourage their followers to accept organizational change. In

addition, transformational leaders usually show a higher level of agreement on the strategic objectives of the organization. This can help promote satisfaction and motivation among employees, thereby reducing work-related problems (Schepers, Wetzels, & Ruyter, 2006).

Kuepers (2011) defined transformation as an aesthetic response to the connecting pattern that in turn leads these dimensions to creative participation in cases of emergency and redevelopment. Therefore, the transformational practice can be realized, when considering the relationship between leaders and followers not only as transactional calculated but also as reciprocal responsive (Jordan, Messner, & Becker, 2009).

In addition, Beugre, Acar, and Braun (2006) found that transformational leaders have a direct and positive impact on the level of expected performance in the organization. Those leaders are characterized by efficiency and ability to change the followers' beliefs and alter their goals in line with the objectives of the organization. In addition, Gumusluoglu and Ilsev (2009b) found that this type of leadership style has a strong influence on creativity and innovation through employees and the organization. Thus, having managers at higher level who exercise TL will lead to a competitive advantage for the organization (Riaz & Haider, 2010).

Currently, many organizations are complex and have dynamic work environments. Therefore, transformational leaders are the ideal agents of change who could help their followers and lead them to overcome uncertain times (Sabir et al., 2011). This will require building an innovative organization that will enable the transformational leader to achieve his goal by inspiring the followers and encouraging them to think in creative ways (Lam, 2011).

2.1.2 Sub dimensions of transformational leadership

Laohavichien, Fredendall, and Catrell (2009), among others, agreed that TL has four dimensions. These dimensions are idealized influence, inspirational motivation, intellectual

stimulation, and individualized consideration. Moreover, many researchers found through empirical studies that leaders who exhibit these four behaviors are able to adapt the values and norms of their followers based on organizational goals, contribute to changing personal and organizational concepts, and motivate followers to exceed their expectations above the initial performance (e.g., Jung, Chow, & Wu, 2003; Laohavichien et al., 2009; Nicholson II, 2007; Voon, Lo, Ngui, & Ayob, 2011). The following is a description of each of these dimensions:

Idealized influence. Gregory, Moates, and Gregory (2011) explained that the concept of idealized influence points to the degree to which the leader inspires his followers through moral behavior that will lead, as a result, to a permanent commitment and loyalty to their leader in different circumstances. Voon et al. (2011) stated that this concept refers to the attention of leaders to their followers in terms of encouragement, guidance, and motivation.

Moreover, the leaders with this dimension gain their followers' respect and trust by doing the right thing and focus on their achievements by adopting strategies of appreciation and open communication with them (Humphreys & Einstein, 2003). In addition, leaders deal with their followers in a manner consistent with the values, principles, and ethics of the organization (Voon et al., 2011). According to Dionne, Yammarino, Atwater, and Spangler (2004), the leader with this dimension highlighted the formulation and articulation of a vision to achieve the common goals of the organization.

Kuepers (2011) stated that the transformational leader, who characterized this behavior, has the ability to exert power, not only in the ideal way but also in the mutual influence between him and his followers through the exercise of mutual respect, trust, and commitment to high moral standards. In addition, Ladkin (2006) mentioned that this behavior is linked to charisma, which enables the leader to influence the extent of his followers' response and realize their envisioned imagination.

Inspirational motivation. According to Judge and Piccolo (2004), inspirational motivation describes the power of the leaders' vision and the ability of this leader to encourage his followers in the organization to achieve this vision through the creation of both individual and team spirit. It also refers to the way leaders motivate and inspire their followers by providing meaning and challenge to their work (Humphreys & Einstein, 2003).

Moreover, Voon et al. (2011) found that leaders with this dimension tend to pay attention to the differences between their followers and lead them toward achieving the desired goals. This dimension highlights the capacity of leaders in providing challenges to followers as well as facilitating the process and feedback donor of meaning through the identification of targets in a way that attracts followers and releases their intrinsic motivational energies (Kuepers, 2011).

Intellectual stimulation. This dimension explains how leaders can enhance the followers' innovative and creative skills by providing solutions to the problems in new ways without any criticism of the errors that may occur. This, in turn, motivates the employees and boosts their confidence, which affects achieving the goals of the organization in an innovative way (Birasnav, Rangnekar, & Dalpati, 2010).

In addition, Kuepers (2011) pointed out that the transformational leader and his followers are considered as catalysts of new insights through generating new ideas and different ways of approaching challenges. The transformational leader affects employee motivation, and he always calls them to practice deliberate activities that are interesting, provocative, and suggestive (Judge & Piccolo, 2004).

Moreover, the intellectual stimulation portrays the leadership behaviors that are related to providing the followers with decision making information and encouraging them to question the organizational values and norms (Voon et al., 2011). As a consequence, leaders can develop generative and exploratory thinking of their followers and stimulate their

innovative abilities (Nicholson II, 2007). They also encourage followers to try new approaches and develop innovative ways of dealing with organizational issues (Rafferty & Griffin, 2004; Voon et al., 2011).

Individualized consideration. According to Judge and Piccolo (2004), individualized consideration refers to the concerns of the leader regarding the followers' needs and confirms his readiness to provide all necessary support for developing and helping them to forward their career. Individualized consideration emphasizes the role of the leader in leading and developing the followers and focusing on their needs in order for them to realize their goals, grow professionally, and expand learning opportunities (Birasnav et al., 2010).

Moreover, leaders with this behavior provide a supportive climate and treat their followers not just as members of a group but as individuals who, in turn, will contribute to increase employees' motivation to focus more and do their jobs better (Nicholson II, 2007; Rafferty & Griffin, 2004). Practically, this dimension requires the leader to sympathize with his followers, listen actively to details, and encourage them to express their feelings, which help to create open communication with each of them (Kuepers, 2011). This includes being spontaneous, always treating followers with mutual respect, and celebrating all the diverse and individual contributions, whether by the leader or his followers (Jordan et al., 2009).

All of these dimensions require being combined and integrated together to achieve transformation (Ladkin, 2006).

The following is a brief summary of what has been mentioned on this issue.

Transformational leaders are individuals who are highly charismatic and can be trusted to do the right thing, which contributes to attracting the followers and inspiring them. Therefore, over time, the followers become more innovative, which increases the level of OI.

They can provide an inspiring vision, which motivates followers to look beyond the normal activities of their jobs and shows how the individual can work toward realizing it in

his current work. When employees believe that their work is relevant in the context of a larger and more meaningful design, they are quite involved in their work, and this involvement releases huge amounts of innovation in the organization.

This type of leader encourages followers to think independently and search for new solutions for the problems that exist as well as obligates them to use their own thinking and their own judgment about the proper course of innovative action.

Finally, they recognize the followers as human beings, orient them if necessary, appreciate their ideas and efforts, treat all of them equally, and encourage the organizational commitment that generates mutual respect and confidence among them all.

2.2 Organizational Innovation

Innovation has been the “buzzword” for all organizations in recent years (Damirch et al., 2011). Hartley (2005) explained that the reason behind increasing interest in innovation is that the subject is considered an important key for the survival of any organization in private and public sectors. This demonstrates the imperative need to innovate, or in Cooper’s words, “It’s War: Innovate or Die” (Eveleens, 2010, p. 1). It is important to first understand the main objective of innovation before going to the definition, which can be summarized as the development of ideas and reacting and modifying these for long-term survival (Mozhdeh et al., 2011).

The concept of innovation has caught the attention of a large number of researchers in the past (Janssen, Van der Vliert, & West, 2004). Gumusluoglu and Ilsev (2009 a) pointed out that this concept was considered for the first time by Schumpeter (1934) who acknowledged it by his description of the innovation process as the creation of a new brand and its impact on economic development. Since then, various researchers have described this concept differently as a key factor for the survival of the organization in the long term (Khan,

Rehman, & Fatima, 2009; Popadiuk & Choo, 2006). Some of the previous researchers consider innovation as a process to solve problems that the organization may face (Sarros, Cooper, & Satora, 2008; Prajogo & Ahmed, 2006). Moreover, innovation is considered as a form of learning or as a means that can respond to a variety of environmental changes in organizations (Ho, 2010). Vigoda-Gadot, Schwabski, Shoham, and Ruvio, (2005) viewed OI as a multidimensional organizational trait consisting of five dimensions: creativity, risk taking, openness to change, future orientation, and proactiveness. A few researchers define innovation as an outcome, and others define it as a complex process (Sarros et al., 2011). Innovation can also mean the adoption of an idea or behavior that is new to the organization (Popadiuk & Choo, 2006; Wejnert, 2002). It refers to change or to an activity that aims to develop the idea (Khan et al., 2009).

The existing literature presents different classifications of OI. For example, Sarros et al. (2008) mentioned that there are three emergent categories in the OI literature: the determinants of innovation, the process of intrafirm diffusion, and the interfirm diffusion research streams. Pacham and Zhang (2006) suggested two types of innovation: OI and technological innovation. Moreover, OI can be classified into two categories: technological innovation and administrative innovation (Ho, 2010). Pasche and Magnusson (2011) classified OI into two types: radical innovation, which requires completely new knowledge and resources (competence-destroying), and incremental innovations, which build upon existing knowledge and resources within a certain company. Subramaniam and Youndt (2005) identified four categories: individual, team, climate, and OI. They stated that innovations have five dimensions:

- Degree of novelty of innovation: refers to all assigned innovations from incremental to radical (Eveleens, 2010)
- Size of organization: if the organization is small or large (Hartley, 2005)

- Type of organization: can be a product, a process, or a service innovation (Albury, 2005)
- Place of innovation: whether the innovation took place in a public organization or a private firm (Eveleens, 2010)
- Environment in which the innovation was developed: refers to the stability of the environment to determine the extent to which an innovation can affect the leadership style (Hartley, 2005)

In conclusion, it seems obvious that innovation could be related to the qualities of TL (Nicholson II, 2007). Therefore, the next section addresses the nature of the relationship between the transformational leader and the OI supported by some previous studies that confirm and highlight this relationship.

2.3 Transformational Leadership and Innovation

OI is influenced by the views of the managers that focus on innovation (Laohavichien et al., 2009). This confirms that managers, who consider the concept of innovation as a value, provide the necessary resources and behavioral support for employees to accept and explore new ideas (Damirch et al., 2011). In addition, it will encourage their followers to perform better than what is expected and do their best to achieve the objectives of the organization (Mozhdeh et al., 2011). Transformational leaders are able to drive innovative work behavior, particularly among men. They are able to accept challenges and apply innovative ideas at workplace exhibiting innovative work behavior (Khan, Aslam, & Riaz, 2012). Even if leaders and followers have the capacity and capability for innovation, there are possibilities of a lack of willingness to undertake efforts in a given environment and a particular situation because of unknown reasons (Sarros et al., 2008). If this is so, employees will experience discouragement leading to difficulties in taking initiatives at work. The reason behind this is

the employees' fear of negative consequences related to risky decisions (Laohavichien et al., 2009). This is where managers play an important role in developing, transforming, and institutionalizing OI (Kavanagh & Ashkanasy, 2006).

Transformational leaders who are considered as a source of inspiration for their followers are able to motivate them and help their followers reach their best performance levels, thus positively affecting the organization (Garcia-Morales et al., 2007). Moreover, transformational leaders show a lot of attention to the needs of their followers and ways to improve performance, which increases the interaction between them and changes their views in relation to the objectives of the organization and encourages and motivates them to work more toward achieving those (Laohavichien et al., 2009). In addition, TL has been theoretically and empirically linked to a range of organizational outcomes (Kavanagh & Ashkanasy, 2006). Despite the importance of leadership in stimulating innovation, there is a lack of research that addresses this vital relationship between leadership and innovation (Oke, Munshi, & Walumbwa, 2009). Jung et al. (2003) argued that TL improves innovation in two ways:

1. By organizing employees' personal value systems, which increase the levels of motivation toward higher levels of performance
2. By encouraging employees to think in creative ways

Such leaders have a vision that inspires their followers and boosts their desire to perform better than expected and challenge them to adopt innovative approaches in their work rather than imitating old ones (Mumford & Licuanan, 2004).

Moreover, when a leader encourages followers' efforts to solve old problems in new ways, he provides his employees with opportunities to explore, investigate, and experiment (Nicholson II, 2007). Previous empirical literature confirms the relationship between TL and innovation. Chen and Lee (2007) found that TL enhanced the innovative abilities of the

employees and the organization, and Khan et al. (2009) claimed that transformational leaders encourage creative ideas that promote innovations within the organization.

Damirch et al. (2011) examined the impact of TL on innovation at the organizational level through 150 workers of Ardabil Province SMEs in Iran. They found that the four dimensions of TL positively related to OI. They stated that transformational leaders offer a situation for OI through their ability

1. to fulfill the followers' need and pay attention to them;
2. to increase the level of innovation through designing realistic goals and entrusting their followers the task of achieving those organizational goals;
3. to provide the followers with motivation, innovation, and the feeling of independence, as well increase the sense of qualification, identity, and adequacy; and
4. to encourage the followers' enthusiasm to find different solutions by enhancing their qualification and adequacy on how to use their personal and organizational capacities to increase innovation.

In addition, Jung et al. (2003) studied 32 Taiwanese companies specializing in the electronics industry. Their study proposes four hypotheses regarding how top managers' leadership styles directly and indirectly affect their companies' innovation through two moderating variables: empowerment and organizational climate. Their analysis yielded a direct and positive link between TL and OI. These researchers suggested that the leader who had the ability to change and influence the work environment and OC is able to influence and motivate followers to achieve organizational goals.

Furthermore, Gumusluoglu and Ilsev (2009a) conducted a study of 163 employees and 43 managers from micro and small-sized Turkish enterprises to determine the impact of transformational leaders on innovation. Their study examines the influence of TL on OI and

considers both internal and external support for innovation as contextual conditions affecting on this relationship. The finding provided support for the positive influence of TL on OI. They found a significant, direct, and positive relationship between TL and innovation. Moreover, external support for innovation significantly moderated this relationship, whereas internal support for innovation was not significant. This study demonstrates that TL is an important factor that may affect OI and motivate managers to get involved in TL behaviors to enhance OI. Table 2 identifies some earlier studies and their findings with regard to this relationship.

Table 2. Some Studies That Support the Relationship Between TL and OI

Author(s)	Title	Year	Findings
Damirch et al.	Transformational leadership style and innovative behavior on innovative climate at SMES in Iran	2011	Transformational leaders offer a situation for OI through their ability (1) to fulfill the workers' needs, (2) to increase the level of innovation through designing realistic goals and trust, (3) to provide the followers with motivation and innovation, and (4) to encourage the followers' insistence on finding different solutions.
Gumusluoglu and Ilsev	Transformational leadership, creativity, and organizational innovation	2009a	The findings provided support for the positive influence of TL on OI. They found a significant, direct, and positive relationship between TL and innovation. External support for innovation significantly moderated this relationship, whereas internal support for innovation was not significant. This study demonstrates that TL is an important factor

			that may affect OI and motivate managers to get involved in TL behaviors to enhance OI.
Jung et al.	The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings.	2003	There is a direct and positive link between TL and OI. The leader who has the ability to change and influence work environment and OC is able to influence and motivate followers to achieve organizational goals.

Note. TL = transformational leadership; OI = organizational innovation; OC = organizational culture.

On the basis of the aforementioned studies, it can be concluded that TL has an important role to play in encouraging and fostering innovation in organizations.

2.4 Organizational Culture

All previous studies agreed on one point: similar cultural backgrounds invariably produce similar thought and behavioral patterns (Ramachandran & Krishnan, 2009). The OC shapes organizational processes, consequently influencing the development of the organizational climate (Jaskyte, 2004). Most organizations try to make a natural and basic

framework, which helps their employees to accept creativity and innovation as a basic cultural norm during all the changes that may occur (Mozhdeh et al., 2011). Moreover, it is important that transformational leaders pay due attention to culture because leaders cannot understand the needs of their followers without understanding their values, norms, and beliefs (Amabile, Schatzel, Moneta, & Kramer, 2004).

OC impacts every aspect of work such as ethical behavior, self-confidence, performance, productivity, and commitment (Givens, 2008). The positive impact of these aspects is that it holds an organization together, whereas in its absence, the negative impact could be seen in the organizational falling apart (Camelia & Elena, 2010). The members of an organization should work together to make better decisions and maintain common values. When there is a decline in performance and productivity, the leader should negotiate to make sure members are working together with problem-solving techniques (Ogbonna & Harris, 2000). There is a need for the proper leadership style to maintain the development of OC (Jaskyte, 2004). The beliefs of a leader, his assumptions and values have a direct impact on OC. The leader should be able to teach and be a role model and a mentor when there is poor OC (Elenkov & Manev, 2005). A well-developed and understood OC brings huge benefits to the organization and its personnel by enhancing employee performance and avoidance of selfless behavior (Kavanagh & Ashkanasy, 2006). Moreover, Givens (2008) argued that the level of influence of a leader can be seen from his employees working in an organization. A positive influence will maintain their productivity, performance, and commitment. In case of negative impact and outcome, a leader should revise values and assumptions made in an OC.

The influence of the transformational leader upon the OC begins with a change in his vision, which produces positive changes within the organization (Camelia & Elena, 2010). There should be a clear sense of direction and a willingness to achieve organizational goals and a perception of how the changes will act in the long term so as to guide the organization

in the new direction (Givens, 2008). To make the followers understand the concept of change, transformational leaders must clearly define the major points to be followed and should have the plan for the future orientation in solving the problems as they arise (Camelia & Elena, 2010).

Transformational leaders should create a strong culture so to encourage the followers and support them in self-learning (Kavanagh & Ashkanasy, 2006). According to Camelia and Elena (2010), a continuous flow of information and feedback from the front line creates a vigorous fresh look. For the change process to be accomplished, the people who are highly experienced and proficient in their work should be hired.

The transformational leader provides a vision for a positive change in an OC. This implies making proactive positive movement in an organization with a clear sense of purpose and clearly defined goals to be achieved in the long term (Amabile et al., 2004). To maintain a positive impact, an organization needs to be guided toward new directions by managing systematic change (Givens, 2008). Thus, employees would work with a passionate sense of purpose and a strong vision for organizational development (Camelia & Elena, 2010).

An OC has a continuing influence on workers and their work, and so leaders should be well aware of the prevalent culture in their organization. When the culture becomes transformational, it becomes more effective in achieving optimum organizational performance and individual growth (Kavanagh & Ashkanasy, 2006). There is a sense of determination, of putting the team above self-interests, a disposition to place the organization above the individual, and a long-term commitment on the part of workers (Givens, 2008). Therefore, transformational leaders affect three areas, namely, the culture beyond the employees of the organization, the culture among the employees of the organization, and the internal mind-set of the employees of the organization (Camelia & Elena, 2010).

Through the impact on organizational productivity, transformational leaders have influenced the culture of organizations (Givens, 2008). To improve productivity and innovation within the organization, the transformational leader has to accentuate the culture and values of an organization (Kavanagh & Ashkanasy, 2006). The OC can be influenced when the transformational leader helps the organization in seeing the world in different ways (Givens, 2008). The culture of an organization can determine the effectiveness of its degree by its type or by its strength (Jaskyte, 2004).

Lai and Yusof (2011) argued that innovation is fostered in an OC as an important engine of progress in an uncertain market and for achieving sustainability. A few studies exploring the question whether innovation is adopted or generated found that OC is a prerequisite to generating or adopting innovation.

2.4.1 Impact of organizational culture

It has been stated that it is only through leadership that one can actually develop and nurture the culture that is adaptive to changes (Sarros et al., 2008). Jaskyte (2004) stated that culture produces a clear vision and helps the leader to build the essential climate to achieve OI. Moreover, transformational leaders can transform the OC through training, education, promotion, and other mechanisms that help to improve employees' commitment and loyalty (Kavanagh & Ashkanasy, 2006). This helps in creating a conducive environment for innovation and motivates employees to realize the objectives of the organization (Martins & Martins, 2002).

Kavanagh and Ashkanasy (2006) argued that the concept of organizational climate can be considered as an expression of the cultural practices that arise because of some contingencies in the internal and external organizational environment. This view supports the climate-for-innovation approach by Ostroff, Kinicki, and Tamkins (2003).

Hutahayan, Astuti, Raharjo, and Hamid (2013) found that TL operates in different ways. The leader is represented as a supervisor of subordinates working together to achieve organizational goals by methods that are ideal; he inspires, motivates, considers the individual, and stimulates intellectually. This research was conducted among employees of PT Barata Indonesia. The research was based on approximately 522 people, with 303 people from UPG & Corporation along with 22 people from EPC and 83 people from UUM Tegal. Employees of PT Barata Indonesia were selected by the appropriate sampling procedures. The research sample was about 230 people. The research was done using four variables: TL, cultural organization, commitment of organization, and organizational citizenship behavior (OCB). The research has proved that transformational leaders had no direct effect on the OCB but the mediating effect of OC and commitment did have a significant effect on OCB. The findings support the idea that a transformational leader plays an important role in the creation of an OC. It is possible to explain this by a tendency of followers to adopt the values of their transformational. Moreover, the researchers found that creating an OC, getting employees to be involved in it, and helping create the stability of OC is the role of a transformational leaders. The motivational behavior of transformational leaders creates the impression that the leader has the vision and competence for achieving success. The sign of an effective leadership is in the communication through behavior rather than merely through words.

Sarros et al. (2011) examined the mediating effect of OC on the relationship between TL factors and climate for OI for 2,380 members from the Australian Institute of Management. The research examined the support of innovation rather than OI because it is a useful proxy and it is difficult to measure innovation. They explained the views of two schools of thought on leaders and culture. The first one is the functionalist school, which claims that leaders are the architects of culture change. The second is the anthropological

school of thought, which sees the leaders as a part of culture and able to create a culture. They found that the leader's vision is a major facet of TL and is strongly associated with OC and innovation. In addition, they found that articulating the vision can achieve results only when its development involves influencing the workers and clients of the organization. In addition, they found that TL is associated with OC, primarily through the processes of articulating a vision, through the setting of high performance expectations, providing individual support to workers and innovating for the organization. Furthermore, the findings supported the two schools of thought of transformational leaders in which they influence followers' innovation. Besides, the findings suggested that helping leaders better articulate their organizational visions is a worthwhile endeavor, because these leaders engage their workers in the strategic orientation of their organizations and build innovative and creative enterprises as a result. Furthermore, the findings suggested that leadership vision as a component of TL needs to be clearly articulated at either an individual or organizational level of analysis.

Gumusluoglu and Ilsev (2009a) examined the culture of organization, innovation of organization, and TL to find the relation between them that will help in changing organizational strategy. Most studies have proven that OC is valuable, so recent studies focus more on exploring the relationship in detail. They argued that OI is a proxy that is very useful when one cannot get the direct measures of the behavior across the industry sectors. In the frame of hypotheses research, the term *climate* is more specifically used for OI. So for the top managers' result, the context and climate for innovation is used. For an OC, the type of leadership needed for change in culture is transformational because the change in culture should have enormous energy power and commitment for achieving the outcomes. For the successful adoption of cultural organization, the top management should articulate the required changes.

Elenkov and Manev's (2005) study of 270 top managers' influence on innovation in 12 European countries found that the sociocultural context was essential in the relationship of leadership innovation and affirmed that leaders positively influenced innovation processes in organizations. They found that the level of innovation is fostered in Russian culture by the demonstration of confidence, charisma, and idealized influence in addition to management by exception (active and passive), whereas in Sweden, it is fostered by inspirational motivation and intellectual stimulation.

Jung et al. (2008) carried out a study of 53 Taiwanese electronics and telecommunications companies. They proposed a model to investigate how TL by top managers (CEOs) can affect their companies' innovativeness. This model includes direct and indirect effects moderated by characteristics of OC, structure, and the external environment. Their results indicate that TL had a positive relationship with OI mediated by OC that encouraged employees to freely discuss to get new and innovative ideas. They found out that the leader who had the behavior of the four TL dimensions could rearrange his followers' values, encourage them to accept the changes on the personal and the organizational level, and help them to exceed initial performance expectations as well. The more leaders stimulate their employees intellectually, the more these employees will be motivated and focus on their work. This boosts their interest in their tasks and enables them to try new and better approaches of doing things, which would lead to a high level of OI. The researchers also found that intellectual stimulation and the continuing ability to challenge followers will have a positive effect on OI. Table 3 summarizes some studies that support the effect of OC on the relationship between TL and OI.

Table 3. Some Studies That Support the Effect of OC in the Relationship Between TL and OI

Author(s)	Title	Year	Findings
Sarros et al.	Leadership vision, organizational culture and support for innovation in not-for-profit and for-profit organizations	2011	Vision is a major facet of TL and is strongly associated with OC and innovation. Articulating the vision can achieve results only when its development involves influencing the workers and clients of the organization. TL is associated with OC, through the processes of articulating a vision, the setting of high performance expectations, providing individual support to workers and innovation for the organization.
Mulla	Transformational leadership is the key to innovation in organizations	2010	Transformational leaders are individuals who are highly charismatic and can be trusted to do the right thing. This attracts the followers and inspires them. Therefore, over time, the followers become more innovative, which increases the level of OI. They can provide an inspiring vision, which motivates followers to look beyond the normal activities of their jobs. When employees feel that their work is part of the context of a larger and more meaningful picture, they are quite involved in their work and this involvement releases massive amounts of innovation in the

			organization. These leaders encourage followers to think independently and search for new solutions to the problems that exist, as well obligate them to use their own thinking and their own judgment about the proper course of innovative action. Finally, they recognize the followers as human beings, orient them if necessary, appreciate their ideas and efforts, treat all of them equally, and encourage the organizational commitment that generates mutual respect and confidence between the employees and their leader.
Jung et al.	Towards understanding the direct and indirect effects of CEO's transformational leadership on firm innovation	2008	TL has a positive relationship with OI as it is mediated by OC that encourages employees to freely discuss to get new and innovative ideas. A leader who has the behavior of the four TL dimensions could rearrange his followers' values, encourage them to accept the changes on both a personal and an organizational level as well as help them to exceed initial performance expectations. This boosts their interest in their tasks and should enable them to try new approaches to doing things, which is likely to lead to high levels of OI.

Elenkov and Manev	Top management and influence on innovation: The role of socio-cultural context	2005	The sociocultural context was essential in the relationship of leadership innovation and affirms that leaders positively influence innovation processes in organizations. Innovation is fostered in the Russian culture by the demonstration of confidence, charisma, and idealized influence in addition to management by exception (active and passive), whereas in Sweden, it is fostered by inspirational motivation and intellectual stimulation.
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Note. TL = transformational leadership; OI = organizational innovation; OC = organizational culture.

2.5 Followers' Creativity

According to Gumusluoglu and Ilsev (2009b), creativity refers to the way novel and beneficial ideas are produced, whereas innovation is the extent of success achieved in the implementation of these creative ideas within the organization. A transformational leader not only undertakes creative actions but also opens up the enterprise of creation to their followers (Simic, 1998). Transformational leaders demonstrate their creativity in the process of transformation. Hence, appreciation of the followers or the employees helps in bringing out their creative talent, and a strong motivational force is built by their involvement in the whole process (Laohavichien et al., 2009). Moreover, TL boosts followers' maturity level and encourages them to focus on achievement, self-realization, and the welfare of the community (Alarifi, 2011; Tims, Bakker, & Xanthopoulou, 2011). For instance, Arnold, Turner, Barling, Kelloway, and Mckee (2007) showed that transformational leaders directly strengthen their

followers' confidence to challenge traditional methods and to depend on themselves in answering any question they may face at work.

Kuepers (2011) argued that an explanation of the four dimensions of TL will make it clear how this kind of leadership can promote creativity.

Idealized influence represents building confidence in the leader and at the same time followers' appreciation of the leaders. Such confidence helps the leader in motivating and aiming to redirect the organization for greater achievement (Elkins & Keller, 2003). If a leader performs the job well, then other potential followers will appreciate it and will believe in him (Humphreys & Einstein, 2003). In short, the main task of a leader is to be a role model for his followers as they try to imitate and idealize him (Laohavichien et al., 2009). Inspiring motivation is the ability of TL in qualifying the leader as a figure of inspiration and motivation to the followers with appropriate behavior (Judge & Piccolo, 2004). At a time when transformational changes are being introduced in an organization, the leader has to bring about the clarity of purpose and the stimulation for following the new ideas (Simic, 1998). A transformational leader plays an important role in the process of transforming an organization through intellectual stimulation; leaders stimulate the followers' efforts as catalysts in creation and innovations and by reexamining the existing assumptions (Kuepers, 2011). Elkins and Keller (2003) explained that by intellectual stimulation, the leader stimulates his followers to develop innovative ways of dealing with organizational issues. Stimulation of positive change is achieved by thinking about the problems. Thus, the follower learns new ways and creative ideas in solving problems. Individualized consideration has the ability to reduce the followers' individual analysis (Birasnav et al., 2010). Including the followers in the process of transformation implies diagnosing their needs and wishes, abilities, and values in the correct form (Kuepers, 2011). Therefore, a transformational leader should know what would motivate his followers individually (Simic, 1998). This is because

using individualized consideration, the leader helps his followers to expand their knowledge to solve problems at work (Laohavichien et al., 2009).

According to Afshari, Siraj, Ghani, and Afshari (2011), transformational leaders promote creativity through intrinsic motivation, by empowerment, and by creating supportive environment for innovation in the workplace, which enables overcoming challenges. Therefore, the leader who acquires these four behaviors leads the followers to be more creative (Gumusluoglu & Ilsev, 2009b). Some of the previous studies on leadership behavior found that the leaders with these behavioral dimensions are more powerfully equipped to define the values and norms of their followers, to encourage individuals and organization to deal with changes, and to support followers to perform beyond expectations (Alarifi, 2011).

Humphreys and Einstein (2003) believed that transformational leaders can change followers so they will become creative and innovative. The followers' efforts are stimulated for creative and innovative activities where the transformational leader questions their assumptions, approaches old situations with fresh perceptions, reframes problems, establishes an OC, promotes innovative work, and approaches and implements risk-taking ventures (Afshari et al., 2011). When an organization appreciates innovative approaches and cultural values, the employees undertake calculated risks, derive intrinsic enjoyment, and accept challenging assignments (Kuepers, 2011). Innovative behavior is increased when there is support for innovation at the organizational level. There is a significant and positive association between the transformational leader and his followers during the exchange and support for innovative ideas (Agbor, 2008). Therefore, the transformational leader plays an important role in establishing an innovative culture and facilitating creativity at the organizational level.

Boerner, Eisenbeiss, and Griesser (2007) found that transformational leaders exercise a strong influence not only on their followers' performance but also on their creativity. This

is necessary for these leaders to boost their FC. The success of the leadership takes place through the mediating process. Followers have shown to partially mediate the relationship between leadership and innovation.

Agbor (2008) has explored the role of leadership in the process of innovation for FC. For an organization to be successful in meeting competitive challenges, its employees must be motivated to be creative. The author has found that leaders should be able to implement strategies for encouraging FC. Therefore, to have constant innovation, a leader should be able to establish an environment to build and renew a culture of creativity among his followers. The author argues that the creativity of an organization is dependent on leaders who manage and encourage diversity at the workplace where they can sustain their FC. Moreover, the primary source of competitive advantage is the creativity of the followers. Leaders should be able to lead and encourage creativity, and the organization should recognize it as an integral part of a leader conduct. With a friendly and supportive work environment, a leader will be able to generate creativity in his team members. In a secure working environment, followers feel that they are accepted and are able to raise their level of creativity. At the same time, transformational leaders should respect, harness, and value the richness of backgrounds, ideas, and perspectives of every staff member.

Afshari, Ghavifekr, Parhizkar, and Ayoufu (2013) found that there is a positive and significant relationship between TL and FC. Indeed, creativity allows solving workplace problems and generating great ideas. Afshari et al. stated that creativity is the interaction among process, aptitude, and environment by which a group or individual produces competitive features of a product. In addition, they assert that many researchers have emphasized the importance of leadership in bringing about change and mobilizing creativity. FC is necessary for change to enhance innovation in organizations where transformational leaders are energetic, enthusiastic, and passionate about it.

According to Althonayan and Alarifi (2013), there is a positive effect of TL on the creativity of followers. These authors have found that in Saudi Arabia, a TL is positively related to the creativity of employees. They found that factors such as employee learning and psychological empowerment have a positive mediating effect on the relation of FC and TL. However, the intrinsic motivating factor did not mediate the relation between these two. Thus, the researchers further contribute to the literature on TL by developing a theoretical framework that will help in examining the factors that influence TL and in enhancing the creativity of followers in the public sector. In reviewing the literature on leadership, it is clear that TL occurs when both the followers and the leaders raise high levels of motivation and morale for both. According to the researchers, transformational leaders are those who inspire and stimulate the followers in achieving the outcomes and at the same time in developing the capacity of leadership. It appears that the transformational leader boosts and raises the maturity level of followers and are concerned about the achievements of followers the well-being of others. Moreover, the transformational leader encourages creation and innovation and helps in creating advantages.

Likewise, Alzawahreh (2011) found that transformational leaders play a significant role in influencing the creativity of their followers by motivating and encouraging them to think critically about the problems and generating ideas for solving those problems. These leaders encourage followers to recognize their own needs and other followers' needs and appreciate them for maximizing their potentials. They argue that TL, as already mentioned above, has four main components: being a role model, inspiring followers to meet organizational goals, encouraging followers to be more creative and innovative, and providing responsible to the needs of employees.

2.5.1 Impact of followers' creativity

FC has a positive and negative impact on OI (Alarifi, 2011). TL plays significant role motivating followers to be creative (Jandaghi, Matin, & Fajami, 2009). Alarifi (2011) argued in his study that there are positive impacts of the FC on organizational performance. These impacts are better workplace relationship, better OL, variety of intrinsic motivation, high level of empowerment, and innovativeness. In this study, he has collected data with a qualitative and quantitative approach from the public sector in Saudi Arabia.

At the workplace, there is a noticeable link between a leader's support for employee performance and creativity due to empowerment and commitment (Lee & Tan, 2012). Both employee creativity and performance are essential to organizational success. To ensure this, transformational leaders strike a psychological balance (Alarifi, 2011; Michaelis, Stegmaier, & Sonntag, 2010). Lee and Tan (2012) mentioned in their study that an employee should be able to perform his jobs and tasks. Moreover, they found that employees will exhibit creative behaviors and will remain competitive when they are actively involved in their work. They also found that individual creativity is classified into motivation, creative thinking skills, and expertise. Transformational leaders influence these components for the better to maintain good workplace conditions and practices.

In his study on leadership, Alzawahreh (2011) found that leaders stimulate creativity among their followers by challenging them about their own values to have innovative ideas to work in a new way and style rather than imitate traditional and old ways of thinking and doing things. He argued that followers get supportive work environment and attention to their needs. Therefore, the transformational leader sets expectations for creativity and OI by being a role model. The result of the study confirmed that transformational leaders enhance their employees' ability in the development of new ideas by providing them with support and empathy leading to higher creativity and innovation. Moreover, transformational leaders can

speculate positively and enhance FC. Finally, the author found that there are determinants of creativity at the individual level, such as problem solving ability, personality, and attitudes.

Gumusluoglu and Ilsev (2009b) studied 163 research and development personnel and managers at 43 micro and small-sized Turkish software development companies. They proposed a model of the impact of TL on FC at the individual level and on innovation at the organizational level. The findings of their model suggested that TL has important effects on OI at both the individual and the organizational levels. At the individual level, the findings showed that there is a positive relationship between TL and employees' efforts to achieve OI. In addition, TL influences employees' creativity through empowerment. At the organizational level, the findings showed that TL is positively associated with OI.

Furthermore, Jandaghi et al. (2009) conducted a study in Iran, which included 68 managers and employees of private manufacturing companies in Qom's molding industry. The aims of their study were (1) to compare TL in successful and less successful companies and (2) to study the four dimensions of TL (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) and their impact on these companies. They found that the effect of TL is more evident in successful companies than that in unsuccessful companies.

The influence of idealized influence, inspirational motivation, intellectual stimulation, and individual consideration is significantly higher in successful companies than that in unsuccessful companies. Moreover, the highest mean in successful companies belongs to inspirational motivation (3.47) and individualized consideration (3.12).

Leaders in successful companies, with intellectually stimulating behavior, can stimulate employees and inspire them to find new sophisticated ideas that challenge them to use alternatives to traditional solutions, as they always encourage and support their creativity and innovation.

Managers in successful companies who are characterized by individualized consideration allocate time to their employees and satisfy their personal needs. They provide a supportive climate with concern for employees' feelings. This increases the employees' intrinsic motivation to work collectively and encourages them to find creative approaches in completing their work and feel empowered.

Moreover, Shin and Zhou (2003) examined 290 employees and their supervisors from 46 Korean companies and found that TL was positively related to the FC, which enhanced innovation in their organizations. They found the following:

- TL positively influenced FC.
- Followers' conservatism, considered as a value, moderated the relationship between TL and creativity.
- Intrinsic motivation mediated the contribution to the interaction of TL.
- Conservatism partially mediated the contribution of TL to creativity.

Modassir and Singh (2008) stated that TL positively relates to FC due to intrinsic motivation and followers' conservatism. This leadership style boosts intrinsic motivation and provides intellectual stimulation where followers face the challenges of old ways of doing things and confirm to status quo. It is also a complex, multifaceted, and dynamic form of influencing and affecting followers with different aspects of social self-concepts and focusing on change from one level to another. The behavior of TL stimulates the intellect of followers and their sense of self-worth with the transmission of the message that leaders have belief in their abilities and their integrity. This results in increased commitment, loyalty, and cooperation on the part of the followers where there is also self-interest for the welfare of the organization. TL has a dual effect on the creativity of the followers through the creation of personal and social identification where these forms of identification lead to a wide range of outcomes such as extra effort, empowerment, cohesiveness, and efficacy. These effects are

made possible by priming employees' relational personality and promoting recognition with the leader. This is the result of the emotional intelligence that the leader exercises with the combination of head and heart and the ability to understand his followers.

Several studies have examined the impact of TL and found that it produced more positive results than negative results in increasing FC resulting in OI (Jung et al., 2003). In their study, these researchers assessed the performance of 78 managers with several creative ideas. They found that the leader provides intellectual stimulation where followers were supported for innovation within the unit or department of a leader. The positive relationship becomes insignificant when there is absence of a supportive environment by TL. Similarly, the performance of research and development is positively influenced by the supportive role of the leader. The innovative orientation of the leader added a unique value to the completion of assigned tasks and activities. Table 4 summarizes some of these studies.

Table 4. Some Studies That Support the Effect of FC in the Relationship Between TL and OI

Author(s)	Title	Year	Results
Jandaghi et al.	Comparing transformational leadership in successful and unsuccessful companies	2009	The effect of TL is more evident in successful companies than that in unsuccessful companies. The effect of idealized influence, inspirational motivation, intellectual stimulation, and individual consideration is significantly higher in successful companies than that in unsuccessful companies. The highest mean in successful

			companies belong to inspirational motivation (3.47) and individualized consideration (3.12). Leaders in successful companies can stimulate the employees and inspire them to find new sophisticated ideas that challenge them to use other alternatives, as they always encourage them toward creativity and innovation. A manager who is characterized by individualized consideration in successful companies allocates time to his employees and satisfies their personal needs. He provides a supportive climate in which the individual members are supported by the manager, who cares about their feelings.
Gumusluoglu and Ilsev	Transformational leadership and organizational innovation: The roles of internal and external support for	2009b	TL has important effects on OI at both the individual and the organizational levels. At the individual level, there is a positive relationship between TL and

	innovation		the employees' efforts to achieve OI. TL influences employees' creativity through psychological empowerment. At the organizational level, TL positively associates with OI through creativity, which is measured with a market-oriented criterion developed specifically for developing countries and newly developing industries.
Shin and Zhou	Transformational leadership, conservation, and creativity: Evidence from Korea	2003	TL positively influences the creativity of the followers. Followers' conservatism, considered as a value, moderated the relationship between TL and creativity. Intrinsic motivation mediated the contribution of the interaction of TL.

Note. TL = transformational leadership; OI = organizational innovation.

2.6 Organizational Learning

Learning is important for organizations because it gives them the opportunity to adapt, to modify strategies in unstable business environments, and to achieve a higher performance (Patterson, Warr, & West, 2004). Learning organizations are about art and practice (Bass, 2000). It is an important topic for an organization's development and growth (King, 2009). For centuries, philosophers, scientists, and intelligent nonprofessionals have shown concern for creating, communicating, and acquiring knowledge with an emphasis on

knowledge reutilization (King, 2009). From OL, there emerged the concept and practice of *knowledge management*. Here, learning organizations are able to create and acquire potential and useful knowledge so it will be possible for employees to use that particular knowledge at the proper location and time (Patterson et al., 2004). OL focuses on the process, whereas knowledge management focuses on the content itself (King, 2009).

The experience in an organization interacts to create knowledge. It is central to the prosperity of the organization, and so a better understanding of learning promises to contribute both to the improvement and the advancement of the organization (Argote & Spekter, 2011). To have effective learning organizations, appropriate leadership is required (Wang & Ahmed, 2002).

Bass (2000) argued that studies examining the current and future states of the learning organization and leadership have focused on organizations in general and on service and productive enterprises in particular. He mentioned that organizations should adapt when operating in changing environments. All leaders should learn to adapt to emerging changes. For example, a leader may look at opportunities to make positive changes in the workforce diversity. Bass confirmed that the engine of change is leadership. In addition, he stated that there is a need for changes in leadership based on organizational development and maturity. Accordingly, learning organizations are willing, ready, and able to change with TL (Bass, 2000).

The case study by Sarros et al. (2008) found that a positive relationship exists between TL and OL. The study of 168 food companies was conducted in the food manufacturing industry in Malaysia, Taiwan, and China. They argued that without OL, there is no mediating link between TL and OL. They found that TL is a powerful tool to bring about development in an organization. It forms teams and groups by bringing people together to follow, support, and facilitate the processes of change and OL. Once applied, it becomes

possible to learn by means of mutual talks, communications, experimentation and exploration. Moreover, TL boosts OL through intellectual stimulation, inspiration of creative ideas, and encouraging self-confidence among members of the organization.

According to a study conducted by Norshidah and Kasbon (2013), there is a positive relationship between TL and OL. This study used 120 academics from both private and public higher educational institutions in Malaysia. The authors found that OL is important because of the tremendous forces of change. They argued that some of the forces of change are advancement in technology, globalization, and competition. A learning organization will adapt to strategic changes required for remaining competitive in the business environment. Therefore, there is need for organizational members and top management to be equipped with organizational knowledge because learning is essential to remain competitive. Moreover, they found that the support of a leader is essential in promoting a learning culture among members of the organization. Commitment from the top management and openness among employees across the organization are necessary. In addition, transformational leaders prepare their followers within a learning environment by continually supporting their organizational changes through understanding and knowledge acquisition. These leaders, more than transactional leaders, are responsible for initiating changes in the organization. The authors stated that during OL and change, the qualities of TL are required to achieve the empowerment of followers to bring about changes from one condition to another. The learning organization's development of the learning process is facilitated by TL because of its readiness to change. These leaders are innovative and satisfy their followers by creating a culture of learning in an organization.

In another study, Hugo, Vlado, and Miha (2009) stated that there are three issues in OL process and TL theory: the question whether influence is stronger or not, the impact of TL, and the effects on transactional leadership. The findings and results in this empirical

study showed that there is a strong relationship and impact of TL on OL. They observed that to develop a learning organization, it is important to have TL capability with a contingent approach toward OL and leadership. Transformational leaders encourage honest, open dialogue, fostering timely communication and collaboration between members of the team. The encouragement consists of different ideas and views. These leaders act as catalysts in speeding up the acquisition and distribution of knowledge. They also facilitate the ability of organizational members in creating and using knowledge. The authors argued that the OL process consisted of information processing by interpretation, distribution, and acquisition of knowledge, to bring about behavioral and cognitive changes.

In their study, Wang and Ahmed (2002) explored the relationship between organizational and individual learning. Their study deals with the action-learning process where the learning organization and OL are important for organizational change. The main learning modes are experiential learning, observational learning, enactive learning, rational learning, and self-efficacy.

2.6.1 Impact of organizational learning

When an organization learns, its members acquire the knowledge required to bring innovative ideas in their products and services (Hugo et al., 2009). In their study of 125 Indian companies to explore OL, Bhat, Rangnekar, and Barua (2013) found the following:

- The followers' of transformational leaders are more satisfied and committed because the members are empowered while their individual and personal needs and development are attended to.
- OL facilitates social interaction among organizational members where they communicate and coordinate more often.

- It is difficult to unlearn from team learning to individual learning with overall OL. Members are expected to learn whenever a change or innovation is required.
- An organization should provide learning opportunities to its employees so they can share and learn in groups.

Leaders expect that an individual should develop specific skills at the workplace as a part of their learning and development process. Therefore, transformational leaders have high expectations from their followers, which sometimes pressure them. The actions of the leader challenge their followers' ways of thinking so they learn and become creative. They are able to find new solutions to problems and make recommendations. At the same time, the leader supports and provides attention to followers so they are able to contribute. They motivate followers by projecting an idealized but achievable vision, stressing ambitious goals, and viewing the future with optimism.

Most of the impact is from previous phases of information processing, where members are part of the learning and change process in the external or internal business environment.

An organization benefits from learning because it ensures alignment of the future with the organizational mission, which, in turn, depends on the reliability of its transformational leaders.

There are more positive factors when transformational leaders are responsible for ensuring leader job performance, follower motivation, and follower job satisfaction. If followers are not heard and the leader shows poor communication skills, then OL will have a negative impact. Leaders will be able to hinder or promote innovation through OL. Consequently, transformational leaders affect all the constructs of the OL process when they do not perform their job effectively.

According to Bryant (2003), transformational leaders invest greatly and continuously in supporting and developing OL to accomplish high innovation and effectiveness in the organization. Many previous studies noted a positive relationship between TL and OI moderated by OL (de Weerd-Nederhof, Pacitti, de Silva Gomes, & Pearson, 2002).

The study by Morales, Montes, and Jover (2006) showed that there was a need for considering both OL and OI for promoting organizational entrepreneurship to increase competitive advantage. They found that there was a need for strengthening various strategic factors or capabilities to achieve improvement in organizational performance and growth of entrepreneurship. The sample used in their study was 408 Spanish organizations analyzed using interfactor correlations matrix and multiple regressions. To address a rapidly changing environment, they argued that there was a need for dynamic capabilities from OL and OI for integration, reconfiguration, and building of competencies. With TL, it becomes possible to support members of the organization in promoting innovation and learning. They observed that the leader will be able to commit openly to innovation and learning so members will overcome difficulties that prevent innovation and learning from being implemented. Therefore, the leader should be able to tackle the new intellectual capital-based economy. Accordingly, with a supportive leadership, it will become possible for an organization to innovate and learn through dialogue, experimentation, personal mastery, and organizational knowledge.

Škerlavaj, Song, and Lee (2010) tested a model of innovativeness to understand the impact of an OL culture on different groups. The data used are from 201 Korean companies employing more than 50 employees. They stated that organizations work under competing pressures and there is need to come up with new ideas such as new products or services consisting of new operation procedures, new production technology, or new strategy for management and leadership. Therefore, OI is essential for the creation of an OL culture. An

extensive review of the literature reveals that there is a strong and growing relation between OI and learning, which enhances the innovative capacity of an organization with the development of OL and proper use of its capabilities, competencies, and resources. At the same time, OC is found to be a key to managing innovation and creating a learning environment. To improve innovativeness, there is a need for an OL culture.

Hsiao and Chang (2011) conducted a study of 330 teachers in charge of administration in 36 postsecondary schools. They proposed a model to investigate the impact of TL on OI and to examine OL as a mediator of this relationship. The results of their study proved that TL and OL have a positive relationship on OI. It discloses the indirect effect of TL through OL on OI more than the direct effect of TL. They found that OL has a positive effect on OI. Moreover, this study emphasizes that OL mediates the relationship between TL and OI, which means that higher OL leads directly to better OI. In addition, OI continues to rely on OL for the development of innovative strategies and performance.

Moreover, Garcia-Morales et al. (2007) examined 164 pharmaceutical firms in Europe and America. Their study aimed to examine the influence of TL on OI and performance depending on the level of OL in technological firms. The findings show that TL positively associated with OI in technological organizations with high OL. This means that transformational leaders boost OI to a higher level if they focus on OL, which helps to minimize the cost of internal change (Zahay & Handfield, 2004).

Similarly, Garcia-Morales, Matias-Reche, and Hurtado-Torres (2008) did another study in Spain. They examined 408 organizations from four sectors in Spain (food farming, manufacturing, construction, and services). They found that TL affected the dynamic capabilities of OL and innovation. This confirms that transformational leaders improve the development of learning in the organization. In addition, they found that the absorptive capacity of the followers had a major role in the development of organizational skills in

managing tacit knowledge, which helped to give a character of learning to the organization to achieve OI. This means that TL mainly affects absorptive capacity. Table 5 describes some of the previous studies with their results.

Table 5. Some Studies That Support the Effect of OL in the Relationship Between TL and OI

Author(s)	Title	Year	Results
Hsiao and Chang	The role of organizational learning in transformational leadership and organizational innovation	2011	TL and OL have a positive impact on OI. It discloses the indirect effect of TL through OL on OI more than the direct effect of TL. OL has a positive effect on OI. Higher OL leads directly to better OI. In addition, OI continues to rely on OL for the development of innovative strategies and performance.
Garcia-Morales et al.	Influence of transformational leadership on organizational innovation and performance depending on the level of organizational learning in the pharmaceutical sector	2008	TL affects the dynamic capabilities of OL and innovation. This confirms that transformational leaders improve the development of learning in the organization. In addition, they found that the absorptive capacity of the followers had a major role in the development of organizational skills in managing tacit knowledge, which helps to give the character of learning to the organization to achieve OI. This means that TL mainly affects the absorptive capacity of employees.

Garcia-Morales et al.	The effects of transformational leadership on organizational performance through knowledge and innovation	2007	TL is positively associated with OI in technological organizations with high OL. This means that transformational leaders boost OI to a higher level if they focus on the OL, which helps to minimize the cost of internal change.
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Note. TL = transformational leadership; OI = organizational innovation; OC = organizational culture.

2.7 New Insight: Identifying Theoretical Gaps

Studies increasingly stress the importance of TL and with a single specific concept. However, there is a lack of investigation of the relationship between TL and OI with the effect of OC, FC, and OL. There is no effort to determine the positive and negative relationships between TL and the impact on OI with the effect of OC, FC, and OL in non-Western countries. The identified variables will be the basis of this study for filling theoretical gaps and strengthening the understanding of TL. There is a gap in the literature with regard to the behavior of leaders and the capability of followers in influencing the practice of successful TL and its relationship with OI with the effect of OC, FC, and OL.

2.8 Theoretical Framework

The literature review shows that the influence of TL on OI is affected by three variables: culture, creativity, and learning. These three variables produce a positive change and support this influence. TL is explained in its four dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. As found in the previous research, there is a positive relationship between TL and OL affected by

culture (Elenkov & Manev, 2005; Jung et al., 2008; Sarros et al., 2011). Moreover, employees' creativity affects the relationship between TL and innovation through intrinsic motivation, empowerment, and a climate supportive of innovation in the workplace (Gumusluoglu & Ilsev, 2009b; Jandaghi et al., 2009; Shin & Zhou, 2003). The relationship between OI and TL is influenced by OL (Hsiao & Chang, 2011; Garcia-Morales et al., 2007, 2008). Finally, there is a positive and direct relationship between TL and OI as mentioned in previous studies (Damirch et al., 2011; Gumusluoglu & Ilsev, 2009a; Jung et al., 2003).

As indicated in the literature, hypotheses are developed, which were suggested to reflect the impact of TL on OI. In every organization, there are many variables that may lead to the strengthening of this relationship. Consequently, these hypotheses focus on the importance of this area of study and the relationship between the two concepts using some variables that may affect them.

In this chapter, we explored in detail this theoretical relationship between TL and OI. We not only reviewed the existing literature but also integrated the literature in a concise way so that the nature of the relationship among the variables of this study is articulated.

Because of the importance of the variables that may affect the relationship between TL and OI, we developed a basic model testing only the impact of OL and then expanded the model to examine the effect of OC, FC, and OL on the relationship between TL and innovation.

2.8.1 Basic model

As a requirement of the DBA program in Abu Dhabi University, I submitted part of my dissertation to the *Journal of Applied Management and Entrepreneurship*, and it will be published in October 2014. The submitted paper evaluates the effect of TL on OI as well as

the potential effect of OL on this relationship. This was the basic model used before starting the general one.

Figure 3 provides an illustration of the basic model being tested. This model features direct and indirect relationships between TL, OL, and innovation. Note that the model also accounts for the multidimensionality of TL, as its four behavioral components are accounted for in the box that represents the exogenous effect of TL.

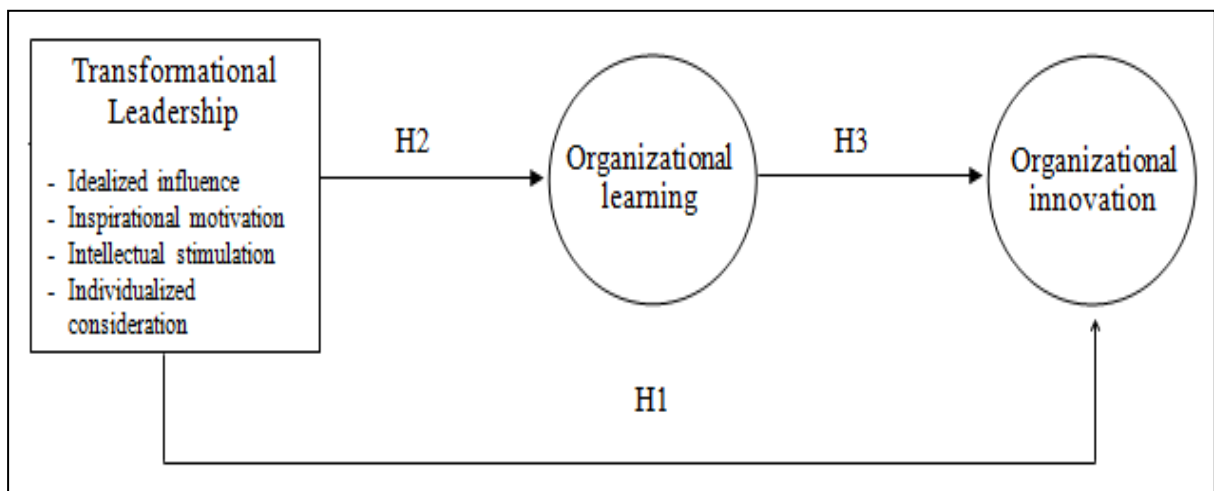


Figure 3. Basic Model

2.8.2 General model

The general model as presented in Figure 4 points out that a positive perception of TL will positively affect OI with the impact of culture, creativity, and OL. Hence, the following are the research hypotheses:

Hypothesis 1: Transformational leadership is positively related to organizational culture.

Hypothesis 2: Organizational culture is positively related to organizational innovation.

Hypothesis 3: Transformational leadership is positively related to followers' creativity.

Hypothesis 4: Followers' creativity is positively related to organizational innovation.

Hypothesis 5: Transformational leadership is positively related to organizational learning.

Hypothesis 6: Organizational learning is positively related to organizational innovation.

Hypothesis 7: Transformational leadership is positively related to organizational innovation.

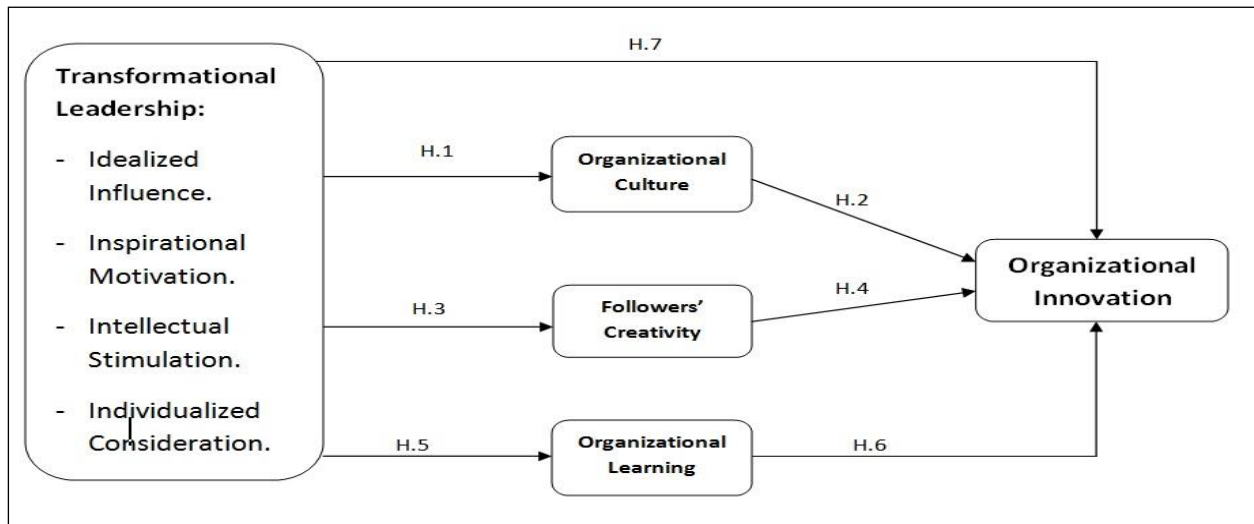


Figure 4. General Model

These hypotheses are tested using quantitative approach. A quantitative approach is used in this research to shed light on the relationships between the variables that are applied in this study. Likewise, the quantitative approach allows us to test the identified hypotheses. That is, the purpose of using the quantitative research is to measure the relationships among variables and to assess the impact of these variables on the dependent factors.

Chapter 3: Data and Methodology

In this chapter, I discuss several aspects of this research's methodology, including the identification of sample, data collection procedures, measurement of variables, and data analysis.

You either do something yourself, you create something, or you follow somebody. If you want to follow anybody, you have to wait for them to get in front of you to follow them. (HH Sheikh Mohammed Bin Rashid Al Maktoum, 2013).

3.1 Identification of Samples

To obtain sufficient heterogeneity to ascertain the stability of the relationships between the constructs, the data were collected from personnel in different functional areas across different organizations representing public, semi government, and private organizations in Dubai.

I contacted a total of 12 organizations for the data collection. Then I distributed the survey materials for the targeted organization. I received 497 of 600 questionnaires.

3.2 Data Collection Procedure

The data collection for this study was done in several steps over the 2-month time frame (from August 2013 to October 2013). The strategy for data collection involved contacting the HR manager in each of the targeted organizations in Dubai and seeking their permission to solicit employees' participation during their working time. Employees were randomly selected and contacted via telephone to request their permission to participate in the survey. This setup was prearranged with the line manager before survey administration. During the survey administration, the researcher advised employees that their participation in the survey was voluntary and that their responses would remain confidential. The employees

who agreed to take the survey were provided with a photocopied version of the questionnaire to fill in. Upon completion of the survey, the questionnaires were handed in to the researcher, who collated the surveys and secured them for data analysis.

3.3 Measurement

All variables in our model were measured with validated instruments using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Moreover, the permission from the authors to use their questionnaires in this research is attached in Appendix A, and the research questionnaire is attached in Appendix B.

To evaluate and identify the number of items for each variable, we conducted a pilot study. It helps to test the validity and reliability of the variables. We distributed 60 questionnaires from personnel across three different organizations representing public, semi government, and private organizations in Dubai.

The respondents have 54 answers with 127 items at the beginning and 123 items at the end to measure the study variables; 64.8% were male ($n = 35$) and 35.2% were female ($n = 19$). Most respondents have organizational experience between 2 and 5 years ($n = 36$, 48.6%), and most of them are employees ($n = 32$, 59.3%) with a bachelor's degree ($n = 18$, 33.3%).

To test the relationship between these variables, we used the Statistical Package for the Social Sciences (SPSS) version 18.0 (SPSS Inc., Chicago, IL, USA) to analyze all the data collected from the questionnaires, which helps to run statistical procedure and examine the model results. Descriptive statistical analysis including frequencies and percentage was used to present the demographic characteristics of the sample. Furthermore, intercorrelations and multiple regressions were used to test the validity of the developed hypotheses. The variance inflation factor (VIF) (collinearity statistic) between OI and TL shows low values

less than 10, which show that the model design is strong. All the model variables show significance at the .01 level, which means that all the variables have strong relation between them.

Reliability assessments using Cronbach's alpha is higher than .97 for all variables. We used factor analysis to check the validity of the scale and to reduce the items with factor loadings below .5 of each dimension, which will lead to fewer items measuring the research variables. If the factor loading of any item is below .5, this means that this item will not measure the study dimension, so we have to delete it. The eigenvalue for all items is more than 1. The higher the eigenvalues of a component, the more representative it is of the data. Moreover, the standard deviation for each item close to 1.

All items are negatively skewed left, which means that the left tail is long relative to the right tail. Data sets with low kurtosis have a flat top near the mean rather than a sharp peak. In addition, we used the factor analysis to delete all the items with factor loadings below .5 to get the items that explain each variable higher than 50% of the total variance.

Furthermore, the factor analysis shows that the Cronbach's alpha (reliabilities) of all study variables is more than .97. We exclude all items with Cronbach's alpha below .7, and from 127 items, we ended with 123 items explaining the study variables. The total of all items was 128 (TL, 30 items; OC, 23 items; follower's creativity, 34 items; OL, 18 items; and OI, 22 items). We deleted one item from OC (17), two items from OL (5 and 14), and one item from OI (10).

3.3.1 Transformational leadership

TL was measured by using a modified version of the Transformational Leadership Questionnaire of Singh and Krishnan (2007). The scale has 30 items for the four factors: idealized influence, inspirational motivation, intellectual stimulation, and individualized

consideration. A 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) was used. Examples of these items include “Not only develops others, but brings the best out of them in pressure situations,” “Ensures that others get all possible support so that they can pursue other interests in life,” and “Recognizes the fact that different people need to be treated differently.”

3.3.2 Organizational culture

OC was measured using the scale developed by Garmon (2004), which includes 22 items. Examples of these items include “People I work with are cooperative and considerate,” “This organization motivates me to put in my best efforts,” and “There is an atmosphere of trust in this organization.” All items used a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

3.3.3 Followers’ creativity

FC was measured with a 34-item scale developed by Johnson (2009). Examples of these items include “Employees tend to trust managers/leaders,” “Leaders encourage employees to have fun while performing their jobs,” and “It shows within our organization that people are our most valuable asset.” All items used a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

3.3.4 Organizational learning

OL was measured by using the scale developed by Garmon (2004), which includes 16 items. Examples of these items include “In my organization, people openly discuss mistakes to learn from them,” “In my organization, people help each other learn,” and “In my organization, people are encouraged to ask ‘why’ regardless of rank.” All items used a 5-point Likert scale ranging from 1 (*never*) to 5 (*always*).

3.3.5 Organizational innovation

OI was measured with a 21-item scale developed by Scott and Bruce (1994). Examples of these items include “This organization can be described as flexible and continually adapting to change,” “A person can’t do things that are too differently around here without provoking anger,” “The best way to get along in this organization is to think the way the rest of the group does,” and “People around here are expected to deal with problems in the same way.” All items used a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

3.3.6 Demographic variables

The study used the following demographic variables:

Respondents’ gender (male or female)

Respondents’ age (25 years or younger, 26–35 years, 36–45 years, 46–55 years, or 56 years or older)

Organizational experiences: measured by the number of working years in the current organization (1 year or less, 2–5 years, 6–10 years, 11–15 years, 16–20 years, or 21 years or more)

Employee educational level (high school, higher diploma, bachelor’s degree, master’s degree, or PhD/DBA)

Job position (managers, supervisors, or employees)

Type of the organization (public, semi government, or private)

3.4 Analysis of the Basic Model

To ensure sample heterogeneity, survey questionnaires were randomly distributed to individuals within public and private firms in Dubai. Of the 300 questionnaires distributed,

248 (82.7%) were returned. To further ensure the heterogeneity of the sample, data were collected from personnel in different functional areas across multiple public and private organizations.

One hundred and thirty-three (53.6%) questionnaires were returned from individuals within public agencies, and 115 (46.4%) respondents worked for private firms. The majority (65.4%) of respondents from the public organizations were male (65.4%) and between the ages of 25 and 35 years (51.1%). Within the private organizations, 49.6% of respondents were male, and 48.7% were between the ages of 25 and 35 years. The majority of respondents from the public sector earned a bachelor's degree (54.0%) and had between 6 and 10 years of work experience (27.1%). In contrast, most respondents in the private sector had only 2 to 5 years of experience, but the larger majority had earned a bachelor's degree (69.6%).

3.4.1 Data analysis of the basic model

Table 6 summarizes the reliability analyses associated with each measurement scale. The reliability estimates (indexed as Cronbach's alpha) for each of the respective dimensions of the survey ranged from .84 to .93, indicating that all subscales were reliable. The reliability estimate for the overall questionnaire was even higher (.95), indicating the internal consistency of the survey as a whole.

Table 6. Reliability Analyses of the Paper Model

Variables		No. items	α (α)
Transformational leadership sub	Idealized influence	12	.928
	Inspirational motivation	6	.878

dimensions	Intellectual stimulation	6	.476
	Individualized consideration	6	.861
Transformational leadership		30	.934
Organizational learning		18	.866
Organizational innovation		22	.835
	Overall	70	.950

All statistical analyses were performed using the SPSS version 19. In particular, factor analysis was conducted to determine the number of dimensions and latent constructs inherent to the model. In addition, a sample *t* test was calculated to determine which items should be included as manifest variables. For all statistical analyses, the significance level is set to be $p < .05$.

To achieve a suitable solution to this problem, the items measuring employee satisfaction were assumed to be reducible to a lesser number of factors. To do so, a nonlinear principal component analysis as well as a confirmatory factor analysis was conducted (Al-Nasser, Al-Rawwash, & Alakhras, 2011; Ferrari & Manzi, 2010; Manisera, Van der Kooij, & Dusseldorp, 2010).

In addition, the reliability estimates for the first ($\alpha = .83$) and second ($\alpha = .74$) dimensions were adequate (see Table 7).

Table 7. Two-Dimensional Solution With Ordinal Measurement (Paper Model)

Dimension	α (α)	Variance explained	
		Total (eigenvalue)	% variance
1	.831	2.243	74.771
2	.740	0.463	15.429
Total	.946 ^a	2.706	90.201

^aTotal Cronbach's alpha is based on total eigenvalue.

Figure 5 illustrates the points for each of the three objects (i.e., TL, OL, and OI) using a two-dimensional ordinal solution from the nonlinear principal component analysis. According to these results, OL has the most pronounced effect on OI.

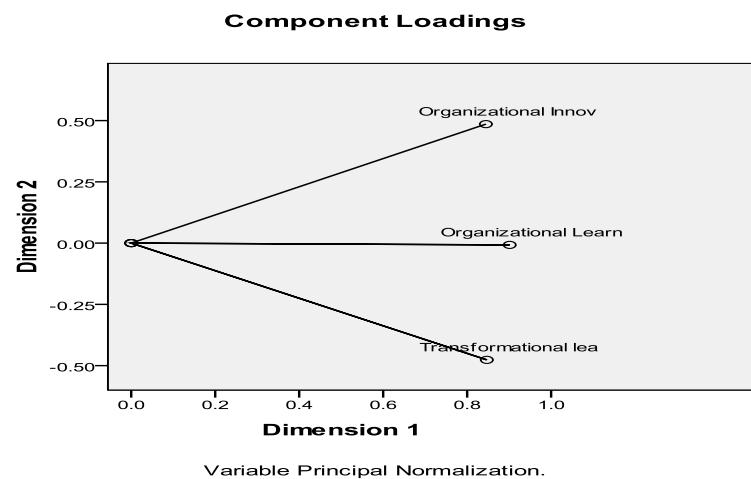


Figure 5. Component Loadings of the Three Factors (Basic Model)

Tables 8 and 9 summarize the descriptive statistics and the correlations among the latent and exogenous variables of interest in this study.

Table 8. Descriptive Statistics and Correlations Among Latent Variables (Paper Model)

Variables	<i>M</i>	<i>SD</i>	Correlations		
			Transformational leadership	Organizational learning	Organizational innovation
Transformational leadership	3.56	0.69	1	.66**	.57**
Organizational learning	3.47	0.65		1	.73**
Organizational innovation	3.37	0.55			1

**Correlation is significant at the .01 level (two-tailed).

Table 9. Descriptive Statistics and Correlations Among Exogenous Variables (Paper Model)

Variables	<i>M</i>	<i>SD</i>	Correlations			
			Idealized influence	Inspirational motivation	Intellectual stimulation	Individualized consideration
Idealized influence	3.57	0.72	1	.82**	.63**	.83**
Inspirational motivation	3.62	0.75		1	.54**	.79**
Intellectual stimulation	3.52	0.95			1	.63**
Individualized consideration	3.54	0.74				1

**Correlation is significant at the .01 level (two-tailed).

Although Tables 8 and 9 provide correlation estimates for each of the variable pairings, it was nonetheless necessary to determine the causal effects between the variables. Therefore, AMOS was used to estimate multigroup structural equation models to compare organizations in the public and private sectors. Table 10 summarizes the standardized regression coefficients that resulted from this analysis. The results indicated that in the public sector, TL significantly and positively affects OL through inspirational motivation ($\beta = .398$, $p < .001$) and intellectual stimulation ($\beta = .303$, $p < .05$).

In the private sector, the relationship between TL and OL is driven by idealized influence ($\beta = .673$, $p < .001$) and inspirational motivation ($\beta = .241$, $p < .05$). The results for organizations in the public sector showed that TL has a significant, positive effect on OI through inspirational motivation ($\beta = .247$, $p < .05$), individualized consideration ($\beta = .196$, $p < .05$), and intellectual stimulation ($\beta = .357$, $p < .01$). Idealized influence ($\beta = .627$, $p < .01$) only significantly affected OI in private sector organizations. Moreover, a significant, positive relationship emerged between OL and OI in both sectors, but the effect was more

pronounced in the private sector ($\beta = .717, p < .001$) relative to the public sector ($\beta = .611, p < .001$).

Table 10. Path Model Estimation (Paper Model)

Endogenous variable		Exogenous variable	Public				Private			
			Standardized estimate	SE	t	p	Standardized estimate	SE	t	p
LEARN	←	Idealized influence	.215	.143	1.463	.146	.673	.134	4.862	.000
LEARN	←	Inspirational motivation	.398	.116	3.293	.001	.241	.115	1.997	.048
LEARN	←	Individualized consideration	.074	.086	.859	.392	.065	.049	1.218	.226
LEARN	←	Intellectual stimulation	.303	.127	2.351	.020	.017	.122	.133	.894
INNO	←	Idealized influence	.196	.134	1.349	.180	.627	.158	3.805	.000
INNO	←	Inspirational motivation	.247	.108	2.062	.041	.233	.136	1.626	.107
INNO	←	Individualized consideration	.196	.081	2.296	.023	-.036	.058	-.566	.573
INNO	←	Intellectual stimulation	.352	.119	2.753	.007	.165	.144	1.103	.273
INNO	←	LEARN	.611	.030	8.823	.000	.717	.064	10.937	.000

Note. The *p* values for significant paths are in boldface.

To evaluate the degree to which the proposed model fits the data, the normed fit index and the comparative fit index were referenced (Bentler & Bonett, 1980). Both indices provided significant values for the proposed model. The normed fit index value was higher than .93, and the comparative fit index value was higher than .97. Taken together, these fit indices indicate that the model provides a good fit to the data related to the relationships between TL, OL, and OI.

To determine if any differences exist between organizations in the public and private sectors with regard to the relationships among these variables, a series of independent *t* tests

were performed. Table 11 summarizes the results of these *t* tests. They show that differences exist between the private and the public sectors with respect to employee perceptions of TL (idealized influence, $t = 2.62$, $p < .01$; inspirational motivation, $t = 3.10$, $p < .01$; and intellectual stimulation, $t = 2.37$, $p < .05$) as well as OL ($t = 3.36$, $p < .001$). However, the results revealed no statistical differences between the public and the private sectors in terms of OI.

Table 11. Independent *t* Tests (Paper Model)

Variables		Sectors	<i>n</i>	μ	<i>SD</i>	<i>t</i>	<i>p</i>
Transformational leadership sub dimensions	Idealized influence	Public	133	3.68	0.77	2.63	.009
		Private	115	3.44	0.65		
	Inspirational motivation	Public	133	3.75	0.74	3.10	.002
		Private	115	3.46	0.74		
	Individualized consideration	Public	133	3.57	0.83	0.77	.440
		Private	115	3.47	1.08		
	Intellectual stimulation	Public	133	3.64	0.74	2.37	.019
		Private	115	3.42	0.73		
Organizational learning	Public	133	3.60	0.66	3.36	.001	
	Private	115	3.33	0.62			
Organizational innovation	Public	133	3.42	0.51	1.59	.112	
	Private	115	3.31	0.58			

3.4.2 Results of the basic model

Past researchers have argued that transformational leaders increase employee motivation, morale, and performance through four behavioral components: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. In turn, these outcomes can lead to OI and long-term survival (Damirch et al., 2011;

Gumusluoglu & Ilsev, 2009b; Jung et al., 2003). In this study, the relationship between TL and OI was examined for the first time in the cultural context of Dubai.

The results were largely consistent with those produced by past researchers who indicated the importance of TL for addressing followers' needs and promoting organizational innovation. Transformational leaders have also been long thought to increase OI by designing realistic yet challenging goals and giving their followers the confidence to achieve these goals. Moreover, transformational leaders encourage their followers to use their personal and organizational abilities to increase innovation.

The study also explored whether OL affects the relationship between TL and OI. However, the results were inconsistent with those produced by researchers who focused on OI in Western nations. For example, Garcia-Morales et al. (2008) found that TL significantly affects OL and innovation. This suggests that transformational leaders contribute to the development of mechanisms for OL. In addition, past researchers found that followers' absorptive capacities were central in the development of organizational skills related to the management of tacit knowledge. In essence, past research has suggested that TL affects the absorptive capacity of an organization's employees; however, this finding was not borne out from the analyses.

A positive relationship was found between OL and OI in the public sector. This result suggests that relative to organizations in the private sector, organizations within the public sector in Dubai have experienced greater success in using TL to incite OI. This finding is consistent with the Dubai government's policy based on a model produced by the EFQM and related to the adoption of criteria demanding excellence from all organizations through a focus on employees, customers, and society as a whole. By using the EFQM model, the Dubai government has begun to develop a plan for governmental emphasis on innovation and

learning. The results of this study also demonstrated that within Dubai, OL has a substantial effect on OI in both the private and the public sectors.

3.5 Analysis of the General Model

The data collected from the questionnaires were analyzed using the SPSS version 18.0 for Windows, which helped to run the statistical procedure and examine the model results.

As a first step, data were cleaned and variables were screened for normality, homogeneity of variance, and detection of outliers. No outliers were found during the analysis. Next, to assess the hypotheses in this study, several multivariate and univariate analyses of variances were conducted, which are described below.

For this study, the participants were selected after they met certain criteria: currently working in business/government organizations. The sample size was 497, reasonably high for a country such as the UAE. The questionnaires were distributed as follows: public organizations ($n = 173$, 35%), semi government ($n = 169$, 34%), and private organizations ($n = 155$, 31%) in Dubai, as mentioned in Figure 6.

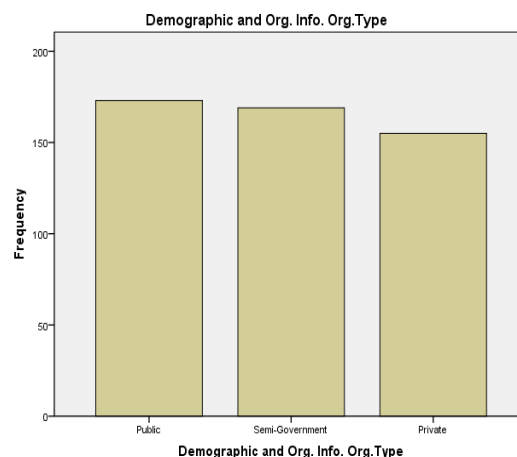


Figure 6. Organization Type (Public, Semi government, and Private)

Table 12 describes the demographic information of the respondents (age and gender) as mentioned in Figures 7 and 8. Moreover, Figures 9–11 describe experience, position, and

educational level. Of the 1
38.7% were females.

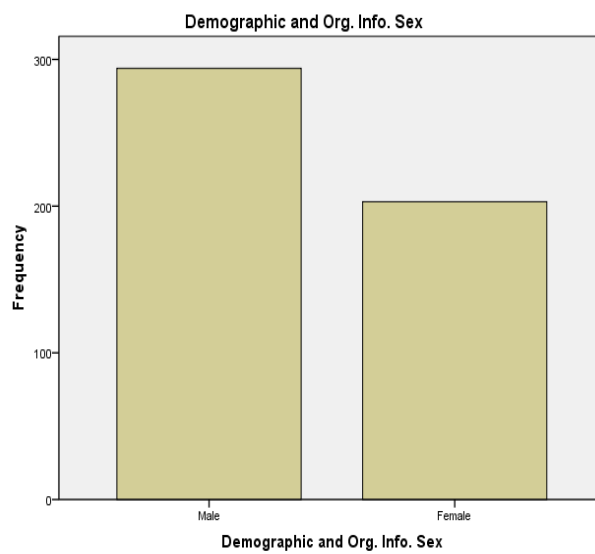
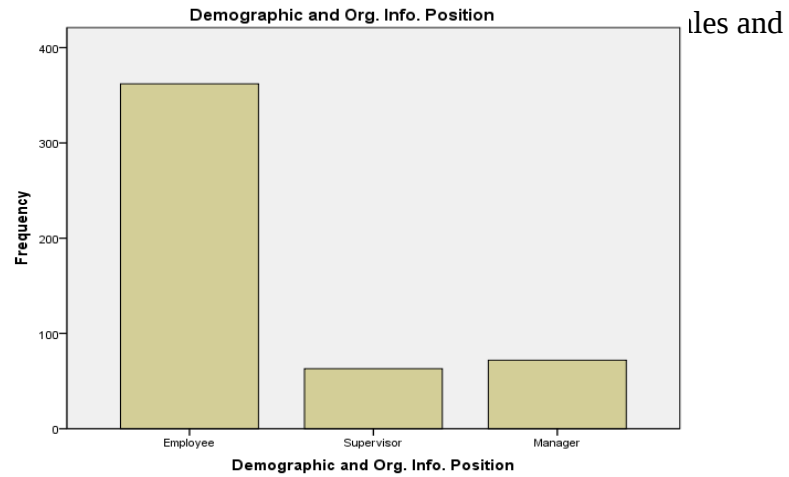


Figure 8. Respondents' Gender

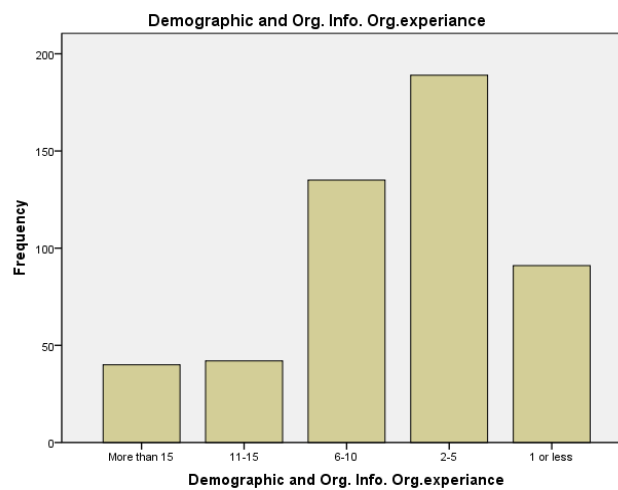


Figure 9. Organizational Experience

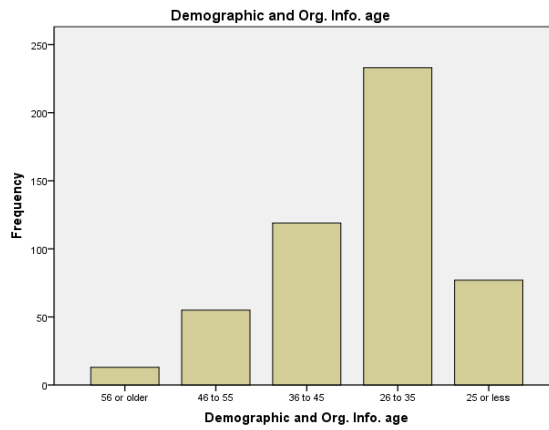


Figure 10. Respondents' Job Position

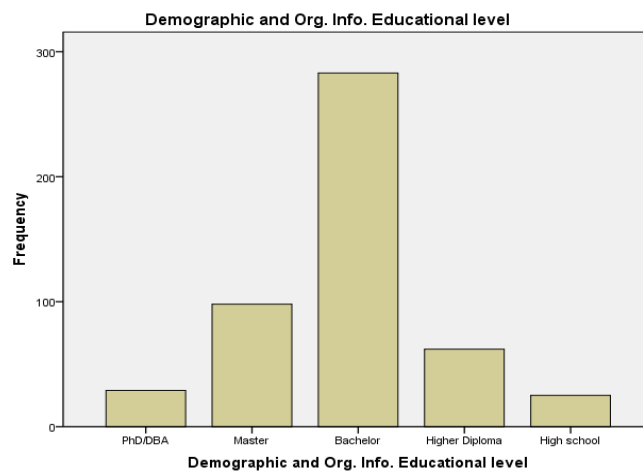


Figure 11. Respondents' Educational Level

As seen Table 12, 59.2% of the respondents were male and 40.8% were female from the semi government sector, whereas there were about 56.8% males from the private sector. The age of the participants ranged from 25 years to 56 years and older. In particular, most of the participants fell between the ages of 25 and 35 years. Of particular relevance to this study was the average work experience of the employees, their position, and their educational level.

Table 12. Demographic Information of the Respondents

Variable	Category	Public ($n_1 = 173, p = 35\%$)		Semi government ($n_2 = 169, p = 34\%$)		Private ($n_3 = 155, p = 31\%$)	
		n	%	n	%	n	%
Gender	Male	106	61.3	100	59.2	88	56.8
	Female	67	38.7	69	40.8	67	43.2
Age	56 years or older	4	2.3	7	4.1	2	1.3
	46–55 years	16	9.2	20	11.8	19	12.3
	36–45 years	37	21.4	36	21.3	46	29.7
	25–35 years	87	50.3	71	42.0	75	48.4
	25 years or younger	29	16.8	35	20.7	13	8.4
Experience	More than 15 years	15	8.7	14	8.3	11	7.1
	11–15 years	18	10.4	13	7.7	11	7.1
	6–10 years	46	26.6	43	25.4	46	29.7
	2–5 years	62	35.8	66	39.1	61	39.4
	1 year or less	32	18.5	33	19.5	26	16.8
Position	Employee	130	75.1	112	66.3	120	77.4
	Supervisor	22	12.7	28	16.6	13	8.4
	Manager	21	12.1	29	17.2	22	14.2
Education level	PhD/DBA	20	11.6	7	4.1	2	1.3
	Master	33	19.1	39	23.1	26	16.8
	Bachelor	98	56.6	85	50.3	100	64.5

	Higher diploma	14	8.1	29	17.2	19	12.3
	High school	8	4.6	9	5.3	8	5.2

3.5.1 Factor analysis

Using a confirmatory factor solution to fit the results into one factor for OL, culture, FC, and innovation, a principal components analysis with a varimax rotation was carried out for data extraction into the one factor demonstrating characteristics. The total variance explained ranged from 27.5% to 43.13%, and all variables loaded on that one factor were extracted. The component factor matrix loadings for each item of innovation on their corresponding factors ranged from .188 to .651, as shown in Table 13. Therefore, the items with low component values (less than 0.4) were not considered because they have weak correlation with the factor and were deleted from further analysis. However, the component factor matrix loadings for other factors were sufficiently high.

Table 13. Component Matrix: Organizational Innovation

Item no.	Learning	Followers	Culture	Innovation
1	.672	.524	.699	.647
2	.718	.626	.633	.630
3	.691	.669	.701	.671
4	.640	.627	.727	.533
5	.347	.312	.727	.188
6	.724	.675	.687	.593
7	.707	.660	.631	.548
8	.713	.560	.628	.592

9	.657	.614	.702	.518
10	.618	.655	.720	.358
11	.666	.606	.686	.554
12	.602	.691	.378	.488
13	.666	.546	.696	.497
14	.637	.698	.738	.651
15	.656	.678	.707	.546
16	.692	.738	.597	.633
17	.663	.664	.643	.427
18	.662	.603	.627	.383
19		.568	.295	.587
20		.634	.632	.239
21		.616	.608	.596
22		.722	.697	.260
23		.594	.648	
24		.557		
25		.596		
26		.572		
27		.433		
28		.618		
29		.588		

30		.547		
31		.608		
32		.635		
33		.588		
34		.637		
Explained variance	43.13%	37.53%	42.52%	27.5%

To test the factor structure of TL, a forced factor solution was implemented to fit the results into four factors based on the model of TL that was proposed. A principal components analysis with a varimax rotation was used for data extraction into the four factors, as hypothesized. Although four factors were extracted, most of the TL items loaded predominantly on the first two factors. The total explained variance by the first factor was 17.4%. This was followed by the second factor at 16.75%, the third factor at 14.47%, and the fourth factor at 12.08%. Thirty items were loaded on the four factors that were extracted. The rotated component factor matrix loadings for each item on their corresponding factors were also sufficiently high, ranging from .508 to .840, except item 5 of intellectual stimulation, which will be deleted from the analysis (Table 14).

Table 14. Rotated Component Matrix^a

Items	Component			
	1	2	3	4
Trans. idealized influence 1	.840			
Trans. idealized influence 2	.784			

Trans. idealized influence 3	.725			
Trans. idealized influence 4	.794			
Trans. idealized influence 5	.709			
Trans. idealized influence 6	.678			
Trans. idealized influence 7	.673			
Trans. idealized influence 8	.742			
Trans. idealized influence 9	.780			
Trans. idealized influence 10	.686			
Trans. idealized influence 11	.728			
Trans. idealized influence 12	.750			
Trans. inspirational motivation 1		.739		
Trans. inspirational motivation 2		.696		
Trans. inspirational motivation 3		.825		
Trans. inspirational motivation 4		.800		
Trans. inspirational motivation 5		.797		
Trans. inspirational motivation 6		.742		
Trans. intellectual stimulation 1			.691	
Trans. intellectual stimulation 2			.808	
Trans. intellectual stimulation 3			.745	
Trans. intellectual stimulation 4			.784	
Trans. intellectual stimulation 5			.369	
Trans. intellectual stimulation 6			.508	

Trans. individualized consideration 1				.714
Trans. individualized consideration 2				.695
Trans. individualized consideration 3				.832
Trans. individualized consideration 4				.834
Trans. individualized consideration 5				.707
Trans. individualized consideration 6				.729

Note. Extraction method: principal component analysis. Rotation method: varimax with Kaiser normalization.

^aRotation converged in 15 iterations.

3.5.2 Reliability analysis

Reliability estimates were calculated using Cronbach's alpha, and the average interitem correlation was computed and can be reviewed in Table 15. Reliabilities ranged from .859 to .957. The overall estimate of internal consistency for the TL (29 items) scale was .957, and the overall reliability estimates for the OC scale (22 items) was .929. Moreover, the overall reliability estimates were .935 for the FC scale (34 items), .895 for the OL scale (18 items), and .861 for the OI scale (19 items).

Table 15. Reliability Analysis

Dimension		No. items	Cronbach's alpha
Transformational leadership sub dimensions	Idealized influence	12	.925
	Inspirational motivation	6	.859
	Intellectual stimulation	5	.718
	Individualized consideration	6	.846
Transformational leadership		29	.957
Organizational culture		22	.929
Followers' creativity		34	.935
Organizational learning		18	.896
Organizational innovation		19	.861
Overall		122	.979

3.5.3 Correlation analysis

Inter correlations using Pearson's correlation coefficients among the TL factors given in Table 10—namely, OC, FC, OL, and OI—were computed. They ranged from .53 to .847. All correlations were found to be positive and significantly correlated at the .01 level, as can be seen in Tables 16 and 17.

Table 16. Descriptive Statistics and Correlation Matrix of the Endogenous Variables

	<i>M</i>	<i>SD</i>	Correlation				
			Transformational leadership	Organizational culture	Followers' creativity	Organizational learning	Organizational innovation
Transformational leadership	3.5581	0.70307					
Organizational culture	3.4626	0.65879	.721**				
Followers' creativity	3.4772	0.59814	.725**	.840**			
Organizational learning	3.4931	0.65095	.631**	.764**	.833**		
Organizational innovation	3.3938	0.57174	.531**	.588**	.668**	.707**	

**Correlation is significant at the .01 level (two-tailed).

Table 17. Descriptive Statistics and the Correlation Matrix of the Exogenous Variables

Dimension of transformational leadership	<i>M</i>	<i>SD</i>	Correlation			
			Idealized influence	Inspirational motivation	Intellectual stimulation	Individualized consideration
Idealized influence	3.5609	0.75458				

Inspirational motivation	3.6677	0.77102	.822**			
Intellectual stimulation	3.4350	0.80551	.737**	.631**		
Individualized consideration	3.5456	0.75576	.847**	.797**	.723**	

**Correlation is significant at the .01 level (two-tailed).

3.5.4 Structural equation modeling results

Structural equation modeling (SEM) is a more robust statistical data analysis technique that is used for multivariate analysis with latent variables. SEM is a set of linear equations for testing the hypotheses about the relationship between observed and latent variables and uses a confirmatory approach. The main goal of SEM is to find the extent to which a hypothesized model fits or adequately describes sample data. The fitness of a model will be tested using a goodness-of-fit and RMSR. Multigroup SEM is used to analyze the proposed model using AMOS.5; a comparison of the fit indices produced by AMOS for the structural model indicates that the chi-square for the overall sample is 2312.667, and it is significant ($p < .001$). The same significant results are obtained for the multigroup analysis by considering the three main groups (public, semi government, and private).

The properties of the causal paths, the standardized coefficients, are given in Table 12 and Figure 12, and the significance of the standardized coefficients and the critical ratio for hypotheses testing are also presented in Table 18 under maximum likelihood estimation method. The results indicated that there are significant positive relationships between OI and FC ($B = .223, p < .001$) and also with OL ($B = .490, p < .001$), and there are no significant relationships between OI and OC. Moreover, the TL factors have positive significant

relationships with the model dimensions but not the following relationships: intellectual stimulation with FC and OL, inspirational motivation with OL, and individualized consideration with OL.

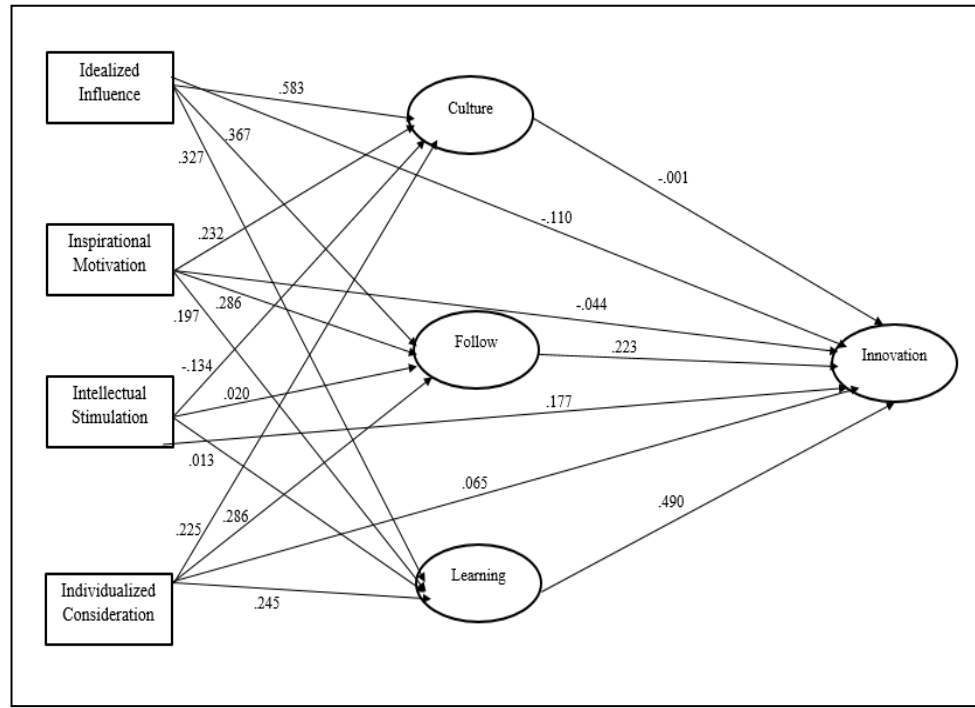


Figure 12. Standardized Coefficients of the General Structural Model

Table 18. Maximum Likelihood Estimates: Dubai Model in General

Endogenous variable	Exogenous variable	Estimate	Standardized estimates	SE	CR	p
CULTURE ←	Idealized influence	.411	.538	.026	15.634	.000
CULTURE ←	Inspirational motivation	.174	.232	.026	6.736	.000
CULTURE ←	Intellectual stimulation	-.096	-.134	.025	-3.879	.000
CULTURE ←	Individualized consideration	.172	.225	.026	6.530	.000
FOLLOW ←	Idealized influence	.237	.367	.024	9.762	.000

FOLLOW	←	Inspirational motivation	.181	.286	.024	7.596	.000
FOLLOW	←	Intellectual stimulation	.012	.020	.023	.519	.603
FOLLOW	←	Individualized consideration	.184	.286	.024	7.593	.000
LEARN	←	Idealized influence	.244	.327	.030	8.168	.000
LEARN	←	Inspirational motivation	.144	.197	.029	4.923	.000
LEARN	←	Intellectual stimulation	.009	.013	.028	.335	.738
LEARN	←	Individualized consideration	.183	.245	.030	6.113	.000
INNOV	←	Idealized influence	-.070	-.110	.025	-2.750	.006
INNOV	←	Inspirational motivation	-.028	-.044	.031	-.907	.364
INNOV	←	Intellectual stimulation	.108	.177	.022	4.881	.000
INNOV	←	Individualized consideration	.042	.065	.026	1.602	.109
INNOV	←	CULTURE	-.001	-.001	.040	-.018	.986
INNOV	←	FOLLOW	.224	.223	.043	5.225	.000
INNOV	←	LEARN	.425	.490	.035	12.194	.000
RMR			.247				
GFI			.457				

Multigroup SEM models given in Tables 19–21 have some common agreements. All models indicated that there is no significant relationship between OC and OI. It is to be noted

that the leader transformational factors vary in the significant results between the three sectors.

It is possible to postulate the reason why no significant relationship exists between OC and stimulation. This stems from the fact that in public, semipublic, or private organizations. There is no emphasis on innovation at this point, be it process or new goods or services. These organizations have, for a long time, been managed to meet immediate demand with emphasis on efficiency and/or processing work. Likewise, it is possible to assume that these organizations have not yet established a culture that values and encourages innovation. Leaders are confronted with processing heavy loads of work, and their employees do not have the needed skills. A characteristic of the Gulf culture is that if the leader does not take the initiative, the employees are not willing to do more than what is required.

Table 19. Maximum Likelihood Estimates: Public Sector

Endogenous variable	Exogenous variable	Estimate	Standardized estimates	<i>E</i>	<i>R</i>	<i>p</i>
CULTURE ←	Idealized influence	.488	.598	.046	10.603	.000
CULTURE ←	Inspirational motivation	.121	.141	.049	2.501	.012
CULTURE ←	Intellectual stimulation	-.150	-.203	.042	-3.594	.000
CULTURE ←	Individualized consideration	.157	.183	.048	3.242	.001
FOLLOW ←	Idealized influence	.164	.271	.039	4.251	.000
FOLLOW ←	Inspirational	.189	.297	.041	4.664	.000

		motivation					
FOLLOW	←	Intellectual stimulation	-.035	-.063	.035	-.995	-.320
FOLLOW	←	Individualized consideration	.237	.372	.041	5.840	.000
LEARN	←	Idealized influence	.203	.274	.050	4.031	.000
LEARN	←	Inspirational motivation	.215	.276	.053	4.050	.000
LEARN	←	Intellectual stimulation	-.044	-.065	.046	-.960	.337
LEARN	←	Individualized consideration	.170	.218	.053	3.203	.001
INNOV	←	Idealized Influence	-.023	-.039	.049	-.466	.641
INNOV	←	Inspirational motivation	-.092	-.148	.042	-2.165	.030
INNOV	←	Intellectual stimulation	.074	.139	.034	2.186	.029
INNOV	←	Individualized consideration	.043	.070	.043	.992	.321
INNOV	←	CULTURE	.065	.090	.059	1.089	.276
INNOV	←	FOLLOW	.216	.222	.071	3.034	.002
INNOV	←	LEARN	.389	.489	.054	7.147	.000
		RMR	.221				

GFI	.496				
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Table 20. Maximum Likelihood Estimates: Semi government Sector

Endogenous variable	Exogenous variable	Estimate	Standardized estimates	SE	CR	p
CULTURE ←	Idealized influence	.373	.515	.044	8.419	.000
CULTURE ←	Inspirational motivation	.130	.183	.043	2.995	.003
CULTURE ←	Intellectual stimulation	-.049	-.072	.042	-1.179	.239
CULTURE ←	Individualized consideration	.191	.259	.045	4.236	.000
FOLLOW ←	Idealized influence	.297	.479	.039	7.559	.000
FOLLOW ←	Inspirational motivation	.141	.233	.038	3.682	.000
FOLLOW ←	Intellectual stimulation	.033	.056	.037	.888	.375
FOLLOW ←	Individualized consideration	.125	.198	.040	3.132	.002
LEARN ←	Idealized influence	.277	.364	.052	5.296	.000
LEARN ←	Inspirational motivation	.020	.027	.051	.393	.694
LEARN ←	Intellectual stimulation	.043	.060	.049	.875	.381
LEARN ←	Individualized consideration	.205	.264	.053	3.843	.000
INNOV ←	Idealized influence	-.049	-.072	.055	-.899	.369
INNOV ←	Inspirational motivation	-.131	-.197	.041	-3.187	.001
INNOV ←	Intellectual stimulation	.135	.209	.038	3.566	.000

INNOV	←	Individualized consideration	.088	.126	.045	1.942	.052
INNOV	←	CULTURE	−.030	−.032	.069	−.441	.659
INNOV	←	FOLLOW	.257	.233	.078	3.302	.000
INNOV	←	LEARN	.438	.488	.058	7.488	.000
RMR			.265				
GFI			.449				

Table 21. Maximum Likelihood Estimates: Private Sector

Endogenous variable		Exogenous variable	Estimate	Standardized estimates	SE	CR	<i>p</i>
CULTURE	←	Idealized influence	.401	.542	.044	9.076	.000
CULTURE	←	Inspirational motivation	.240	.359	.040	6.012	.000
CULTURE	←	Intellectual stimulation	−.028	−.039	.042	−.658	.511
CULTURE	←	Individualized consideration	.110	.163	.040	2.723	.006
FOLLOW	←	Idealized influence	.355	.486	.048	7.373	.000
FOLLOW	←	Inspirational motivation	.126	.190	.043	2.891	.004

FOLLOW	←	Intellectual stimulation	.123	.174	.046	2.649	.008
FOLLOW	←	Individualized consideration	.115	.172	.044	2.615	.009
LEARN	←	Idealized influence	.314	.421	.051	6.132	.000
LEARN	←	Inspirational motivation	.153	.227	.046	3.314	.000
LEARN	←	Intellectual stimulation	.087	.121	.049	1.770	.077
LEARN	←	Individualized consideration	.121	.178	.047	2.588	.010
INNOV	←	Idealized influence	-.007	-.010	.066	-.112	.911
INNOV	←	Inspirational motivation	.076	.115	.048	1.592	.111
INNOV	←	Intellectual stimulation	.127	.181	.045	2.828	.005
INNOV	←	Individualized consideration	-.044	-.066	.044	-.996	.319
INNOV	←	CULTURE	-.145	-.147	.082	-1.76	.078
INNOV	←	FOLLOW	.228	.228	.076	3.010	.003
INNOV	←	LEARN	.486	.497	.071	6.835	.000
RMR			.261				

GFI	.418				
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As evident from all the above, the results of this research support statistical significances for six hypotheses of seven, as shown in Table 22.

Table 22. Summary of the Research Hypotheses Outcomes

Research hypotheses	Outcomes
Hypothesis 1: Transformational leadership is positively related to organizational innovation	Supported
Hypothesis 2: Transformational leadership is positively related to organizational culture	Supported
Hypothesis 3: Organizational culture is positively related to organizational innovation	Not supported
Hypothesis 4: Transformational leadership is positively related to followers' creativity	Supported
Hypothesis 5: Followers' creativity is positively related to organizational innovation	Supported
Hypothesis 6: Transformational leadership is positively related to organizational learning	Supported
Hypothesis 7: Organizational learning is positively related to organizational innovation	Supported

Chapter 4: Discussion of Results

In this chapter, I report the results of my hypothesized relationships and answer the research questions.

There is a wide knowledge gap between us and the developed world in the West and in Asia. Our only choice is to bridge this gap as quickly as possible, because our age is defined by knowledge. (HH Sheikh Mohammed Bin Rashid Al Maktoum, 2013)

4.1 Hypotheses

As was indicated earlier, certain hypotheses have been suggested. These hypotheses were formulated after a careful review of the literature on management and organization. In addition, a research model was developed to reflect the nature of work and organizations in the UAE. The results of the hypotheses are as follows:

4.1.1 Hypothesis 1: Transformational leadership is positively related to OI

As we find from the results of the research, TL was positively and significantly related to OI. The transformational leader plays an important role in enhancing the motivation, morale, and performance of employees through the four components (idealized influence, inspirational motivation, intellectual stimulation, and individual consideration), which leads to OI and long-term survival. Moreover, such leaders seek positive change that encourages the employees to work differently to save their time and to put in more effort that at the end enables the organization to be innovative. These results complement recent findings of positive relationships between these TL components and OI (Damirch et al., 2011; Gumusluoglu & Ilsev, 2009a; Jung et al., 2003).

4.1.2 Hypothesis 2: Transformational leadership is positively related to OC

The results showed that TL had a significant positive effect in OC. The influence of the employees on the culture of the organization can be seen. Transformational leaders helped them discover who they were and what part they had to play in the organization for achieving its goals and mission (Givens, 2008). Transformational leaders also helped the employees increase their level of commitment toward the organization by interacting with them in appropriate manners (Jaskyte, 2004).

This research has proven that there is a significant positive impact of transformational leaders on OC. It has confirmed that TL has provided strength to the organization. Empirical evidence suggests that it produces positive results for the organization although the transformational tactics used by leaders could differ in the levels of success in different cultures (Antonakis & House, 2002; Bass & Avolio, 1989; Damanpour & Schneider, 2006; Deal & Kennedy, 1982; Jung & Avolio, 1999; Walumbwa, Lawler, Avolio, Wang, & Shi, 2005).

4.1.3 Hypothesis 3: Organizational culture is positively related to OI

OC is manifested in the process of change. OC has shared manifestations and meanings of organizational behavior. Groups and individual employees learn it as they work through, encounter challenges, and resolve problems.

OI literature focuses heavily on the role that culture largely plays in organizational change or learning. When there is an adaptive and learning culture in the organization, it pursues performance and innovation in dynamic environments in the long term (Bates & Khasawneh, 2005). Through previous studies, organizations have become more innovative, adaptive, flexible, and entrepreneurial and succeeded in achieving the change according to

the demands of the present environment. Such leadership has an influence on changes for communication (Sarros et al., 2011; Elenkov & Manev, 2005; Jung et al., 2008).

This research demonstrates that the relationship between OC and OI is not significant ($B = -.001, p = .986$), which means this hypothesis is not accepted. This result is consistent with the findings of Bruno's (2013) study. He found that the organizational culture index is very negative where innovation activities are concerned. He recommends taking certain steps to reduce some of the negative cultural aspects. Some of the previous studies confirm this relationship (Deshpandé, Farley, & Webster, 1993; Jaskyte, 2004; Jaskyte & Kisieliene, 2006; Kimberly & Evanisko, 1981).

4.1.4 Hypothesis 4: Transformational leadership is positively related to FC

For the purpose of encouraging the creativity of the followers, the transformational leader must motivate them beyond their expectations. His aim should be to transform the self-concepts and personal values of his followers and shift them to the next level of their aspirations and needs. In the current research, the results support the view that the transformational leader positively affects FC, a result consistent with the findings of Gumusluoglu and Ilsev (2009b), Jandaghi et al. (2009), Lee and Tan (2012), and Shin and Zhou (2003). Moreover, the results of SEM analysis show that intellectual stimulation is not a significant influence of one of the TL components on the FC, a result that is consistent with the findings of Jandaghi et al. (2009). Jandaghi et al. (2009) found that the intellectual stimulation mean in unsuccessful companies is significantly less than in the successful ones.

According to the results of the current research, the reason behind having a non-significant relationship between intellectual stimulation and creativity is that most managers in the targeted organizations do not allow the employees to explore their ideas in solving problems and restrict them from perceiving the issues from different perspectives. That

means the managers first need to be trained in stimulating the intellectual capabilities of their employees.

4.1.5 Hypothesis 5: Followers' creativity is positively related to OI

This research supports the view that managers should shape the work contexts based on the definition of each employee's interaction to define goal-related solutions to the organization's problems. This will make it possible to make joint efforts in innovative work processes. Similarly, employee creative performance is possible when there is quality leader-follower relationship. When employees are given support and freedom, there is high potential for creative work and OI. This research has proven that there is a positive significance between FC and OI. This finding is consistent with the findings of Althonayan and Alarifi (2013), Gumusluoglu and Ilsev (2009b), Michaelis et al. (2010), Shin and Zhou (2003), and Modassir and Singh (2008).

4.1.6 Hypothesis 6: Transformational leadership is positively related to OL

There is a strong relationship between TL and OL where leaders raise employees' awareness about their self-actualization, and their ideals increase their concerns for achievement. With OL, followers will be able to go beyond their own self-interests for the good of team, organization, community, or country. This is consistent with the findings of Hugo et al. (2009); Norshidah and Kasbon (2013); Sarros et al. (2008); and Wang and Ahmed (2002).

The results of SEM analysis showed that intellectual stimulation, inspirational motivation, and individualized consideration have negative significance relationships with OL. This is consistent with the findings of Jogulu (2011). She argued that the four dimensions of TL are expected to have a high level of relationship and personal identification between the leader and his followers. This impact cannot be used to develop OL to enhance

long-term survival in the organization. This means that a leader who is considered by his followers as exceptional could hamper collective learning because followers expect that he knows what is the best for the organization and his self-knowledge always drives the success of the organization. Accordingly, his followers will be less motivated in creating new ideas and initiatives because of the extent of his knowledge to serve the organization.

4.1.7 Hypothesis 7: Organizational learning is positively related to OI

The results show that OL had a significance positive effect on OI. OL capability influences and contributes to OI. Leaders play an important role in bringing about an improvement in the innovation of their organizations with OL. This finding is consistent with the findings of Bates and Khasawneh (2005); Garcia-Morales et al. (2008); Hsiao and Chang (2011); Rashidi and Motlagh (2013); and Škerlavaj et al. (2010).

4.1.8 Summary of hypothesized relationships and answering the research questions

Transformational leaders inspire positive changes and they have a positive relationship with their followers. These leaders are generally passionate, enthusiastic, and energetic. They are also involved and concerned in the process where the focus is helping team members or group members to succeed. Studies proved that similar cultural backgrounds produce similar behavioral patterns and thought processes. OC develops the organizational climate as, along with the leaders, organizations also try to make original frameworks for creativity and innovation during the occurrence of changes in cultural norms. When leaders are unable to understand the needs of their followers, culture plays a very important role in an organization. Through the OC, the leaders' vision could be clarified and will help in building the steps for OI. Research has proven that transformational leaders had

four dimensions of cultural influence, namely, idealizing the influence, inspiring motivation, considering individually, and stimulating intellectually.

A review of the literature reveals that there are two schools of thought for culture and leadership. The Functionalist school focuses on the leaders, stressing that they are the architects of cultural change, and the Anthropological school maintains that leaders are part of culture. Both schools have found that vision is a major factor of TL and is the main factor of stimulating innovation and OC. They also found that if the vision is articulated, then they could achieve the output only when the involvement of TL is able to influence the client and workers of the organization. OC and TL are interconnected. As leaders mostly engaged their workers in the organizational strategy for producing new ideas, building innovation and creativity, the leaders should articulate a clear vision in the organization. It has also proven that those leaders who interrelate with the four dimensions of TL are able to organize their followers' values in a better way and help and encourage them to accept and manage the changes for the next organizational level.

The positive influence of workers on OC can be demonstrated in work as subordinates will be able to discover their individual identity and seek to achieve organizational goals. Through the productive process, transformational leaders exercise an influence on the OC. Productivity can be improved by accentuating the cultural values of an organization. Research shows that the influence of transformational leaders on the vision, culture, and behavior has a positive impact on the performance of the workers. Literature also says that research has come to investigate the impact of TL on the organizational climate. Transformational leaders have to adopt different ways in supervising their subordinates in achieving their goals and in inspiring them. However, transformational leaders have no direct effect on OCB. Only a mediating effect of cultural organization along with commitment has a significant effect on OCB. Theory also says that transformational leaders play an important

role in helping create OC. Followers adopt the same values that are practiced by their transformational leaders. Transformational leaders are skillful in presenting themselves as role models to their followers, and the symbol of an effective leader is to present himself by his work rather than with his words.

TL affects FC, and there is a strong and positive relationship between OI and FC. When the transformational leader enhances OI and FC, the followers perform beyond their expectations because they release their energy and migration creativity. These leaders challenge the status quo and encourage creativity among their followers. As a first step, the transformational leader needs to encourage his FC to ensure that innovative ideas are generated. There is an association between FC and leadership for innovative output. Transformational leaders inspire and stimulate their followers so they will develop their own capacity and achieve extraordinary outcomes. These leaders help followers to develop and grow by aligning their needs with the goals and objectives of individual followers, the leader, the team, and the organization as a whole. There is a positive influence of TL on FC as it produces higher levels of satisfaction, performance, and productivity in the group. The reason is that transformational leaders demonstrate a strong belief in their followers' capacity to do their best when they are empowered and inspired.

OL is made possible when the transformational leader creates an OL culture and develops the learners' capability. There is a need for support from the top management to assign challenging tasks and activities so that followers learn and improve their knowledge, skills, and abilities. There is a marked influence of TL on organizational performance and innovation depending on the learning that takes place in the organization. Therefore, leadership plays an important role in OL and generating innovative ideas. Studies have shown that there is a positive relationship between OL and TL, but there is a need for dynamic capabilities in the organization. It is quite challenging to maintain a learning organization,

particularly a complex learning organization. With balanced learning behavior and culture at the workplace, transformational leaders will be able to achieve employee learning orientation.

TL and OL have positive as well as negative relationships. There is no point in creating a learning organization when the transformational leader is not able to create a learning culture or obtain support from the top management. Furthermore, there should be followers' willingness to put in the effort and time into learning to bring about improvements in the organizational performance in a learning environment. They will perform better, and the transformational leader will be able to direct them toward positive change. There is a need for OL when it comes to OI. Innovative ideas come when followers have up-to-date knowledge, skills, and abilities, which is only possible through continuous change and learning. Learning organizations affect innovative ideas, which improve the capacity and capability for enhanced organizational performance. The transformational leader leads his followers by supporting and encouraging them in learning best practices showing the link with OI. Therefore, the concept of OL and its relationship with OI is growing. Most transformational leaders have teams working in research and development departments, where the members contribute in bringing about changes and improvements. Accordingly, an organization adapts to the influential factors in the business environment. It shows that both OL and innovation are closely related. The meditation of employees' experience has a positive influence on the innovative capability of the organization. There is a significant and direct impact of OL on OI. Transformational leaders practice knowledge management, which itself is a research discipline for bringing about organizational improvements. The application of knowledge by followers is to ensure improvements in business performance resulting from OL and innovation. Similarly, the organization gains a strategic advantage due to organizational growth and competitiveness.

The impact on OL takes place at three levels, namely, organizational, group, and individual. Because of TL and commitment, the impact level will be highly positive. Members of an organization will be performing better, and this is mostly true when there is a need for change and adaptation. There should be a learning capability within the organization to have a positive impact on business performance. The relationship comes from new product and intellectual capability. The transformational leader exploits efficiencies with resources and learning to achieve competitive advantage.

Chapter 5: Implications and Suggestions for Future Research

In this chapter, I discuss the research and managerial implications. I also discuss the potential limitations and future research directions.

Your question is: Why now? I say why not? We have to anticipate our future. If we postpone till tomorrow, today will be upon us. We always hear the excuse: “I’ll do it tomorrow.” One shouldn’t postpone matters till tomorrow and make excuses. If we were able to do it today to strengthen our economy today, then it should be done today. (HH Sheikh Mohammed Bin Rashid Al Maktoum, 2013)

5.1 Research Implications

This research is one of the first to investigate TL and its effects on OI. In addition, this research can add to the leadership literature as it elaborates the concept of TL in the Gulf culture in relation to creativity, culture, OL, and innovation in the work environment.

The findings of this research have several practical implications. An obvious implication is for employee selection. The results show that participant employees would like to have transformational leaders who can inspire them to achieve new levels of performance. That is, employees understand the nature of organizational challenges and the necessity to participate effectively in a dynamic market where their skills and qualifications are optimally used. This is impossible to reach without having organizational leaders who trust and have confidence in their employees, appreciate their inputs, and encourage them to be imaginative in carrying out their duties.

Moreover, in today’s market, employees are confronted with unlimited possibilities. To take advantage of these opportunities, they need to sharpen their skills and rethink their professional priorities. This makes having a transformational leader an imperative organizational task. It is the transformational leader who can make change possible and

address challenging issues at the workplace with confidence and create an OC that enhances performance and thoughtful propositions.

5.2 Practical Implications

Understanding the nature of relationships between TL and OI in a society like the UAE takes on a practical and intellectual value. Since the establishment of the UAE in the early 1970s, the country has progressed steadily from a seminomadic society to a global hub for business action. Successful management under the unfolding events and the emerging business environment requires a rethinking of the old approach to organizational operations and activities. This was underscored by the results of this study. Although traditional and autocratic managers have been tolerated in the past, the new realities dictate that a new form of leadership is needed to motivate employees and cultivate their skills to cope with the mounting organizational challenges.

Furthermore, today's employees are mostly educated and look for opportunities to use their skills and be useful. They like challenging opportunities and to be part of a generation that makes a difference in their organizations and the lives of people in the larger society. To use their skills and to improve their capacity to deal with market conditions, a new leadership is needed, that is, leaders who are not intimidated by competent subordinates and make every effort to value their aspirations and accommodate their needs. This makes TL a necessity and a pressing organizational task.

Horne and Jones (2001) conducted a survey—through the Chartered Management Institute in London—of 1,500 managers to explore what the employees believed were the most important characteristics their managers should possess to act like leaders. Fifty-five percent of the employees in this survey wish to have inspirational leaders through their ability

to influence and motivate their followers. Approximately 41% preferred strategic thinking leaders, and 36% preferred someone who is gifted with a forward-looking approach.

In addition, the results of this study indicate that managers should motivate their followers by empowering them and cultivating qualities of TL behavior to stimulate the creative involvement of their employees and to bring about the needed organizational change and innovation. The challenge that managers in the UAE face is how to cope with the new demands of employees and the requirements for having a vital organization. As it was argued before, this requires a new thinking and an imaginative capacity to explore various ways to improve employees' competency. Transformational leaders may help in this process and lead their organizations to achieve the desired goals, including improved performance. Some of the possible ways to motivate employees are offering specialized seminars and workshops, visiting first-class corporations abroad, recreating qualified employees, internal training, and empowering HR managers who are qualified and courageous.

5.3 Limitations

As with any research, this study has several limitations. First, the focus of the study was on Dubai and did not include the other emirates. This means that there is a need to test and examine this model in the context of the other parts of the UAE to get an accurate understanding of the nature of the organizational difficulties in the country. Indeed, other emirates might benefit from the fact that FC and OL facilitate employee acceptance of OI through transformational leaders. Second, all of the data collected were gathered through a single instrument using a Likert-type scale. This should be combined with interviews and/or open-ended questions. Third, most of the literature related to TL and OI has been examined in the Western countries. These perspectives might not be applicable to the culture of the UAE.

5.4 Future Research Directions

This study focuses on the underlying relationship between TL and OI. Future research might examine this relationship in other Arab countries using some factors, such as creativity of the employees and the OC that has been studied in this research. In addition, studies should investigate whether these factors are significant mediators of the relationship between TL and OI in different countries or industries. Moreover, this study does not support the effect of individual characteristics on OI. Future research should examine whether diversity and conflict are the determinants of OI rather than other factors that have been mentioned in this research.

From a research point of view, the review of literature opens up the door for the next step in research on the perception of subordinates of the influence of transformational leaders on organizations. Further research should be conducted to investigate the impact of TL on organizational climate. Future research should also determine whether the influence of the transformational leaders on organizational climate is congruent or the transformational leaders' influence on OC is a contradiction. From a practical outlook, the transformational leaders can identify the area in which their style of leadership is more effective for the organization. Future research should examine the effect of TL on the followers, at both the individual and the group levels, in the enhancement of OI.

5.5 Conclusion

This research suggests that TL has a significant positive relationship with OI. Moreover, previous research focused on the leaders' influence on organizations that mostly resulted in innovation. In addition, literature indicates that the transformational leader plays an important role in enhancing the motivation, morale, and performance of employees through the four components, namely, idealized influence, inspirational motivation,

intellectual stimulation, and individual consideration, which lead to OI and long-term survival. The current research is in agreement with previous research, which advocates that transformational leaders are those who provide a situation for innovation by paying more attention to the followers' needs and their improvement. In addition, transformational leaders are thought to raise the level of innovation of their followers by designing realistic and challenging goals and by giving their followers the confidence to achieve these goals. Moreover, transformational leaders encourage their followers to use their personal and organizational abilities to increase innovation.

Sarros et al. (2011) emphasized the need for further empirical research to support this relationship and the extent of the effect of some factors, especially in the government sector. In addition, they confirmed that there is a scarcity of this type of research. The conceptual framework of this research addresses this gap and sheds more light on the influence of TL on OI through some factors that affect this relationship. These factors are OC, followers' creativity, and OL. Some propositions are offered based on previous conceptual and empirical studies. These studies identify culture, FC, and OL as the most important moderating variables in enhancing the relationship between TL and OI. Thus, a framework was developed to depict such relationships.

Ultimately, as John Quincy Adams said, "If your actions inspire others to dream more, learn more, do more and become more, you are a leader" (Caughron, 2010, p. 27). This statement, in the context of this study, can be modified to read, "If your actions inspire others to dream more, learn more, do more and become more, you are a transformational leader."

References

- Afshari, M., Ghavifekr, S., Parhizkar, S., & Ayoufu, W. (2013). Relationship between transformational leadership behaviors of lecturers and students' creativity. *Malaysian Online Journal of Educational Management*, 1(2), 33–40.
- Afshari, M., Siraj, S., Ghani, M., & Afshari, M. (2011). Leadership and creativity. *Australian Journal of Basic and Applied Sciences*, 5(10), 1591–1594.
- Agbor, E. (2008). Creativity and innovation: The leadership dynamics. *Journal of Strategic Leadership*, 1(1), 39–45.
- Al Marashi, H., & Bhinder, J. (2008). From the tallest to the greenest—Paradigm shift in Dubai. In *Tall and green: Typology for a sustainable urban future* (pp. 1–8). Proceedings of the CTBUH 8th World Congress, Dubai, UAE.
- Al-Ansari, Y. (2014). *Innovation practices as a path to business growth performance: A study of small and medium sized firms in the emerging UAE market* (PhD thesis). Southern Cross University, Lismore, NSW.
- Alarifi, S. (2011). *The effects of transformational leadership on followers' creativity and organizational innovation in public sector*. London: Brunel Business School.
- Al-Banawi, S. (2012). *The unknown leader: Discover the leader in you*. New York: Kogan Page Publishers.
- Al-Nasser, A. D., Al-Rawwash, M. Y., & Alakhras, A. S. (2011). An approach to setting up a national customer satisfaction index: The Jordan case study. *Journal of Applied Statistics*, 38(9), 1977–1993.
- Albury, D. (2005). Fostering innovation in public services. *Public Money and Management*, 25(1), 51–56.

- Althonayan, A., & Alarifi, S. (2013). *The effects of transformational leadership on followers' creativity in public sector*. Paper presented at the 2nd International Conference on Management, Behavioral Sciences and Economics Issues (ICMBSE 2013), March 17–18, Dubai, (UAE). Retrieved November 2, 2013, from <http://psrcentre.org/images/extraimages/313055.pdf>
- Alzawahreh, A. (2011). Transformational leadership of superiors and creativity level among faculty members in Jordanian Universities. *Journal of Institutional Research (South East Asia)*, 9(1), 125–132.
- Amabile, T., Schatzel, E., Moneta, G., & Kramer, S. (2004). Leader behaviors and the work environment for creativity: Perceived leader support. *Leadership Quarterly*, 15(1), 5–32.
- Antonakis, J., & House, R. J. (2002). The full-range leadership theory: The way forward. *Transformational and Charismatic Leadership: The Road Ahead*, 2, 3–34.
- Argote, L., & Spekter, E. (2011). Organizational learning: From experience to knowledge. *Organization Science*, 22(5), 1123–1137.
- Arnold, K., Turner, N., Barling, J., Kelloway, E., & Mckee, M. (2007). Transformational leadership and psychological well-being: The mediating role of meaningful work. *Journal of Occupational Health Psychology*, 12, 193–203.
- Augsburg, K., Claus, I., & Randeree, K. (2009). *Leadership and the Emirati woman: Breaking the glass ceiling in the Arabian Gulf*. New York: LIT Verlag Münster.
- Avolio, B., & Bass, B. (1988). *Transformational leadership, charisma, and beyond*. In J. G. Hunt, B. R. Baliga, H. P. Dachler, & C. A. Schriesheim (Eds.), *Emerging leadership vitas*. Lexington, MA: Lexington Books.
- Avolio, B., & Bass, B. (1994). *Improving organizational effectiveness through transformational leadership*. California: Sage.

- Avolio, B., Zhu, W., Koh, W., & Bhatia, P. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behavior*, 951–968.
- Bass, B. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B. M. (2000). The future of leadership in learning organizations. *Journal of Leadership and Organizational Studies*, 7(3), 18–40.
- Bass, B. M., & Avolio, B. J. (1989). *Manual for the multifactor leadership questionnaire*. Palo Alto, CA: Consulting Psychologists Press.
- Bates, R., & Khasawneh, S. (2005). Organizational learning culture, learning transfer climate and perceived innovation in Jordanian organizations. *International Journal of Training and Development*, 9(2), 96–109
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588–606.
- Beugre, C., Acar, W., & Braun, W. (2006). Transformational leadership in organizations: An environment-induced model. *International Journal of Manpower*, 27(1), 52–62.
- Bhat, A., Rangnekar, S., & Barua, M. (2013). Impact of transformational leadership style on organizational learning. *Elite Research Journal of Education and Review*, 1(4), 24–31.
- Birasnav, M., Rangnekar, S., & Dalpati, A. (2010). Transformational leadership and human capital benefits: The role of knowledge management. *Leadership and Organization Development Journal*, 32(2), 106–126.
- Boerner, S., Eisenbeiss, S., & Griesser, D. (2007). Follower behavior and organizational performance: The impact of transformational leaders. *Journal of Leadership and Organizational Studies*, 3(3), 15–26

- Bommer, W., Rubin, R., & Baldwin, T. (2004). Setting the stage for effective leadership: Antecedents of transformational leadership behavior. *Leadership Quarterly*, 15, 195–210.
- Borins, S. (2002). Leadership and innovation in the public sector. *Leadership and Organization Development Journal*, 23(8), 467–476.
- Boseman, G. (2008). Effective leadership in a changing world. *Journal of Financial Service Professionals*, 62(3), 36–38.
- Bruno, L. F. (2013). Relationship between organizational culture and innovation management: An exploratory investigation. *PM World Journal*, II(X), 1–28.
- Bryant, S. (2003). The role of transformational and transactional leadership in creating, sharing and exploiting organizational knowledge. *Journal of Leadership and Organizational Studies*, 9(4), 32–44.
- Budhwar, P., & Mellahi, K. (2006). *Managing human resources in the Middle-East*. New York: Routledge.
- Burns, J. (1978). *Leadership*. New York: Harper & Row.
- Camelia, F., & Elena, B. (2010). The influence of transformational leader upon organizational culture. *Journal of Applied Economic Sciences*, 1(11), 43–47
- Caughron, J. J. (2010). *Perspectives on leadership research* (p. 27). Leader One Hundred One.
- Chen, C.-H., & Lee, H.-M. (2007). Effects of transformational team leadership on collective efficacy and team performance. *International Journal of Management and Enterprise Development*, 4, 202–217.
- Dale, B., Wiele, T., & Iwaarden, J. (2012). *Managing quality*. New York: John Wiley & Sons.

- Dale, B., Wiele, T., and Iwaarden, J. (2013). *Managing quality*. New York: John Wiley & Sons.
- Damanpour, F., & Schneider, M. (2006). Phases of the adoption of innovation in organizations: Effects of environment, organization and top managers. *British Journal of Management*, 17, 215–236.
- Damirch, Q., Rahimi, G., & Sayyedi, M. (2011). Transformational leadership style and innovative behavior on innovative climate at SMES in Iran. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 1(4), 119–127.
- de Weerd-Nederhof, P., Pacitti, B., de Silva Gomes, J., & Pearson, A. (2002). Tools for the improvement of organizational learning processes in innovation. *Journal of Workplace Learning*, 14(7/8), 320–331.
- Deal, P., & Kennedy, A. (1982). *Corporate cultures*. Reading, MA: Addison-Wesley.
- Deluga, R. (1992). The relationship of leader-member exchanges with laissez-faire, transactional, and transformational leadership in naval environment. In K. E. Clark, M. B. Clark, & D. R. Campbell (Eds.), *Impact of Leadership* (pp. 237–247). Greensboro, NC: Center for Creative Leadership.
- Deshpandé, R., Farley, J. U., & Webster, F. E. (1993). Corporate culture, customer orientation, and innovativeness in Japanese firms: A quadrad analysis. *Journal of Marketing*, 57(1), 23–37.
- Dionne, S., Yammarino, F., Atwater, L., & Spangler, W. (2004). Transformational leadership and team performance. *Journal of Organizational Change Management*, 17(2), 177–193.
- Dubai Chamber of Commerce and Industry. (2011). Dubai Chamber of Commerce and Industry, Information Centre, Dubai.

- Eisenbeiss, S., Knippenberg, D., & Boerner, S. (2008). Transformational leadership and team innovation: Integrating team climate principles. *Journal of Applied Psychology*, 93, 1438–1446.
- Elenkov, D., & Manev, I. (2005). Top management and influence on innovation: The role of socio-cultural context. *Journal of Management*, 31(3), 381–402.
- Elkins, T., & Keller, R. (2003). Leadership in research and development organizations: A literature review and conceptual framework. *Leadership Quarterly*, 14(4–5), 587–606.
- Emirates Competitiveness Council. (2012). *UAE: Innovation at work*. Dubai, UAE: Author.
- Eveleens, C. (2010). Innovation management: A literature review of innovation process models and their implications. *Lectoraate Innovatie Publieke Sector*, 1–16.
- Ferrari, P. A., & Manzi, G. (2010). Nonlinear principal components analysis as a tool for the evaluation of customer satisfaction. *Qualitative Technology and Quantitative Management*, 7(2), 117–132.
- Garcia-Morales, V., Llorens-Montes, F., & Verdu-Jover, A. (2007). The effects of transformational leadership on organizational performance through knowledge and innovation. *British Journal of Management*, 19(4), 299–319.
- Garcia-Morales, V., Matias-Reche, F., & Hurtado-Torres, N. (2008). Influence of transformational leadership on organizational innovation and performance depending on the level of organizational learning in the pharmaceutical sector. *Journal of Organizational Change Management*, 21(2), 188–212.
- Garmon, M. S. (2004). *The relationship between organizational learning, culture, image, identity and identification: An empirical study* (Order No. 3157338, Touro University International). ProQuest Dissertations and Theses (pp. 276–276). Retrieved from <http://adezproxy.adu.ac.ae/docview/305051876?accountid=26149>. (305051876).

- Givens, R. (2008). Transformational leadership: The impact on organizational and personal outcomes. *Emerging Leadership Journeys*, 1(1), 4–24.
- Gregory, B., Moates, K., & Gergory, S. (2011). An exploration of perspective taking as an antecedent of transformational leadership behavior. *Leadership and Organization Development Journal*, 32(8), 807–816.
- Gumusluoglu, L., & Ilsev, A. (2009a). Transformational leadership, creativity, and organizational innovation. *Journal of Business Research*, 62(4), 461–473.
- Gumusluoglu, L., & Ilsev, A. (2009b). Transformational leadership and organizational innovation: The roles of internal and external support for innovation. *Journal of Product Innovation Management*, 26(1), 264–277.
- Hartley, J. (2005). Innovation in governance and public services: Past and present. *Public Money and Management*, 25(1), 27–34.
- Hassan, D., & Faezeh, R. (2011). The impact of authentic leadership on job satisfaction and team commitment. *Management and Marketing Challenges for the Knowledge Society*, 6(3), 421–436.
- Hassanien, A., Dale, C., Clarke, A., & Herriott, M. (2012). *Hospitality Business Development*. New York: Routledge.
- HH Sheikh Mohammed Bin Rashid Al Maktoum. (2013, February 11). *Interviews with His Highness*. Retrieved December 20, 2013, from <http://www.sheikhmohammed.ae>
- Hirtz, P., Murray, S., & Riordan, C. (2007). The effect of leadership on quality. *Engineering Management Journal*, 19(1), 22–27.
- Ho, L. (2010). Meditation, learning, organizational innovation and performance. *Industrial Management and Data Systems*, 111, 113–131.
- Horne, M., & Jones, D. (2001). *Leadership: The challenge for all?* London: Institute of Management & Demos.

- Hsiao, H., & Chang, J. (2011). The role of organizational learning in transformational leadership and organizational innovation. *Asia Pacific Education Review*, 12, 621–631.
- Hugo, Z., Vlado, D., & Miha, S. (2009). Transactional and transformational leadership impacts on organizational learning. *Journal for East European Management Studies*, 14(2), 144–165.
- Humphreys, J., & Einstein, W. (2003). Nothing new under the sun: Transformational leadership from historical perspective. *Management Decision*, 41(1), 85–95.
- Husna, N., & Idris, A. (2010). *Leadership style, external environment, learning climate and innovation in small and medium enterprises*. International Conference on Arab-Malaysian Islamic Global Business Entrepreneurship (pp. 1–9). Kuala Lumpur: UUM College of Business, University of Malaysia.
- Hutahayan, B., Astuti, E., Raharjo, K., & Hamid, D. (2013). The mediation effect of organizational culture and organizational commitment in relationship between transformational leadership to organizational citizenship behavior. *Interdisciplinary Journal of Contemporary Research in Business*, 5(5), 618–626.
- Ibraheem, S., Mohammad, S., Al-Zeaud, H., & Batayneh, A. (2011). The relationship between transformational leadership and employees' satisfaction at Jordanian private hospitals. *Business and Economic Horizons*, 5(2), 35–46.
- Jandaghi, G., Zarei Matin, H., & Farjami, A. (2009). Comparing transformational leadership in successful and unsuccessful companies. *African Journal of Business Management*, 3(7), 272–280.
- Janssen, O., Van der Vliert, E., & West, M. (2004). The bright and dark sides of individual and group innovation: A special issue introduction. *Journal of Organizational Behavior*, 25, 129–145.

- Jaskyte, K. (2004). Transformational leadership, organizational culture and innovativeness in nonprofit organizations. *Nonprofit Management and Leadership*, 15(2), 135–168.
- Jaskyte, K., & Kisieliene, A. (2006). Organizational innovation a comparison of nonprofit human-service organizations in Lithuania and the United States. *International Social Work*, 49(2), 165–76.
- Jogulu, U. (2011). Leadership that promotes organizational learning: Both sides of the coin. *Development and Learning in Organizations*, 25(4), 11–14.
- Johnson, B. M. (2009). Individual creativity and its association to individual productivity
- Jordan, S., Messner, M., & Becker, A. (2009). Reflection and mindfulness in organizations: Rationals and possibilities for integration. *Management Learning*, 40(4), 465–473.
- Judge, T., & Piccolo, R. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755–768.
- Jung, D., Chow, C., & Wu, A. (2003). The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings. *Leadership Quarterly*, 14(4), 525–544.
- Jung, D., Wu, A., & Chow, C. (2008). Towards understanding the direct and indirect effects of CEO's transformational leadership on firm innovation. *Leadership Quarterly*, 19, 582–594.
- Jung, D. I., & Avolio, B. J. (1999). Effects of leadership style of followers' cultural orientation on performance in group and individual task conditions, *Academy of Management Journal*, 2(42), 208–218.
- Kavanagh, M., & Ashkanasy, N. (2006). The impact of leadership and change management strategy on organizational culture and individual acceptance of change during a merger. *British Journal of Management*, 17, 81–103.

- Khan, M., Aslam, N., & Riaz, M. (2012). Leadership styles as predictors of innovative work behavior. *Pakistan Journal of Social and Clinical Psychology*, 10(1), 17–22.
- Khan, R., Rehman, A., & Fatima, A. (2009). Transformational leadership and organizational innovation: Moderated by organizational size. *Journal of Business and Management*, 3(11), 678–684.
- Kimberly, J., & Evanisko, M. (1981). Organizational innovation: The influence of individual, organizational, and contextual factors on hospital adoption of technological and administrative innovations. *Academy of Management Journal*, 24, 689–713.
- King, W. R. (2009). *Knowledge management and organizational learning*. New York, NY: Springer.
- Kouzes, J., & Posner, B. (1988). *The leadership challenge* (6th ed.). San Francisco, CA: Jossey-Bass.
- Kuepers, W. (2011). “Trans- + -Form” leader- and followership as an embodied emotional and aesthetic practice for creative transformation in organizations. *Leadership and Organization Development Journal*, 32(1), 20–40.
- Ladkin, D. (2006). The enchantment of charismatic leader. *Leadership*, 2(2), 165–179.
- Lai, K., and Yusof, N. (2011). Organizational culture and innovation adoption/generation: A proposed model. *World Academy of Science, Engineering and Technology*, 58, 58–57.
- Lam, A. (2011). *Innovative organizations: Structure, learning and adaptation*. DIME Final conference (pp. 162–177). Maastricht: UNU-MERIT & School of Economics and Business, Maastricht University.
- Laohavichien, T., Fredendall, L., & Catrell, R. (2009). The effects of transformational and transactional leadership on quality improvement. *Quality Management Journal*, 16(2), 7–24.

- Lee, L., & Tan, E. (2012). The influences of antecedents on employee creativity and employee performance: A meta-analytic review. *Interdisciplinary Journal of Contemporary Research in Business*, 4(2), 984–996.
- Manisera, M., Van der Kooij, A., & Dusseldorp, E. (2010). Identifying the component structure of satisfaction scales by nonlinear principal components analysis. *Qualitative Technology and Quantitative Management*, 7(2), 97–115.
- Marki, M., & Scandura, T. (2010). Exploring the effects of creative CEO leadership on innovation in high-technology firms. *Leadership Quarterly*, 21(1), 75–88.
- Marshall, S., Rosenbach, W., Deal, T., & Peterson, K. (1992). Assessing transformational leadership and its impact. In K. E. Clark, M. B. Clark, & D. P. Campbell (Eds.), *Impact of leadership* (pp. 131–148).
- Martins, E., & Martins, N. (2002). An organizational culture model to promote creativity and innovation. *Journal of Industrial Psychology*, 28(4), 58–65.
- Masi, R., & Cooke, R. (2000). Effects of transformational leadership on subordinate motivation, empowering norms, and organizational productivity. *International Journal of Organizational Analysis*, 8, 16–47.
- Medley, F., & Larochelle, D. (1995). Transformational leadership and job satisfaction. *Nursing Management*, 26, 5–64.
- Michaelis, B., Stegmaier, R., & Sonntag, K. (2010). Shedding light on followers' innovation implementation behavior. *Journal of Management Psychology*, 25(4), 408–429.
- Modassir, A., & Singh, T. (2008). Relationship of emotional intelligence with transformational leadership and organizational citizenship behavior. *International Journal of Leadership Studies*, 4(1), 3–21.
- Model Criteria. (2013). Retrieved November 20, 2013, from <http://www.efqm.org/>

- Moore, M., & Hartley, J. (2008). Innovation in governance. *Public Management Review*, 10(1), 3–20.
- Morales, V., Montes, F., & Jover, A. (2006). Antecedents and consequences of organizational innovation and organizational learning in entrepreneurship. *Industrial Management and Data Systems*, 106(1), 21–42.
- Mozhdeh, M., Wan, K., & Amin, V. (2011). The impact of transformational leadership on organizational innovation moderated by organizational culture. *Australian Journal of Basic and Applied Sciences*, 5(6), 504–508.
- Mulla, Z. (2010). *Transformational leadership is the key to innovation in organizations*. Mumbai: Kausthubham School of Management and Labour Studies.
- Mumford, M., & Licuanan, B. (2004). Leading for innovation: conclusion, issues and directions. *Leadership Quarterly*, 15(1), 163–171.
- Nicholson II, W. (2007). Leading where it counts: An investigation of leadership styles and behaviours that define college and university presidents as successful fundraisers. *International Journal of Educational Advancement*, 7(4), 256–270.
- Norshidah, N., & Kasbon, H. (2013). A study on leadership behavior and organizational learning institutions. *GSE Journal of Education*, 125–134.
- OECD, International Development Research Centre (IDRC), Canada. (2013). *Competitiveness and private sector development new entrepreneurs and high performance enterprises in the Middle East and North Africa* (pp. 92–93). New York: OECD Publishing. Retrieved November 20, 2013, from http://books.google.ae/books?id=JeTBr7BL5F8C&pg=PA92&dq=UAE+and+%22innovation%22&hl=en&sa=X&ei=_aekUvnIBsqXtQbrmoCoDw&redir_esc=y#v=onepage&q=UAE%20and%20%22innovation%22&f=false

- Ogbonna, E., & Harris, L. (2000). Leadership style, organizational culture and performance: Empirical evidence from UK companies. *International Journal of Human Resource Management*, 11(4), 766–788.
- Oke, A., Munshi, N., & Walumbwa, F. (2009). The influence of leadership on innovation processes and activities. *Organizational Dynamic*, 38(1), 64–72.
- Ostroff, C., Kinicki, A., & Tamkins, M. (2003). Organizational culture and climate. *Handbook of Psychology*, 565–593.
- Pacham, P., & Zhang, L. (2006). Accounting, innovation, and incentives. *Journal of Engineering and Technology Management*, 23(1/2), 114–129.
- Parry, K. (1996). Leadership research: Themes, implications, and a new leadership challenge. In K. Parry (Ed.), *Leadership research and practice*. Melbourne, Victoria: Pitman Press.
- Parry, K. (1998). Grounded theory and social process: A new direction for leadership research. *Leadership Quarterly*, 9, 85–105.
- Pasche, M., & Magnusson, M. (2011). Continuous innovation and improvement of product platforms. *International Journal of Technology Management*, 56(2), 256–271.
- Patterson, M., Warr, P., & West, M. (2004). Organizational climate and company performance: The role of employee affect and employee level. *Journal of Occupational and Organizational Psychology*, 77, 193–216.
- Perry, M. (2011). *Business driven project portfolio management: Conquering the top 10 risks that threaten success*. New York: J. Ross Publishing.
- Popadiuk, S., & Choo, C. (2006). Innovation and knowledge creation: How are these concepts related? *International Journal of Information Management*, 26, 302–312.
- Prajogo, D., & Ahmed, P. (2006). Relationships between innovation stimulus, innovation capacity, and innovation performance. *R&D Management*, 36(5), 499–515.

- Rafferty, A., & Griffin, M. (2004). Dimensions of transformational leadership: Conceptual and empirical extensions. *Leadership Quarterly*, 15(3), 329–354.
- Ramachandran, S., & Krishnan, V. (2009). Effect of transformational leadership on followers' affective and normative commitment: Culture as moderator. *Great Lakes Institute of Management*, 3(1), 23–38.
- Rashidi, P., & Motlagh, M. (2013). A study of the impact of organizational learning on organizational innovation. *International Journal of Research in Organizational Behavior and Human Resource Management*, 1(3), 48–56.
- Rettab, B., Brik, A., & Mellahi, K. (2009). A study of management perceptions of the impact of corporate social responsibility on organisational performance in emerging economies: The case of Dubai. *Journal of Business Ethics*, 89, 371–390.
- Riaz, A., & Haider, M. (2010). Role of transformational and transactional leadership on job satisfaction and career satisfaction. *Business and Economic horizons*, 1(1), 29–38.
- Sabir, M., Sohail, A., & Asif Khan, M. (2011). Impact of leadership style on organization commitment: In mediating role of employee value. *Journal of Economics and Behavioral Studies*, 3(2), 145–152.
- Sadik, A., & Elbadawi, I. (2012). *The global economic crisis and consequences for development strategy in Dubai*. New York: Palgrave Macmillan.
- Sarros, J., Cooper, B., & Santora, J. (2008). Building a climate for innovation through transformational leadership and organizational culture. *Journal of Leadership and Organizational Studies*, 15(2), 145–158.
- Sarros, J., Cooper, B., & Santora, J. (2011). Leadership vision, organizational culture and support for innovation in not-for-profit and for-profit organizations. *Leadership and Organization Development Journal*, 32(3), 291–309.

- Schepers, J., Wetzels, M., & Ruyter, K. (2006). Leadership styles in technology acceptance: Do followers practice what leaders preach. *Managing Service Quality*, 15(6), 496–508.
- Schumpeter, J. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Cambridge, MA: Harvard University Press.
- Schwab, K. (2013). *The Global Competitiveness Report 2013–2014*. Geneva: World Economic Forum.
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580–607.
- Shin, S., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of Management Journal*, 46(6), 703–714.
- Simic, I. (1998). Transformational leadership—The key to successful management of transformational organizational changes. *Economics and Organization*, 1(6), 49–55.
- Singh, N., & Krishnan, V. R. (2007). Transformational leadership in India: Developing and validating a new scale using grounded theory approach. *International Journal of Cross Cultural Management*, 7(2), 219–236.
- Sivanathan, N., & Fekken, G. (2002). Emotional intelligence, moral reasoning and transformational leadership. *Leadership and Organization Development Journal*, 23(3/4), 1980204.
- Škerlavaj, M., Song, Ji, & Lee, Y. (2010). Organizational learning culture, innovative culture and innovations in South Korean firms. *Expert Systems With Applications*, 37(9), 6390–6403.

- Sparks, J., & Schenk, J. (2001). Explaining the effects of transformational leadership: An investigation of the effects of higher-orders motives in multilevel marketing organizations. *Journal of Organizational Behavior*, 22, 849–869.
- Subramaniam, M., & Youndt, M. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal*, 48, 450–463.
- Tichy, N., & Devanna, M. (1986). *The transformational leader*. New York: Wiley.
- Tichy, N., & Devanna, M. (1990). *The transformational leader* (Rev. ed.). New York: Wiley.
- Tims, M., Bakker, A., & Xanthopoulou, D. (2011). Do transformational leaders enhance their followers' daily work engagement? *Leadership Quarterly*, 22, 121–131.
- UAE MFT. (2012). *Why UAE: Unlimited opportunity yearbook 2012*. UAE: Ministry of Foreign Trade Publications.
- Vigoda-Gadot, E., Schwabski, N., Shoham, A., & Ruvio, A. (2005). Public sector innovation for managerial and the post-managerial era: Promises and realities in a globalizing public administration. *International Public Management Journal*, 8(1), 75–81.
- Voon, M., Lo, M., Ngui, K., & Ayob, N. (2011). The influence of leadership styles on employee job satisfaction in public sector organization Malaysia. *International Journal of Business, Management and Social Sciences*, 2(1), 24–32.
- Walumbwa, F. O., Lawler, J. J., Avolio, B. J., Wang, P., & Shi, K. (2005). Transformational leadership and work-related attitudes: The moderating effects of collective and self-efficacy across cultures. *Journal of Leadership and Organizational Studies*, 11(3), 2–16.
- Wang, C., & Ahmed, P. (2002). *A review of the concept of organizational learning*. Working paper series 2002 Management Research Centre, Wolverhampton Business School, University of Wolverhampton, UK.

- Weber, M. (1947). *The theory of social and economic organization*. In A. N. Henderson & T. Parsons (Eds. & Trans.). Glencoe, IL: Free Press.
- Wejnert, B. (2002). Integrating models of diffusion of innovation: A conceptual framework. *Annual Review of Sociology*, 28, 297–326.
- Zahay, D., & Handfield, R. (2004). The role of learning and technical capabilities in predicting adoption of B2B technologies. *Industrial Marketing Management* (33), 627–641.

Appendix A. Permissions From Authors

Re: Request for IP consent

Bernard Johnson [bmj@email.phoenix.edu]

Sent: 19 April 2013 04:15 AM

To: Eman Ahmed Mohamed AlSalami

Dear Eman Ahmed Mohamed AlSalami,

Your thesis appears quite interesting. You are welcome to use my creativity survey. I would like to see the results of your study when complete. Feel free to email me with any questions that you may have.

Best Regards,

Dr. Bernard M. Johnson

On Sun, Apr 14, 2013 at 10:34 AM, Eman Ahmed Mohamed AlSalami <1008023@students.adu.ac.ae> wrote:

Dear Dr. Bernard M. Johnson,

Hope my email find both of you well.

My name is Eman AL Salami from United Arab Emirates. I am a DBA candidate at Abu Dhabi University. My dissertation title is "Driving organizational innovation through transformational leadership". The mediator factors are organizational culture, followers' creativity and organizational learning.

In preparation for my thesis I came across your article titled "INDIVIDUAL CREATIVITY AND ITS ASSOCIATION TO INDIVIDUAL PRODUCTIVITY IN THE WORKPLACE" /2009 and I believe that the foundation of it is going to be highly beneficial for my work. Therefore, I kindly request your consent to make use of the questionnaire you have used to support your article (Creativity Survey). Needless to say that I will be more than happy to provide you with the result of my study upon your request.

Your cooperation is highly appreciated.

Kind Regards,

Eman Alsalami

Re: Request for IP consent

Susanne G. Scott [sscott@umassd.edu]

Sent: 19 April 2013 07:34 PM

To: Eman Ahmed Mohamed AlSalami

Cc: mohamed behery [mohamed.behery@adu.ac.ae]; reg bruce [reg.bruce@louisville.edu]

Hello Eman:

Thank you for the interest in our work. Although the article is now almost 20 years old, it has received over 3000 citations to date in many countries. I am pleased to hear that it might be of benefit to you in your work. You have my permission to use the use the questionnaire in your work. Please keep me informed of your work.

--

Susanne G. Scott

Associate Dean of the Charlton College of Business

University of Massachusetts Dartmouth

285 Old Westport Rd.

N. Dartmouth, MA 02747

508-999-9188

sscott@umassd.edu

Re: Request for IP consent

Venkat R. Krishnan [venkat.r.krishnan@gmail.com]

Sent: 18 April 2013 02:22 AM

To: Eman Ahmed Mohamed AlSalami

Cc: niti_singh@yahoo.com; mohamed.behery@adu.ac.ae

Eman Ahmed Mohamed AlSalami wrote 2013-04-17 21:06:

> In preparation for my thesis I came across your article titled
> "Transformational leadership in India: Developing and validating a new
> scale using grounded theory approach." /2007 and I believe that the
> foundation of it is going to be highly beneficial for my work.
> Therefore, I kindly request your consent to make use of the
> questionnaire you have used to support your article (Transformational
> Leadership Items). Also I would like to request using Likert Scale
> instead of a five-point scale, so that it could be matching with the
> scale that I used for the other factors in my study.

Please go ahead. Good luck with your research.

Best wishes,

Venkat R. Krishnan

<http://www.rkvenkat.org>

RE: Request for IP consent

Dr. Michael Garmon [Michael.Garmon@trident.edu]

Sent: 14 April 2013 11:22 PM

To: Eman Ahmed Mohamed ALSalami

Importance: High

Hello Eman,

I'd be honored if you would use the scale I used in my research -- thank you for asking. Certainly, any adaptation you need to make is also just fine. Please feel free to adapt to your needs.

And yes -- I'd LOVE to have a copy of your completed study if you are able to send upon completion.

I wish you the very best!

Mike

Appendix B. Research Questionnaire

Dear Respected Colleagues,

I'm carrying out a survey on transformational leadership and organizational innovation to be used in writing my doctoral dissertation. As you might know, I am writing this dissertation as one of the requirements for my DBA degree at Abu Dhabi University. The aim of the study is to measure the impact of transformational leadership on organizational innovation through followers' creativity, organizational culture, and organizational learning. You will find that the questionnaire is easy to read, and it should only take a few minutes to fill. Your cooperation in answering this questionnaire will be highly appreciated.

I assure you that your responses will be used purely for academic purposes. Also, I assure you that your answers will remain confidential.

Thank you for your time and assistance.

Eman AL salami

DBA Student

Abu Dhabi University

First section: Demographic and organizational Information. Please mark the appropriate answer:

Sex:

☐ Male

☐ Female

Age:

☐ 56 years
or older

☐ 46–55
years

☐ 36–45
years

☐ 26–35
years

☐ 25 years
or less

Number of years working in the organization:

☐ More than
15

☐ 11–15

☐ 6–10

☐ 2–5

☐ 1 or less

Your position in the organization:

☐ Employee

☐ Supervisor

☐ Manager

Educational level:

☐ PhD/DBA

☐ Master's
degree

☐ Bachelor's
degree

☐ Higher
diploma

☐ High
school

Type of your organization:

☐ Public

☐ Semi government

☐ Private

Second section: Please indicate how each statement typically applies to your manager as you perceive he or she works with you. Circle the number that in your estimation best describes your supervisor (adopted from Krishnan, 2007).

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

1	My manager makes others feel that they are important members of his or her group.	1	2	3	4	5
2	My manager works for the group's common goal, even at the cost of foregoing personal benefits.	1	2	3	4	5
3	My manager involves each member of his or her group in striving toward the group's common goal.	1	2	3	4	5
4	My manager does not miss any opportunity to talk about the vision of the group or organization.	1	2	3	4	5
5	My manager encourages others to solve problems independently.	1	2	3	4	5
6	My manager listens to others with patience.	1	2	3	4	5
7	My manager nurtures creativity by not imposing too many processes.	1	2	3	4	5
8	My manager not only develops others but also brings the best out of them in pressure situations.	1	2	3	4	5
9	My manager ensures that others get all possible support so that they can pursue other interests of life.	1	2	3	4	5
10	My manager recognizes the fact that different people need to be treated differently.	1	2	3	4	5
11	My manager is an example of the confidence, whatever the situation.	1	2	3	4	5
12	My manager leads from the front.	1	2	3	4	5
13	My manager shows tremendous amount of faith in others' ability.	1	2	3	4	5
14	My manager has the courage to take bold decisions and stick to them.	1	2	3	4	5
15	My manager is hardworking and enthusiastic about assignments.	1	2	3	4	5
16	My manager is charged with energy to do more.	1	2	3	4	5
17	My manager is persistent in achieving the targets.	1	2	3	4	5

1 8	My manager has a fantastic sense of visualization of future outcomes.	1	2	3	4	5
1 9	My manager makes others question the assumptions they make, for even the simplest of things.	1	2	3	4	5
2 0	My manager promotes free and radical thinking.	1	2	3	4	5
2 1	My manager asks others to think in nontechnical ways to arrive at solutions.	1	2	3	4	5
2 2	My manager is sensitive to others' personal needs.	1	2	3	4	5
2 3	My manager encourages others to discuss professional as well as personal issues with him or her.	1	2	3	4	5
2 4	My manager recognizes competence in others and encourages them to build on the same.	1	2	3	4	5
2 5	My manager exhibits consistency in behavior when it comes to his or her set of core values.	1	2	3	4	5
2 6	My manager coordinates well between multiple factions or subgroups.	1	2	3	4	5
2 7	My manager leads by example, by practicing what he or she preaches.	1	2	3	4	5
2 8	My manager is clear in his or her thoughts and actions.	1	2	3	4	5
2 9	My manager lives up to his or her commitments, no matter what.	1	2	3	4	5
3 0	My manager influences each person not to be selfish but to think about the comfort of others.	1	2	3	4	5

Third section: Please indicate how the following characterize your organization (adopted from Garmon, 2004).

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	2	3	4	5

1				
---	--	--	--	--

1	People I work with are direct and honest with each other.	1	2	3	4	5
2	People I work with accept criticism without becoming defensive.	1	2	3	4	5
3	People I work with resolve disagreements cooperatively.	1	2	3	4	5
4	People I work with function as a team.	1	2	3	4	5
5	People I work with are cooperative and considerate.	1	2	3	4	5
6	People I work with constructively confront problems.	1	2	3	4	5
7	People I work with are good listeners.	1	2	3	4	5
8	People I work with are concerned about each other.	1	2	3	4	5
9	Employees and management have productive working relationships.	1	2	3	4	5
10	This organization motivates me to put out my best efforts.	1	2	3	4	5
11	This organization respects its workers.	1	2	3	4	5
12	This organization treats people in a consistent and fair manner.	1	2	3	4	5
13	Working here feels like being part of a family.	1	2	3	4	5
14	There is an atmosphere of trust in this organization.	1	2	3	4	5
15	This organization motivates people to be efficient and productive.	1	2	3	4	5
16	I get enough information to understand the big picture here.	1	2	3	4	5
17	When changes are made, the reasons why are made clear.	1	2	3	4	5
18	I know what's happening in work sections outside my own.	1	2	3	4	5

8						
1 9	I get the information I need to do my job well.	1	2	3	4	5
2 0	I have a say in decisions that affect my work.	1	2	3	4	5
2 1	I am asked to make suggestions about how to do my job better.	1	2	3	4	5
2 2	This organization values the ideas of workers at every level.	1	2	3	4	5
2 3	My opinions count in this organization.	1	2	3	4	5

Fourth section: Listed below are statements reflecting beliefs, feelings, and behaviors. Please indicate the degree to which each statement is typically applied in your organization (adopted from Johnson, 2009).

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

1	I do not feel in danger at work.	1	2	3	4	5
2	Workers are not intimidated by management expectations.	1	2	3	4	5
3	Employees are encouraged to express concerns and resolve problems.	1	2	3	4	5
4	Employees typically understand work requirements and instructions.	1	2	3	4	5
5	Leaders are effective at communicating goals throughout the organization.	1	2	3	4	5
6	Managers/leaders tend to trust our employees.	1	2	3	4	5
7	Employee ideas are acknowledged as valid.	1	2	3	4	5
8	Error is tolerated as a component of success.	1	2	3	4	5
9	Workers at all levels feel equal in their ability to approach organizational leaders.	1	2	3	4	5

1 0	Training is provided to workers through the organization.	1	2	3	4	5
1 1	Organizational leader's value and support employee education.	1	2	3	4	5
1 2	Employees are encouraged to share knowledge throughout the organization.	1	2	3	4	5
1 3	People in the organization have diverse backgrounds.	1	2	3	4	5
1 4	Leaders find multiple perspectives are important.	1	2	3	4	5
1 5	Organizational culture provides employees with a sense of friendship.	1	2	3	4	5
1 6	Managers have a positive attitude toward the organization.	1	2	3	4	5
1 7	Employees have a positive attitude toward the organization.	1	2	3	4	5
1 8	Employees have a positive attitude toward sharing knowledge.	1	2	3	4	5
1 9	Leaders encourage employees to have fun while performing their jobs.	1	2	3	4	5
2 0	Most organizational members have a good sense of humor.	1	2	3	4	5
2 1	Leaders have a good sense of humor.	1	2	3	4	5
2 2	It shows within our organization that people are our most valuable asset.	1	2	3	4	5
2 3	Employee retention is always more important than downsizing.	1	2	3	4	5
2 4	Absenteeism and turnover are uncommon occurrences.	1	2	3	4	5
2 5	Employees are empowered to make influential decisions.	1	2	3	4	5

2 6	Employees tend to trust managers/leaders.	1	2	3	4	5
2 7	Employees receive recognition for their work.	1	2	3	4	5
2 8	Innovation drives success.	1	2	3	4	5
2 9	Innovation is a part of daily routine.	1	2	3	4	5
3 0	Innovation is predominantly related to new products or services.	1	2	3	4	5
3 1	When team members disagree, solutions are usually reached through discussion.	1	2	3	4	5
3 2	Disputes often result in agreements.	1	2	3	4	5
3 3	Employees value other perspectives in an argument.	1	2	3	4	5
3 4	Employee productivity is focused toward company goals.	1	2	3	4	5

Fifth section: Please indicate how each of the following statements characterizes your organization (adopted from Garmon, 2004).

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

1	In my organization, people openly discuss mistakes in order to learn from them.	1	2	3	4	5
2	In my organization, people identify skills they need for future work tasks.	1	2	3	4	5
3	In my organization, people help each other learn.	1	2	3	4	5
4	In my organization, people can get money and other resources to support their learning.	1	2	3	4	5

5	In my organization, people are given time to support learning.	1	2	3	4	5
6	In my organization, people view problems in their work as an opportunity to learn.	1	2	3	4	5
7	In my organization, people are rewarded for learning.	1	2	3	4	5
8	In my organization, people give open and honest feedback to each other.	1	2	3	4	5
9	In my organization, people listen to others' views before speaking.	1	2	3	4	5
10	In my organization, people are encouraged to ask "why" regardless of rank.	1	2	3	4	5
11	In my organization, whenever people state their view, they also ask what others think.	1	2	3	4	5
12	In my organization, people treat each other with respect.	1	2	3	4	5
13	In my organization, people spend time building trust with each other.	1	2	3	4	5
14	The organizational structure supports our strategic direction.	1	2	3	4	5
15	The organizational structure allows us to work effectively.	1	2	3	4	5
16	We have a strategy that positions us well for the future.	1	2	3	4	5
17	The organizations' culture can be described as innovative.	1	2	3	4	5
18	Our operational procedures allow us to work effectively.	1	2	3	4	5

Sixth section: Please indicate how each of the following statements characterizes your organization (adopted from Scott and Bruce, 1994).

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

1	Creativity is encouraged here.	1	2	3	4	5
2	Our ability to function creatively is respected by the leadership.	1	2	3	4	5
3	Around here, people are allowed to try to solve the same problems different ways.	1	2	3	4	5
4	The main function of employees in this organization is to follow orders which come down through channels.	1	2	3	4	5
5	Around here, a person can get in a lot of trouble by being different.	1	2	3	4	5
6	This organization can be described as flexible and continually adapting to change.	1	2	3	4	5
7	A person can't do things that are too differently around here without provoking anger.	1	2	3	4	5
8	The best way to get along in this organization is to think the way the rest of the group does.	1	2	3	4	5
9	People around here are expected to deal with problems in the same way.	1	2	3	4	5
10	This organization is open and responsive to change.	1	2	3	4	5
11	The people in charge around here usually get credit for others' ideas.	1	2	3	4	5
12	In this organization, we tend to stick to tried and true ways.	1	2	3	4	5
13	This place seems more concerned with the status quo than with change.	1	2	3	4	5
14	Assistance in developing new ideas is readily available.	1	2	3	4	5
15	There are adequate resources devoted to innovation in this organization.	1	2	3	4	5
16	There is adequate time available to pursue creative ideas here.	1	2	3	4	5
17	Lack of funding to investigate creative ideas is a problem in this organization.	1	2	3	4	5
18	Personnel shortages inhibit innovation in this organization.	1	2	3	4	5

1 9	This organization gives me free time to pursue creative ideas during the workday.	1	2	3	4	5
2 0	The reward system here encourages innovation.	1	2	3	4	5
2 1	This organization publicly recognizes those who are innovative.	1	2	3	4	5
2 2	The reward system here benefits mainly those who don't rock the boat.	1	2	3	4	5

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Please tick this box if you wish to receive a summary of findings of this research and write your email.